About Binghamton University

Binghamton University, the State University of New York, is one of this country’s distinguished public research universities and is known for the excellence of its students, faculty, staff and programs.

One of the four university centers of the State University of New York, Binghamton University offers academic programs leading to the bachelor’s, master’s and doctoral degrees. Binghamton’s undergraduate and graduate programs are complementary, drawing upon nationally recognized faculty to create an outstanding academic experience for students at all levels. Binghamton University operates on a year-round schedule that includes a fall and spring semester, as well as winter and summer sessions.

A continuing commitment to the liberal arts forms the basis for undergraduate instruction in the arts and sciences and in the professional programs of nursing, engineering, management, pharmacy, public administration, social work and education. Graduate education and research emphasize scholarly depth within the disciplines and among Binghamton’s unique interdisciplinary perspectives.

Binghamton University attracts an exceptionally talented student population and challenges academically-motivated students to work to their fullest intellectual capacities. In all of its programs, the University seeks to enhance the self-development of students so that they will become informed and effective participants in public affairs and in all of their subsequent educational and vocational pursuits. To that end, Binghamton provides a challenging and supportive living and learning environment that encourages students’ active participation in residential life, student organizations, recreational and athletic programs, and cultural and social events.

As a public institution of higher education, Binghamton recognizes its responsibility to build a multicultural campus community that encourages access to and full participation in all aspects of University life and reflects in its constituencies the broader society of which the University is a part.

In Fall 2016, a total of 13,632 undergraduates were enrolled at Binghamton University: 6,613 women and 7,019 men. Graduate enrollments totaled 3,660: 1,750 women and 1,910 men.

During the 2016-17 academic year, full-time teaching faculty numbered 730, of whom 92 percent held a PhD or the appropriate terminal degree in their fields. Both graduates and undergraduates are taught by faculty whose members are committed to teaching, advising and working closely with students.

History

The institution dates from 1946, when Triple Cities College opened in Endicott, NY, five miles west of the present campus, as a branch of Syracuse University. When the college was incorporated into the State University of New York four years later, it was renamed Harpur College in honor of Robert Harpur, a Colonial teacher, patriot and pioneer, who devoted his later years to settling the area around Binghamton.

Until 1953, Harpur College was one of only two public liberal arts colleges in the state. In 1961 the campus was moved across the Susquehanna River to Vestal. Growing enrollments and a reputation for excellence soon led to the selection of Harpur College as one of four doctorate-granting university centers in the state system. In 1965 the campus was formally designated the State University of New York at Binghamton.

Harpur College retained its identity as the undergraduate liberal arts and sciences component of the University, and it became the nucleus of an evolving complex of graduate, research and professional programs. Binghamton
University’s professional schools now include the College of Community and Public Affairs, Decker School of Nursing, School of Management, School of Pharmacy and Pharmaceutical Sciences and Thomas J. Watson School of Engineering and Applied Science.

The Campus

Binghamton is centrally located in New York, 50 miles from Ithaca, 70 miles from Syracuse and about 200 miles from both New York City and Philadelphia. Routes I-81, I-88 and NY 17 converge near the city. The campus is set on a wooded hillside in the town of Vestal near the Susquehanna River, one mile west of Binghamton.

Binghamton, Vestal, Endicott and Johnson City are part of the Greater Binghamton region, an urban metropolitan area that offers a sophisticated cultural life along with easily accessible outdoor recreational opportunities. Major employers are Lockheed Martin, BAE Systems, United Health Services, Universal Instruments and the University itself.

Binghamton’s modern campus is compactly designed, well-maintained and noted for its scenic setting. The campus is arranged in an irregular oval, with residential colleges and recreational facilities on the periphery and academic and classroom buildings in the center. There are about 110 buildings, all built since 1958.

The science laboratories are well-equipped and allow students to practice state-of-the-art experimental techniques in their courses and research projects. Extensive and up-to-date computer support is readily available for research and instruction at every level. Teaching and research greenhouses house over 6,000 exotic plants representing over 1,200 distinct species.

The Binghamton University Innovative Technologies Complex represents the University’s latest development of state-of-the-art research facilities. The Biotechnology Building contains laboratories for life sciences and supportive technologies related to product development. The building also includes a start-up suite, where new high-tech companies spun off by the faculty can obtain office space along with the support they need for making the company independent and functional. The Engineering and Science Building, which opened in spring 2011, is the home to the Watson School of Engineering and Applied Science Dean’s Office and Electrical and Computer Engineering and Mechanical Engineering departments. The building features a number of core laboratory facilities that foster collaboration and act as a catalyst for innovation. The Center of Excellence Building opened in 2014 and provides high-functioning space for the University’s Center of Excellence in Small Scale Systems Integration and Packaging. The Smart Energy Research and Development Building opened in 2017 and houses the Chemistry and Physics departments. Research in the building will focus on alternative energy production, harvesting and storage in areas such as thin-film solar panel design and production, consumer-ready solar cells and next-generation battery production.

Facilities for fine and performing arts are exceptional. In addition to several theaters and recital halls for the performing arts, we offer music listening and practice rooms, dance studios, film production and projection facilities, and art, sculpture, printing and graphic arts facilities, including a bronze-casting foundry. The Theatre and Music departments present scores of plays and concerts. The Cinema department hosts a wide range of exceptional films through the Harpur Cinema series. The University Art Museum has a permanent collection of art representing all periods, and displays special loaned exhibitions as well as the works of University artists. The Anderson Center for the Arts offers a full schedule of concerts, dance performances and recitals by faculty, students and internationally acclaimed performers.

There are three Information Commons, located in the Bartle Library, the Science Library and the University Downtown Center. These areas feature librarians and IT consultants to assist with research and computing needs and include single and multi-user computer stations, printing stations, scanning and copy areas and small group rooms.
Opened in 2007, the secure, four-story University Downtown Center is an all-in-one home for the College of Community and Public Affairs, boasting state-of-the-art classrooms, conference areas, a computer center, a library, faculty and staff offices, a coffee kiosk and a student lounge.

Development of a Health and Science Technology Park in nearby Johnson City is currently underway. Construction is progressing on a four-story building for the new School of Pharmacy and Pharmaceutical Sciences. This structure will house the classrooms, instructional and simulation labs, research labs and all administrative and faculty offices to support the school. Occupancy is planned for summer 2018. Simultaneously, an adjacent, existing building is undergoing transformation into the new home for the Decker School of Nursing, which will boast smart classrooms, a state of the art simulation studio, and space for program expansion. Renovations are to be complete by 2020.

The Southern Tier Incubator, located at 120 Hawley Street in downtown Binghamton, opened in spring 2017 and is a collaboration between Binghamton University, SUNY Broome and the regional economic development community. It provides the infrastructure needed for companies focusing on energy, electronics and health, with specialized laboratories and other features associated with industry-based R&D, including testing and evaluation and prototyping. The incubator has business resources, and tenants are connected to research and educational programming at Binghamton University and SUNY Broome.

The Bearcats offer 21 intercollegiate varsity sports: baseball, men's and women's basketball, men's and women's cross country, men's golf, men's and women's lacrosse, men's and women's soccer, softball, men's and women's swimming and diving, men's and women's tennis, men's and women's indoor and outdoor track and field, wrestling and women's volleyball. The school has produced 28 conference champions, 41 runner-up teams, one individual NCAA champion and 18 All-Americans in its 15-year Division I tenure. Binghamton has led the America East Conference in men's basketball attendance nine times in the last 13 years. Tens of thousands of fans visit the Events Center and expansive outdoor facilities each year. Students participate in recreational and intramural sports, including Binghamton's "co-rec football." Numerous playing fields, tennis courts and a track comprise the outdoor offerings.

Binghamton’s wooded campus includes the Nature Preserve, a 190-acre forest and wetland area with a six-acre pond. This diverse natural habitat, containing many forms of plant and animal life, provides special study and leisure opportunities.

The University supports a number of Organized Research Centers (ORCs) and Institutes for Advanced Studies (IAS) to promote multidisciplinary and interdisciplinary sponsored and non-sponsored research and scholarly activities involving faculty and students. Here, exceptional undergraduate and graduate students have the opportunity to work side by side with post-doctoral fellows, visiting scholars and senior faculty in high-level research and, not uncommonly, to publish the results of their findings.

Federally designated centers on campus include the Developmental Exposure Alcohol Research Center (DEARC), a National Institute on Alcohol Abuse and Alcoholism Alcohol Research Center; the Center for Energy-Smart Electronic Systems (ES2), a National Science Foundation Industry/University Cooperative Research Center; the NorthEast Center for Chemical Energy Storage (NECCES), a Department of Energy funded Energy Frontier Research Center, and the New York Node of NextFlex, a Department of Defense-funded Institute for Manufacturing Innovation.

The S3IP is a New York State Center of Excellence conducting research in electronics packaging, energy-efficient systems, flexible electronics and energy harvesting and storage. S3IP includes the following Organized Research Centers: the Integrated Electronics Engineering Center (IEEC); the Center for Energy Smart Electronic Systems (ES2); the Center for Advanced Microelectronics Manufacturing (CAMM); and the Center for Autonomous Solar Power (CASP). Affiliated centers include the Institute for Materials Research (IMR) and the NorthEast Center for Chemical Energy Storage (NECCES).

Additional Organized Research Centers include Binghamton Center for Biofilms Research; Center for Affective
Science; Center for Cognitive and Psycholinguistic Sciences (CaPS); Center of Biomanufacturing for Regenerative Medicine (CBRM); Center for Development and Behavioral Neuroscience (CDBN); Center for Healthcare Systems Engineering (CHSE); Center for the Historical Study of Women and Gender (CHSWG); Center for Integrated Watershed Studies (CIWS); Center for Interdisciplinary Studies in Philosophy, Interpretation, and Culture (CPIC); Center for Leadership Studies (CLS); Center for Medieval and Renaissance Studies (CEMERS); Center for Writers (CW); Institute of Biomedical Technology (IBT); Institute for Materials Research (IMR); Public Archaeology Facility (PAF); Roger L. Kresge Center for Nursing Research (KCNR), and the Center for Collective Dynamics of Complex Systems (CoCo). The Institutes for Advanced Studies include the Center for Israel Studies, the Fernand Braudel Center for the Study of Economies, Historical Systems, and Civilizations (FBC); Institute for Advanced Studies in the Humanities (IASH); Institute for Asia and Asian Diasporas (IAAD) (including the Center for Korean Studies (CKS)); Institute for Evolutionary Studies (EvoS); Institute of Global Cultural Studies (IGCS); Institute for Multi-generational Studies (IMS); and Watson Institute for Systems Excellence (WISE).

The University Union serves as a central hub on campus for student, faculty, staff and visitors and is the home of most student cultural and social activities on campus. The Union houses many student organization offices, including the Student Association (undergraduate student government) and student media offices (radio, TV and newspaper), as well as the offices for student cultural groups. Other offices and services offered include the Marketplace eating area with 13 different food options; University Bookstore; M&T Bank with ATM; Post Office; Fleishman Center for Career and Professional Development; Student Support Services; Center for Civic Engagement; and the Offices of the Dean of Students, including Campus Activities, Off Campus Programs, and Fraternity and Sorority Affairs. There are many meeting rooms and lounges throughout the building, and recreational options in the Union include bowling, billiards and table tennis.

In addition to maintaining a website and regular annual publication of the University Bulletin (on the web), the Schedule of Classes and Course Guide viewable on BU BRAIN each semester, and producing other print and electronic publications as needed, the University regularly communicates important news and information to students, faculty and staff. News and information of general interest is distributed via Inside, an online newspaper; Dateline, a daily electronic news service for faculty and staff; B-Line and B-Engaged, electronic news services for students; and regularly updated electronic message boards in several dining halls and at the main entrances to campus. B-Alert emergency messaging is sent as necessary via text, e-mail and social media. The Binghamton University Magazine is published three times a year and distributed to a wide audience, and several of the University's schools publish annual magazines. The student Web portal, my.binghamton.edu, is available 24 hours a day, seven days a week, and contains updated, password-protected information on individual students' registration and records, academic status, account balances, financial aid status and e-mail accounts. Students register via the BU BRAIN during specific registration periods throughout the year.

Accreditation

Binghamton University is registered by the Education Department of the State of New York and is approved to grant the degrees listed under “Academic Programs.” It is accredited by the Middle States Commission on Higher Education (MSCHE), and the accreditation was last reaffirmed on November 17, 2016. Binghamton’s nursing programs are accredited by the Commission on Collegiate Nursing Education (CCNE). Education’s teaching certification programs are accredited by the Teacher Education Accreditation Council (TEAC). All business programs in the School of Management are accredited by the Association to Advance Collegiate Schools of Business (AACSB) International. The University’s engineering programs are accredited by the Engineering Accreditation Commission of ABET, Inc., and its computer science program is accredited by the Computing Accreditation Commission of ABET, Inc. The Masters in Public Administration program is accredited by the National Association of Schools of Public Affairs and Administration (NASPAA). Programs are also accredited by the American Psychological Association (APA), the National Association of Schools of Music (NASM) and the Council on Social Work Education (CSWE). Requests to review licensing and accreditation documents may be made through the Office of the President.
Honor Societies

The campus has chartered chapters of Phi Beta Kappa, which recognizes academically excellent juniors and seniors in the liberal arts (http://people.math.binghamton.edu/alex/phibetakappa.html); Phi Eta Sigma, which recognizes freshman students; Tau Sigma, which recognizes transfer students; and Beta Upsilon Alpha, which recognizes non-traditional students. There are, in addition, chapters of the following academic honor societies: Alpha Pi Mu, industrial engineering; Beta Alpha Psi, accounting, finance, and management information systems; Beta Gamma Sigma, business; Chi Alpha Epsilon, Educational Opportunity Program; Chi Alpha Sigma, Athletics; Eta Kappa Nu, electrical engineering; Gamma Kappa Alpha, Italian; Gamma Theta Upsilon, geography; Kappa Delta Pi, International Honor Society in Education; Phi Alpha Alpha, public administration; Phi Alpha Theta, history; Phi Sigma Iota, foreign languages; Pi Sigma Alpha, political science; Pi Mu Epsilon, math (http://people.math.binghamton.edu/alex/Pi_Mu_Epsilon_at_Binghamton_University.html); Pi Tau Sigma, mechanical engineering; Psi Chi, psychology; Sigma Delta Phi, Spanish; Sigma Pi Sigma, physics; Sigma Theta Tau, nursing; Tau Beta Pi, engineering; and Upsilon Pi Epsilon, computer science.

Binghamton University awards several scholarships each fall semester to members of Phi Theta Kappa, an honor society for students at two-year U.S. or international schools. See http://www2.binghamton.edu/admissions/students/transfer-students.html for more information.

Academic Programs

Undergraduate programs at Binghamton University are offered in Harpur College of Arts and Sciences, the College of Community and Public Affairs, the Decker School of Nursing, the School of Management and the Thomas J. Watson School of Engineering and Applied Science. All five of these schools, as well as the School of Pharmacy and Pharmaceutical Sciences, offer advanced degrees; all advanced degree programs are administered by the Graduate School.

Undergraduate programs lead to the bachelor of arts, bachelor of fine arts, bachelor of music and bachelor of science. Graduate programs include master's degrees in various fields, including the arts, humanities, social sciences, natural sciences, engineering, nursing, social work, student affairs administration, public administration, business administration, and education and teaching. Doctoral programs include degrees in the arts and sciences, engineering, nursing, education, management, pharmacy, and community and public affairs.

In 2015-2016, the University awarded 3,463 bachelor's, 1,011 master's and 139 doctoral degrees.

Harpur College of Arts and Sciences

Undergraduate Programs

Harpur College of Arts and Sciences was the first college of what would become Binghamton University. The great majority of undergraduates on campus are enrolled in Harpur College, and those enrolled in the other schools fulfill their liberal arts requirements in Harpur.

Harpur is organized into departments and programs. All students select some Harpur courses to meet General Education and college-wide requirements in expository writing.

Undergraduate degree programs range from traditional disciplines to majors in Arabic, biochemistry, cinema, classical studies and Judaic studies. Students may also select from interdisciplinary majors, including environmental studies, integrative neuroscience, and philosophy, politics and law.

Graduate Programs
The strength of the graduate programs in the arts and sciences rests on the high quality of a faculty distinguished for its scholarship as well as its teaching. Graduate students typically learn in small seminars and prepare their work with close supervision from faculty members. Departments assign a faculty advisor to help new graduate students choose courses appropriate to their programs and interests, and, as students progress through coursework toward research for master’s and doctoral degrees, they have mentors in their fields of study.

As a selective university center, Binghamton offers more than 30 doctoral programs. The Harpur College of Arts and Sciences houses doctoral programs in fine arts, humanities, mathematics, sciences and social sciences. These doctoral programs help fulfill one of the University’s crucial missions: to prepare a professoriate and a capable, trained workforce that is ready to think through the problems of the future and to contribute creativity and invention in a variety of disciplines.

All of these divisions offer master’s degrees as well, and many collaborate with the Department of Teaching, Learning and Educational Leadership in the College of Community and Public Affairs to offer advanced degrees for students who plan to teach at the elementary or secondary levels. Master’s-level study prepares students for professional practice and encourages habits of analysis and reflection that lead some students to further study in the discipline.

Several advanced certificate programs, which may be pursued in addition to degree programs, emphasize interdisciplinary study in various fields.

**College of Community and Public Affairs**

The College of Community and Public Affairs (CCPA) provides undergraduate and graduate programs to traditional and non-traditional full-time and part-time students. The college offers an undergraduate degree in human development (BS); master’s degree programs in social work (MSW), public administration (MPA), and student affairs administration (MS); and a doctoral degree (PhD) in community and public affairs. The MSW and MPA are nationally accredited degrees. CCPA also offers master's degree programs in education (MAT, MSEd, MS), a Certificate of Advanced Studies in Educational Leadership (CAS), and a doctoral degree in Educational Theory and Practice (EdD).

The college comprises five departments: human development; public administration; social work; student affairs administration; and teaching, learning and educational leadership. In addition, the Institute for Intergenerational Studies is housed in the college as well. CCPA is strongly committed to community partnerships, and the synergies between theory and practice which underlie the teaching, research, scholarly productivity and public service of its departments.

**Decker School of Nursing**

The Decker School of Nursing’s mission is to disseminate and advance knowledge about health care, disease promotion, health promotion and the treatment of illness in individuals, families and communities with an emphasis on underserved and rural and vulnerable populations. To support this mission, students may enroll in the undergraduate and/or graduate programs offered by the school.

The undergraduate program awards the Bachelor of Science (BS) degree with the major in nursing. This baccalaureate degree in nursing prepares graduates for entry-level positions of professional nursing practice in hospitals, community health care agencies, long-term care facilities and other institutions. Students complete a four-year program that has a firm foundation in the liberal arts and sciences. Baccalaureate students may be admitted as freshmen or as transfer students at multiple entry points. Transfer students may be admitted to the liberal arts curriculum of the University before entering the upper division nursing curriculum or into the junior level at the
beginning of the upper division nursing curriculum. There is also an accelerated 12-month, three-semester option, offered to persons with an earned baccalaureate or higher degree in another field who wish to make a career change to professional nursing. Upon graduation, graduates of the traditional and accelerated programs are eligible to take the national licensure examination (NCLEX-RN) to become registered professional nurses. Transfer students may also be licensed registered nurse (RN) students who enroll in prerequisite courses before entering the upper-division baccalaureate nursing coursework. The RN curriculum may be completed in two, three, four or six semesters and confers a Bachelor of Science (BS) degree with a major in nursing upon graduation.

The graduate program in nursing awards the Master of Science (MS) degree, the Doctorate in Nursing Practice degree (DNP), and the Doctor of Philosophy degree (PhD). The Master of Science (MS) and Doctorate in Nursing Practice (DNP) degree programs offer majors of study in specialty practice areas of family health, community health, family psychiatric mental health or adult-gerontological health nursing. The master’s degree program is a 46-48 credit curriculum preparing students with advanced knowledge and clinical skills in nursing specialty areas of study. All master's students select a functional role as Nurse Practitioner (NP), Clinical Nurse Specialist (CNS)**, nurse administrator, or nurse educator. MS students may choose to complete a dual functional role (e.g., MS Family NP/Administrator) by completion of additional course credits; the dual role option is available to MS students with the exception of nurse educator, which is reserved as a primary functional role for enrolled MS in Nursing students or by enrollment to post graduate certificate students. Graduates of the MS program are eligible to sit for national certification exams upon graduation, depending on functional role selected. Post-graduate certificates in various subjects are also available to prospective students (e.g., Forensics and Disaster Management). The Doctorate in Nursing Practice (DNP) degree is the terminal clinical doctorate for those interested in the advanced practice roles of nurse practitioner or clinical nurse specialist. The DNP degree focuses on providing graduates with knowledge and competence in health systems leadership, policy development and interdisciplinary collaboration to improve health care outcomes and increase health care access for all populations. The DNP post-baccalaureate* degree program is 77 credits to completion. The post-graduate DNP degree program option is from 35-38 credits to completion. The Doctorate of Philosophy (PhD) program is the terminal research doctorate with emphases in rural health and vulnerable populations preparing graduates for careers in higher education, health policy or clinical research. Students may choose to enter the PhD program at the post-master's or post-baccalaureate level.

The Decker School of Nursing is a member of the American Association of Colleges of Nursing (AACN) and is accredited by the Commission on Collegiate Nursing Education (CCNE) through June 30, 2019. The school is also registered with the New York State Education Department.

*Admission to the DNP post-baccalaureate program is temporarily suspended until further notice.

**The CNS role is only available to students who enroll in the MS Adult-Gerontological program.

School of Management

The School of Management offers degree programs to approximately 1,700 students at the bachelor’s, master’s and doctoral levels. Undergraduates choose between BS degree programs in either business administration or accounting. At the graduate level, an MBA, an MS in accounting and a PhD degree are offered.

Both undergraduate programs offered by the School of Management stress breadth of educational experience combined with an opportunity for some level of specialization. They require liberal arts study in Harpur College of Arts and Sciences and a sound foundation in basic management disciplines, and promote an awareness of the legal, environmental and societal factors that affect decision-making in organizations. The two programs include prominent coverage of ethical and international issues and the use of computers as a decision-making tool. Students receive valuable pre-professional training as well as preparation for study in graduate or professional school.

The MBA program at Binghamton University is designed to meet the needs of today’s managers who are continually challenged by the dynamic changes occurring in the corporate, public and non-profit sectors. The MBA program, in
addition to offering training and background in the traditional functional areas of business administration, emphasizes interdisciplinary decision making, teamwork, internationalization and social responsibility.

The MS in accounting prepares students for work in the areas of public accounting and management accounting. Like the BS in accounting, the MS program may be used as the basis for satisfying the educational requirements for taking the CPA examination and licensure as a certified public accountant. New York state has adopted the policy that exists in other states and now requires completion of a 150 credit-hour program of study as a condition for sitting for the CPA exam and licensure. The School of Management recommends that the combination of the BS in accounting and the MS in accounting be chosen to satisfy the new 150-credit requirements.

The school’s PhD students may pursue concentrations in the areas of finance, marketing, management information systems and organizational behavior. Students also may combine an interest in management information systems with one of the other concentration areas by designing an interdisciplinary program. The School of Management offers BS/MS and BS/MBA combined-degree programs that satisfy the 150 credit-hour requirement.

School of Pharmacy and Pharmaceutical Sciences

The mission of the School of Pharmacy and Pharmaceutical Sciences (SOPPS) is to develop outstanding leaders in pharmacy and pharmaceutical sciences using contemporary medication management and innovative research in order to transform human health locally and globally.

The SOPPS currently offers a graduate-level pharmacy program culminating in the professional degree of Doctor of Pharmacy (PharmD). This program will prepare graduates with the professional competencies for entry-level pharmacy practice in any setting; to ensure optimal medication therapy outcomes, patient safety and patient-centered team-based care; and to satisfy the educational requirements for licensure as a pharmacist. Binghamton’s program develops caring professionals with the knowledge, skills, attitudes and values required for the ethical and effective practice of pharmacy. The PharmD program has three objectives: (1) to educate skilled pharmacists to serve their communities with competence and compassion and in an ethical manner, (2) to promote public health by educating pharmacists to provide drug information and education and (3) to develop skills in pharmacy management, medication distribution and control and in counseling of patients on medications.

The Binghamton University SOPPS PharmD program has been granted Precandidate status by the Accreditation Council for Pharmacy Education (ACPE), 135 South LaSalle Street, Suite 4100, Chicago, IL 60503 (Phone: 312-644-3575; Fax: 312-664-4652; www.acpe-accredit.org).

On December 13, 2016, the New York State Board of Regents authorized Binghamton University to award the PharmD degree. The New York State Education Department reviewed the program and registered it for professional purposes on February 6, 2017.

Thomas J. Watson School of Engineering and Applied Science

Established in 1983, the Thomas J. Watson School of Engineering and Applied Science consists of the departments of Biomedical Engineering, Computer Science, Electrical and Computer Engineering, Mechanical Engineering, and Systems Science and Industrial Engineering. The Engineering Design Division is responsible for the freshman-year engineering program, which is common to all engineering majors.

The Watson School offers bachelor of science degrees in biomedical engineering, computer science, computer engineering, electrical engineering, industrial and systems engineering, information systems (dual-diploma), and mechanical engineering.

The Watson School’s undergraduate programs combine a strong base in fundamentals with extensive practical application through laboratory and design projects. Modern computer facilities and instructional laboratories support
these programs. Students are also encouraged to obtain additional technical experience through summer
internships.


Graduate students may pursue the master of science (MS) in biomedical engineering, computer science, electrical and computer engineering, industrial and systems engineering, mechanical engineering, or systems science, or the master of engineering (MEng) degree, which is a practice-oriented graduate degree. The school offers the doctor of philosophy in biomedical engineering, computer science, electrical and computer engineering, industrial and systems engineering, mechanical engineering, and systems science. In addition, the Watson School offers an advanced graduate certificate program in complex systems science and engineering, which is available for graduate students in any major. Master of science (MS) and doctor of philosophy degrees in materials science and engineering are available through the graduate school.

The graduate program provides strong research opportunities in all the academic departments. There are also strong practice-oriented opportunities in the master of engineering (MEng) program.

The Watson School supports its graduates and the technical community with professional development programs that address the lifelong learning needs of technical professionals. Programs include professional development symposia, seminars, research briefings and various non-credit courses designed to update practicing engineers across the state and nation. In addition to the credit courses, various non-credit courses are offered each semester by the engineering professional development program of the Watson School. The goals of this program are to keep technical personnel informed of advances in their fields and to stimulate innovation. These courses are conceived and developed in close cooperation with the technical community. This enables the school to focus on immediate training needs and to design programs specific to those needs. For more information, contact the director of industrial outreach of the Watson School.

The Graduate School

The Graduate School administers all advanced degree programs offered in the College of Community and Public Affairs, the Decker School of Nursing, the Harpur College of Arts and Sciences, the School of Management, the School of Pharmacy and Pharmaceutical Sciences and the Thomas J. Watson School of Engineering and Applied Science. The Graduate School prepares students with training in scholarly study, advanced research, teaching and professional leadership.

The Graduate School was formally established by the faculty in 1975 and is under the administration of the vice provost and dean of the Graduate School. The faculty of the Graduate School comprises all full professors, associate professors and assistant professors in departments, schools and colleges offering instructional programs leading to advanced degrees. The governing body of the Graduate School is the Graduate Council.

Inter-Institutional Cooperation

The University provides Binghamton students and their instructors with opportunities to learn through study, research and service in cooperation with other educational institutions. These include study abroad and international joint degree programs; five-year programs with schools of engineering; and intercampus doctoral exchange with Cornell University, the SUNY university centers at Albany, Buffalo and Stony Brook, the City University of New York, and the SUNY College of Environmental Science and Forestry. The University also participates in the National Student Exchange.

Binghamton University Libraries are members of the Center for Research Libraries (CRL), the Council on Library
and Information Resources (CLIR), the Scholarly Publishing and Academic Resources Coalition (SPARC) and the Online Computer Library Center (OCLC). Binghamton University Libraries are a selective depository for U.S. and New York State government publications.

The Libraries support a variety of resource sharing agreements and consortia, including SUNYConnect, South Central Regional Library Council (SCRLC), the Information Delivery Services (IDS) Project and the Inter-University Consortium for Political and Social Research. Consortial purchasing arrangements with other SUNY libraries, WALDO and NERL allow the libraries to purchase resources at favorable rates.

Membership in the Center for Research Libraries provides faculty and students with access to the center's collection of more than 5 million volumes. The center's collection complements and supplements the collections of the major research libraries of North America. Holdings of particular note are foreign dissertations, foreign newspapers, official publications of all U.S. states and territories and their departments and agencies, and official publications of foreign governments. Materials owned by the center are available by placing orders through Interlibrary Loan. The center's collections may also be used on-site. For more information about the CRL's collections, please see their website.

OCLC Shares membership includes on-site access privileges across member institutions and facilitates resource sharing among member institutions. Through SHARES, its state-of-the-art interlending and document supply program, library materials, including traditionally non-circulating items, are shared among partners in an expedited and cost-effective manner.

The Libraries participate in the SUNY Open Access Program. Upon presentation of a valid State University ID card from one's home campus, a reader is entitled to the same use of the collection, and the same services and facilities, as the library offers its own community, including borrowing privileges. See the SUNY Open Access Overview for more information.

**Binghamton University Libraries**

The Libraries provide a wide range of library resources and services. The Libraries' collection consists of a variety of print and digital resources, including over 2.7 million volumes (e-books and print); 87,000 print and electronic journals, 2,200 linear feet of manuscripts and 2.0 million microform, map and multimedia items.

- The **Glenn G. Bartle Library**, named after the University's first president, contains collections and other resources in the humanities, social sciences, mathematical and computer sciences, as well as government documents. It also houses the Fine Arts Collection, Special Collections, Preservation and University Archives.
- The **Science Library** holds resources related to science and engineering disciplines, as well as a map collection.
- The **University Downtown Center**'s (UDC) Library-Information Commons, located at 67 Washington Street in Binghamton, houses a local collection of books, local government documents, and current periodicals to support the College of Community and Public Affairs.
- The **Library Annex@Conklin**, located at 400 Corporate Parkway in Conklin, NY, houses over 450,000 important but infrequently used materials in the Libraries' collections and is open to the public by appointment.
- The Libraries' **online gateway** (http://www.binghamton.edu/libraries/) provides access to library services and resources, including a next-generation search tool providing a dynamic "one-stop" discovery and delivery service for patrons.

The Libraries offer research consultation and reference assistance in person and electronically, customized instruction sessions, library tutorials, and post news/updates through a number of blogs. Together with the online gateway, these services give patrons access to innumerable information resources and research tools such as catalogs, research databases, citation databases, subject guides, e-books, and e-journals. To learn more about our
research services, visit Research Help at http://www.binghamton.edu/libraries/research/.

The Libraries also offer access to our extensive print collection, technology lending, interlibrary loan services, and course reserves. Course Reserves information, online at http://www.binghamton.edu/libraries/services/eres/index.html, are materials faculty select as required and assigned readings. Electronic Course Reserves materials — articles, book chapters, student papers and non-copyrighted materials (lecture notes and exams, for example) — may be accessed 24 hours a day, seven days a week through Blackboard.

Physical reserve materials, including books, videos, DVDs, cassettes, CDs, and other items (both from the Libraries' and instructors’ personal collections) are located in the Newcomb Reading Room and the UDC Library. Loan periods are established in consultation with instructors and range from two hours (three hours for VHS and DVD) to one and two-day loans.

Quiet and group study spaces are available throughout the Libraries. During the fall and spring semesters, Bartle Library is open 24 hours a day from noon Sundays through 8 p.m. Fridays, and from noon until 8 p.m. on Saturdays. The Library Annex@Conklin is open to the public Monday through Friday by appointment. Complete library hours are available online at http://www.binghamton.edu/libraries/about/hours/index.html.

The Graduate Study Commons is a quiet study space in Bartle Library available exclusively for graduate students. The Commons provides room for 35 with individual work spaces, tables and lounge seating. For more information, see http://www.binghamton.edu/libraries/locations/graduate.html.

The Binghamton University Information Commons, a collaborative initiative between the Libraries and Information Technology Services, provide access to a powerful selection of print and online resources and a vast array of application software and tools. Each Information Commons is a computer-enhanced research environment that invites and attracts users to work collaboratively, use the wide range of resources available in the library, and obtain expert assistance. For more information, see http://www.binghamton.edu/ic/index.html.

Special Collections, Preservation and University Archives, located on the second floor of Bartle Library, houses rare books, manuscript and archival collections, sound recordings and the University Archives and is the location of the Bernard F. Huppe Reading Room and the Link Conference Room. The rare and archival collections include North American editions published prior to 1850, British imprints prior to 1800 and European imprints prior to 1750. Collections of note include the Edwin A. Link Collection, the Frances R. Conole Archive of Recorded Sounds, the Max Reinhardt Archive and Library, the William J. Haggerty Collection of French Colonial History, the Yi-t'ung and An-chi Lou Wang Research Collection on Chinese Culture.

Libraries' website: http://www.binghamton.edu/libraries/

Information Technology Services

Information Technology Services (ITS), located in the Technology Hub, provides technology infrastructure, strategic business resources and computing services to the entire university community. Our organization seeks to advance the university's strategic goals, support learning, enable scholarly endeavors and improve institutional management. ITS staff is committed to outstanding customer service and ensuring the reliability, availability and continuity of critical IT resources for the Binghamton University community.

Major computing equipment includes over 250 physical and virtual application servers and an enterprise file storage system consisting of over 500 terabytes of data. Personal and university owned computers are connected through a high-speed, campus-wide network where more than 2,500 wireless access points provide signals to users. As expected, the majority of Binghamton's bandwidth utilization comes from student use (88.5%) and ITS continues to increase internet capacity to campus each year. Binghamton University is also a member of the Internet2.
Consortium.

ITS offers technology support and consultation through the Help Desk located in the Technology Hub. You can walk in, call, or send an e-mail to log a ticket with the Help Desk to address your technology needs. Services include software consultation and installation, assistance with hardware issues, advisement on specs for new computers, and who to contact to report malicious phishing scams. The Help Desk is also your first point of contact to help with a password or e-mail access problem, and where all of the business units on campus contact for assistance with their software. Also available are satellite help desks in the Bartle Library, as well as via the ResCon program, Binghamton's student residence hall technology consultants. ITS maintains over 700 computers in the public computing areas and 34 public printers in 19 different locations across campus.

Information Technology Services supports critical applications for students, faculty, and staff at Binghamton including the Blackboard learning management system, the my.Binghamton portal, BUbrain and the campus web environment for Binghamton.edu. Software developers on staff help to keep systems and applications updated as well as develop custom solutions to meet campus needs. Within the Technology Hub, you'll also find ITS' makerspace, The Emerging Technology Studio, which allows you the opportunity to become certified to use the 3D printers and 3D Scanners.

With these resources, students, faculty and staff find that information technology enriches many aspects of the curriculum, and IT solutions to new challenges are readily available to all. To learn more about Information Technology Services, ITS Help Desk Hours and other technology alerts and resources, visit http://its.binghamton.edu.

Dual-Diploma Joint Degrees with Turkish Universities

Binghamton University offers three innovative dual-diploma joint-degree programs in partnership with two Turkish universities: Istanbul Technical University and Middle East Technical University. These programs lead to the BS degree in Information Systems from the Thomas J. Watson School of Engineering and Applied Science, in Global and International Affairs from Harpur College of Arts and Sciences, and in Business Administration from the School of Management. In these four-year undergraduate programs, students spend their freshman and junior years at one of the Turkish partner institutions and their sophomore and senior years at Binghamton University. Applicants must meet all the admission requirements at their Turkish university, including successful participation in the Turkish national university entrance examination, as well as at Binghamton. Degree recipients must meet all of the academic requirements for a bachelor's degree at Binghamton and for a lisans degree at their home Turkish institution.

The aim of the dual-diploma joint-degree programs is to provide enrollees with a unique, rigorous, bi-cultural learning experience leading to the receipt of a high-value dual-diploma degree from a pair of well-respected research universities, one in Turkey and one in the United States. The programs enrich the global diversity of the Binghamton University educational experience. The programs were developed in cooperation with SUNY System Administration and the Turkish Higher Education Council (YÖK).

Academic Policies and Procedures for All Students

Principles Governing Academic Life

Academic Integrity

The faculty assumes that themes, term papers, studio work, results of laboratory experiments, examinations and computer-generated material submitted by the student represent the student’s own work. The presentation for
academic credit of the same work in more than one course is prohibited, unless a joint project receives the express and prior consent of the instructors involved. All student work, including collaborations, should conform to the University’s ethical standards. The following remarks are intended to clarify this for all students. Whenever there is a question regarding academic integrity, students and faculty should consult the Student Academic Honesty Code, which appears later in this section of the University Bulletin.

**Cooperation in Preparing Course Material**

Cooperative study of coursework is one of the legitimate ways to master a subject. Joint discussion of problems is therefore encouraged. Sometimes instructors encourage collaborative methods of learning, including peer review of papers. This too can be a productive way of mastering material and promoting one’s writing abilities. Students should be aware that wherever such learning results in an instructor’s evaluation, they are responsible for acknowledging their membership in the group fostering their learning.

**Written Work**

Much coursework is assigned to students individually rather than in groups. In carrying out such assignments, unless prohibited by the instructor, a student may ask others for criticism of a piece of writing. Effective learning is often fostered by cooperation and assistance. Nonetheless, such assistance should never be so complete or so detailed that the piece of writing becomes more the work of the person assisting than of the student. That would be a form of misrepresentation. Similarly, a student may occasionally feel the need for preliminary aid in understanding the principles involved in various problems and the methods to be used in solving them (for example, in mathematics and foreign language courses). Such aid is legitimate, but in every case the student must be responsible for the preparation and presentation of assignments. Without these precautions, the student may unwittingly become involved in collaborative work so extensive that it may be considered plagiarism.

**Laboratory Experiments**

Although students may be permitted or required to cooperate with one or more other students in a laboratory experiment, many experiments are to be done by the students independently, and all require some independent work. For students to submit the results of another’s experiment as their own, or to accept unauthorized help in an experiment, constitutes academic dishonesty.

**Credit**

All sources of assistance — published or unpublished — are to be scrupulously acknowledged in every piece of writing and in oral reports.

**Student Academic Honesty Code**

**Actions Outside the Boundaries of Academic Honesty and Integrity**

No set of written guidelines can anticipate all types and degrees of violations of academic honesty. To the extent that the examples below are not exhaustive, duly-appointed representatives of the University will judge each case according to its merits. They will be guided by the principle that academic dishonesty involves misappropriation of academic or intellectual credit to oneself or to the discredit of others. Instances of such dishonesty include:

**Plagiarism**

Presenting the work of another person as one’s own work (including papers, words, ideas, information, computer code, data, evidence-organizing principles, or style of presentation of someone else taken from the Internet, books,
Plagiarism includes:

- quoting, paraphrasing or summarizing without acknowledgement, even a few phrases;
- failing to acknowledge the source of either a major idea or ordering principle central to one’s own paper;
- relying on another person’s data, evidence or critical method without credit or permission;
- submitting another person’s work as one’s own;
- using unacknowledged research sources gathered by someone else.

Cheating on Examinations

Giving or receiving unauthorized help before, during or after an examination. Examples include:

- unauthorized collaboration of any sort during an examination;
- reading of an examination before it has been given;
- unauthorized use of notes, books, tapes, computers or other aids during an examination;
- allowing another person to take an examination in one’s place;
- looking at someone else's examination during the examination period;
- allowing another person to use one’s own examination during the examination period;
- passing examination information to students who have not yet taken the examination.

Multiple Submissions

Submitting substantial portions of the same work for credit more than once, unless there is prior explicit consent of the instructor(s) to whom the material is being or has been submitted.

Unauthorized Collaboration

Collaboration on projects, papers, computer programs or other academic assignments that has been prohibited by the instructor.

Fabrication and Misrepresentation

Misrepresenting or fabricating material, including misleading citation of sources as well as falsified or fabricated data or results from experiments or other analyses. Misrepresenting facts related to academic performance, including the justification of absences, late assignments and other activities.

Forgery

Imitating another person’s signature on academic documents (for example, an academic advising form or one’s own paper that is signed with respect to the time of submission) or other official documents that have an effect on academic credit (for example, a medical form submitted in support of taking a make-up examination).

Sabotage

Deliberately impairing, destroying, damaging or stealing another’s work or working material. Examples include destroying, stealing or damaging another’s laboratory experiment, computer program, term paper, examination or project; removing uncharged library materials with the effect that others cannot use them; defacing or damaging library materials with the effect that others cannot use them; hoarding or displacing materials within the library with
the effect that others have undue difficulty using them; interfering with the operation of a computer system so it has an adverse effect on the academic performance of others.

**Bribery**

Offering or receiving any service or article with the purpose or effect of receiving a grade or other academic benefit that was not earned on the merits of the academic work.

**Responsibility for Implementation**

Each school of Binghamton University, including the Graduate School, will implement the Student Academic Honesty Code and adjudicate all matters related thereto (except as noted below) through its own committee structure. All reports of findings of guilt (either by admission or by adjudication) will be reported to the Provost’s Office for archival purposes.

For cases involving graduate students in the five professional schools, initial implementation shall occur in those schools. For graduate cases in Harpur College of Arts and Sciences, initial implementation shall occur in the cognizant department or program. Any graduate programs temporarily residing in the Graduate School will report and adjudicate all cases through the Graduate Council’s Academic Standards Committee. At its discretion, the Academic Honesty Committee in any department or school may consult with the Graduate Council’s Academic Standards Committee about unusual or complicated cases. When an act of academic dishonesty violates the University’s policy on ethical research, the procedures outlined in the Policy on Responsible Conduct of Research, as found in the University Bulletin, apply.

For cases involving University-Wide courses (including CDCI, ELI, OUT, SCHL and UNIV courses), implementation and adjudication will occur through committee structures in Harpur College of Arts and Sciences. The Harpur College honesty committee may consult with other schools, as needed, for University-wide honors cases involving students from those schools.

**Publication and Dissemination of the Code**

Students will receive copies of the code during Orientation, when they will discuss its importance and its meaning. They will acknowledge the code and their intent to abide by its terms each semester when they log onto the registration system. Faculty will ensure enforcement of the code.

**Interpretation of the Code**

Violations of the code vary in severity, so that the appropriate punishments vary. Some violations (Category I) may be handled by the instructor and student(s) involved. However, violations requiring more severe penalties (Category II) are appropriately dealt with by the Academic Honesty Committee of the relevant school in accordance with procedures laid out in the Rules of Student Conduct. Category I violations are serious but may be dealt with by the instructor. Category II violations may result in letters of reprimand, probation, suspension or expulsion from the University, transcript notation, and/or revocation of degree or honors. Behavior explicitly permitted in a course syllabus or explicitly permitted by the instructor for a specific assignment is not a violation of the code.

**Plagiarism**

This may be either a Category I or Category II violation, depending on the amount of material that is plagiarized and the degree of premeditation. A Category I violation involves small amounts of plagiarized material — for example, a single passage or a relatively minor idea. Category II violations occur when more material is plagiarized or where central ideas are plagiarized. Category II violations may involve more planning and premeditation.
Cheating on Examinations

This may be either a Category I or Category II violation, depending on the level or amount of unauthorized help given or received on the examination and the degree of premeditation. Category I includes looking at another’s examination or collaborating on a small portion of the examination. Category II violations involve significant cheating on an examination and may involve more planning and premeditation.

Multiple Submissions

This is a Category I violation.

Unauthorized Collaboration

This is a Category I violation, unless it also involves Category II offenses.

Fabrication and Misrepresentation

This can be a Category I or II violation.

Forgery

This is a Category II violation.

Sabotage

This is a Category II violation.

Bribery

This is a Category II violation.

Note that misconduct involving forgery, sabotage and bribery refers only to such offenses when committed for an academic purpose as defined in the Student Academic Honesty Code; any violations involving other aspects of student life or subject to federal, state and/or local law are dealt with through the University judicial system.

Enforcement Procedures

Each school should develop its own procedures, consistent with these guidelines. These procedures may vary, depending on the size of the school and other relevant factors. The appropriate procedures for addressing the two categories of violations are as follows.

Category I Violations

If an instructor discovers one of these violations, the instructor should first communicate with the student regarding the nature of the charge and the evidence on which the instructor has relied in reaching the conclusion that a violation has occurred. The student should be given the opportunity to respond. If the instructor remains convinced by the preponderance of evidence that a violation has occurred, the instructor may check to see if there is a record of a previous violation by the student. Students who are accused of a second Category I offense will be treated as
being charged with a Category II offense and referred to the committee of the school in which the offense occurred.

If there is no previous violation, the faculty member should impose the appropriate penalty. The instructor should then fill in a Report of Academic Dishonesty Form describing the violation that occurred and the evidence supporting that finding. The form will also explain to the student the procedures whereby the student may appeal the decision. The student will be asked to read and sign the form and will be provided with a copy. If the student chooses not to sign the form, the case goes to a hearing before the committee of the school in which the offense occurred. The instructor will then forward the Report of Academic Dishonesty Form along with the supporting evidence to the chair of the appropriate committee, who will send a copy to the Provost’s Office, where it will be kept on file. Records of Report of Academic Dishonesty forms should be retained until the student's graduation, or for six years following the semester or term of the violation in the case of a student who departs from the University without graduating.

**Category II Violations**

If an instructor discovers a Category II violation, the instructor should first communicate with the student regarding the nature of the charge and the evidence on which the instructor has relied in reaching the conclusion that a violation has occurred. If the instructor remains convinced that a Category II violation has occurred, he or she should submit a detailed written charge with supporting evidence to the honesty committee of the school in which the offense occurred. The student will be notified of the charge and the date of the hearing and will receive a copy of the committee procedures. The instructor should assign an Incomplete grade for the student’s work, pending the outcome of the hearing. If, after the hearing, the committee concludes that the charges were unproven, the faculty member should re-evaluate the student's work in light of that finding. In determination of any penalty for Category II violations, committees will consider all relevant factors, including the nature of the violation and any previous violations that may have been committed by the student. The chair of the appropriate committee will report any guilty findings to the Provost’s Office, where they will be kept on file. Records of hearing cases should be retained for six years following the semester or term in which the hearing is held. If a hearing case is appealed, the six years would begin after the semester or term in which the appeal decision is made.

**Violations Concerning Honors Projects, Theses and Dissertations**

In cases of alleged violations of the academic honesty code in honors projects, theses or dissertations, a faculty member who was not part of the original honors, thesis or dissertation committee may be appointed by the head of the academic unit to investigate. The investigation will be conducted in accordance with the policies stated above for Category II violations and under the guidance of the detailed procedures developed by each unit. In addition to possible sanctions mentioned above, there may be other sanctions as deemed appropriate, such as notation on the transcript; requiring students/graduates to revise and resubmit honors projects, theses or dissertations for approval; and/or revocation of the degree or honors.

*Note: This ends the section of the Bulletin and information applicable to Student Academic Honesty Code.*

**Academic Grievance Procedures**

If a student has a complaint about a grade or other academic grievance, the first step is to talk to the instructor involved. If the matter is not settled satisfactorily, the student should contact the department chair or division director about the complaint and submit the complaint through the formal grievance procedure established by the department. The department decision may, if the student still feels aggrieved, be appealed to the appropriate dean.

**Copyright Law**

Students should be aware that copyright laws cover photocopying and other reproductions of materials.
Summary of Civil and Criminal Penalties for Violation of Federal Copyright Laws

Copyright infringement is the use of someone else's work without permission. It is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading parts or all of a copyrighted work without authority or permission constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or "statutory" damages affixed at not less than $750 and not more than $30,000 per work infringed. For "willful" infringement, a court may award up to $150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $250,000 per offense. For details, see Title 17, United States Code, Section 506.

For more information, please see the website of the U.S. Copyright Office at [http://www.copyright.gov](http://www.copyright.gov), especially their FAQs at [http://www.copyright.gov/help/faq](http://www.copyright.gov/help/faq).

Classroom Discipline

Any instructor may exclude from attendance any student who, in the instructor’s judgment, has seriously impaired the class’s ability to achieve the objectives of the course.

The student may appeal the instructor’s action to the department or school via the department’s grievance procedure. If the student is not satisfied with the ruling or recommendation emerging from the grievance hearings, an appeal may be brought to the appropriate dean.

Attendance in Classes

Students are expected to attend all scheduled classes, laboratories and discussions. Instructors may establish their own attendance criteria for a course. They may establish both the number of unexcused absences permitted to receive credit for the course and the number of such absences after which the final grade may be adjusted downward. In such cases it is expected that the instructor stipulate such requirements in the syllabus and that the syllabus be made available to students at or near the beginning of classes. In the absence of such statements, instructors have the right to deny a student the privilege of taking the final examination or of receiving credit for the course, or may prescribe other academic penalties if the student misses more than 25 percent of the total class sessions. Excessive tardiness may count as absence.

In order to attend a class, either undergraduate or graduate, individuals must be appropriately registered for the particular course or receive the permission of the instructor.

For more information, please see the current Faculty-Staff Handbook section on Instructional Policies at [http://www2.binghamton.edu/academics/provost/faculty-staff-handbook/handbook-vii.html](http://www2.binghamton.edu/academics/provost/faculty-staff-handbook/handbook-vii.html).

Final Examinations

It is the University's policy that all faculty members administer their final or end-of-course examinations during the official Examination Period, at the time scheduled by the Office of Course Building and Academic Space Management. Faculty who wish to administer final or end-of-course examinations outside the official Examination Period must have permission of the deans of their schools. Except examinations for labs, students shall not be
Students should not have to take three or more final examinations in one 24-hour period. In cases in which a student has more than two examinations scheduled during a 24-hour period, faculty are urged to arrange a time for a make-up exam. In cases where a conflict arises, the faculty member teaching the largest course will be expected to arrange a make-up examination because s/he has the greatest probability of offering another make-up for other valid reasons.

Student Authentication Policy

At Binghamton University, distance-learning students must log into a secure portal via a customized user ID and password. All students who enroll in courses at Binghamton are authenticated through an identity management system that provides a unique user name and password for access. Without these identifiers, students cannot register for classes or access University tools for distance learning. The University’s policies regarding academic honesty and acceptable use of information technology services include penalties for unauthorized use of another individual’s name and password and for cheating on examinations. In addition, some academic units offering distance learning classes use proctored exams. In the future, when other methodologies to assist with student authentication become more prevalent and affordable, Binghamton University will use them. (For more information, please see the ITS acceptable use policy at [http://www.binghamton.edu/its/policies/acceptable-use.html](http://www.binghamton.edu/its/policies/acceptable-use.html) and the Academic Honesty Policy in the "Academic Policies and Procedures for All Students" section of the University Bulletin.) Instructors of distance learning courses are encouraged to require students to acknowledge the acceptance of these policies in course syllabi and in online materials provided for the course.

Distance Learning Courses

Distance learning courses are indicated in the schedule of classes on BU Brain with an Instructional Method of Online Asynchronous (OA), Online Synchronous (OS), Online Combined (OC), or Online Hybrid (OH). Online Asynchronous courses are those in which the instruction is recorded/stored and then accessed by the students at another time. Online Synchronous courses are those in which students are at locations remote from the instructor and viewing the instruction as it occurs. Online Combined courses are those in which students are at locations remote from the instructor and viewing the instruction as it occurs. Online Combined courses are those in which there is a combination of asynchronous and synchronous instruction that occurs over the length of the course. Online Hybrid courses are those in which there is both in-person and online (asynchronous and/or synchronous) instruction that occurs over the length of the course.

Policy on Responsible Conduct of Research

The Public Health Service and National Science Foundation require recipients of grants to develop policies on scientific misconduct and adopt procedures to both uncover acts of research fraud and examine allegations of misconduct in the conduct of research. On the advice of the Graduate Council and its Advisory Committee for Scholarship and Research, the University has adopted the following policies regarding the responsible conduct of research in all fields throughout the University.

Definition

Research misconduct is defined as fabrication, falsification or plagiarism in proposing, conducting or reporting research and creative scholarly activity. It does not include honest error or honest differences in interpretations or judgments of data.

Policy
The University has established a procedure to review reports of research misconduct. The principles associated with Binghamton’s policy and procedure are as follows:

- The University shall treat all parties with justice and fairness and shall be sensitive to each person’s reputation and responsibilities.
- Procedures shall preserve the highest attainable degree of confidentiality compatible with an effective investigation response.
- Procedures shall be as expeditious as possible in leading to the resolution of the charges in a timely manner.
- The integrity of the process shall be maintained by carefully avoiding any real or apparent conflict of interest.

Procedure

The vice president for research (VPR) has primary responsibility for overseeing research integrity, and shall appoint a research integrity officer (RIO), who will be primarily responsible for the correct observance of the procedures set forth below.

Reports of misconduct shall be handled in a four-stage process:

- an inquiry to determine whether the allegation or related issue warrants further investigation;
- when warranted, an investigation to collect and examine all pertinent evidence;
- a formal finding on the allegation; and
- appropriate administrative action on the matter.

1. Inquiry

1. The contact person for allegations of research misconduct is the research integrity officer. The RIO shall be responsible for securing and maintaining written records for all allegations.

2. An inquiry shall be made into any allegation that the initiator (the person making the allegation) provides in writing to the RIO. The purpose of this inquiry is to determine whether a full investigation is warranted. The RIO will notify the respondent (the person about whom the allegation is made) in writing of the allegations (if possible, maintaining the confidentiality of the initiator), and of the respondent’s right to submit a written response to the allegation. The RIO shall submit the allegation along with all evidence that may exist, any written rebuttal from the respondent, and any other pertinent documentation to the Advisory Committee for Scholarship and Research of the Graduate Council for review. The RIO will provide staff support to the committee. The Advisory Committee shall make a written recommendation to the VPR on whether a formal investigation is warranted. This process must be completed within 60 days of the receipt of the initial allegation unless an extension of time is approved by the VPR.

3. Within 10 days of receiving the recommendation, the VPR, after consulting with Legal Affairs and the RIO, shall determine whether to conduct an investigation, to drop the matter or to take some other appropriate action. If the VPR decides not to pursue the matter further, the RIO will seal all files and notify the respondent and the initiator in writing that allegations have been dropped. If the VPR decides to proceed with an investigation, the RIO will notify the respondent and initiator in writing, and the VPR will notify the respondent’s chair, dean and vice president; the RIO will also notify external funding agencies and governmental offices as contractually required.

2. Investigation

1. The VPR, within 30 days of the inquiry report, will appoint an investigation panel of persons who have no conflicts of interest with the respondent and have research backgrounds that qualify them to understand the
subject matter of the alleged research misconduct. The panel will consist of a minimum of three persons, at least one of whom must be a faculty member. The respondent may challenge any panel member, within 14 days of written notification of panel membership, on the grounds that the member does not meet the above criteria.

2. The VPR shall define the subject matter of the investigation in a written charge to the investigation panel. The VPR may change the subject matter during investigation if substantive new material is discovered by the investigation panel; the panel must notify the VPR of such new material.

3. The RIO will convene the first meeting of the investigation panel, and will provide staff assistance to the panel. The panel will select a chair at the first meeting.

4. The panel shall present a written report to the VPR within 90 days of its appointment. This report will contain an explicit finding of fact with respect to each allegation in the investigation charge listing the supporting evidence, and will describe the investigative process used. The report will also state the panel’s conclusions as to whether any of the proven allegations violate research integrity. Investigation will be completed within 120 days or an extension must be justified by the vice president.

5. A copy of the report will be made available by the RIO to the respondent. The respondent may submit written comments within 14 days of receipt of report to the VPR through the RIO.

3. Finding

- The VPR will send the report, with any written comments of the respondent, to the president through the vice president for academic affairs, together with the VPR’s recommendations.

4. Actions

1. Where allegations are not substantiated, the University shall take action to clear the reputations of those falsely accused; all files relating to the case will be sealed.

2. When the findings of the investigation substantiate the allegation of misconduct, the president shall initiate appropriate action, depending on the nature of the misconduct and the employment status of the individual involved, and shall notify the sponsor of the action if the research was performed with external support. United University Professions (UUP)-represented employees may be disciplined according to Article 19 of the agreement with UUP or may be subject to such other action as the president deems appropriate.

3. The research record shall be corrected if fabricated or fraudulent information has been published.

Notification of Other Agencies during Process

1. Criminal Activities: If any criminal activities are discovered or claimed during inquiry or investigation, University Counsel shall be informed.

2. Federal-Sponsored Research: Federal agencies will be kept informed of all inquiries and investigations as required contractually. Specifically:

   1. in the early inquiry stage if there is one or more of the following:

      - an immediate health hazard;
      - need to protect sponsor resources;
      - need to protect human or animal subjects;
      - need to protect person reporting misconduct;
2. when the VPR recommends an investigation;
3. the findings of the investigation and the institutional sanctions.

3. University student code: Other University agencies may be informed and, in turn, those agencies may take action as well.

**Student Research Projects**

1. Students who intend to contact private, voluntary or governmental agencies as part of their research in an academic project should first ask the faculty member who assigned the project to secure permission and cooperation from University and agency officials.

2. Students engaged in research, independent study, internships or other courses/projects involving human subjects must be made fully aware of their ethical, legal and moral responsibilities and their potential legal/financial liabilities when participating in such activities. Students planning research and/or course work involving human subjects should consult their faculty advisor for project design and methodology. The University’s Human Subjects Research Review Committee (HSRRC) reviews and must approve all research activities involving human subjects; HSRRC approval must be obtained prior to the initiation of the research. The Division of Research staff provides the appropriate review forms and guidance to initiate the human-subjects research review process.

3. Students planning research and/or coursework involving live vertebrate animals should consult their faculty advisor for project design and methodology. In addition, the Institutional Animal Care and Use Committee (IACUC) must first review and approve such projects to ensure compliance with University, state and federal regulations regarding the humane care and treatment of vertebrate animals. For appropriate review forms and guidance, contact the Animal Resources Laboratory at 607-777-4905.

4. Students planning projects involving the use of recombinant DNA molecules must consult with their faculty advisor for proper project protocol. The Institutional Biosafety Committee (IBC) oversees all research on campus involving the use of recombinant DNA molecules in order to ensure compliance with both University and federal regulations. IBC approval must be obtained prior to the initiation of any research involving the use of recombinant DNA molecules. Further information and guidelines are available from the Division of Research at 607-777-6137.

5. Students planning research projects involving the use of radioactive materials must consult with their faculty advisor for proper project protocol. The Radioactive Safety Committee oversees all research on campus involving the use of radioactive materials. For further information, contact the radiation safety officer at 607-777-4370.

6. Failure to comply with these guidelines may result in the Division of Research, HSRRC, IACUC and/or IBC notifying other University agencies and, in turn, those agencies taking action.

**Unlawful Sale of Dissertations, Theses and Term Papers**

The following is a reproduction of section (213b) of the Education Law of New York State, concerning the illegal sale of term papers, theses or dissertations:

1. No person shall, for financial consideration, or the promise of financial consideration, prepare, offer to prepare, cause to be prepared, sell or offer for sale to any person any written material which the seller knows, is informed or has reason to believe is intended for submission as a dissertation, thesis, term paper, essay, report or other written assignment by a student in a university, college, academy, school or other educational institution to such institution or to a course, seminar or degree program held by such institution.

2. Nothing herein contained shall prevent such educational institution or any member of its faculty or staff, from offering courses, instruction, counseling or tutoring for research or writing as part of a curriculum or other
program conducted by such educational institution. Nor shall this section prevent any educational institution or any member of its faculty or staff from authorizing students to use statistical, computer or any other services which may be required or permitted by such educational institution in the preparation, research or writing of a dissertation, thesis, term paper, essay, report or other written assignment. Nor shall this section prevent tutorial assistance rendered by other persons which does not include the preparation, research or writing of a dissertation, thesis, term paper, essay, report or other written assignment intended for submission to such educational institution in fulfillment of the requirements for a degree, diploma, certificate or course of study. Nor shall any person be prevented by the provisions of this section from rendering services for a fee that shall be limited to the typing, transcription or reproduction of a manuscript.

3. Nothing contained within this section shall prevent any person from selling or offering for sale a publication or other written material which shall have been registered under the United States laws of copyright, provided, however, that the owner of such copyright shall have given his authorization or approval for such sale and provided further that such publication or other written material shall not be intended for submission as a dissertation, thesis, term paper, essay, report or other written assignment to such educational institution within the state of New York in fulfillment of the requirements for a degree, diploma, certificate or course of study.

4. No person shall sell, assign or otherwise transfer for business or for any other purpose to any person any information and material of a personal or private nature acquired from a purchaser of a dissertation, thesis, term paper, essay, report or other written assignment without the prior consent of such purchaser. The term "information and material of a personal or private nature" as used in this subdivision shall include, but not be limited to the name of such purchaser, his address and telephone number, the name of such educational institution, the name or number of the course, the name of the faculty member or members for whom such written assignment has been prepared and any description of the research involved or the nature of such written assignment.

5. A violation of the provisions of this section shall constitute a class B misdemeanor.

6. The attorney general and district attorney of the county wherein a violation of this section occurs shall have concurrent authority to investigate and prosecute any violation of this section and any related violations discovered during the course of such investigation.

7. Whenever there shall be a violation of this section, an application also may be made by the attorney general in the name of the people of the state of New York to a court or justice having jurisdiction to issue an injunction, and upon notice to the defendant of not less than five days, to enjoin and restrain the continuance of such violation; and if it shall appear to the satisfaction of the court or justice that the defendant has, in fact, violated this section, an injunction may be issued by such court or justice, enjoining and restraining any further violation, without requiring proof that any person has, in fact, been injured or damaged thereby. In any such proceeding the court may make allowances to the attorney general as provided in section eighty-three hundred three, subdivision six of the civil practice law and rules. In connection with any such proposed application, the attorney general is authorized to take proof and make a determination of the relevant facts and to issue subpoenas in accordance with the civil practice law and rules. Additionally, the attorney general may apply in any such proceeding for a monetary penalty of not more than one thousand dollars per violation.

Access to University Records

The Freedom of Information Law (New York State Public Officers Law, Article 6) provides rights of access to University records, except those that fall within one of the nine categories of deniable records [Public Officers Law § 87(2)].

Written application for examination and copying of accessible records must be made either during regular business hours or on an approved form, or by written or electronic correspondence, addressed to the Records Access Officer, Office of University Counsel, Couper Administration Building, Room AD 614, or FOIL@binghamton.edu. Appeals of a denial of requested information may be taken within 30 days to Kellie Dupuis, FOIL Appeals Officer, State University
**Student Records**

The Family Educational Rights and Privacy Act of 1974 (FERPA), commonly known as the Buckley Amendment, provides students with access to their files and assures them of the confidentiality of their records. Undergraduates’ main academic files are kept in the University Registrar’s Office. Graduate records are kept in the Graduate School. The University is not required by legislation to make available to students files kept in the office of the New York State University Police, Binghamton; Binghamton University Counseling Center or the Student Health Center. Students with files in these offices should contact the appropriate office with any questions.

There is to be no oral or written release of personally identifiable information from any student’s educational record without the signed and dated consent of the student, except to:

- authorized University personnel defined by the person responsible for the file as having a reasonable need to know;
- state and federal education authorities to whom information must be made available by statute and/or for the audit of federal programs;
- organizations and educational agencies involved in testing, administering financial aid or improving instruction, provided the information is presented anonymously;
- accreditting agencies;
- appropriate persons to comply with a court-ordered subpoena, in which case an attempt is made to notify the student in advance unless prohibited by court order;
- appropriate persons in the case of emergency;
- University counsel.

Information printed in the University Directory and information routinely released to the public, such as Commencement listings, election results and rosters of athletic teams, is regarded as public or “directory information” and, as such, may be released without student consent.

The following information is defined as directory information and may be routinely released unless specified differently by the student:

- name;
- local address and telephone number;
- home address and telephone number;
- e-mail address;
- class level;
- degree information (including any associated majors, certificates or minors);
- dates of attendance.

Students should be aware that even though they may request and receive directory exclusion status, it is a federal requirement that the University promptly provide lenders and guarantee agencies with any information it has regarding the last known address, surname, employer and employer address of a borrower who attends or has attended the University.

Information that is not classified as directory information and may not be released to third parties without written consent of the student includes (but is not limited to) the following:
Third-party sources requesting to know a student’s course schedule for “emergency purposes” should be referred to the New York State University Police, Binghamton. University Police will attempt to ascertain the nature of the emergency and contact the student with the message.

Other Information Regarded as Public

Other information occasionally released in a routine manner to appropriate representatives of various media for publicity purposes includes:

- awards and academic degrees awarded at Binghamton University;
- participation in recognized University activities (election outcomes, membership in athletic teams, participation in plays, etc.);
- personal information on members of University athletic teams (height, weight, high school, etc.).

Students with questions about their records or wishing to withhold their names from the University Directory should contact the Registrar’s Office at 607-777-6088.

Student Absences for Religious Beliefs

In accordance with New York State Education Law 224-a, student absences may be excused as follows:

- No person shall be expelled from or be refused admission as a student to an institution of higher education for reason that he or she is unable, because of his or her religious beliefs, to register or attend classes or to participate in any examination, study or work requirements on a particular day or days.

- Any student in an institution of higher education who is unable, because of his or her religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirement.

- It shall be the responsibility of the faculty and of the administration officials of each institution of higher education to make available to each student who is absent from school because of his or her religious beliefs, an equivalent opportunity to register for classes or make up any examination, study or work requirements that he or she may have missed because of such absences on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.

- If registration, classes, examinations, study or work requirements are held on Fridays after 4 p.m. or on Saturdays, similar or makeup classes, examinations, study or work requirements, or opportunity to register shall be made available on other days where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements, or registration held on other days.

- In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his or her availing himself or herself of the provisions of this
Any student who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his or her rights under this section.

It shall be the responsibility of the administrative officials of each institution of higher education to give written notice to students of their rights under this section, informing them that each student who is absent from school because of his or her religious beliefs must be given an equivalent opportunity to register for classes or make up any examination, study or work requirements which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to such student such equivalent opportunity. It is the student’s responsibility to notify their instructors at least one week in advance of a scheduled religious holiday, if they intend to miss class. Instructors will determine the coursework that should be completed in order to make up the student’s absence. Students are responsible for the prompt completion of any alternative assignments.

Binghamton University Online Student Records

All students at Binghamton University have 24/7 access to an online information service through BU BRAIN Self Service. Students may access BU BRAIN Self Service, via the University Portal at http://my.binghamton.edu/, from their residence halls, home computers or in the on-campus public computing areas. In BU BRAIN Self Service, students may register for classes, add and drop courses as well as change grading options (within specified time frames), check and print their course schedules, check their grades, check for any financial obligations owed to the University, make payments, review their financial aid status, manage their computer accounts, request an official transcript, print an unofficial transcript and obtain the University’s official certification of enrollment form.

Registration and Changes in Program

Students at Binghamton University register for their classes using the online student registration system. Students are responsible for ensuring that they are registered for the proper number of credits and types of courses. Although staff may assist with student registration, it is ultimately each student’s responsibility to check his/her registration, verify that it is correct, and to correct it as needed. Registration/course schedules can be checked and verified in BU BRAIN Self Service via the Portal at http://my.binghamton.edu/.

Currently enrolled, degree-seeking students may participate in early registration for classes in an upcoming term (spring or fall) approximately two-thirds of the way through the current semester. Students are assigned registration start times, referred to as “time tickets,” based on the number of credits they have completed. Registration start times are available online approximately two weeks prior to early registration on the student's record in BU BRAIN Self Service via the Portal.

New and transfer students may register for classes during Orientation or just before the start of classes. There is a brief registration period just prior to the start of classes each semester when eligible students may register for courses. Registration must be completed by each student in BU BRAIN Self Service via the Portal before the add/drop deadline for that term.

Students who have outstanding debts with the University will not be permitted to register for courses or obtain transcripts until the outstanding debts are satisfied (paid in full). In addition, debts owed to the University that are not paid by the end of the term will be forwarded to a collection agency or the NYS Attorney General’s office for collection.

Binghamton University also conducts an add/drop course period each semester. Students may add a course to their
schedule, or drop a course without having a grade recorded, up until the add/drop course deadline. This deadline is listed in the academic calendar. A course withdrawal period extends from the add/drop deadline until the announced course withdrawal deadline (fall and spring semester: around the ninth week of classes; Winter Session and Summer Session: times vary). Students who drop courses during this period receive a grade of "W". The course withdrawal deadline is also the deadline for changing grading options for individual courses. These policies apply to courses offered on a full-term basis. Deadlines for adding and dropping courses offered for a half-semester or less are adjusted accordingly. Deadlines for half semester courses are available on the Registrar's website, http://www2.binghamton.edu/registrar/deadlines.html.

All course adds or drops occurring after the deadline dates require academic approval from the student's academic advising office. Such late requests should be made through the automated petition process in BU BRAIN Self Service via the Portal.

Students must cite extraordinary circumstances to justify a late add, a late drop or late withdrawal, that is, circumstances beyond their control and beyond their ability to foresee. Poor judgment, academic incompetence or not registering for a course by the deadline does not qualify as an extraordinary circumstance.

For information on auditing courses, please see the Admission section of the University Bulletin.

**Grading Systems**

At the end of each semester, students may access their grades in BU BRAIN Self Service via the Portal at http://my.binghamton.edu/. For a discussion of the grading system used in each undergraduate college and school, see the specific college and school sections in this publication. Under appropriate circumstances, students may take undergraduate courses in any of the schools at Binghamton University. Courses are usually graded according to the offering college or school’s grading system; e.g., a course offered by the School of Management is graded using the School of Management's grading system, and a Harpur College course is graded according to the Harpur system. However, if a student petitions the instructor for an exception and the petition is approved, the grading system of the student's school may be used. (Example: a student in Harpur College of Arts and Sciences who takes a School of Management course petitions the instructor and the Harpur College Academic Advising Office to request to be graded according to the Harpur grading system.) Approved petitions must be submitted to Financial Aid and Student Records by the deadline for the change-of-grading option/withdrawal deadline for processing.

Students should realize that not only do grading systems differ from school to school, but that the various schools also have their own policies on 1) taking courses in other Binghamton University schools and 2) on petitioning for grading options. These grading systems are described in this publication in the introductory section for each school. Students wishing to register a complaint about alleged unfair grading procedures should speak with the instructor or the appropriate department chair.

**Disciplinary Suspension or Expulsion**

Students who are suspended have the following statement placed on their transcript: "Disciplinary Suspension." The suspension notation is removed when the suspension period expires.

Students who are expelled have the following statement placed on their transcript: "Disciplinary Expulsion." Ordinarily, notation of expulsion is a permanent notation on the transcript. After five years from the date of the expulsion, expelled students may submit a written petition to have the notation removed from their transcript. The petition is submitted to the dean of students or his/her designee and must outline the reasons for the request and provide documentation of activities (work, education, etc.) since the student’s expulsion from Binghamton University.

Students who have completed degree requirements but who have been suspended for academic dishonesty or judicial reasons must complete the terms of the suspension prior to degree conferral. Suspension is the separation
of a student from the University for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified. Students who have been suspended may not be on campus without specific, written permission of the dean of students.

**Withdrawal**

**Involuntary Withdrawal of Students**

Students may be involuntarily withdrawn from the University based on the recommendation of the medical director of the University Health Service office or the director of the University Counseling Center without academic penalty; that is, they may continue as students in good academic standing and are eligible to return upon clearance by the dean of students. Efforts are made to preserve a student's academic progress with Incompletes and/or Withdrawals through consultation with faculty. If there are irreconcilable disagreements in these discussions, the provost will make the final decision regarding the disposition of the student's academic records. Recommendations for involuntary withdrawals are submitted to the dean of students for appropriate action. Students are sent written notification of the intended action. Appeals may be made in writing to the vice president for student affairs within 10 business days. Students who are involuntarily withdrawn from the University for medical reasons are not readmitted without a recommendation from either the medical director of the University Health Service or the director of the University Counseling Center. Students on voluntary or involuntary medical leave who are otherwise eligible to continue with their studies may request a letter to this effect from the dean of students. Health insurance companies may accept this type of letter for continuing health insurance benefits for a student covered by the policy of a parent or guardian.

**Full University Withdrawal**

Students who withdraw from all courses for which they are registered at the University must follow a formal withdrawal procedure if they wish their record to indicate good standing. Mere absence from class or failure to register does not constitute due notice of withdrawal. Students must submit the withdrawal form by the last day of classes for that semester.

Approved withdrawals are noted on the student's record as an Official Withdrawal and, in place of a regular grade, the courses have a "W." An official withdrawal processed prior to the add/drop deadline will result in the deletion of all courses, in which case courses will not be marked with a "W" on the student's transcript, because no grades are recorded for students who formally withdraw within the first two weeks of classes. After the add/drop deadline, withdrawal results in a notation on the transcript stating “Official University Withdrawal (date).” Students required to withdraw for disciplinary reasons are not entitled to any refund of tuition.

Students should contact their schools with any questions regarding the withdrawal procedure.

**Graduate Students**

Graduate students who wish to drop ALL fall or spring semester courses or to withdraw from Binghamton University in good standing must submit the graduate student withdrawal form.

Students should read the policies on graduate student withdrawal in the [Binghamton University Bulletin](#) and the [Graduate School Manual](#).

- Students are required to speak to their department chair or graduate director to clarify their student status and funding status.
- **International students** must also speak with an International Student and Scholar Services (ISSS) representative about the withdrawal.
Financial Aid recipients must also contact Financial Aid and Student Records to discuss the effects of the withdrawal.

Students should submit the completed graduate student withdrawal form to the Graduate School in Couper Administration Building Room 134 or to gradsch@binghamton.edu.

Undergraduate Students

Prior to the Course Withdrawal Deadline

Students are permitted to withdraw from the University after consultation with the academic advising office of their college.

After the Course Withdrawal Deadline

Students requesting to withdraw from the University must consult with the academic advising office of their college for consideration of this request. If there is no previous withdrawal on the student’s record, the request will be approved. Students requesting to withdraw for medical reasons will be referred to the Dean of Students office. Medical withdrawals will require the Dean of Students' approval, and students will be required to follow the Dean of Students' readmissions procedures. Students who are attempting a second (or subsequent) semester withdrawal for reasons other than medical reasons will have their cases reviewed on an individual basis. In addition, any student approved for multiple withdrawals must consult the academic advising office of their college for readmissions procedures.

Financial Aid Recipients

The University is required to perform a Title IV refund and repayment calculation for any student who withdraws from the University and is a recipient of federal financial aid for the semester of the withdrawal. The calculation determines how much financial aid the student has earned and how much must be returned to the federal government. The date of the withdrawal triggers the amount to be repaid, if any. Students who stop attending, but do not formally withdraw, are subject to the same rules and return of federal funds based on their last date of attendance, last date of academically-related activity or the midpoint of the semester, if no date or withdrawal form is provided.

Information Regarding Students Called to Active Military Duty

Academic Information

Undergraduate students called to active military duty during an academic term should contact their Academic Advising Office. Graduate students should contact their academic department and the Graduate School. The academic advisor or department will advise each student regarding his/her options. The following factors should be considered when advising the student: timing of orders to report to active duty in relation to the semester start and end dates; the length of the active duty orders; the student’s course workload; percentage of work completed, etc. The student will either be allowed to remain in one or more of their courses, will be allowed to take an Incomplete grade in one or more courses, or will be advised to drop all courses (Withdrawal) for the semester.

Administrative Information

Students who withdraw from all courses for which they are registered at the University must follow a formal withdrawal procedure. Mere absence from class or failure to register does not constitute due notice of withdrawal.
For information on withdrawal procedures, please contact the Dean of Students Office (located in University Union West, Room 205 or by calling 607-777-2804) to initiate the process.

- Veteran students recalled to active duty must notify the TRIO Office for Veterans Services at 607-777-2024.
- International students called to military service in their homeland must contact the International Student and Scholars Services Office at 607-777-2510 for information on appropriate departure procedures required under U.S. Immigration law.
- Graduate students called to active duty must provide written documentation of their deployment orders and may then apply for a leave of absence. Students on leave are excused from the registration requirement during the period of the leave. Leaves are normally granted for a period not exceeding 12 months. If possible, requests for leaves of absence should be submitted one month prior to the semester for which the leave is requested. For further details contact the Graduate Office at 607-777-2151.

Financial Information

Tuition

Students who withdraw from the University to enter military service are granted full tuition refunds for the semester if no academic credit is received (does not apply to international students serving the military in their homeland). A copy of the official military orders must be provided to the University. During the withdrawal procedure, the student must meet with a representative of the Student Accounts Office and make arrangements to provide the document in accordance with State University of New York policy 8 NYCRR § 302.2.

(http://www.suny.edu/sunypp/documents.cfm?doc_id=118)

There shall be no tuition or fee liability established for a student who withdraws to enter military service prior to the end of an academic term for those courses in which the student does not receive academic credit.

Note: The term "military service" means full-time active duty in the U.S. Army, Navy (including Marine Corps), Air Force, Coast Guard of the United States, or qualifying National Guard duty during a war, other military operation, or national emergency as defined in Section 5 of the Higher Education Relief Opportunities for Students (HEROES) Act (Public Law 108-76).

Enlistment under a delayed enlistment plan does not constitute "full-time duty" until the student is required to leave school on the effective date of active duty as stated in the student's orders.

Documentation of the call to active duty in the military service (official orders) shall be provided to and retained by the campus.

Housing

Students who withdraw from the University are assessed a prorated room charge based on the date the student removes his/her belongings from the room, completes a room inventory and returns the room key to a member of the Residential Life staff. The prorated charge is calculated by multiplying the weekly room charge by the number of weeks housed.

Dining

The amount of a resident dining plan refund is a percentage of the total meal plan paid for that semester, determined according to a prorated weekly schedule. The same prorated percentage is applied to both the cost of the operations component and the discretionary component. An eligible student will receive the anticipated refund.
Financial Aid Recipients

The University is required to perform a Title IV refund and repayment calculation for any student who withdraws from the University and is a recipient of federal financial aid for the semester of the withdrawal. The calculation determines how much financial aid the student earned and how much must be returned to the federal government. The date of the withdrawal triggers the amount to be repaid.

Loans

Banks and other lenders have procedures in place to grant deferments/forbearance under the amendment to 34 CFR 682.211(c) which was published on November 1, 2002 (at 67 Fed. Reg. 67048).

(http://ifap.ed.gov/dpcletters/L03241.html)

Borrowers

If a borrower's loan is in an in-school status, in-school deferment status, or in a grace period status when the borrower is ordered to active duty or reassigned, the lender must maintain the loan in that status during the period of the borrower's active duty service or reassignment, plus the time necessary for the borrower to resume enrollment in the next regular enrollment period that is reasonably available to the borrower if the borrower is planning to go back to school. However, this maintenance of loan status may not exceed a total of 3 years, including the period of time necessary for the borrower to resume enrollment. Additionally, if the loan was in a grace period status at the time the borrower was ordered to active duty, the period of time during which the borrower served on active duty must be excluded from the grace period in order to ensure that the borrower receives the full grace period in the future. It is the responsibility of the student to notify the lender.

Readmission (or Reenrollment) Information

Undergraduate students who have completed their tour of duty and wish to return to the University to resume their studies should contact the Undergraduate Admissions Office at 607-777-2171.

Graduate students who have completed their tour of duty and wish to return to the University to resume their studies should contact the Graduate School at 607-777-2151.

Official Transcripts

Academic records of all Binghamton University students are maintained by Financial Aid and Student Records. An official transcript is a student's complete listing of all coursework taken at the University. Students may obtain copies of their official transcript, or request that the University send them directly to other institutions, provided the student is in good financial standing (free of outstanding debts) with the University. Current students may request a transcript in BU Brain Self Service via the portal at http://my.binghamton.edu/. All others please submit a transcript request by visiting http://www2.binghamton.edu/registrar/services/transcripts.html.

Application for Degree

Undergraduates should file an Application For Degree (AFD) with Financial Aid and Student Records by the deadline of the semester of the anticipated graduation semester. The deadline is the fifth day of classes. The application form is available in BU BRAIN Self Service via the Portal at http://my.binghamton.edu/.

Any undergraduate student who files an AFD should also print and review his/her academic requirements/progress toward their degree via the degree audit report. This report is available in BU BRAIN Self Service via the Portal at http://my.binghamton.edu/. The report will show which program requirements have been completed and which, if any, requirements remain for degree completion. If a student has questions regarding the degree audit report, he/she
should consult with an academic advisor in his/her school or with their major departmental advisor. Completion of undergraduate degree requirements and all academic work pertaining to that completion, must be submitted to faculty within 30 calendar days of the last day of classes of the semester in which the student has declared to graduate. Academic work refers to study abroad courses, courses taken at other institutions and courses taken at Binghamton University. In the semester in which the student has declared to graduate, all incompletes must be completed within 30 days of the last day of classes. If requirements are not met by the deadline, students must submit a new AFD for a future semester. Faculty should submit the grades for any incompletes or missing grades within 72 hours after the work has been received and evaluated.

Undergraduate degrees are conferred for spring and fall semesters as well as summer and winter terms.

Graduate students should file a Graduate Application for Degree (GAFD) with the Graduate School. Instructions and the online form can be found at http://binghamton.edu/grad-school/resources/graduation/index.html. Students should complete the form in the semester in which they expect to receive a graduate degree.

Students planning to attend the University-wide Commencement ceremonies can find complete details about participation registration, regalia, event dates, times and locations, diplomas and more at http://www.binghamton.edu/commencement/.

Academic Policies and Procedures for Graduate Students

Graduate Information

Determination of Requirements

Academic requirements for graduate programs are listed in the individual sections of the Bulletin. Matriculated students follow the requirements for graduation listed in the Bulletin current at the time they are admitted (or readmitted). With the departmental advisor’s consent and approval from their graduate program, students may elect a later Bulletin under which to fulfill the degree requirements; they may not elect an earlier Bulletin, nor use a combination of requirements from different Bulletins.

Previously non-matriculated students who then matriculate are governed by the requirements of the Bulletin in effect at the time of their matriculation.

When courses required in older Bulletins are no longer offered, or in other special cases, course substitutions may be made with the approval of the appropriate graduate program.

Changes in regulations concerning grading systems, withdrawals, academic actions, etc., may be made by appropriate University governing bodies; they become effective on the date specified in the legislation. The University reserves the right at any time to make changes deemed necessary in the regulations, fees, courses or programs described in the Bulletin, and to cancel any course if registration does not justify its continuance or if qualified faculty members are no longer available.

It is the responsibility of the student and supervising professors to know the rules and procedures leading to completion of the degree pursued, but it is always wise for each student to take primary responsibility for meeting deadlines and ensuring his or her own progress.

Grades

The general grading system of the Graduate School applies to all graduate-level courses offered in the Harpur College of Arts and Sciences, the Decker School of Nursing (DSON), the College of Community and Public Affairs, the School of Management, the Thomas J. Watson School of Engineering and Applied Science and the Graduate
School. Grades are on a letter scale: A through C– and F. The School of Pharmacy and Pharmaceutical Sciences (SOPPS) uses a slightly different letter scale: A through C-, D and F.

Grades of S (satisfactory) and U (unsatisfactory) may be used in a limited number of cases, described below, for which no greater precision in grading is required. The grades of S and U are not assigned numerical value and thus are not averaged in with other grades in computing grade-point averages. A grade of S denotes a minimum level of academic performance equivalent to at least a B.

For the purpose of computing semester or cumulative averages, each letter grade is assigned a quality point value as follows:

\[
\begin{align*}
A & = 4.0 \\
A– & = 3.7 \\
B+ & = 3.3 \\
B & = 3.0 \\
B– & = 2.7 \\
C+ & = 2.3 \\
C & = 2.0 \\
C– & = 1.7 \\
D & = 1.0 \text{ (D is used only in SOPPS)} \\
F & = 0.0
\end{align*}
\]

These grade values are combined with course credit hours to produce a grade-point average. A cumulative grade-point average of B (3.0) is required for graduation. A cumulative grade-point average of 2.50 is required for graduation for PharmD students. Courses for which a student has received a D or an F do not count toward the number of courses required for a graduate degree or certificate.

Course Credits

Most courses, unless otherwise noted, are assigned four credit hours.

Graduate School Transcripts

The official transcript of record for all students enrolled in advanced degree programs or as continuing education graduate students of Binghamton University is the Graduate School transcript, which provides a complete record of all academic work attempted. Undergraduate work is indicated on a separate undergraduate transcript. Graduate students with both undergraduate and graduate academic records at Binghamton have the option of requesting release only of the Graduate School transcript.

Interpretation of Transcript Symbols

In addition to the letter grades and corresponding quality point values described earlier, the following symbols may appear on official transcripts for the Graduate School:

X — audit; no numerical credit given for the course.

I — incomplete; course not completed for reasons acceptable to the instructor. A grade of I gives no grade points.

NC — no credit; no grade issued.

W — withdrawn; the student withdrew from the course following the second week of the semester. A grade of W is not counted in computing grade-point averages, nor does the course earn credit hours.
R — registered; the student maintained required matriculated status during the semester through continuous registration (700, GRD 750) or registration in a research skills (707) course. Courses assigned R grades are not applied toward degree progression.

0 (zero plus letter grade) — course was repeated for a higher grade, or undergraduate courses taken as graduate students (will not calculate in graduate grade-point average or earn credit hours).

S/U — satisfactory/unsatisfactory (a grade of S is equivalent to a B or better). The following limitations apply to the use of S/U grading:

500-589 — master’s-level courses: at the option of the instructor (not the student), either S/U or regular letter grading may be used.

590, 592-596 and 598 — internship or practicum courses: at the option of the instructor (not the student), either S/U or regular letter grading may be used.

591 — supervised college teaching of the discipline: only S/U grading may be used.

597 — independent study: at the option of the instructor (not the student), either S/U or regular letter grading may be used.

599 — thesis: only S/U grading may be used.*

600-696 — doctoral research seminars: at the option of the instructor (not the student), either S/U or regular letter grading may be used.

697 — independent study at the doctoral level: at the option of the instructor (not the student), either S/U or regular letter grading may be used.

698 — pre-dissertation research: only S/U grading may be used.*

699 — dissertation: only S/U grading may be used.*

*Registration for one credit in 599, 698, 699 or related courses may be considered full-time whenever the principal supervisor confirms that the student is spending appropriate time and effort in research, equal to at least 32 hours per semester week. This is done by the completion of a Full-Time Working Toward Degree Status Certification Form.

Full-Time Working Toward Degree Status

Students in the final stages of degree work may be certified as full-time for loan or visa purposes if the student's supervisor and program director certify that the student is making a full-time investment in work toward their degree.

In order to qualify, students must have completed 24 or more graduate credits in residency and be classified as a G2, G3 or G4 student. Students must also meet additional criteria, depending on their student status:

- Domestic doctoral students must have ABD status OR be within one academic year of ABD status.
- International doctoral students must be officially course complete AND registered in thesis, final project, pre-dissertation research or dissertation.
- Domestic master’s students must be officially course complete OR within one academic semester of degree completion.
- International master’s students must be officially course complete AND registered in thesis or final project.

To be certified full-time, students must make a formal request to their academic department by completing the Full-
**Time Working Toward Degree Status Certification Form.** In order to receive full-time working toward degree status for the semester, this certification form must be approved before the first day of classes for the semester.

Qualifying students must be registered for billable credits, often including comprehensive exams, non-thesis projects, thesis (599), pre-dissertation research (698) or dissertation (699). After the full-time working toward degree status is approved, students can be registered for additional credits of GRD 700 (self-funded) or GRD 701 (funded) to establish a full-time status. Fees are not assessed for GRD 700 or 701. They are not courses; they are non-billable place-holders in Banner, used only to certify full-time status. GRD 700 or 701 may not be used in conjunction with any continuous registration credits or winter registration.

Graduate students receiving University support (a tuition scholarship, stipend or other support) and all international students are required to maintain full-time registration. Full-time registration status is defined as 12 credits per semester for G1 students (who have completed less than 24 graduate credits) and 9 credits for G2, G3 and G4 students (who have completed 24 or more graduate credits).

Domestic students being certified as full-time for loan purposes must be registered for a minimum of six credits.

Certification of status is the responsibility of the student and the graduate program. It is important that the student request certification in a timely manner and that the graduate program carefully review the student's records to make sure that they meet the requirements for the given status.

### Determination of Academic Standing

A cumulative grade-point average of at least 3.0 is required for a graduate degree. To maintain satisfactory academic progress, students are required to earn a minimum grade-point average of 3.0 in all courses that the Graduate School counts toward a degree. Students in the PharmD program in the SOPPS must earn a minimum grade-point average of 2.50. The Graduate School may sever a student, when in the estimation of the dean of the Graduate School (or the dean's designee), the student is not maintaining a satisfactory grade-point average, as required for graduation.

Graduate students may also be severed from the Graduate School for not meeting other academic requirements, such as not passing required exams or not meeting required program deadlines. In this case, graduate students may be severed by action of the dean of the Graduate School (or the dean's designee) on recommendation of the departmental graduate committee with endorsement by the department chair, or by the school/college graduate committee with endorsement by the dean of the school/college, if it appears that the student is not making satisfactory progress toward the degree and it is unlikely that requirements for the degree will be satisfactorily completed.

### Course Repeat Policy

Students are permitted to repeat for credit a graduate course in which they earned a grade of B– (2.7) or lower. This option is contingent on approval by the graduate program director and review by the Graduate School. A course may be repeated only once. In those cases in which students are on financial support, the repeated course is considered as part of the academic workload.

When a course is repeated, the grade received in the second attempt is substituted for the first in the computation of the grade-point average and in the award of credit at the time of degree finalization. However, the first grade remains on the student transcript.

### Probation

The minimum requirement for continuing status in the Graduate School is the maintenance of a B (3.0) average.
Students whose academic achievement falls below this standard should receive special counseling from their faculty advisors in order to improve their performance to satisfactory levels. In order to ensure that students receive such assistance when needed, the Graduate School has the following probation policies:

- A graduate student whose cumulative grade-point average falls below 3.0 may be enrolled subsequently only on a probationary status. While on probation, the student is responsible for meeting on a regular basis (at least once each semester) with the appropriate director of graduate studies to review academic performance and progress toward a return to good standing. A graduate student may spend a cumulative maximum of three semesters (excluding summer or winter sessions) on probation.

- A graduate student whose cumulative grade-point average falls below 2.6 is considered in academic jeopardy, as well as on probation. Students may be in academic jeopardy for only one semester.

Students whose grade-point averages would place them on a fourth semester of probation, or in a second semester of academic jeopardy, are not making satisfactory progress toward the degree. They are normally severed from the Graduate School. Their continued enrollment requires the specific endorsement of their director of graduate studies and approval by the vice provost and dean of the Graduate School.

Students in the PharmD program in the SOPPS will be assessed for academic probation/academic jeopardy status according to the policies and procedures described in the SOPPS section of the Bulletin. PharmD students must maintain a 2.50 average to avoid academic probation/academic jeopardy.

Satisfactory Progress

Graduate students may be dropped from the Graduate School by action of the vice provost and dean or on recommendation of the departmental or school/college graduate committee, if it appears that they are not making satisfactory progress toward their degrees and that it is unlikely that requirements for the degree will be satisfactorily completed in a timely manner. The Graduate School’s minimum requirement for continuing status is the maintenance of a B (3.0) average. Students in the PharmD program in the SOPPS must maintain a 2.50 average.

Policy on Graduate Student Severance or Removal of Support

Graduate students who do not meet academic standards may be dropped from their graduate programs according to the process described above. Normally this process entails detailed warning letters to students, who then work with their faculty advisors to improve their grade-point averages to satisfactory levels of B (3.0) or above -- or 2.50 or above for PharmD students -- or to meet other specified program requirements (such as the passing of comprehensive exams or the completion of theses). If the necessary requirements are not attained within a specified period, the program’s director of graduate studies recommends to the vice provost and dean of the Graduate School that the student be severed.

Graduate students who do not make satisfactory progress toward the degree based on the progression to candidacy guidelines outlined below, as well as graduate students who do not maintain continuous registration, put themselves at risk of being dropped from their graduate program.

Graduate students are subject to the rules governing academic life listed elsewhere in this publication. Accusations that students have committed acts of academic dishonesty may be brought before the academic honesty committee of the program or school, which issues a finding and a recommendation to the vice provost and dean of the Graduate School. The student receives a copy. A graduate student who is found to have violated the rules of academic integrity or who plagiarizes, cheats or falsifies research data is subject to suspension or expulsion. Students have the right to appeal such recommendations to the vice provost and dean of the Graduate School.

Graduate students may be involuntarily withdrawn from the University for medical or psychological reasons, following the policies outlined in this publication under the "Involuntary Withdrawal of Students” section of the "Academic
All other recommendations to sever a student from the Graduate School or one of its programs, to break a student's assistantship contract or to revoke a fellowship, tuition scholarship or other source of financial support are made to the vice provost and dean of the Graduate School, accompanied by appropriate documentation. The student must be informed of the basis for any such decision and may appeal it, using first the grievance procedure of the student's program and then, if needed, the appeals procedures of the Graduate Council Grievance Committee. Action on a recommendation to remove support from or sever a student in good academic standing will await the outcome of the grievance procedure.

Incomplete Grades

An instructor may assign an Incomplete (I) when a student has done most of the course work satisfactorily, but due to unforeseen circumstances beyond the student's control has not completed the course work. The Incomplete is not for the purpose of converting a failing grade, or unsatisfactory work, to a passing grade. The Incomplete grade option is not for the purpose of extending a project that has grown such that it cannot be completed within the course time frame. Completion of projects that require more than the course time frame can be done in other ways, such as "independent study." It is not a grading option for entire classes or courses. If an instructor assigns an Incomplete, then according to University policy, the instructor is implicitly indicating availability and a commitment to assist that student with completion of the course beyond the usual time frame within the University's six-month grace period (or sooner if the instructor establishes an earlier deadline).

The student must request the Incomplete option from the instructor, but it is the instructor's decision as to whether it is appropriate or not. Students should be aware that a grade of Incomplete is automatically assigned in any course for which an instructor has not submitted a grade. Graduate students who are given an Incomplete may be given up to six months from the last day of classes to make up the incomplete work, which includes having the new grade submitted to the Office of Financial Aid and Student Records. This is the maximum allowed; the instructor and student should have a written contract that indicates the timeline and requirements for completion. The instructor may set a deadline sooner than the University maximum, reflecting the instructor's availability to extend his/her commitment beyond the course, but the instructor cannot extend the University period of six months. It is expected that, upon submission of the remaining work, faculty will take no longer than one month to file a final letter grade for the course. Therefore, students are advised to submit the remaining work at least one month before the agreed upon deadline or the University six-month deadline, whichever comes first. Unless the student completes the coursework (which includes the instructor submitting a final letter grade within six months), the Incomplete changes to a grade of No Credit (NC). Once an Incomplete has changed to a No Credit, the student has no further opportunity to complete the course and the course will appear on the final transcript as No Credit. Under exceptional circumstances only, the six-month grace period for Incomplete grades may be extended for up to another six months. Requests for extensions of incomplete grades require the approval of the course instructor and the vice provost or dean of the Graduate School (or the dean's designee). Requests must be made at least one month before the six-month deadline. It is the student's responsibility to submit this request to the Graduate School.

To ensure that the University's tuition allocation is used appropriately, the University's Office of the Internal Auditor periodically audits use of tuition scholarships and student compliance with the terms and conditions for acceptance of tuition scholarship. Incompletes, No Credit and Withdrawals may be in violation of the terms and conditions. The Graduate School's policy on Incompletes, No Credits and Withdrawals reflects the need for compliance with the University's Office of the Internal Auditor.

An Incomplete means that the work required for the course, which has a set end, was not completed, even though the tuition was paid. Depending on why the Incomplete was assigned, the contract (or lack thereof) to finish the work, and/or the progress on the contract or Incomplete, there may be a violation of the terms and conditions for acceptance of tuition scholarship.
If a student is receiving a tuition scholarship, then the Graduate School expects the department to monitor the Incomplete situation. If the Incomplete becomes a No Credit and, as a consequence, the student's registration drops below full-time, then the student is in violation of the terms and conditions for acceptance of the tuition scholarship and the tuition for the semester that course was taken is owed to the University. Students in that situation cannot be funded further by the University until that situation is rectified by payment.

Therefore, departments should not offer funding to unfunded students or further funding to funded students who have an Incomplete. In most cases, funding appointments will not be approved by the Graduate School if the student has any Incomplete grades. That is, funded students who receive an Incomplete for a spring course must resolve the Incomplete before funding offers for fall semester will be approved by the Graduate School. Only exceptional cases with compelling justification will be approved. In the rare instances when approval is granted, funding can only be offered for one semester, and no additional funding will be approved until all incomplete grades are converted to grades. This policy helps students avoid an extra load on top of a regular load of courses, teaching and research required for their degree.

All courses taken by graduate students are subject to the above policy. Incomplete and missing grades must be resolved before students can receive a graduate degree. Because students are using University resources and services, students must be registered in the term for which the Incomplete grade is converted to a grade.

Some departments and programs may have more restrictive policies regarding Incomplete grades and students should make it a point to learn about their department's rules and expectations. Because of the financial issues involved, directors of graduate studies should make sure that faculty and graduate students understand the Incomplete policy. The Incomplete grading option should only be used for unusual situations — when circumstances beyond the student's control prevent the student from completing course work.

The Incomplete policy has specific implications for students receiving tuition scholarships and other kinds of financial aid and for international students holding visas.

**Tuition scholarships:**

When a student receives a tuition scholarship, the University pays tuition for the courses taken by that student. In the case where an Incomplete converts to a No Credit, the University has paid for tuition for a course that was not completed. Furthermore, when the student drops below the required number of registered courses, the student has violated the conditions outlined in the terms and conditions for acceptance of tuition scholarship (which is signed by the student). Students receiving tuition scholarships should be aware that the University will seek repayment of tuition for the semester for which Incomplete courses turned into No Credit courses. Students in that situation cannot be funded further by the University until that situation is rectified by repayment. Students with a No Credit or Withdraw that did not occur for a course paid for by a tuition scholarship may qualify for consideration for University funding.

Although a student may be given up to six months to convert an Incomplete to a regular grade, that does not obligate the Graduate School to fund the student. For example, a student given an Incomplete for the spring semester must convert that to a grade before an offer of funding can be made for the following fall semester.

**Financial aid:**

Graduate students who receive federal or state aid may lose these benefits if they take Incompletes. See the Graduate Academic Progress Charts for information on the required number of completed credits per graduate level per semester.

**International students:**

Student visas require that students are registered as full-time, so Withdrawn courses usually signal registration that
fell below full-time status.

**Missing Grades**

In instances where graduate students are not assigned a grade for a graduate-level course at the end of the University’s grade submission deadline, the students in these courses will be automatically assigned an Incomplete (I) grade. In accordance with the Incomplete Grades policy above, Incomplete grades that are unresolved or not extended will then convert to a No Credit grade after one semester.

**Residence Requirement**

Regardless of any previous graduate experience, the minimum University residence requirement for any graduate degree is 24 credit hours.

For pre-master’s students (i.e., entering the University with a bachelor’s degree), credit hours earned under any of the following rubrics normally may not be counted toward the Graduate School’s minimum residence requirement: College Teaching of the Discipline (591); Thesis (599); Pre-Dissertation Research (698); Dissertation (699) and Continuous Registration (700-level).

*Students enrolled in accelerated master’s degree programs (as defined by the Graduate School) have a reduced residence requirement, where a minimum of 18 credit hours must be completed at the graduate level in order to satisfy the residence requirement. Students are advised to carefully review their plans and consult with their advisors before confirming their course schedule each semester. Taking less than 12 credits during the graduate-level year of study may adversely impact financial aid, immigration status and graduation requirements.

**New and Revised Courses**

Courses of instruction proposed by academic units as regular offerings within the curriculum of the Graduate School must be approved in advance by the Graduate Council. New course proposals must follow the information format established by the Graduate Council and must be formally approved by program graduate committees prior to their forwarding to the vice provost and dean for consideration by the Graduate Council.

In practice, the Graduate Council has delegated primary authority for action on new course proposals to its Curriculum Committee. Approval of a new course by the Curriculum Committee is formally noted on each agenda for regular meetings of the Graduate Council, with the committee’s approval standing as final unless two or more council members request that formal review and action be taken by the Graduate Council.

The descriptions of courses as initially approved by the Curriculum Committee or Graduate Council remain official unless and until formal revisions are made and approved. Revisions of existing course numbers, titles, descriptions or credit-hour assignments may be proposed at any time by program graduate committees to the vice provost and dean. In cases in which the vice provost and dean believes the revision of an existing course or courses of instruction implies substantive changes in the academic scope or general requirements of an advanced degree program, review by the Graduate Council’s Curriculum Committee is required.

Program graduate committees may propose new courses as experimental, or “X,” offerings. Experimental graduate courses require the approval of the vice provost and dean, and may be formally offered only once. Courses offered on an experimental basis may not be offered a second time unless they are formally approved as regular offerings according to the procedure given above. Proposals for experimental course offerings must follow the information format prescribed by the Graduate Council for regular course proposals.

The curriculum of the Graduate School is reviewed annually. Approved courses of instruction that have not been offered within the previous four semesters may be dropped from the curriculum by the vice provost and dean,
following formal notice to and consultation with program directors of graduate studies.

**Research Skills (707) Courses**

The policies of the Graduate School allow students to register each semester for one to four credit hours of Research Skills (707) courses. Students may enroll in Research Skills (707) courses only when the faculty of the program have determined that there are specific research skills essential to the student’s degree work, and that such skills are not remedial — that is, are not normal admission requirements in that degree program. Research Skills (707) courses taken by graduate students may not be used to satisfy course requirements in any graduate degree program and may not be used in determining G2 enrollment status.

**Graduate Students in Undergraduate Courses**

Courses numbered 400 through 499 are advanced undergraduate courses for which graduate credit may be assigned only when the graduate student obtains permission from the professor and enrolls in a graduate-level independent study course numbered 597. The name of the independent study will be the name of the course at the undergraduate level. The student must do additional work beyond that required for undergraduate students in the course. Within six weeks after the start of the semester, the instructor files with the Graduate School a statement as to the nature of additional work the student is doing in the advanced undergraduate course. In general, approval of graduate credit for advanced undergraduate courses is limited to unique program circumstances usually involving interdisciplinary work. Graduate students should not expect to receive graduate credit for more than two 400-level courses.

**Undergraduate Students in Graduate Courses**

Courses numbered 500 and above are graduate courses, ordinarily open only to graduate students, primarily at the master’s level; 600-level courses are research seminars primarily for doctoral students. Undergraduate students who are within eight credits of graduation may register for up to two graduate-level courses and receive graduate credit, provided the graduate courses are not used to meet the undergraduate degree requirements. When graduate courses are not taken with the intent of fulfilling undergraduate requirements, such graduate hours do not count toward full-time status for financial aid purposes; thus, undergraduates taking graduate courses may not be eligible for certain types of financial aid.

To receive graduate credit for such courses, the undergraduate student must complete the Undergraduate Receiving Graduate Credit: Transcript Notation Petition Form. The form is then filed with the Office of Financial Aid and Student Records and the Student Accounts Office before the beginning of the semester.

An exception to these policies is made for undergraduate students admitted to accelerated bachelor’s/master’s degree programs.

**Accelerated Bachelor's/Master's Degree Programs**

Accelerated degree (combined degree) programs are opportunities for qualified and motivated students who wish to meet all undergraduate requirements and complete a focused master's-level program in approximately five years. Students must meet eligibility criteria as undergraduates. This normally occurs during the sophomore or junior year, at which time students must request, through their undergraduate advising office, that their major be changed to the accelerated bachelor’s/master’s program. By the middle of the senior year, the student formally applies to the Graduate School. If the student is admitted to graduate study by the academic program and completes the undergraduate degree, all requirements for the master’s program are completed in the fifth year. Students who decide to not pursue the graduate degree may change majors back to a regular undergraduate program at any time.

For undergraduate students admitted to the accelerated degree programs, all graduate courses count toward the
undergraduate degree up to the maximum number of graduate credits allowed for the particular program, as specified elsewhere in this publication. Such students will still be considered undergraduates for purposes of tuition calculation, financial aid status and other administrative purposes through the end of their senior (fourth) year. After receiving the bachelor's degree and enrolling in graduate school, the student’s status code will be changed from undergraduate to graduate, and all financial and academic policies for graduate students will then take precedence.

**Enrollment and Registration**

Registration periods are controlled and maintained by the Office of Financial Aid and Student Records, which includes Registrar Services. Permission to register on days other than those designated must be obtained from the vice provost and dean. Students registering later than the regular registration dates are charged a late registration fee. Students ordinarily are not admitted to any regular classes after the first two weeks of class.

Payment of all outstanding charges, tuition and fees is a part of the registration process, and a student’s registration is not complete until full payment is made. Payment or arrangement for payment must be made with the Office of Student Accounts by the due dates established or, in the case of late enrollment, by the time of enrollment. Failure to conclude appropriate financial arrangements will result in the cancellation of the student’s enrollment in classes.

All delinquencies and enrollment blocks (e.g., compliance with New York State Department of Health requirements) must also be resolved before students may register.

**Registration Changes**

Students may add a course, change course sections or drop a course without a grade being recorded only during the first two weeks of class. Deadlines are published by the Office of Financial Aid and Student Records. Students making changes in course enrollments (registrations) after the add/drop deadlines are assessed a late fee for each transaction.

- To add, drop or change a course after the deadline, students must obtain the written approval of the instructor and the department chair or the director of graduate studies. Signed request forms must be submitted to the vice provost and dean of the Graduate School (or the dean's designee) and then processed by the Office of Financial Aid and Student Records.
- Students may add or substitute courses, change credit hours for courses carrying variable credit or change the course grading option without penalty within the first two weeks of class. After that date, in addition to the normally required signatures, students must secure the approval of the vice provost and dean (or the dean's designee).
- Students may drop a course without restriction through the first two weeks of class without a grade being recorded. If it is necessary for a student to drop a course after this period, submission of a Withdrawn (W) grade is determined by the instructor. See section on “Grades” above.

**Dissertation Registration**

All doctoral candidates must register for dissertation (699) to maintain registration after admission to candidacy.

Doctoral students are not permitted to register for dissertation (699) credits before they have been formally admitted to candidacy by the Graduate School for the doctoral degree. Admission to candidacy for any doctoral degree occurs when the student has completed all coursework and research skill requirements and has successfully passed the required comprehensive examinations. Doctoral students who have completed all coursework for the degree, but who have not yet satisfied research skill requirements or have not yet passed the comprehensive examinations, must register each semester for an appropriate number of credit hours under the rubric pre-dissertation research (698).
Because work on the dissertation may be interrupted from time to time for a variety of reasons, students may register for continuous registration (700) if they are not actively engaged in research and writing during a particular semester. When students declare inactive status, it is assumed that only a minimum amount of faculty supervision is required for them to maintain matriculation. Students are limited to a maximum of two years (four semesters) of continuous registration (700) during the five-year period following the successful completion of the doctoral comprehensive examinations.

**Withdrawals**

See the "Full University Withdrawal" section of the "Academic Policies and Procedures for All Students" section of the Bulletin.

**Continuous Registration and Leaves of Absence**

All graduate students who have been admitted into a degree-granting program must maintain continuous registration each semester for a minimum number of credit hours or must apply for a formal leave of absence. Students who do not register and who have not been granted a leave of absence are severed from the Graduate School and are ineligible to return until readmitted. Graduate students are not required to maintain matriculation during the summer sessions unless they intend to complete their final degree requirements during this period. Students must be registered during the semester their degree requirements are completed.

Students who do not maintain registration are severed and may not return. They must reapply and pay a new application fee. Readmission is not automatic. Students who are readmitted are required to register and pay for one credit for each semester they have not registered, up to a maximum of four credits.

Graduate students in a degree program who wish to absent themselves from their studies for a semester or two should register for one credit of continuous registration (700).

A leave of absence is granted only in exceptional circumstances, such as hospitalization or other unusual personal hardship, and requires detailed justification. Leaves of absence are not granted to students working toward a graduate degree who are absenting themselves from campus to undertake thesis or dissertation research elsewhere; such students must maintain continuous registration. Students going off campus to fulfill an internship related to degree requirements must similarly register for at least one credit of continuous registration (700), unless the department or school specifies a course rubric and a minimum credit-hour registration to encompass such internship experience.

Leaves of absence, since they are given for personal hardship reasons, may be granted for a maximum of one year. Requests for leaves of absence should be submitted one month prior to the semester for which leave is requested. On a case-by-case basis, typically for medical reasons, a leave of absence may be granted once the semester has started. In these cases, once the leave is approved, the student will be administratively withdrawn from all current coursework. When a leave of absence is granted, the period of leave is not counted against the time limitation for completing the degree. Students with loans or funding of any kind are strongly advised to understand the impact a leave may have on repayment schedules, loan eligibility, assistantships, fellowships, scholarships and other awards, and to consult with a financial aid counselor in advance of requesting a leave of absence.

**Auditing of Courses**

Students may satisfy their interest in a subject area or explore a new area of study through a course audit. By auditing, they participate in but do not receive credit for the course. Course Audit Petitions are available in the Office of Financial Aid and Student Records or the undergraduate advising offices. Students may register for audits within the course add period only. Credit-bearing courses may not be changed to audit courses after the course add deadline, nor may audited courses be changed to credit courses after this deadline. Audited courses do not satisfy
Prospective auditors are advised of the following:

- Students who audit courses must pay full tuition.
- Audit students are expected to attend class regularly and to fulfill course requirements. Successful completion is listed on the transcript with a notation of X in place of the grade; the course is expunged from the record if the student fails to meet the requirements.
- A course taken on an audit basis will not be counted in determining full-time status for financial aid eligibility, student loan deferments, NCAA eligibility, assistantship or fellowship eligibility, on-campus housing, immigration status or for some health insurance coverage.

Credit by Examination

No provision exists within the Graduate School for students to receive course credit by demonstrating proficiency through examinations. However, demonstration of proficiency in the subject matter of a course, in a manner acceptable to the program graduate committee, may permit the student to receive a waiver of the requirement of that particular course. In such cases the normal procedure is to substitute an approved elective course carrying an equivalent number of credit hours toward the degree pursued. With the approval of the program graduate committee, it is also possible for a student to satisfy degree requirements with fewer than the minimum number of credit hours normally established for the program, provided that the Graduate School’s minimum residence requirements are met, and that the total number of graduate credit hours satisfactorily completed for any master's-level degree is not fewer than 30.

Transfer of Graduate Credits from Other Universities

Students matriculated in advanced degree programs may petition to have relevant graduate credits transferred toward their Binghamton University master’s degrees. Transfer credits are not normally considered for doctoral degrees. Students seeking transfer credit for a master’s degree should submit a petition to the appropriate department or school/college graduate committee, using the form established for this purpose by the Graduate School. The petition must include a copy of the official transcript. Credits petitioned for transfer must not have been used to satisfy the requirements of another degree. Petitions must be forwarded to the vice provost and dean of the Graduate School for final approval. If the vice provost and dean approves, the transferred credits are included on the student’s official Graduate School transcript. When courses are approved for transfer by the Graduate School, the letter grades are not reflected in the Binghamton University transcript nor are they considered in determination of the student’s grade-point average.

Requests to accept transfer credits must be evaluated for equivalency and currency. Normally, the student provides information to the director of graduate studies on the course description, credit hours, syllabi, work output including papers and exams and other relevant content. Consideration must be given to learning competencies the student has achieved and demonstrated.

Credits for which transfer is sought must have been earned in graduate-level courses passed with grades of at least B. Courses for which the student did not receive letter credit are not transferable. Courses taken more than five years prior to matriculation in the Graduate School are accepted only when the graduate program director attaches a statement justifying the transfer. Credits earned through correspondence courses, or through courses or experiences offered under the auspices of proprietary schools, business or industrial training programs, or schools conducted by federal agencies such as the Department of Defense, are normally not considered for transfer.

Limitations on the number of credit hours that may be approved for transfer are set by the Graduate School’s minimum residence requirement of 24 credit hours for any advanced degree. Credits approved for transfer may not
be applied toward this minimum residence requirement. For master’s programs requiring a minimum of 30 credit hours, therefore, a maximum of six transfer credits may be applied toward the degree. When master’s programs require more than 30 credit hours, the vice provost and dean may accept a correspondingly larger number of transfer credits in individual cases.

Double-Degree Counting

Students admitted to a graduate program may use a course to fulfill the requirements of two degrees, within certain guidelines. A candidate for two degrees of the same rank (e.g., master’s degrees) in separate disciplines may be allowed to do so in accordance with the following guidelines:

- For students working toward two MA or two MS degrees, all credits must be unique and count toward only one degree.
- For a student working toward an MA and an MS degree simultaneously, a maximum of three courses (12 credit hours) may be used to fulfill the requirements of both programs. The same is permissible for combinations of MA or MS degrees with the MBA and MPA degrees.
- For doctoral degrees, decisions about using credits toward more than one degree are made on an ad hoc basis.
- It is normally considered inappropriate to use thesis (599) or dissertation (699) credit hours to fulfill requirements of more than one degree.

Using credits to fulfill the requirements of more than one degree requires endorsement by both program graduate committees and approval by the vice provost and dean.

A candidate for two degrees of the same rank in the same discipline may be allowed to take advantage of double-degree counting in accordance with the following guidelines:

- An MAT candidate who wishes to pursue, concurrently or subsequently, an MA degree in the same discipline may use up to 5 courses to fulfill the requirements of both programs, if the department regularly lists them as common to both its MAT and MA programs.
- It is normally considered inappropriate to use MSEd coursework for more than one degree.

Special policies apply to approved dual-degree programs (MPA/MS Nursing, MPA/MSW, and MPA/MS Student Affairs Administration).

Policy Prohibiting Award of a Second Degree in the Same Field

State University of New York policy states that a second degree at the same level (e.g., master’s or doctorate) may be awarded only when a significant amount of additional coursework in a very different field is completed. Normally when a student has already earned a master’s or doctorate in a given discipline (e.g., economics, history, etc.) at either a foreign or a U.S. institution, a second degree at the same level in that discipline may not be earned at Binghamton University.

Master’s Degree

At their discretion, departmental or school/college graduate committees recommend for the master’s degree those candidates who have:

- completed at least 24 credit hours of graduate coursework, exclusive of a thesis, in residence at Binghamton University;
- completed the required coursework presented for the degree (minimum total is 30 credit hours). A maximum of
six hours of transfer credit is allowed for degree programs requiring 30 credit hours; a maximum of eight hours of transfer credit is allowed for degree programs requiring 32 credit hours.

- maintained at least a B (3.0) average in courses approved by the departmental or school/college graduate committee and presented for the degree;
- fulfilled all departmental or school/college course requirements, with no credit for graduate courses in which a grade lower than C– (1.7) has been received;
- given evidence satisfactory to their examination committees, by means of a master’s examination (written and/or oral) and required papers or a thesis, that they are familiar with basic hypotheses and techniques of their disciplines and are competent in applying them.

Candidates for the master’s degree must complete all requirements for the degree, including thesis if required by the program, within five years after matriculating in the Graduate School.

**Admission to Doctoral Candidacy**

Matriculated students are admitted to candidacy for the doctoral degree by the vice provost and dean (or the dean's designee), on recommendation of the appropriate academic unit, when they have passed required comprehensive examinations and met all research skills and coursework requirements, as certified by program submission of the **Admission to Candidacy for Doctoral Degree Form**. Within six months of admission to candidacy, a copy of the dissertation prospectus approved by the dissertation committee must be submitted to the department or school/college office.

A student in a doctoral program must be admitted to candidacy within five years of admission to the Graduate School if entering directly into a doctoral program at Binghamton University, or within five years after award of a master’s degree at Binghamton University.

**Dissertation Defense**

The dissertation committee has direct charge of all matters pertaining to the dissertation. The dissertation must have the unanimous approval of the committee before arrangements are made for the final examination for the degree.

Members of the dissertation committee serve on the examination committee, and the dissertation chair normally serves as examination chair. The list of examiners may include one or more faculty members outside a program, if they were members of the dissertation committee.

**Outside Examiner**

The vice provost and dean (or the dean's designee), upon recommendation from the department, adds to the examination committee membership an outside examiner as the representative of the faculty of the Graduate School. The outside examiner’s function on the examination committee is to render an independent judgment and to ensure that the dissertation satisfies Graduate School standards. The outside examiner must be approved and appointed before the dissertation defense may be scheduled. The outside examiner is either a Binghamton University faculty member from a related area outside the major department or division, or someone from a related discipline outside the University. The outside examiner should have no involvement in the supervision of a dissertation and no other conflict of interest.

If the nominee is from another institution, the program officer should forward a curriculum vitae and a brief statement that gives the title and focus of the student’s dissertation, along with a brief commentary on how the outside examiner’s credentials relate to the student’s work. The vice provost and dean (or the dean's designee) evaluates the outside examiner’s credentials and then invites the nominee or another faculty member to serve as outside examiner.
Because of the time required to give adequate consideration to the student’s research, the student is expected to submit the dissertation to the dissertation committee — including the outside examiner — well in advance of the final oral defense. Normally, two months is recommended; however, this falls under the purview of the committee. In all cases, the dissertation defense may be scheduled only after the outside examiner is appointed.

**Doctoral Degree**

At their discretion, departmental or school/college graduate committees recommend for the doctoral degree those candidates who have:

- fulfilled the University residence requirement for course credits;
- maintained at least a B (3.0) average in courses approved by the departmental or school/college graduate committee and presented for the degree;
  - Note: Students in the PharmD program in the SOPPS must maintain a 2.50 average.
- fulfilled all departmental or school/college course requirements, with no credit for graduate courses in which a grade lower than C– (1.7) has been received;
- given evidence satisfactory to their examination committees by means of a comprehensive examination (written and/or oral) that they are familiar with basic hypotheses and techniques of their discipline and are competent in applying them;
- satisfactorily fulfilled the departmental or school/college research skills requirement;
- submitted a dissertation, on a topic approved by the department, that embodies the results of original research and gives evidence of high scholarship.
  - Note: This requirement does not apply to students in the PharmD program in the SOPPS or in the DNP program in the DSON, who instead complete capstone projects.

Candidates for the doctoral degree must complete all requirements for the degree, including the dissertation, within five years after admission to doctoral candidacy.

**Thesis and Dissertation Preparation and Completion**

For specific instructions regarding the preparation and submission of master’s theses and doctoral dissertations, students should consult the Graduate School Manual.

The absolute deadline for fulfilling thesis and dissertation requirements is approximately ten working days prior to Commencement. The recommended submission dates and absolute submission deadlines are published on the Graduate School website.

**Awarding of Graduate Degrees**

Students who have completed their program requirements and wish to graduate must submit a Graduate Application For Degree (GAFD) to the Graduate School. The GAFD is an electronic application found on the Graduate School website. Simultaneously, when all requirements have been completed (including program-required final exam/paper/project submissions or thesis/dissertation defenses, etc.) departmental or school/college graduate committees will certify and recommend to the Graduate School that the appropriate degree be awarded. Following verification by the Graduate School that all degree requirements prescribed by the departmental graduate faculty have been met, the Graduate School will officially approve the award of a graduate degree.

Degrees are conferred three times each year: December, May and August. Students who complete degree
requirements in the fall semester are awarded degrees in December; students who complete degree requirements in
the spring semester are awarded degrees in May; students who complete degree requirements in the summer term
are awarded degrees in August. Formal investiture of all degrees occurs at the University's annual spring
Commencement ceremonies. All students who have completed their graduate degree requirements are invited to
participate in Commencement, and eligible students will be notified by the Graduate School of all deadlines, as well
as all charges and responsibilities that must be fulfilled prior to Commencement and final conferral.

Waiver of Regulations and Requirements

Specified Graduate School regulations and/or program degree requirements may be waived by the vice provost and
dean in individual instances. A petition for such a waiver must be endorsed by the appropriate program graduate
committee and graduate program director, who append their reasons for believing that the requested waiver would
not result in a breach of the spirit of the specified regulation or requirement.

The University reserves the right to alter these regulations and requirements without notice, pending the publication
of the next scheduled issue of this publication.

Academic Policies and Procedures for Undergraduate Students

Undergraduate Information

The following pages contain academic regulations and other information of interest to all students pursuing an
undergraduate degree at Binghamton University. In addition to the all-University regulations discussed here,
regulations specifically pertaining to the various schools at the University appear in the school sections later in the
Bulletin. All students are expected to be familiar with the regulations in this section and in the section for the school
in which they are enrolled, and are responsible for their observance. For interpretations of these regulations or for
answers to questions about specific points of academic policy, students should consult the academic advising office
of the college or school in which they are enrolled.

Students whose circumstances or aspirations are not covered by standard academic policies, or who wish to request
exceptions to standard policies, may seek a waiver by filing a petition in the academic advising office of the college
or school in which they are enrolled. If the initial petition is not resolved to their satisfaction, they may appeal
according to guidelines available in each dean’s office. To aid students with their appeals, the Student Association
provides an ombudsperson.

Binghamton University has had a General Education program for all undergraduate students since 1996. The State
University of New York Board of Trustees, in December 1998, adopted Resolution 98-241 establishing a General
Education Requirement for all baccalaureate degree candidates at SUNY’s state-operated campuses.

Undergraduate General Education Program

Convinced that there are several areas of knowledge and experience that ought to be central to the academic
experience of every undergraduate student, Binghamton University has adopted a comprehensive General
Education curriculum. This curriculum has broad goals. It is intended to help students develop:

- an appreciation of and capacity for effective personal expression;
- knowledge about various intellectual traditions;
- an understanding of and respect for different peoples and civilizations;
- knowledge of and appreciation for the natural world, achieved through active engagement with the methods
  and philosophy of natural science;
logical thinking, balanced skepticism, and tolerance for ambiguity and uncertainty;
- a knowledge of and appreciation for the arts and creative expression;
- skills needed to locate, evaluate and synthesize information from a variety of sources;
- skills needed to understand and use basic research techniques;
- skills needed to perform the basic operations of personal computer use.

To achieve these objectives, the faculty of Binghamton University require students to take courses in the following broad areas of learning:

**Category 1: Language and Communication**

*Composition (C)* courses are courses in any of the departments or divisions of the University. They require a process of revision and a minimum of 20 pages of expository prose. At least 50 percent of the course grade is based on student writing.

*Oral Communication (O)* courses involve at least two oral presentations and evaluation of speaking that count for at least 15 percent of the final course grade.

The language of communication for fulfilling both the C and O requirement shall be English.

Note: Composition and Oral Communication components may be combined to create Joint (J) courses.

Foreign Language skills are ensured by requiring that students pass either an approved FL3 (third-semester college-level) course in one foreign language or an approved FL2 (second-semester college-level) course in two foreign languages, or satisfactorily complete some other significant activity that requires second-level foreign language proficiency as a prerequisite, such as study abroad in a non-English environment or an internship serving people who can communicate only in a language other than English. Students may fulfill the foreign language requirement prior to enrolling in college either by completing four or more units of one high school foreign language with a course grade in the fourth unit of 85 or better, or three units each of two high school languages with course grades in each third unit of 85 or better, by passing the AP examination (or its equivalent) with a score of 3 or better, or by demonstrating equivalent proficiency in some other fashion. Foreign Language courses are designated as FL1 (first-semester college-level course), FL2 (second-semester college-level course), or FL3 (third-semester college-level course or higher). For additional information, please see the General Education website at http://www.binghamton.edu/general-education/.

**Category 2: Creating a Global Vision**

The complexity of the modern world demands that students attain a heightened awareness both of the plurality of cultures that have contributed to the making of the United States and of the interdependence of the cultures of the world.

*Pluralism in the United States (P)* courses must consider United States society by paying substantive attention to three or more of the following groups and to how these groups have affected and been affected by basic institutions of American society, such as commerce, family, legal and political structures, or religion, and by issues involving inequality:

<table>
<thead>
<tr>
<th>Required groups/identities (at least 2):</th>
<th>Additional groups/identities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Americans</td>
<td>Disability status</td>
</tr>
<tr>
<td>Arab Americans</td>
<td>Gender and gender identity</td>
</tr>
</tbody>
</table>

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Most P courses assume a basic knowledge of United States history, as measured by demonstrating a level of proficiency equivalent to a score of 85 or above on the Regents examination on United States History and Government. Students who have not demonstrated this knowledge must meet the P requirement by choosing from among a designated group of P courses that pay significant attention to a broad span of United States history.

The primary focus of Global Interdependencies (G) courses is to study how two or more distinctive world regions have influenced and interacted with one another and how such interactions have been informed by their respective cultures or civilizations.

**Category 3: Natural Sciences, Social Sciences and Mathematics**

Students must have an understanding of the methods of investigation typical of the natural and social sciences and must be able to make individual observations and quantitative measurements in a hands-on environment in the natural sciences. In order to have the experience of discovery through the use of logic and reasoning, students also need to study mathematical methods and reasoning.

*Laboratory Science* (L) courses emphasize the formulation and testing of hypotheses and the collection, analysis and interpretation of data. Each course includes a minimum of 10 laboratory meetings, exercises, field studies or practica.

*Social Science* (N) courses emphasize the major concepts, models and issues of at least one of the social sciences.

*Mathematics/Reasoning* (M) courses include any course in the Mathematics Department numbered 130 or above, any of several designated statistics courses, or any of several designated logic courses. An Advanced Placement score of 3 or better in Calculus or Statistics may be used to satisfy this requirement.

**Category 4: Aesthetics and Humanities**

By taking courses in this area, students gain an expanded sense and understanding of culture and a greater appreciation of human experience and its expressions.

*Aesthetics* (A) courses enhance students’ understanding of the creative process and the role of imagination in it. Students study or practice artistic expression and production in such fields as art, art history, cinema, creative writing, dance, graphic design, music and theater.

*Humanities* (H) courses enhance students’ understanding of human experience through the study of literature or philosophy.

**Category 5: Physical Activity/Wellness**

Exercise, body awareness and wellness are essential components of a healthy and productive lifestyle. The dictum we follow is “a sound mind in a sound body.”
Physical Activity (Y) courses devote at least 50 percent of their time to the performance of physical exercise designed to develop one or more of the following attributes: neuromuscular skill, muscular strength and endurance, cardiovascular endurance, flexibility.

Wellness (S) courses deal with such topics as diet and nutrition, physical development, substance abuse, human sexuality, relaxation or physical, mental and emotional fitness. Their focus is on developing a healthy lifestyle rather than on simply providing information about the human body.

The Physical Activity/Wellness requirement may be fulfilled in any of the following ways:

- Completion of a one-credit (or more) Physical Activity course and a one-credit (or more) Wellness course.
- Completion of a one-credit Physical Activity/Wellness course and one of the following:
  - one-credit Physical Activity course;
  - one-credit Wellness course;
  - one-credit Physical Activity/Wellness course.
- Completion of a two-credit (or more) course that combines a physical activity and wellness.

Note: Physical Activity and Wellness components may be combined to create Physical Activity/Wellness (B) courses.

Restrictions and Exceptions

- Students may use appropriate transfer credits to satisfy particular course requirements. The determination of which transfer credits satisfy General Education requirements will be the responsibility of the evaluator of transfer credit in each of the undergraduate schools.
- General Education courses may also be counted as satisfying college and major requirements.
- Certain courses are designated as meeting the criteria for more than one of the General Education categories. When a course is so designated, students may use it to satisfy only one of the General Education course requirements. There is an exception to this rule: Composition (C), Oral Communication (O), Joint (J) and Foreign Language (FL1, FL2, or FL3) courses may satisfy either one or both of these requirements and also satisfy one other General Education requirement.
- General Education courses may not be taken Pass/Fail unless that is the mandatory grade option in the course.
- External examination credit earned through Advanced Placement (AP), International Baccalaureate (IB), or College Level Examination Program (CLEP) may apply to selected General Education requirements as specified. Appropriate AP credits or IB scores, in some instances, may be used to satisfy the following General Education requirements: Aesthetics, Foreign Language, Humanities, Laboratory Science, Mathematics/Reasoning or Social Science. Appropriate CLEP scores in Calculus may be used to satisfy the Mathematics/Reasoning requirement. Appropriate AP scores in American History or CLEP scores in U.S. History I or II may be used to determine proficiency for the Pluralism in the U.S. requirement.
- The Foreign Language requirement is waived for students in the Watson School engineering programs.
- The Foreign Language requirement for students in the Decker School of Nursing and the Watson School computer science program is fulfilled by one approved college course in foreign language at any level. This requirement may also be fulfilled in high school by demonstrating a level of proficiency equivalent to completing three or more units of high school foreign language with a Regents or LOTE/Checkpoint B Examination score of 85 or better (or, for students who did not take the Regents or LOTE/Checkpoint B Examination, a course grade in the third unit of 85 or better).
- The Foreign Language requirement for transfer students in the College of Community and Public Affairs, Harpur College, and the School of Management is fulfilled by an approved FL2 (second-semester college-level) course in foreign language. This requirement may also be fulfilled in high school by demonstrating a level of proficiency equivalent to completing three or more units of high school foreign language with a Regents or LOTE/Checkpoint B Examination score of 85 or better (or, for students who did not take the Regents or LOTE/Checkpoint B Examination, a course grade in the third unit of 85 or better).

- Courses that satisfy General Education requirements are so designated in the Schedule of Classes each semester. The code letter attached to a course in the Schedule of Classes means that the course fulfills the particular General Education requirement.

- For all General Education requirements, a “course” is understood to be four credits. There are exceptions to this rule:
  - transfer courses that earned three credits at the student’s original school;
  - Physical Activity/Wellness courses (the specific credit-hour criteria for these courses are defined above);
  - Laboratory Science courses of one and two credits that have a four-credit pre- or corequisite;
  - Oral Communication courses of varying credits;
  - schools or programs in which three-credit courses are the norm.

### Summary of General Education Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Composition (C)*</td>
<td>4</td>
</tr>
<tr>
<td>1b. Oral Communication (O)*</td>
<td>1-4</td>
</tr>
<tr>
<td>1c. Foreign Language (FL1, FL2, or FL3)</td>
<td>0-16</td>
</tr>
<tr>
<td>2a. Pluralism in the U.S. (P)</td>
<td>4</td>
</tr>
<tr>
<td>2b. Global Interdependencies (G)</td>
<td>4</td>
</tr>
<tr>
<td>3a. Laboratory Science (L)</td>
<td>4-6</td>
</tr>
<tr>
<td>3b. Social Science (N)</td>
<td>4</td>
</tr>
<tr>
<td>3c. Mathematics/Reasoning (M)</td>
<td>4</td>
</tr>
<tr>
<td>4a. Aesthetics (A)</td>
<td>4</td>
</tr>
<tr>
<td>4b. Humanities (H)</td>
<td>4</td>
</tr>
<tr>
<td>5. Physical Activity (Y), Wellness (S), Physical Activity/Wellness (B)</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>35-60</td>
</tr>
</tbody>
</table>

*Joint Oral Communication/Composition (J) courses satisfy both the C and O requirements simultaneously.*

### Determination of Graduation Requirements
Graduation requirements for the undergraduate schools on the Binghamton campus are listed in the individual school sections of the *Bulletin*. In general, matriculated students follow the requirements for graduation listed in the *Bulletin* current at the time they are admitted. However, students who interrupt enrollment for three or more consecutive semesters (not counting summer or winter terms) are governed by the *Bulletin* in effect when they are readmitted. Exceptions are made for students eligible to continue at Binghamton who are forced to leave because of involuntary recall to military service.

With the departmental advisor’s consent and approval from their college or school’s academic advising office, students may elect a later *Bulletin* under which to fulfill the degree requirements; they may not elect an earlier *Bulletin*, nor use a combination of requirements from different *Bulletins*.

No *Bulletin* more than 10 years old may be used under any circumstances. Should a student maintain continuous enrollment under a *Bulletin* older than 10 years, the *Bulletin* under which degree requirements are to be completed is determined by the advising office of the college or school in which he or she is enrolled, in consultation with the student’s departmental advisor.

Previously non-matriculated students who then matriculate are governed by the requirements of the *Bulletin* in effect at the time of their matriculation.

When courses required in older *Bulletins* are no longer offered, or in other special cases, course substitutions may be made with the approval of appropriate department chairs, departmental advisors or deans.

Changes in regulations concerning grading systems, withdrawals, academic actions, attendance at other institutions, etc., may be made by appropriate University governing bodies; they become effective on the date specified in the legislation. The University reserves the right at any time to make changes deemed necessary in the regulations, fees, courses or programs described in the *Bulletin* and to cancel any course if registration does not justify its continuance or if qualified faculty members become unavailable.

### Residence Requirements

To receive a degree, students in the Decker School of Nursing or the School of Management must take at least 7-1/2 courses (30 credits) while in residence at their school. These 7-1/2 courses must be the last 7-1/2 courses toward the degree, unless students petition the appropriate academic advising office and obtain in advance an exception to this rule. Thomas J. Watson School of Engineering and Applied Science students must also take at least 30 credits in residence, all of which must be within Watson School. Students in the Computer Science major are required to take at least 40 credits of computer science courses in residence. Students in the College of Community and Public Affairs must take at least 40 credits while in residence at the school. Students in Harpur College of Arts and Sciences must complete a minimum of 44 credits in Harpur College in order to graduate. Please see the Harpur undergraduate section of the *Bulletin* titled "Requirements for Graduation" for more information.

### Classification of Students

A student must pass a minimum of 24 credits to be classified a sophomore; 56 credits to be classified a junior; and 88 credits to be classified a senior. For this purpose, Incompletes are counted as credits passed.

### Program Load

The term “full-time” is applied to any undergraduate student carrying 12 or more credits, excluding audited courses. Undergraduate students are allowed to register for no more than 18 credit hours per semester, unless they have filed an academic petition form for an overload. Petitions to register for an overload are considered on an individual basis when submitted to the appropriate academic advising office.
Undergraduate courses carry varying credits, typically ranging from one credit to four credits. A course's credit assignment reflects an expectation concerning the typical amount of work to be completed by students both in class and outside of class; for each credit, students should expect to do at least three hours of work per week throughout the semester. The work distribution may vary widely between courses. In such courses as beginning languages and sciences, a course may have classes and laboratory sessions five or six hours a week. Other courses may meet three or four hours a week. In each case, the combination of time spent in class and course-related tasks to be completed outside of class are expected to engage students for at least three hours per week per credit hour.

**Tutoring Services**

Tutoring in various subjects is available free of charge to students through University Tutorial Services. The Writing Center is open to all students and offers students free assistance in improving their writing. Student Support Services provides limited drop-in tutoring and covers most lower-level core courses, as well as offering writing assistance. More information is available online at [http://www2.binghamton.edu/academics/provost/undergrad/tutoring.html](http://www2.binghamton.edu/academics/provost/undergrad/tutoring.html).

**Transfer of Credit**

Once students are matriculated at Binghamton University, they may obtain credit toward graduation for courses taken at other institutions. The awarding of transfer credit is determined by each undergraduate school. We do not specifically list offerings at other schools in the Binghamton University Bulletin or elsewhere on the University website; however, courses taken at other accredited colleges and universities can most often be entered as transfer credit. Evaluations are completed in the advising office of each school. Questions regarding transfer credit decisions may be discussed with your academic advising office.

Before any courses are taken elsewhere, students should submit a “Petition to Take Courses at Another Institution” form. The student should submit the form to the department or school in which they are enrolled, or to the academic advising office of the school, for prior approval.

Transferred credits are adjusted when the credit system at the other institution is different; e.g., credits taken under a quarter system rather than a semester system are transferred to Binghamton at two-thirds of their quarter-credit value. In general, credits may be transferred only if they were earned for courses that are essentially theoretical rather than practical in nature (e.g., not practice teaching or typing courses), and if the student received a grade of C– or better, or the equivalent (C or better for students in the School of Management and the College of Community and Public Affairs).

These guidelines apply to courses taken at other institutions during a summer or winter session, correspondence courses, online courses, study-abroad courses sponsored by other units of the State University of New York, and courses taken through the National Student Exchange Program (which involves a semester or a year of study at one of many participating schools).

Students participating in study-abroad programs sponsored by American universities not a part of the State University of New York system, as well as students studying for a time at a foreign university, should first obtain approval from their academic advising office. Upon completion of the semester abroad, the student should request that the institution attended send a transcript or official grade statement to the appropriate academic advising office at Binghamton University.

**Progress Toward Degree (Degree Works Audit)**

All undergraduate students at the University are encouraged to print a degree audit report in BU BRAIN Self Service via the Portal at [http://my.binghamton.edu](http://my.binghamton.edu).
The degree audit report shows students what program requirements have been completed and what requirements must still be met before a degree can be conferred. If students have questions regarding the degree audit report, they should consult with a professional advisor in their college or school, or with their departmental advisor for their major.

**Double Degree Program**

A student may earn separate baccalaureate degrees in very different fields by completing a significant amount of work (typically 30 credits) beyond that required for one degree and satisfying requirements for both degree programs. Only two degrees may be earned simultaneously; exceptions to this policy will be considered on an individual basis. Students who successfully complete one or two degrees may pursue an additional baccalaureate degree in another very different field of study by completing additional academic work (again, typically 30 credits). This requires the submission of a new application to the desired school. To learn more about requirements and application procedures, students should contact the academic advising office of the college or school in which they are enrolled.

**Course Offerings**

The Schedule of Classes is available online in BU BRAIN Self Service via the Portal at [http://my.binghamton.edu](http://my.binghamton.edu). This site lists the courses offered as well as course meet times, instructors, number of credits, General Education indicators, course descriptions, etc.

**Course Numbering and Prerequisites**

All Binghamton University undergraduate schools use a course numbering system from 100 through 499. While each school may define the tiers more specifically, all schools define 100-299 as lower division and 300-499 as upper division.

**Harpur College Numbering System**

100-199 Introductory courses, normally with no prerequisites, open to all students.

200-299 Intermediate courses, with or without prerequisites.

300-399 Intermediate courses, normally with prerequisites.

400-499 Advanced courses with specific course prerequisites.

**Professional Schools’ Numbering System**

100-199 Lower-division introductory courses, no prerequisites, open to all students.

200-299 Lower-division intermediate courses, with or without prerequisites.

300-399 Upper-division intermediate courses, intended primarily for juniors and seniors, with prerequisites (courses, class standing or special permission).

400-499 Upper-division advanced courses, intended for seniors, with specific course prerequisites.

Within these levels, certain numbers are set aside to indicate particular learning experiences: A course number ending in “91” indicates a teaching practicum course; “95” indicates an internship course; a “97” indicates an independent study course; “98” or “99” indicates honors or thesis work.
Program planning must include the early identification of, and registration for, prerequisites to courses that the student intends to take at a later date. When there are special reasons, students may register for a course without having completed the prerequisites, provided they first obtain the consent of the course instructor.

**Undergraduate Degree Completion Policy**

Completion of undergraduate degree requirements and all academic work pertaining to completion must be submitted prior to degree conferral. Academic work refers to study-abroad courses, courses taken at other institutions and courses taken at Binghamton University. All incompletes must be finished and missing grades posted before a degree can be conferred. Faculty should submit the grades for any incomplete or missing grades within 72 hours of the work being received and evaluated. All students must have a final high school transcript or the equivalent on file before an undergraduate degree will be conferred. Substantive changes are not to be made to any student record after a degree is conferred.

Financial aid recipients: A student who completes the academic requirements for a program is not eligible for further Title IV federal aid for the program.

**Credit by Examination**

Credit for knowledge gained outside the classroom may be obtained through Excelsior College Examinations (formerly known as Regents College Examinations) and through subject-based College Entrance Examination Board (College-Level Examination Program, or CLEP) examinations. Credit earned through Advanced Placement, International Baccalaureate, U.S. Armed Forces Institute/Defense Activity for Non-Traditional Education Services (USAF/DANTES) and examination credit from other institutions may also apply to degree credit. Up to 32 external examination credits may be accepted; however, each undergraduate school within the University determines the number and kind of credit that counts toward its degree.

School and/or departmental policy governs acceptance of these exams for major credit. (See the section titled “External Placement” in the Admission section of the Bulletin for a discussion of these exams and of International Baccalaureate credit.)

**Academic Progress and Standing**

**Academic Standing**

To remain in good academic standing, students must demonstrate that they are passing courses at a satisfactory rate to earn a bachelor’s degree in a reasonable period of time; that is, they are required to show a reasonable rate of progress toward their degree. Students in all schools must maintain a satisfactory grade-point average. Academic progress is reviewed at the end of the fall and spring semesters. If students fail to maintain satisfactory academic standing, they are subject to dismissal. For detailed information on how academic standing is computed in the various undergraduate schools, see the individual school sections in this publication.

**Grade-Point Averages**

Grade-point averages are computed for students in all of the University’s undergraduate schools.

For the purpose of computing semester or cumulative averages, each letter grade is assigned a quality point value as follows:

- A = 4.0
- A– = 3.7
- B+ = 3.3
B = 3.0  
B– = 2.7  
C+ = 2.3  
C = 2.0  
C– = 1.7  
D = 1.0  
F = 0.0  

These grade values are combined with course credit hours to produce a grade-point average.

Repeating Courses

Students may not gain additional credit by repeating an undergraduate course in which they received a passing grade, except where an exception is noted under a particular school's policies. Please refer to your school's grading policies in this publication for further information.

Academic Probation and Dismissal

The academic standards committee of each school determines policies by which students are placed on academic probation when academic performance, as reflected in the grade-point average, raises doubts about the student's capability to complete requirements for the bachelor's degree. Academic probation does not imply either suspension or dismissal, and does not preclude the student's registering or receiving financial aid. Academic probation ordinarily entails a contract with the student to complete a specified amount of coursework in a specified period of time at a specified level of performance.

Students are subject to academic dismissal from the University at any time their record warrants. Students dismissed for academic reasons should contact their school's academic advising office for any conditions to be satisfied before re-enrollment is permitted.

Confidentiality of student records is maintained in accordance with the Family Education Rights and Privacy Act of 1974 (FERPA). (See the Binghamton University Student Handbook.) Additional information is available at the Registrar's website at http://www2.binghamton.edu/registrar/services/ferpa.html.

Dropping a Course

Students who wish their records to indicate good standing when dropping a course or withdrawing from a semester must follow formal drop and withdrawal procedures. Mere absence from class does not constitute due notice of drop or withdrawal. Students are advised to check the school sections in this publication for additional information regarding the regulations.

In general, undergraduates may drop a course up to the published course drop deadline. Such a course will not appear on their academic record. After the drop deadline, and until the course withdraw deadline, students may drop a course and receive a grade of "W". After the published semester course withdrawal deadline, students must have the consent of the instructor and the appropriate academic advising office on an approved Late Withdraw Petition Form to drop the course with a "W". Students must cite extraordinary circumstances to justify a late withdrawal from a course, that is, circumstances beyond their control and beyond their ability to foresee. Poor judgment or academic incompetence does not qualify as extraordinary circumstances. The Late Withdraw Petition Form may be obtained from the academic advising office of the college or school in which the student is enrolled. (Check for online forms available for each school.) If the petition is approved, the student must pay a $20 late drop/withdraw fee to have the late drop/withdraw petition processed.

General Readmission (or Reenrollment) Policies
Candidates matriculated for undergraduate degrees, who interrupt their education at Binghamton University and later wish to return, must be formally reenrolled. The exception is for students who withdraw from all classes during a major (spring or fall) semester. These students are eligible to return and can stop out for two consecutive semesters without having to go through a reenrollment process. Students who must be reenrolled should go to the admissions website, http://www.binghamton.edu/admissions/apply/ for instructions and appropriate form. Students must complete and file the reenrollment form no later than two weeks before the start of classes for the term in which they plan to return.

Continuing education (non-matriculated) students may also interrupt their studies for as long as two major (fall or spring) semesters without having to file for formal reenrollment. After two semesters have elapsed without enrollment, a reenrollment form must be completed no later than two weeks prior to the start of classes for the desired semester.

Note: All students enrolled in the Educational Opportunity Program (EOP) at the time studies were interrupted must receive clearance from the director of EOP in order to resume their studies.

Students dismissed for academic or other reasons should contact their college or school’s academic advising office for any conditions to be satisfied before readmission is approved.

All Decker School of Nursing students must file for readmission and have an interview at the school before reenrolling. Further details may be found in the Decker School of Nursing readmission section in this publication.

Depending on the demand for on-campus housing, a space in one of the residence halls may not be available for reenrolled students. First priority is given to reenrolled students who have left the University due to health reasons or to participate in a study-abroad program. Students may contact the Office of Residential Life to obtain more information.

All students wishing to take advantage of state and federal funding options, such as grants and student loans, must file the Free Application for Federal Student Aid (FAFSA) online at http://www.fafsa.ed.gov after January 1st each year. The recommended FAFSA filing date is April 1 for students planning to reenroll for the fall semester. Students planning to reenroll in the spring semester should file by November 1. Students can still apply after these dates but funding for need-based financial aid is limited, and is offered on a first-come, first-served basis.

To receive federal and/or state funding, students must meet general eligibility criteria established by both agencies and coordinated through Financial Aid and Student Records. In addition, students must be making Satisfactory Academic Progress (SAP). To review SAP requirements for both federal and New York state funding, go to http://www2.binghamton.edu/financial-aid/services/academic-progress/index.html.

For additional information about funding your Binghamton University education, go to the Financial Aid Services main webpage at http://www.binghamton.edu/financial-aid/.

**Off Campus Housing**

For off-campus housing information, readmitted students may view the Off Campus College (OCC) website at http://www.binghamton.edu/occ/. For additional information about off-campus housing, contact OCC at 607-777-2768 or via e-mail at occ@binghamton.edu.

**Admission**

**Undergraduate Admission**

Students wishing to take courses for credit or pursue undergraduate degree programs in Harpur College of Arts and
Freshman Admission

Freshmen are defined as students who have attempted no college coursework, or whose only college courses were pursued before high school graduation. All of Binghamton's undergraduate schools accept freshman applicants. Binghamton offers Early Action admissions, an option frequently used by applicants for whom Binghamton is a top choice.

Applications are available online at [http://www.binghamton.edu/admissions/apply/](http://www.binghamton.edu/admissions/apply/). Binghamton University accepts The Common Application, the State University of New York (SUNY) Application and the Coalition Application. Freshmen are required to submit a high-school transcript. Binghamton strongly encourages SOAR, the SUNY online academic record system, since it instantly confirms transcript receipt. An essay and a teacher or counselor recommendation are also required for all applicants. Score results of the SAT or ACT with writing must be sent directly by the testing agency to the Admissions Office. Binghamton will accept old and new SAT scores for admission consideration for fall 2017 and fall 2018 terms. Both versions of the test will be treated equally in the admission process. Applicants must be graduates of an accredited secondary school or offer evidence of equivalent education.

After admission for the fall term has been offered, an enrollment deposit of $350 must be paid by May 1, or 20 days after admission, as specified in the admission letter. Deposits are non-refundable. Students admitted to the spring term are given 20 days to pay deposit or until the start of the term, if less than 20 days.

Payment of an undergraduate admissions deposit indicates that the student plans to enroll. Students may accept an admission offer from one school only. If a student pays a deposit at more than one institution, Binghamton may revoke the offer of admission.

All enrolling students must complete, with the aid of a health official, a health history and a physical examination report prior to orientation and course registration. Students unable to submit health forms because of religious affiliation should consult the University Health Service for alternatives at [http://www.binghamton.edu/health/](http://www.binghamton.edu/health/). Binghamton also requires a final high-school transcript.

Freshman Admission Decisions

Specific enrollment goals are set for each undergraduate school. Available spaces in relation to the number of applications, as well as admission policy, play a role in who is admitted. Admission is very selective. Freshmen are admitted to one of five undergraduate schools/colleges: Harpur College of Arts and Sciences, College of Community and Public Affairs, Decker School of Nursing, School of Management and Thomas J. Watson School of Engineering and Applied Science. Majors are declared after students enroll in the school to which they were admitted. Applicants to the University are admitted on the overall strength of their applications. While academic criteria such as grades, quality and level of courses, test scores, trend of grades and rank are primary, involvement in leadership and school and community activities, recommendations, and how effectively an applicant communicates strengths and interests, are also important elements in an admission decision. There is no automatic cutoff in the admission process, either in GPA, test scores or rank, as the Admissions Committee is aware of differences in how secondary schools grade
and rank their students, as well as ways in which secondary-school offerings and competitiveness vary. Home-
schooled applicants with well-documented educational and personal achievement records are encouraged to apply.

The Admissions Committee seeks to enroll the strongest and most diverse class possible. Candidates are urged to
make full use of the Supplementary Admission Form and essay. The Admissions Committee is sensitive to all types
of achievement and welcomes information about the candidate’s values, aspirations and personal challenges.
Candidates with special skills and talents (i.e., music, theater, debate, art) may be asked to submit additional
information according to details available online. As a participating NCAA Division I member institution, Binghamton
University extends application periods for prospective student-athletes to accommodate National Letter of Intent
signing periods and the review of other prospective student-athlete applications (NCAA Staff Interpretation
02101989).

New York state students who meet both historic academic and financial criteria may be admitted to the Educational

**Internal Transfer**

Students enroll in a specific undergraduate school at Binghamton University. If internal transfer to a different school
is sought, a formal application and guidelines for intra-university transfer must be obtained online at
[http://www.binghamton.edu/admissions/apply/](http://www.binghamton.edu/admissions/apply/) and submitted online by the fall or spring deadline. Students are
responsible for meeting the specific academic requirements of the school to which they are seeking a transfer.
Spaces for intra-university transfers within some programs are limited and competitive. Students should apply well
before the beginning of the semester in which enrollment is desired.

**Reenrollment**

See the Academic Policies and Procedures section of this publication.

**Deferred Admission**

Students who wish to defer their enrollment for one or two semesters, after having been admitted and having paid
their tuition deposit, should contact the Admissions Office. Deferments are reviewed on a case-by-case basis by the
Admissions Committee.

**International Student Admission**

Applicants who are citizens of other countries, and who have or will acquire a student visa to study in the United
States, whether they are enrolled in a school in the United States or abroad, are required to submit special
international student admission forms to the Undergraduate Admissions Office. Application forms are available online
at [http://www.binghamton.edu/admissions/apply/](http://www.binghamton.edu/admissions/apply/).

International applicants are required to meet the academic standards for admission, show proficiency in English at
the college level and submit documentation of sufficient funds to cover all educational and living expenses for the
duration of study. Due to delays in the exchange of some foreign currencies, students from certain countries may be
required to prepay one year’s academic and personal living expenses to ensure that adequate funds will be available
for their study.

Scholastic Assessment Test (SAT) or American College Test (ACT) results are required for international students who
will graduate from a U.S. high school or a high school outside the United States where the primary language of
instruction is English.

Freshman international applicants studying outside the U.S. are strongly encouraged to submit results from the SAT
or ACT exam. Test results should be sent electronically from College Board or ACT.

Students are required to provide their own funds for tuition, fees, housing, meals, insurance and personal expenses. Currently, this figure is estimated at approximately $41,000 (as of March 2017, subject to change). The University cannot provide financial assistance to international undergraduate students. Note, the U.S. Bureau of Citizenship and Federal Immigration Services rarely grants permission to work off campus, and on-campus employment opportunities are limited.

Applicants who meet the above requirements are issued a letter of admission and, subsequently, the appropriate Certificate of Eligibility to apply for a student or exchange visitor visa. Additional details regarding admission policies and procedures for international students are sent to all admitted applicants.

With the exception of students placed through special educational exchange agreements and those enrolling for the summer term only, all international students are required to be enrolled in a degree program.

**English Proficiency**

Proof of English proficiency is required for international students whose first language is not English. The English proficiency requirement can be satisfied in the following circumstances:

- Transfer students who at the time of application have completed two semesters of English (non-ESL) courses at a U.S. college/university with grades of B or better; or
- Students who have earned a degree from any university/college where English is the primary language of instruction; or
- Test scores from the TOEL iBT (Test of English as a Foreign Language Internet-Based Test), IELTS Academic (International English Language Testing System), SAT, or ACT. We do not have minimum required scores, but many of our international students have scores higher than 90 on the TOEFL, higher than 7.0 on the IELTS, higher than 610 on the Evidence-Based Reading and Writing (new version) of the SAT 550 on the (Pre-march 2016) Critical Reading section of the SAT, and higher than 24 on the English section of ACT.

For students who are admitted and whose application or on-campus proficiency test indicates that degree progress would be enhanced by additional English language courses, an appropriate curriculum will be designed for the first year of study. Any courses taken as part of this language support will provide academic credit toward the degree.

**Educational Opportunity Program (EOP)**

Under the New York state-supported Educational Opportunity Program (EOP), Binghamton provides an avenue for low-income students from historically under-represented backgrounds to pursue a bachelor’s degree. Students with unrealized potential and talent are provided with financial assistance, tutoring and counseling, the opportunity to take advantage of credit-bearing developmental courses where needed, and other student support services required to provide a transition into any one of the degree programs offered by the University. Continued enrollment in EOP is contingent upon meeting program expectations and use of student services. Complete program guidelines set forth by New York state can be accessed at [http://www.suny.edu/Student/academic_eop.cfm](http://www.suny.edu/Student/academic_eop.cfm).

Students who believe they may qualify for this program should complete either the SUNY Application or The Common Application in addition to any required EOP financial forms. Further instructions on how to apply can be found at [http://www.binghamton.edu/admissions/apply/freshman/instructions/eop/index.html](http://www.binghamton.edu/admissions/apply/freshman/instructions/eop/index.html).

**Transfer Admission**

A transfer applicant is someone who graduated from high school and has completed (or will have completed) at least
Applications are available online at http://www.binghamton.edu/admissions/apply/. Binghamton University accepts The Common Application, the State University of New York (SUNY) Application and the Coalition Application. Binghamton also requires Nursing candidates to complete Binghamton's Supplementary Admission Form that provides additional information about course-work, extra-curricular activities, awards, and other experiences. EOP applicants must also submit the required EOP forms. Students applying for transfer admission during their first year of college must also submit an official copy of their high school transcripts. Transfers with fewer than 24 post high-school college credits must submit a high school transcript and are strongly encouraged to submit SAT/ACT scores. It is highly recommended that all other students submit their high school transcripts. For some students, admission decisions may be delayed until grades from two consecutive college semesters or mid-semester grades from the current semester are available; in such cases, students are notified of this requirement. Transcripts should be sent directly to the Undergraduate Admissions Office at Binghamton University.

Transfer students are admitted on the strength of their academic performance at the two and/or four-year colleges they have attended. For more information on admission standards, visit http://www.binghamton.edu/admissions/apply/transfer/.

It is essential that all final college and final high school transcripts (or GED) for newly-enrolled students be received well before classes start so that a complete transfer credit evaluation may be conducted by an academic adviser. College coursework record(s) should be sent in a timely manner to the Undergraduate Admissions Office to ensure a final credit evaluation is conducted by each school at Binghamton University. Typically, a final credit evaluation is made available by academic advising for new students attending orientation, thereby allowing the student to schedule the appropriate courses prior to the start of the semester.

**Transfer Credit**

The awarding of transfer credit is determined by each undergraduate school. Evaluations are completed for admitted and/or enrolled students by the advising office of each school, available via the BU Brain. Questions regarding transfer credit decisions may be discussed with the academic advising staff within your school at Binghamton University.

**Academic Integrity**

Binghamton University values enrollment honesty and integrity. Undergraduate and graduate students applying for admission or readmission must provide full and accurate information on the appropriate application. Students falsifying information by any method may be suspended or dismissed from the University or have their admission rescinded.

**Special Circumstances**

*Consideration of Undergraduate and Graduate Admissions Applications from Individuals Who Have Been Suspended or Expelled from a College or University for Disciplinary Reasons:* Disciplinary suspension or expulsion from another college or university is not grounds for automatic rejection of an application for admission to Binghamton University. If the applicant is academically admissible, additional information is requested about the expulsion or suspension. A Special Circumstance Committee chaired by the Dean of Students requests a personal statement and signed release form giving Binghamton permission to obtain and discuss documents related to the incident.

The Special Circumstance Committee may recommend acceptance of the applicant, acceptance of the applicant with restrictions on participation in university life at Binghamton University, or rejection of the applicant based on the
nature of the incident(s) that caused the disciplinary suspension or expulsion. An appeal of the decision of the committee may be made to the provost and vice president for academic affairs. Questions regarding this policy should be directed to the Provost, Binghamton University, PO Box 6000, Binghamton, New York 13902-6000.

Consideration of Undergraduate and Graduate Admissions Applications from Individuals with Felony Convictions:
State law prohibits discrimination against those previously convicted of criminal offenses (Correction Law, S750 et seq.). However, the law permits an institution to deny an application for admission based on an individual’s prior conviction when the admission “would involve an unreasonable risk to property or to the safety or welfare of specific individuals or the general public” (S752).

Section 753 of the Correction Law specifically sets forth the factors to be considered concerning a prior criminal conviction. These factors are as follows:

In making a determination, the public agency or private employer shall consider the following factors:

- the public policy of this state, as expressed in this act, to encourage the licensure and employment of persons previously convicted of one or more criminal offenses;
- the specific duties and responsibilities necessarily related to the license or employment sought;
- the bearing, if any, of the criminal offense or offenses for which the person was previously convicted will have on his or her fitness or ability to perform one or more such duties or responsibilities;
- the time that has elapsed since the occurrence of the criminal offense or offenses;
- the age of the person at the time of occurrence of the criminal offense or offenses;
- the seriousness of the offense or offenses;
- any information produced by the person, or produced on his or her behalf, in regard to his or her rehabilitation and good conduct;
- the legitimate interest of the public agency or private employer in protecting property, and the safety and welfare of specific individuals or the general public.

In making a determination, the public agency or private employer shall also give consideration to a certificate of relief from disabilities or a certificate of good conduct issued to the applicant, which shall create a presumption of rehabilitation in regard to the offense or offenses specified therein.

Applications for admission to Binghamton University from individuals with felony convictions are considered in accordance with the above criteria. A special circumstance committee reviews such applications if the applicant meets academic admission criteria. The applicant is required to sign a release permitting the committee to obtain documents related to criminal offenses and allowing the committee to discuss the circumstances related to such offenses with corrections officials.

Applications are considered incomplete until additional information is provided to Binghamton University. In addition to signing the release mentioned above, applicants with criminal convictions must provide a complete criminal background history. Upon receipt of the required material, the special admissions committee reviews the circumstances pertaining to such applications and makes its recommendation.

The Special Circumstance Committee may recommend acceptance of the applicant, acceptance of the applicant with restrictions on participation in university life at Binghamton University, or denial of the applicant based on the nature of the criminal offenses. An appeal of the decision of the committee may be made to the provost and vice president for academic affairs. Questions regarding this policy should be directed to the Provost, Binghamton University, PO Box 6000, Binghamton, New York 13902-6000.
External Placement

External examination credit includes credits earned through Advanced Placement (AP), International Baccalaureate (IB), College Level Examination Program (CLEP), Excelsior College Examinations (formerly known as Regents College Examinations), DANTES Standard Subject Tests (DSST) or through official transcript evaluation of courses taken at other institutions. Selected external credits may apply to General Education or major requirements as specified.

Students in Harpur College of Arts and Sciences may apply a maximum of 32 external examination credits towards a degree.

AP and IB course equivalencies follow.

Advanced Placement

Advanced Placement examinations with a grade of 3 or better are approved for credit, with the amount and applicability determined by the appropriate academic unit.

Art History

Score of 3: four elective credits. May be used to fulfill the Aesthetics General Education requirement.

Score of 4 or 5: four credits equivalent to ARTH 110. May be used to fulfill the Aesthetics General Education requirement.

Biological Sciences

For students in Harpur College of Arts and Sciences, College of Community and Public Affairs, School of Management and the Thomas J. Watson School of Engineering and Applied Science

Score of 3: four elective credits. May not to be used toward the biological sciences or biochemistry majors.

Score of 4: four credits equivalent to either BIOL 117 or BIOL 118. A biological sciences advisor, in consultation with the student, will determine appropriate placement. May be used to fulfill the Laboratory Science General Education requirement.

Score of 5: eight credits equivalent to BIOL 117 and BIOL 118. May be used toward the biological sciences major. May be used to fulfill the Laboratory Science General Education requirement.

For students in Decker School of Nursing:

Score of 3: four elective credits.

Score of 4: four credits equivalent to either BIOL 117 or BIOL 118. A biological sciences advisor, in consultation with the student, will determine appropriate placement. May be used to fulfill the Laboratory Science General Education requirement.
Score of 5: eight credits equivalent to BIOL 117 and BIOL 118 that may be used toward the biological sciences major. BIOL 118 credit may be used to fulfill the Introduction to Biology requirement of the nursing major. The remaining four credits count as elective credit towards satisfying the overall degree requirements in nursing. May be used to fulfill the Laboratory Science General Education requirement.

**Calculus AB**

Score of 3, 4 or 5: four credits equivalent to MATH 224/225. May be used to fulfill the Mathematics/Reasoning General Education requirement.

**Calculus BC**

Score of 3: four credits equivalent to MATH 224/225. May be used to fulfill the Mathematics/Reasoning General Education requirement.

Score of 4: eight credits equivalent to MATH 223 (2 credits), MATH 224 (2 credits), MATH 225 (2 credits) and MATH 226 (2 credits). May be used to fulfill the Mathematics/Reasoning General Education requirement.

Score of 5: eight credits equivalent to MATH 224 (2 credits), MATH 225 (2 credits), MATH 226 (2 credits) and MATH 227 (2 credits). May be used to fulfill the Mathematics/Reasoning General Education requirement.

Score of less than a 3 on the BC exam with a 4 or 5 subscore for Calculus AB: four credits equivalent to MATH 224/225. May be used to fulfill the Mathematics/Reasoning General Education requirement.

Score of less than a 3 on the BC exam with a 3 subscore for Calculus AB: four credits equivalent to MATH 223/224. May be used to fulfill the Mathematics/Reasoning General Education requirement.

**Chemistry**

Score of 3: four credits equivalent to CHEM 101. May not be used to fulfill chemistry major requirements.

Score of 4: four credits equivalent to CHEM 107 or CHEM 111. A chemistry advisor, in consultation with the student, will determine appropriate placement. May be used to fulfill chemistry major requirements. May be used to fulfill the Laboratory Science General Education requirement.

Score of 5: eight credits equivalent to CHEM 107 and CHEM 108. May be used to fulfill chemistry major requirements. May be used to fulfill the Laboratory Science General Education requirement.

**Chinese Language and Culture**

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Foreign Language General Education requirement.

**Comparative Government and Politics**

Score of 3, 4 or 5: four credits equivalent to PLSC 113. May be used to fulfill Political Science major requirements. May be used to fulfill the Social Science General Education requirement.

**Computer Science A**
For students in Harpur College of Arts and Sciences, College of Community and Public Affairs and Decker School of Nursing

Score of 3, 4 or 5: four elective credits.

For students in the School of Management

Score of 3: four credits of free elective.
Score of 4 or 5: eight credits of free elective.

For students in the Thomas J. Watson School of Engineering and Applied Science

Score of 3, 4 or 5: four credits of free electives.

English Language and Composition

For students in Harpur College of Arts and Sciences and Decker School of Nursing

Score of 3, 4 or 5: four elective credits. Not to be used to fulfill major requirements. Does not satisfy Harpur College Writing requirement.

For students in College of Community and Public Affairs and School of Management

Score of 3, 4 or 5: four credits. May be used as liberal arts or free elective credit. Does not satisfy School of Management writing requirement.

For students in the Thomas J. Watson School of Engineering and Applied Science

Score of 3, 4 or 5: four credits. May be used toward English and communication requirements in the Computer Science major. For engineering majors, four credits may be entered as generic English credit.

English Literature and Composition

For students in Harpur College of Arts and Sciences and Decker School of Nursing

Score of 3, 4 or 5: four elective credits. Not to be used to fulfill major requirements. Does not satisfy Harpur College Writing requirement. May be used to meet Humanities General Education requirement.

For students in College of Community and Public Affairs and School of Management

Score of 3, 4 or 5: four credits. May be used to meet humanities or distribution requirements. Does not satisfy School of Management writing requirement. May be used to meet Humanities General Education requirement.

For students in the Thomas J. Watson School of Engineering and Applied Science

Score of 3, 4 or 5: four credits. May be used toward English and communication requirements in the Computer Science major or to meet the Humanities General Education requirement. For Engineering majors, four credits of
generic English credit can be used to meet the Humanities General Education Requirement.

**Environmental Science**

Score of 3, 4 or 5: four credits equivalent to ENVI 101. Score of 4 or 5 may be used to fulfill the Laboratory Science General Education requirement.

**European History**

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Social Science General Education requirement.

**French Language and Culture**

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Foreign Language General Education requirement.

Course placement – score of 3, the next course would be FREN 215; score of 4, the next course would be FREN 241; score of 5, the next course would be FREN 300-level; 341 or above.

**French Literature**

Exam discontinued by AP following the May 2009 exam administration.

**German Language and Culture**

Score of 3 or 4: four elective credits. May be used to fulfill the Foreign Language General Education requirement. Contact the department to discuss placement in the major.

Score of 5: four credits equivalent to GERM 203. May be used to fulfill German major requirements after consultation with the department. May be used to fulfill the Foreign Language General Education requirement.

**Human Geography**

Score of 3, 4 or 5: four credits equivalent to GEOG 101. May be used to fulfill the Social Science General Education requirement.

**Italian Language and Culture**

Score of 3: four credits equivalent to ITAL 211. Score of 4: four credits equivalent to ITAL 215. Score of 5: four credits equivalent to ITAL 215. May be used to fulfill the Foreign Language General Education requirement.

Course placement – score of 3, the next course would be ITAL 215; score of 4, the next course would be ITAL 241; score of 5, the next course would be ITAL 241 or above.

**Japanese Language and Culture**

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Foreign Language General Education requirement.

**Latin Virgil/Vergil**

Exam discontinued by AP following the May 2012 exam administration.
Score of 3, 4 or 5: four elective credits. May be used to fulfill the Foreign Language General Education requirement.

**Latin**

Score of 3: four elective credits. Score of 4 or 5: four credits equivalent to LAT 203; consult with Classics and Near Eastern Studies department to determine whether this may count towards the major. May be used to fulfill the Foreign Language and Humanities General Education requirements.

**Macroeconomics**

Score of 3, 4 or 5: four credits equivalent to ECON 162. May be used to meet the Social Science General Education requirement.

**Microeconomics**

Score of 3, 4 or 5: four credits equivalent to ECON 160. May be used to meet the Social Science General Education requirement.

**Music Theory**

Score of 3: four elective credits. Score of 4 or 5: four elective credits; see Music department for placement in Music Theory sequence. May be used to fulfill the Aesthetics General Education requirement.

**Physics 1: Algebra-based**

Score of 3 or 4: four elective credits. Score of 5: four credits equivalent to PHYS 121; may be used to fulfill the Laboratory Science General Education requirement. Exam first administered in May 2015.

**Physics 2: Algebra-based**

Score of 3 or 4: four elective credits. Score of 5: four credits equivalent to PHYS 122; may be used to fulfill the Laboratory Science General Education requirement. Exam first administered in May 2015.

**Physics B**

Score of 3 or 4: four elective credits. Score of 5: eight credits equivalent to PHYS 121 and PHYS 122; may be used to fulfill the Laboratory Science General Education requirement. This exam was discontinued by AP following the May 2014 exam administration.

**Physics C: Electricity and Magnetism**

Score of 3 or 4: four elective credits. Score of 5: four credits equivalent to PHYS 132; may be used to fulfill the Laboratory Science General Education requirement.

**Physics C: Mechanics**

Score of 3 or 4: four elective credits. Score of 5: four credits equivalent to PHYS 131; may be used to fulfill the Laboratory Science General Education requirement.

**Psychology**
For students in Harpur College of Arts and Sciences and Thomas J. Watson School of Engineering and Applied Science

Score of 3: four elective credits. Score of 4 or 5: four credits equivalent to PSYC 111. May be used to fulfill major requirements.

For students in Decker School of Nursing, College of Community and Public Affairs, and School of Management:

Score of 3, 4 or 5: four credits equivalent to PSYC 111.

Spanish Language and Culture

Score of 3: four credits equivalent to SPAN 211. Score of 4: four credits equivalent to SPAN 215. Score of 5: four credits equivalent to SPAN 215. May be used to fulfill the Foreign Language General Education requirement.

Course placement – score of 3, the next course would be SPAN 215; score of 4, the next course would be SPAN 250; score of 5, the next course would be SPAN 251.

Spanish Literature and Culture

Score of 3: four credits equivalent to SPAN 250. Score of 4 or 5: four credits equivalent to SPAN 251. May be used to fulfill the Foreign Language and Humanities General Education requirements.

Course placement – score of 3, the next course would be SPAN 251; score of 4 or 5, the next course would be SPAN 344.

Statistics

Score of 3, 4 or 5: four credits equivalent to MATH 147. May be used to fulfill the Mathematics/Reasoning General Education requirement.

Studio Art: Drawing

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Aesthetics General Education requirement.

Studio Art: 2-D Design

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Aesthetics General Education requirement.

Studio Art: 3-D Design

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Aesthetics General Education requirement.

United States Government and Politics

Score of 3, 4 or 5: four credits equivalent to PLSC 111. May be used to fulfill Political Science major requirements. May be used to fulfill the Social Science General Education requirement.
United States History

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Social Science General Education requirement. The exam score may be used to determine proficiency in United States history.

World History

Score of 3, 4 or 5: four elective credits. May be used to fulfill the Social Science General Education requirement.

International Baccalaureate Program

Binghamton University students may earn credit by exam for coursework completed in high school under the International Baccalaureate Program. Credit is awarded as follows: students scoring a 4 or 5 receive four credits for a subject, and students scoring a 6 or 7 receive eight credits for a subject.

General Education credit can be awarded for successfully completing IB exams in the following areas: Aesthetics, Humanities, Mathematics, and Social Science. Students who received an IB score of 6 on the Biology or Environmental Sciences exam, an IB score of 5 on the Chemistry exam or an IB score of 7 on the Physics exam will receive general education laboratory science credit. In addition, the General Education requirement for foreign language may be satisfied by a score of 4-7 on the IB exam.

Students in the Diploma Program may receive up to 32 credits. To receive the full 32 credits, the following conditions must be met:

- The IB Diploma must be completed with a score of 30 or more points; and
- The student must complete at least three IB exams with a score of 5 or higher.

IB diploma holders who meet these conditions receive credit for their individual exam scores plus additional liberal arts elective credit totaling 32 credits.

The IB student who does not meet all of these conditions will receive credits on a course-by-course basis.

Harpur College of Arts and Sciences

Credit is usually granted for liberal arts courses completed at other accredited institutions. In addition, up to 32 elective credits may be granted for the study of theoretically oriented courses of a non-liberal arts nature. Academic credit may be granted only if a grade of Pass or a C– or better was earned in the course.

College of Community and Public Affairs

Undergraduate students must have earned a grade of C or better from an accredited college or university to receive credit for any transfer courses, including those completed as part of the associate degree. In cases where questions arise about the transferability of a course, a Human Development academic standards committee will review and provide a recommendation about the status of a course. Please note that HDEV 200 (Introduction to Human Development), HDEV 400 (Social Justice) and HDEV 475 (Practicum in Human Development) are not transferable courses and must be taken in the Department of Human Development at Binghamton University. In addition, please note that HDEV 300 is not transferable without the evaluation of a relevant course syllabus and departmental approval. As such, it is expected that the research methods course is equivalent in scope to the HDEV 300 course.

Questions concerning the transfer of academic and advanced-standing credit should be addressed to the CCPA Human Development undergraduate academic advisor. Official transcripts and certificates of completion submitted by applicants for transfer credit are evaluated by the CCPA Human Development undergraduate academic advisor.
The final decision to deny or grant academic credit rests with the dean of CCPA.

Applicants to graduate programs in the Department of Teaching, Learning and Educational Leadership are required to submit college transcripts and GRE (General Test) scores, as well as a résumé, personal statement and letters of reference attesting to the applicant's teaching competence and potential to successfully complete graduate study. Refer to http://www2.binghamton.edu/gse/teacher-education/apply.html for up-to-date information about prerequisites and application to programs within CCPA's Department of Teaching, Learning and Educational Leadership. The department will gladly consider applications submitted throughout the year as long as there are openings (inquire within programs).

Decker School of Nursing

Decker School of Nursing admits transfer students with advanced standing to the sophomore or junior level of the undergraduate program. Transfer applicants include students with liberal arts and science coursework from a two-year or four-year institution, students with baccalaureate or higher degrees in other fields, and registered nurse students from associate degree programs and hospital diploma schools.

Admission is competitive and based upon:

- evidence of a minimum of one semester of full-time college study, including science and other courses prerequisite to the nursing major;
- review of high school transcript if there has been no prerequisite science course;
- competitive cumulative and prerequisite GPA of 3.0 or above.

Other considerations include:

- student’s personal statement;
- extracurricular activities;
- quality of previous college or university work;
- trend of semester grades;
- demonstrated evidence of talent in athletics, performing arts, fine arts, leadership or other areas;
- letters of recommendation;
- assessed potential for success.

A minimum of 128 credits is needed to meet the program requirements. Credit for liberal arts and science coursework, including courses prerequisite to the nursing major, may be transferred for courses where a grade of C– or better has been earned. Credit for courses in which the student has received a grade of D may not be transferred. Credit for upper-division nursing coursework taken in another baccalaureate nursing program is evaluated on an individual basis. See “Transfer Student Admission” in the Decker School of Nursing section or contact the Decker School for more information.

Registered Nurse Students

Liberal arts courses, including all courses prerequisite to upper-division nursing courses and taken at other colleges and universities, may be accepted in transfer. Graduates of community college nursing programs may transfer nursing coursework. Twenty credits may be used to fulfill nursing major requirements and additional credits count toward the degree as general elective credits. There is no limit on the number of transfer credits. Residency requirements of the University of at least 30 credits are met by taking the 32 credits of required coursework in the nursing major. The 30 credits in residence must be the last courses taken toward the degree, unless a student...
petitions the Educational Policies Committee and obtains, in advance, an exception to this rule.

Registered nurse students may choose to present evidence of professional experience, continuing education in nursing, specialty certification, etc., to extend the time frame for direct transfer of nursing and required prerequisite courses.

Graduates of hospital diploma programs may be granted up to 30 college credits for nursing coursework with an acceptable level of achievement on selected Excelsior College Examinations in nursing. An unlimited number of credits may be transferred. Residency requirements are described earlier in this section.

A complete program plan for the registered nurse student is developed in consultation with the faculty advisor to meet individual needs.

**Applicants with Baccalaureate Degrees in Other Fields**

Applicants with a baccalaureate or higher degree in another field wishing to earn the bachelor of science degree in nursing are required to complete the prerequisite courses listed in the Decker School of Nursing section and required nursing coursework.

Applicants may be eligible for admission to the accelerated baccalaureate track program. See “Program Options” in the Decker School of Nursing section or contact the Decker School for more information.

**School of Management**

In order to maximize credit transfer, students who have taken two years of undergraduate education at another college or university, and who wish to transfer into the School of Management for their junior and senior years, should have concentrated their first two years of academic work in arts and sciences courses, attaining at least 30 hours of credit in such subjects with grades of C or better. The student’s first two years of education should therefore consist of work in the following areas: English and literature (including at least one course in compositional techniques); economics (including one course each in microeconomic and macroeconomic theory); mathematics (including at least one course in calculus); and elective coursework in the humanities, social sciences and natural sciences — with special attention to courses that fulfill the University’s General Education requirements. Students may also choose to further supplement their first two years of undergraduate education with courses in the principles of financial accounting, statistics and business law. Such courses are an important foundation for the professional coursework that composes the School of Management student’s final two years of study. Students whose two-year curriculum closely follows the pattern above will have completed coursework that maintains the course sequence adhered to by School of Management students during their freshman and sophomore years.

While students are able to transfer courses and/or credit for the specific business administration and accounting courses indicated above, in accordance with the school’s transfer credit policy, transfer credit for upper-division accounting and business administration coursework is not granted without ample evidence of its basic equivalency to analogous coursework taught in the School of Management, unless these courses are taken at AACSB-accredited business programs during the junior or senior year of study. Thus, students completing upper-division accounting and business administration coursework as part of freshman or sophomore years of study must formally “validate” all such courses for which transfer credit is requested. Normally this requires (at a minimum) completion of a detailed proficiency examination in each course area for which transfer credit is requested. The coverage of such examinations is based on the appropriate coursework as it is taught in the School of Management.

Although most transfer students have completed two years of college work, students may be accepted for transfer at any time during their college careers, if space permits. School of Management transfer spaces are very limited and consequently admission is highly competitive. Admission is granted primarily on the basis of academic proficiency in appropriate courses; candidates generally need above a 3.2 average for admission. Advanced-standing credit is
generally granted for all work comparable to that offered by Binghamton University. In addition, up to 16 hours of free elective credit may be granted for courses not comparable to any offered by Binghamton, provided that the work was theoretical/analytical rather than applied in nature. Courses falling within this category may not include business or accounting courses. Advanced standing is not granted for courses completed with a grade lower than C.

School of Pharmacy and Pharmaceutical Sciences

Admission Requirements

Admission to the Doctor of Pharmacy (PharmD) program will be via the Pharmacy College Application Service (PharmCAS; http://pharmcas.org).

Students must complete at least two years of study at a regionally accredited college or university (or an equivalent institution) to enroll. All prerequisite courses (see below) must be completed by the time of matriculation, with grades of "C-" or better prior to enrollment. Prerequisites must be completed within seven years preceding matriculation. Exceptions may be considered upon review of a student's full application. A minimum overall GPA of 2.75 and a minimum GPA of 2.75 in all science and mathematics courses are required for entry.

All applicants must take the Pharmacy College Admission Test (PCAT). An applicant's PCAT results cannot be older than five years. While the SOPPS does not have a minimum PCAT score, scores at or above the national average are considered highly competitive for entry.

Additionally, competitive applicants will be invited to and must complete an on-campus interview to be considered for admission.

The admission process is holistic and will consider a variety of factors including academic record, intellectual achievements, extracurricular activities and personal background rather than being solely based on an empirical formula of GPA and PCAT scores. Additional consideration will be given to those with community service, patient care, pharmacy and/or military experience.

The SOPPS focuses on maintaining a culturally diverse student population.

Prerequisite Courses

<table>
<thead>
<tr>
<th>Binghamton University Course Number</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 251</td>
<td>Human Anatomy and Physiology I</td>
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<tr>
<td>BIOL 347</td>
<td>Human Anatomy and Physiology II</td>
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<tr>
<td>WRIT 111</td>
<td>College Writing I</td>
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<tr>
<td>Any course that has both written and oral communications components</td>
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<td>Social or behavioral science</td>
<td></td>
<td>2</td>
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<tr>
<td>BIO 117</td>
<td>Intro to Organisms &amp; Pops Biology</td>
<td>4</td>
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</tbody>
</table>
BIO 118 | Intro to Cell & Molecular Biology | 4
BIOL 314 | General Microbiology | 4
CHEM 107 or 111 | Intro Chemistry Principles I or Chemical Principles | 4
CHEM 108 or 341 | Intro Chem Principles II or Intermediate Inorganic Chem | 4
CHEM 231 | Organic Chemistry I | 4
CHEM 332 & CHEM 335 | Organic Chemistry II with Lab | 4
PHYS 121 | General Physics I | 
MAT 224 & 225 | Differential Calculus and Integral Calculus | 2 and 2
MAT 147 or 148 or PSYC 243 (for majors only) | Statistics | 4
ECON 160 | Principles of Microeconomics | 4

**Thomas J. Watson School of Engineering and Applied Science**

**BS in Engineering**

Students transferring into the Watson School have their credits evaluated on a course-by-course basis. Any courses in which they receive a grade of C– or better and which apply to their major requirements will transfer. Students transferring into the junior year of biomedical engineering, computer engineering, electrical engineering, industrial and systems engineering or mechanical engineering normally hold the degree of associate of science in engineering science (or equivalent coursework).

Students transferring into the Watson School should work with the Watson School Advising Office to have their current and future coursework evaluated for transfer. The Watson School Advising Office evaluates all credits on a course-by-course basis, including General Education courses and major requirements.

**BS in Computer Science**

All transfer courses that earn a C- or better, including computer science major requirements and General Education courses, are awarded on a course-by-course basis. Transfer students should work with the Watson School Advising Office to have their current and future coursework evaluated for transfer.

**Non-Degree Students**

The University encourages certain types of students to pursue coursework on a non-matriculated basis, within certain academic limits. Those who wish to take courses for credit, and who intend to apply for matriculation into the University, may enroll as non-degree students, provided they have been out of high school at least one year and give evidence of the ability to do satisfactory work. Others, including visiting students interested in taking a limited amount
of coursework for transfer or prerequisite purposes, may also do so as non-degree students. Finally, those
individuals interested in taking credit-bearing courses for their own personal improvement or enjoyment, which will
not transfer into a degree from the University, may do so as a special type of student known as the lifelong learner.

All undergraduate non-degree students are strongly encouraged to meet regularly with the non-degree student
advisor in the Harpur College Academic Advising Office to explore available options and develop a personalized
educational plan to guide their efforts at Binghamton University.

Undergraduate non-degree students may attend part time or full time each semester, are limited to a total maximum
of 24 attempted credit hours of coursework, and must maintain GPA standards set by Harpur College.

Beyond that point, individuals may continue taking courses at Binghamton only by gaining admission into a degree-
granting program or agreeing to become a lifelong learner. Applications for admission to the University and
information on deadlines are available from Undergraduate Admissions. Students may apply for lifelong learner
status through the Harpur College Academic Advising Office.

Students suspended or dismissed from another college or university may not enter Binghamton until one major
semester has elapsed since the date of dismissal. Summer Session and Winter Session are not major semesters.

Applicants 21 years or older without a high school diploma or its equivalent who have not enrolled in any previous
college-level coursework may apply only as non-degree students. Upon completing appropriate coursework, a
student may apply for a high school equivalency diploma and, upon receiving it, seek admission to a degree
program by completing the appropriate application for matriculation. Students interested in earning a high school
equivalency diploma should work with the New York State Education Department.

While non-degree status has certain limitations, many students have found it to be a strategic and useful way of
continuing their journey toward achieving their most valued educational goals.

Visiting Students

Students attending and in good standing at other colleges or universities who wish to enroll in the University for one
or two semesters apply as non-degree students. This status is generally available only for Harpur College of Arts and
Sciences and College of Community and Public Affairs, but inquiries about spaces in the Decker School of Nursing,
School of Management and Thomas J. Watson School of Engineering and Applied Science should be directed to the
Admissions Office. Admission as a visiting student or for one of the study-abroad programs does not imply admission
to a degree program at Binghamton University. Visiting students who become interested in pursuing a degree at
Binghamton must apply for admission by completing the SUNY application.

College Link Program

This program is open to qualified Binghamton-area secondary school and home-schooled students who wish to take
coursework in the arts and sciences at Binghamton University during their junior and/or senior years.

Courses taken by College Link students carry regular University credit and will appear on their official University
transcript. College Link students are considered non-degree students, and therefore, not admitted into a degree-
granting program of the University.

Specific information concerning admissions procedures and academic standards for the College Link Program is
available in the Harpur College Dean's office.

Advising

Binghamton University's Harpur College Academic Advising Office is responsible for administratively overseeing the
educational activities and academic advising of undergraduate non-degree students. All undergraduate non-degree students are directed to the non-degree advisor in the Harpur College Academic Advising Office for their initial contact. Administrative duties, school coding and most advising activities are handled by the Harpur College Academic Advising Office. Once non-degree students apply and are formally admitted as students into a degree-granting program, the admitting school takes over all administrative and advising duties and intra-University transfer policies take effect.

**Student Auditors**

Students may satisfy their interest in a subject area or explore a new area of study through a course audit. By auditing, they participate in, but do not receive credit for, the course. Course Audit Petitions are available in the Registrar’s Office and the Graduate School. Students may register for audits within the course add period only. Credit-bearing courses may not be changed to audit courses after the course-add deadline, nor may audited courses be changed to credit courses after this deadline. Audited courses do not satisfy degree requirements.

Prospective auditors are advised of the following:

- Students who audit a course must pay full tuition and fees.
- Audit students are expected to attend class regularly and to fulfill course requirements. Successful completion is listed on the transcript with a notation of AU in place of the grade; the course is expunged from the record if the student fails to meet the requirements.
- A course taken on an audit basis will not be counted in determining full-time status for financial aid eligibility, student loan deferments, NCAA eligibility, assistantship or fellowship eligibility, on-campus housing, or for some health insurance coverage.

**Older Adults Auditors**

New York residents 60 years of age or older may audit courses free of charge when space is available. Courses may not be taken for credit. Consent of the instructor is required. Persons interested in auditing courses are encouraged to contact the Harpur College Academic Advising Office at 607-777-6305.

**Graduate Admission**

**Requirements for Matriculation**

To be eligible for graduate study, applicants must:

- Provide a complete set of undergraduate (and, if applicable, graduate) transcripts showing one of the following:
  - The applicant has earned a bachelor's degree (or its equivalent) from a nationally or regionally accredited college or university
  - The applicant is within one academic year of earning a bachelor’s degree (or its equivalent) from a nationally or regionally accredited college or university
  - The applicant is eligible to apply as part of a memorandum of understanding between their current institution and Binghamton University
- Have earned, at minimum, one of the following:
  - A 3.0 GPA over the entire undergraduate career
- A 3.0 GPA during the last 60 semester credits or 90 quarter credits of the undergraduate degree, with most courses graded regularly (not as "pass/fail")
- A 3.0 GPA in a graduate degree, with most courses graded regularly (not as "pass/fail")
- In consideration of the different grading scales used around the world, each academic department evaluates international transcripts to determine on a case-by-case basis whether they demonstrate one of the above requirements.

Exception: Applicants for the PharmD program in the School of Pharmacy and Pharmaceutical Sciences (SOPPS) must meet the requirements listed in the SOPPS section of the Bulletin. Applicants must have completed certain courses and must have, at minimum, a 2.75 GPA.

All applicants must submit:
- Online application
- Application fee
- Transcript(s) for all previous college or university coursework showing courses, grades and conferral of degree (submitted according to the guidelines outlined in the Graduate School Manual)
  - Unofficial transcripts are accepted for application review; official transcripts are required upon admission.
- Personal statement
- Résumé or curriculum vitae (CV)
- Letters of recommendation from individuals who can comment authoritatively on the applicant's academic achievements and/or work or internship experience related to the program (submitted according to the guidelines outlined in the Graduate School Manual)
- Official Graduate Record Examination (GRE) or Graduate Management Admissions Test (GMAT) scores, as specified by the program, unless otherwise specified by the program (submitted electronically according to the guidelines in the Graduate School Manual)
- Any program-specific application materials, such as writing and/or work samples, licenses and/or certifications, and/or other test scores

Exception: Applicants for the PharmD program in the School of Pharmacy and Pharmaceutical Sciences (SOPPS) must apply through the Pharmacy College Application Service (PharmCAS) and submit official Pharmacy College Admission Test (PCAT) scores.

International students must also submit:
- International Student Financial Statement (ISFS) Form
- Supporting financial documentation (such as bank statements, scholarship or sponsor letters, etc.)
- Proof of English proficiency (such as TOEFL, IELTS or PTE Academic scores)

These and all other required documents must be submitted according to the instructions on the application and in the Graduate School Manual. Please review individual department admission requirements before submitting an application, as different programs may have different requirements.

Students are admitted after recommendation for admission from the department or program and with approval from the vice provost and dean of the Graduate School.
The vice provost and dean may waive the admission requirement of official test scores in individual cases, on the recommendation of the department’s director of graduate studies. Students who do not submit official test scores may be admitted but may be required to submit test scores before they achieve regular matriculated status.

Admission to graduate study in any discipline does not imply admission to candidacy for a degree. Such candidacy is subject to specific requirements as defined by the academic programs and schools/colleges. Students must have the approval of the program or school/college in which they wish to major before they may become candidates for the degree in a specific subject.

**Procedures**

Application instructions and forms are available [online](#). Applicants should carefully read the detailed online instructions. These instructions direct applicants regarding electronic submission of materials. When the completed application is received, recorded and matched with appropriate test scores (sent at the applicant’s request by the appropriate testing agency), the application is forwarded to the department or program for review. Applications for the PharmD program are processed through the PharmCAS.

Individual graduate programs have their own criteria for evaluation. Some programs require credentials beyond those required by the Graduate School. Applicants should review the requirements specified by the program and should contact the program office if they have questions.

Like other highly competitive graduate institutions, Binghamton University has deadlines for the receipt of completed applications. Decisions on admission and funding are made early in the spring for the following academic year. To be considered for University funding, students must submit completed applications to the Graduate School by the deadline specified by the graduate program. [See deadlines.](#) International applicants should generally apply at least one month before these deadlines.

All applicants are evaluated and considered for fellowships and assistantships. There is no general application for funding. There may be additional application requirements for program-specific funding. Applicants should check with the program office if they have questions.

Applicants admitted as matriculated students may be placed in one of the following categories:

- **Degree status:** Students are admitted as fully qualified to undertake a program leading to a graduate degree, as determined and specified in the University’s offer of admission.
- **Conditional admission:** Students who do not meet all academic requirements for admission, as determined by the academic program, may be admitted conditionally. Specific conditions for admission to degree status and a timetable for fulfilling those conditions will be identified by the program at the time of conditional admission. Each semester, the program will review the student’s progress toward satisfying those conditions and recommend appropriate action by the vice provost and dean. Due to federal regulations, international students are not eligible for conditional admission.

**International Student Admission**

Applicants to the Graduate School who are not citizens or permanent residents of the United States, whether they are enrolled in a college/university in the United States or abroad, are required to meet academic standards for admission to a degree program, show proficiency in English at the college level and certify that they will have the required funds needed for each year of study.

When applicants are offered admission to Binghamton University, the Office of International Student and Scholar Services (ISSS) issues a Certificate of Eligibility: either Form I-20 (F-1 visa) or Form DS-2019 (J-1 visa). Although special circumstances may allow an individual to be admitted as a continuing education student for one term,
international students (F-1 visa) generally are not eligible for admission in continuing education status.

To certify English proficiency, international applicants must submit official scores from the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) or the PTE Academic. Applicants who have a college or university degree from a regionally accredited U.S. college or university OR from an institution in the United Kingdom (England, Northern Ireland, Scotland and Wales), Ireland, Australia, New Zealand or Canada (except Quebec) are eligible for a waiver. The required minimum scores are detailed in the Graduate School Manual. Additional instruction in English may also be required.

International applicants must guarantee and certify funds sufficient to cover the cost of education, as posted by the Graduate School and the federal government. This figure includes living expenses, tuition, fees and insurance expenses. Additional funds are needed for a spouse and for each child accompanying the student to the United States. For details, see the International Student Financial Statement (ISFS) Form.

**Continuing Education Admission for Non-Matriculated/Non-Degree Study**

Persons holding a baccalaureate degree may apply to enroll in graduate courses. Application for status as a non-matriculated/non-degree student is processed by the Graduate School.

Non-matriculated/non-degree students may take up to 12 credits total, though some academic departments and schools/colleges limit that number further. Academic departments and schools/colleges may also restrict enrollment in their courses to degree and certificate matriculated students. Degrees, certificates and financial assistantships are not granted to non-matriculated/non-degree students.

Depending on the curriculum requirements of a program, some courses taken as a non-matriculated/non-degree student may be applied toward a degree, if the student later gains admission to a Binghamton University graduate degree or certificate program. The maximum number of credits taken as a non-matriculated/non-degree student that can be applied toward a degree is 12 and toward a certificate is 8. Whether non-matriculated/non-degree credits will be applied toward a degree or certificate is determined at the time of admission to a degree or certificate program. Non-matriculated/non-degree credits will not be applied toward a degree or certificate once the student has begun the degree or certificate program. Students should take no more than 12 graduate-level credit hours as a non-matriculated/non-degree student if they plan to eventually pursue a graduate degree.

If at a later date a student decides to apply to the Graduate School for admission to a degree program, a graduate degree application must be submitted electronically. If the student is admitted to a degree program, they should obtain an evaluation of graduate courses taken as a non-matriculated/non-degree student from the department. Through this evaluation, those courses that are found appropriate may be officially credited toward the student’s degree.

**Readmission**

All graduate students admitted to a degree program must register for each semester, excluding summer and winter, until all degree requirements have been completed. Students who fail to maintain continuous registration, unless granted a formal leave of absence, are ineligible to resume graduate study until readmission has been approved. Students applying for readmission to a graduate program are subject to the rules, procedures, curriculum and standards in effect at the time of readmission. Readmission is not automatic and may be subject to additional conditions set by the department or school/college or by the vice provost and dean of the Graduate School.

Continuing education students who fail to register for more than two consecutive semesters, excluding summer and winter, are not permitted to register for courses until they have been readmitted.

Applications for readmission may be obtained online. The regular application fee is assessed for all applications for
readmission to Binghamton University graduate degree programs.

**Special Circumstances**

*Consideration of Graduate Admissions Applications from Individuals Who Have Been Suspended or Expelled from a College or University for Disciplinary Reasons:* Disciplinary suspension or expulsion from another college or university is not grounds for automatic rejection of an application for admission to Binghamton University. However, applications are considered incomplete until additional information is provided to Binghamton University. The applicant is required to sign a release permitting a special admissions committee convened by the vice provost and dean to obtain documents related to the disciplinary suspension or expulsion and allowing the committee to discuss the circumstances related to such action with college officials at the previous institution. Upon receipt of the required materials, the special admissions committee reviews the circumstances pertaining to such applications and makes its recommendation.

The special admissions committee may recommend acceptance of the applicant, acceptance of the applicant with restrictions on participation in university life at Binghamton University, or rejection of the applicant. An appeal of the decision of the committee may be made to the vice president for student affairs. Questions regarding this policy should be directed to the Vice President for Student Affairs, Binghamton University, PO Box 6000, Binghamton, New York 13902-6000.

*Consideration of Graduate Admissions Applications from Individuals with Felony Convictions:* State law prohibits discrimination against those previously convicted of criminal offenses (Correction Law, S750 et seq.). However, the law permits an institution to deny an application for admission based on an individual’s prior conviction when the admission “would involve an unreasonable risk to property or to the safety or welfare of specific individuals or the general public” (S752).

Section 753 of the Correction Law specifically sets forth the factors to be considered concerning a prior criminal conviction. These factors are as follows:

- In making a determination pursuant to Section 752 of this chapter, the public agency or private employer shall consider the following factors:
  - the public policy of this state, as expressed in this act, to encourage the licensure and employment of persons previously convicted of one or more criminal offenses;
  - the specific duties and responsibilities necessarily related to the license or employment sought;
  - the bearing, if any, the criminal offense or offenses for which the person was previously convicted will have on his or her fitness or ability to perform one or more such duties or responsibilities;
  - the time that has elapsed since the occurrence of the criminal offense or offenses;
  - the age of the person at the time of occurrence of the criminal offense or offenses;
  - the seriousness of the offense or offenses;
  - any information produced by the person, or produced on his or her behalf, in regard to his or her rehabilitation and good conduct;
  - the legitimate interest of the public agency or private employer in protecting property, and the safety and welfare of specific individuals or the general public.

- In making a determination pursuant to section 752 of this chapter, the public agency or private employer shall also give consideration to a certificate of relief from disabilities or a certificate of good conduct issued to the applicant, which shall create a presumption of rehabilitation in regard to the offense or offenses specified therein.
Applications for admission to Binghamton University from individuals with felony convictions are considered in accordance with the above criteria. A special admissions committee convened by the vice provost and dean reviews such applications and the applicant is required to sign a release permitting the committee to obtain documents related to criminal offenses and allowing the committee to discuss the circumstances related to such offenses with corrections officials.

Applications are considered incomplete until additional information is provided to Binghamton University. In addition to signing the release mentioned above, applicants with criminal convictions must provide a complete criminal background history. Upon receipt of the required material, the special admissions committee reviews the circumstances pertaining to such applications and makes its recommendation.

The special admissions committee may recommend acceptance of the applicant, acceptance of the applicant with restrictions on participation in university life at Binghamton University, or rejection of the applicant. An appeal of the decision of the committee may be made to the vice president for student affairs. Questions regarding this policy should be directed to the Associate Vice President for Student Affairs and Dean of Students, Binghamton University, PO Box 6000, Binghamton, New York 13902-6000.

**Binghamton University Foundation**

The Binghamton University Foundation is a not-for-profit corporation established to raise funds that further the purpose and mission of Binghamton University. Volunteers and staff working on behalf of the Foundation foster and maintain partnerships with alumni, parents, friends and members of the University community. The Foundation also educates others about charitable giving, matches institutional fundraising priorities with donors’ charitable intentions and provides stewardship of all assets held in trust for the benefit of Binghamton University.

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Michael Lane '89
Bai O. Lee
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Harvey G. Stenger*
Jeffrey S. Tucker '84
Mark A. Zurack '78, LHD '03

*Ex-officio

Financial Information

Rates contained in this Bulletin reflect estimated costs for the 2017-2018 academic year and are subject to change pending New York State Division of the Budget, New York State Legislature, SUNY Board of Trustees or University action.

For the most current costs for tuition and fees, please visit the Office of Student Accounts webpage at https://www.binghamton.edu/student-accounts/.

For the most current costs for Housing and Dining, please visit the Office of Residential Life webpage at http://binghamton.edu/residential-life/housing/rates.html.
## Tuition

### Matriculated Students, Full Time

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<td>New York Residents</td>
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<td>MBA students</td>
<td>$12,195</td>
<td></td>
</tr>
<tr>
<td>MSW</td>
<td>$11,105</td>
<td></td>
</tr>
<tr>
<td>Nursing DNP</td>
<td>$16,080</td>
<td></td>
</tr>
<tr>
<td>Pharmacy PharmD</td>
<td>$18,225</td>
<td></td>
</tr>
</tbody>
</table>

### Matriculated Students, Part Time

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York Residents</td>
<td>$278</td>
<td>$453</td>
</tr>
<tr>
<td>MBA</td>
<td>$613</td>
<td></td>
</tr>
<tr>
<td>MSW</td>
<td>$545</td>
<td></td>
</tr>
<tr>
<td>Nursing DNP</td>
<td>$1,016</td>
<td></td>
</tr>
<tr>
<td>Pharmacy PharmD</td>
<td>$1,077</td>
<td></td>
</tr>
<tr>
<td>Out-of-State Residents</td>
<td>$898</td>
<td>$925</td>
</tr>
<tr>
<td>MBA</td>
<td>$1,016</td>
<td></td>
</tr>
<tr>
<td>MSW</td>
<td>$925</td>
<td></td>
</tr>
<tr>
<td>Nursing DNP</td>
<td>$1,340</td>
<td></td>
</tr>
<tr>
<td>Pharmacy PharmD</td>
<td>$1,519</td>
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</table>

### Non-Matriculated Students, Full-Time

82/669
### Per Semester

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York Residents</td>
<td>$3,335</td>
<td>$5,435</td>
</tr>
<tr>
<td>Out-of-State Residents</td>
<td>$10,775</td>
<td>$11,105</td>
</tr>
</tbody>
</table>

### Non-Matriculated Students, Part-Time

#### Per Credit Hour, Per Semester

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York Residents</td>
<td>$278</td>
<td>$453</td>
</tr>
<tr>
<td>Out-of-State Residents</td>
<td>$898</td>
<td>$925</td>
</tr>
</tbody>
</table>

### Residence Requirements

The Colleges and Universities that comprise the State University of New York system were established to provide a quality education at a reduced rate for the benefit of qualified residents of New York state. Residency classification is determined for all students in accordance with SUNY's administrative policy, "Establishment of Residency for Tuition Purposes." Students who are classified as non-residents can request reclassification and must support their request with documentation that shows compliance with policy and current state law. For more information, visit [https://www.binghamton.edu/student-accounts](https://www.binghamton.edu/student-accounts). SUNY’s Residency Policy can be found at [www.suny.edu/sunypp/documents.cfm?doc_id=402](http://www.suny.edu/sunypp/documents.cfm?doc_id=402).

### Residency Determination Appeal Process

Students who wish to appeal their residency determination may file a written appeal with the University Residency Appeals Committee, Binghamton University, PO Box 6000, Couper Administration Bldg., Room 614 A&B, Binghamton, New York 13902-6000. Decisions made by the University Appeals Committee are final.

### Tuition Refunds/Adjustment

**SUNY Board of Trustees Tuition Refunds/Adjustment Schedule (Fall and Spring semesters only; Summer and Winter Sessions have separate refund schedules):**

Students who drop courses or withdraw from the University are entitled to a refund of tuition only. Fees are refundable only within the first week of classes and are nonrefundable thereafter. The following refund schedule applies to courses that are a full semester's duration.

- **First Week** - 100 percent, tuition and fees
- **Second Week** - 70 percent, tuition ONLY
- **Third Week** - 50 percent, tuition ONLY
- **Fourth Week** - 30 percent, tuition ONLY
- **Fifth Week and after** - 0 percent

Courses scheduled for less than a semester's duration have a separate refund schedule. Consult the Student
Accounts Office’s webpage for these refund schedules.

The date used to determine the tuition cost for a dropped course is the date the student or department drops the course in the online system. Non-attendance in a course will not result in removal of the tuition charges from the bill.

The academic course drop deadline is not related to the deadlines for determining tuition liability.

Students required to withdraw for disciplinary reasons are not entitled to any refund of tuition or fees.

Students who withdraw to enter military service (active duty) are granted full tuition and University fee refunds for a semester in which academic credit is not received.

Students who withdraw for medical reasons may request a full tuition refund. Decisions are made on a case-by-case basis. The rates listed below are those assessed on a semester based upon full time attendance. Fees that are prorated based upon part-time attendance are noted.

Mandatory and Enrollment Fees

Undergraduate Fees

- State University of New York application: $50
- Academic Record Fee: $5
- Campus Life Fee*: $34
- Career Resource Fee: $11
- Academic Support Service Fee: $14.50
- Health Fee*: $190
- ID Card Fee: $5
- Intercollegiate Athletic Fee*: $295
- Recreation Fee*: $56
- Technology Fee*: $372
- Transportation Fee*: $95
- University Fee*: $62.50
- Activity Fee, full-time student, per semester: $99
- Academic Excellence and Success Fee: $187.50

*Fees are prorated for part-time students based upon number of credits enrolled.

Graduate Fees

- State University of New York application, per program, online (no paper applications)**: $75
### Non-degree application
- **$50**

### Full-Time Activity Fee, nine or more credits
- **$65**

### Part-time Activity Fee, less than nine credits
- **$7.25 per credit**

### Academic Record Fee
- **$5**

### Health Fee*
- **$190**

### ID Card Fee
- **$5**

### Recreation Fee
- **$56**

### Technology Fee*
- **$372**

### Transportation Fee*
- **$95**

### University Fee*
- **$62.50**

### Academic Excellence and Success Fee
- **$187.50**

*Fees are prorated for part-time students based upon number of credits enrolled.

**Costs may be different for PharmD applications, which are submitted through the PharmCAS.

#### Other Fees

<table>
<thead>
<tr>
<th>Fee</th>
<th>Description</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Insurance**</td>
<td>Fall</td>
<td>$899.50</td>
</tr>
<tr>
<td>Health Insurance**</td>
<td>Spring</td>
<td>$1,259.50</td>
</tr>
<tr>
<td>Administrative Fee</td>
<td></td>
<td>$30</td>
</tr>
<tr>
<td>Late Payment Fee</td>
<td></td>
<td>$30</td>
</tr>
<tr>
<td>Returned Check Fee</td>
<td></td>
<td>$20</td>
</tr>
<tr>
<td>Late Add/Drop Fee, per transaction</td>
<td></td>
<td>$20</td>
</tr>
<tr>
<td>Replacement ID Card Fee</td>
<td></td>
<td>$20</td>
</tr>
<tr>
<td>Replacement Diploma Fee</td>
<td></td>
<td>$15</td>
</tr>
</tbody>
</table>

**Mandatory for all undergraduate full-time students unless Insurance Waiver Form is filed. Optional for all other students.

#### Graduate Degree/Certificate Completion Fees*

<table>
<thead>
<tr>
<th>Fee</th>
<th>Description</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissertation Processing Fee</td>
<td></td>
<td>$100</td>
</tr>
<tr>
<td>Thesis Processing Fee</td>
<td></td>
<td>$85</td>
</tr>
<tr>
<td>Binding Fee for Paper Copies</td>
<td>(optional, unless department requires a paper copy)</td>
<td>$15 per copy</td>
</tr>
<tr>
<td>Copyrights Fee (optional)</td>
<td></td>
<td>$55</td>
</tr>
</tbody>
</table>
Certificate Processing Fee (add-on certificates and certificates of completion only)  $100

*Please see the Graduate School Manual at http://www2.binghamton.edu/grad-school/manual/ for complete details.

**Mandatory Fees**

**Academic Excellence and Success Fee:** The State University of New York instituted the Academic Excellence and Success Fee to provide the financial resources necessary for building and enhancing academic and student success. The fee is charged to all undergraduate and graduate students.

**Academic Record Fee:** This fee is to assist in the processing and storage of student permanent records. For more information, visit the Registrar's website at http://www.binghamton.edu/registrar/services/transcripts.html.

**Academic Support Services Fee:** Tutorial services for undergraduate students are partially supported by this fee, allowing tutorial services at all levels of academic performance. For more information visit https://www.binghamton.edu/clt/tutoring-services/.

**Activity Fee:** Undergraduates — This fee funds approximately 170 student organizations and clubs. The Student Association allocates funds annually. For details, contact the Student Association at 607-777-6503. Graduates — This fee is used to provide funds to each graduate department for speakers, programs, activities and conferences. For details, contact the Graduate Student Organization at 607-777-4247.

**Campus Life:** The campus life fee, charged to undergraduate students only, enables the University and students to provide programming opportunities during the academic year, with special emphasis on Late Nite Binghamton programs on weekends. More information on Late Nite Binghamton is available at http://latenite.binghamton.edu.

**Career Resource Fee:** This fee supports technology-based career resources that provide job, internship and career information for undergraduate students. For more information, visit the Career Development Center's website at http://www.binghamton.edu/career-development-center/.

**CCPA Program Fee:** This fee is assessed to all students enrolled in the College of Community and Public Affairs.

**ID Card Fee:** This fee covers the expense of producing the University identification card and related security, financial and service access components.

**Intercollegiate Athletic Fee:** The athletic fee, charged to undergraduate students only, supports Binghamton University's Division I intercollegiate athletics program and campus athletics facilities. Athletic fee revenues are used to cover all types of costs related to the athletics program, including expenses such as travel, officiating, facilities preparation, telephone, sports equipment and uniforms. More information is available at the Athletics Department website http://www.bubearcats.com.

**International Student Administration Fee:** Supports certain federally mandated services and staff salaries in the Office of International Student and Scholar Services for students with F and J visas. Questions about this fee should be directed to the Office of International Student and Scholar Services at 607-777-2510. For more information visit http://www.binghamton.edu/isss/.

**Recreation Fee:** The recreation fee, charged to all students, enables Campus Recreation Services to offer programs intended to enrich the overall educational experience of students at the University. Programs include Club Sports, Wellness Services, Intramural Sports, Outdoor Pursuits and Open Recreation. More information is available at http://www.binghamton.edu/campus-recreation/.

**SOM Fee:** This fee is charged to all students of the School of Management.
**Student Health Center Fee:** The health fee is not health insurance. All students are charged this fee to support services at the University Health Service, including medical care for illness and injury, psychiatry, women's health care, sports medicine, vaccination services, health education programs, alcohol/other drug counseling and HIV testing. Medications ordered by staff providers and medical supplies are both covered by this fee, as is public health management of infectious disease outbreaks when these occur. More information is available online at [http://www2.binghamton.edu/health/](http://www2.binghamton.edu/health/).

**Technology Fee:** The technology fee, charged to all students, is used to support a number of services provided for student use by Computing Services and Educational Communications. Services include the Blackboard online course system, the campus computing network, Internet connections, classroom technology, email service, computer PODs, the Help Desk and many other technology applications. More information is available at [http://www.binghamton.edu/its/](http://www.binghamton.edu/its/).

**Transportation Fee:** The transportation fee, charged to all students, supports mass transportation (bus) services to and from campus. Contracts with Broome County Transit and Off Campus College Transit Inc. (OCCT) provide comprehensive coverage to the Greater Binghamton region. More information on OCCT is available at [http://www.binghamton.edu/occ/](http://www.binghamton.edu/occ/). Broome Transit is the local county-operated bus service that covers an extended region.

**University Fee:** The University fee is mandatory for all SUNY students. This fee is charged to all enrolled students by authority of the Board of Trustees.

**Watson School Program Fee:** This fee is assessed to all students enrolled in the Watson School.

**Deposits**

**Admission Deposit** (credited to the student account balance):

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>All new undergraduates</td>
<td>$350</td>
</tr>
<tr>
<td>All new graduate students</td>
<td>$100</td>
</tr>
</tbody>
</table>

**Dining Plans**

All resident students are required by the University to purchase a resident dining meal plan with the exception of students living in Hillside and Susquehanna communities. Students living in Hillside, Susquehanna or off campus may purchase one of the commuter meal plans. Log onto [www.BinghamtonUdining.com](http://www.BinghamtonUdining.com) for further information regarding meal plans and meal plan rates.

**Dining Plan Refunds**

Refunds of dining plan payments are permitted only during the first nine weeks of the semester under one of the following circumstances:

1. A student withdraws from the University.
2. A student obtains a medical exemption from the dining plan from the University physician.

Students who register but do not attend the University receive a full refund of their entire dining plan payment.

The dining plan refund is computed on a prorated basis of the membership fee and the unused portion of the current
semester dining dollars. Carry over balances will not be refunded.

For the purpose of prorating the membership fee, weekly increments are used and students eating for part of the week are charged for the full week. Refunds are prorated according to the following schedule:

- Week 1 - 85 percent
- Week 2 - 75 percent
- Week 3 - 65 percent
- Week 4 - 55 percent
- Week 5 - 45 percent
- Week 6 - 35 percent
- Week 7 - 25 percent
- Week 8 - 15 percent
- Week 9 - 5 percent

There are no refunds after the ninth week of the semester.

Outstanding Obligations

Students who owe money to the University, payments on a University loan or a Title IV financial aid repayment are denied registration privileges. Transcripts and diplomas are withheld until past due balances are paid in full.

In addition, any past due balances owed to the University and not paid on a timely basis are forwarded to a collection agency and/or the New York State Attorney General’s Office for collection. Accounts forwarded to collection agencies or the Attorney General’s Office are assessed additional collection costs and interest charges.

Housing

Below are proposed rates for 2017-18 and are subject to change.

**College-in-the-Woods, Dickinson, Hinman, Mountainview and Newing**

<table>
<thead>
<tr>
<th>College-in-the-Woods</th>
<th>Semester</th>
<th>Total Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double</td>
<td>$4,534</td>
<td>$9,068</td>
</tr>
<tr>
<td>Double (Break Housing)</td>
<td>$4,844</td>
<td>$9,688</td>
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<tr>
<td><strong>Dickinson</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triple</td>
<td>$4,957</td>
<td>$9,914</td>
</tr>
<tr>
<td>Double</td>
<td>$5,089</td>
<td>$10,178</td>
</tr>
<tr>
<td>Single</td>
<td>$5,540</td>
<td>$11,080</td>
</tr>
<tr>
<td>Health and Wellness double</td>
<td>$4,534</td>
<td>$9,068</td>
</tr>
<tr>
<td><strong>Hinman</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double</td>
<td>$4,534</td>
<td>$9,068</td>
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</tbody>
</table>
### Mountainview

<table>
<thead>
<tr>
<th></th>
<th>Semester</th>
<th>Total Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triple</td>
<td>$4,957</td>
<td>$9,914</td>
</tr>
<tr>
<td>Double</td>
<td>$5,033</td>
<td>$10,066</td>
</tr>
<tr>
<td>Double (Break Housing)</td>
<td>$5,343</td>
<td>$10,686</td>
</tr>
<tr>
<td>Designed Triple (Break Housing)</td>
<td>$5,205</td>
<td>$10,410</td>
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### Newing

<table>
<thead>
<tr>
<th></th>
<th>Semester</th>
<th>Total Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double</td>
<td>$5,043</td>
<td>$10,086</td>
</tr>
<tr>
<td>Double (Break Housing)</td>
<td>$5,343</td>
<td>$10,686</td>
</tr>
<tr>
<td>Single</td>
<td>$5,540</td>
<td>$11,080</td>
</tr>
<tr>
<td>Single (Break Housing)</td>
<td>$5,782</td>
<td>$11,564</td>
</tr>
<tr>
<td>Designed Triple</td>
<td>$4,957</td>
<td>$9,914</td>
</tr>
<tr>
<td>Designed Triple (Break Housing)</td>
<td>$5,205</td>
<td>$10,410</td>
</tr>
</tbody>
</table>

### Other

<table>
<thead>
<tr>
<th></th>
<th>Semester</th>
<th>Total Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single with private bathroom</td>
<td>$5,542</td>
<td>$11,084</td>
</tr>
</tbody>
</table>

### Apartment Communities

<table>
<thead>
<tr>
<th></th>
<th>Semester</th>
<th>Total Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillside and Susquehanna - single</td>
<td>$5,135</td>
<td>$10,270</td>
</tr>
<tr>
<td>Hillside and Susquehanna - super single</td>
<td>$5,847</td>
<td>$11,694</td>
</tr>
<tr>
<td>Susquehanna - family apartment</td>
<td>$7,121</td>
<td>$14,242</td>
</tr>
</tbody>
</table>

For additional information on University housing, see the Residential Life website at [http://www.binghamton.edu/residential-life/](http://www.binghamton.edu/residential-life/).

### Housing Refunds

- Continuing students assigned to University housing must cancel their fall semester housing by March 9, 2017. A student who participated in the March housing sign-ups must cancel their fall semester housing by June 7, 2017. A new student must cancel within 14 calendar days of notification of housing assignment until August 18, 2017. A request to cancel after the 14-day deadline and/or August 18, 2017 (whichever comes first) will be denied if the student is enrolled during the term of the housing license; he or she will be required to pay the entire room charge for the fall and spring semesters.

- Residents who withdraw for the fall semester after November 26, 2017, but remain students at the University for the spring 2018 semester must fulfill the terms of the University Housing License for the spring semester and remain in University housing.

- Fall 2017 residents may request permission to cancel their housing for the spring 2018 semester due to
graduation, study abroad, exchange program, academic dismissal, transfer of schools, withdrawal, or military service. A Request for Housing Cancellation must be submitted and approved no later than November 17, 2017, at 4:30 p.m. to avoid a $200 late cancellation charge. Approved cancellations after November 17, 2017 will result in a $200 late cancellation charge.

- New spring semester students must cancel their spring housing within 14 calendar days of notification of housing assignment until January 19, 2018. A request to cancel after this deadline and/or January 19, 2018 (whichever comes first) will be denied if the student is enrolled during term of the housing license; he or she will be required to pay the entire room charge for the spring semester.

**Accident and Sickness Insurance for Students**

The student health fee does not pay for medical charges for off-campus providers or facilities. Students must have adequate accident and sickness insurance. Undergraduate students will be automatically enrolled in and billed for the campus-sponsored plan, which offers worldwide coverage and a full choice of providers. Students who already have comparable health insurance coverage may waive enrollment and related charges. Information on the waiver process can be found at [http://www2.binghamton.edu/student-accounts/inswaiver.html](http://www2.binghamton.edu/student-accounts/inswaiver.html). If the University plan is waived, please be sure that the current health insurance coverage can be used for inpatient/outpatient services and specialist referrals in the Binghamton community. Students are responsible for knowing the limitations and special considerations of their respective health plans.

The student’s status relative to insurance will be continued in subsequent academic years unless the student acts to change that status. A brochure detailing the cost and the provisions of this accident and sickness insurance is available through the Student Accounts Office or the Decker Student Health Services Center. Costs and benefits are subject to change from year to year. Call the Decker Student Health Services Center at 607-777-2221 for current information or with questions. The Decker Student Health Services Center website is [http://www.binghamton.edu/health/](http://www.binghamton.edu/health/). Graduate students, part-time students and dependents of enrolled students are encouraged to consider enrolling in the campus program, but are not obligated to do so. International students are required to enroll in a separate health insurance program. Information regarding international student health insurance can be found on the Office of International Student and Scholar Services website at [http://www2.binghamton.edu/isss/health-insurance/index.html](http://www2.binghamton.edu/isss/health-insurance/index.html).

**Insurance for International Students**

International students in non-immigrant status (F-1, J-1, etc.) and students participating in overseas study programs are required by the State University of New York to purchase a special SUNY health and accident insurance policy designed specifically for them. Dependents of J-1 students and scholars are required by the U.S. Department of State, Bureau of Educational and Cultural Affairs, to purchase insurance as well. Students are charged on a semester basis, with Fall coverage in effect Aug. 15-Jan. 15 and Spring coverage in effect Jan. 14-Aug. 15. Since Fall-semester coverage is for a five-month period and Spring coverage is for seven months, the insurance fee is higher in the Spring. Overseas study participants may select shorter coverage periods matched to the length of their program. Insurance rates are reviewed each year and are subject to change. The policy is comprehensive and provides benefits not found in standard insurance policies, such as medical evacuation and repatriation. Coverage for dependents is also available.

Deadline for submission of the international health insurance adjustment/waiver form is February 15 for the Spring semester and October 15 for the Fall semester. Click [here](http://www2.binghamton.edu/isss/health-insurance/index.html) for information on filing the health insurance waiver request. Filing a request does not guarantee a waiver or adjustment. You must either be a Graduate Assistant (G.A.), Teaching Assistant (T.A.) or Research Assistant (R.A.) funded through Binghamton University and enrolled in employee health insurance, -or- you must meet the standards for comparable coverage outlined on the ISSS Health Insurance web page located through the above link.
The policy is administered by the Office of International Student and Scholar Services (Floor 1R, Room 142 of Old Champlain Building on the Binghamton University campus, 607-777-2510, intl.insure@binghamton.edu). Detailed information on the policy, as well as claims assistance, may be obtained there. For policy information, visit http://www.binghamton.edu/isss/health-insurance/.

**Payment Procedures**

**Electronic Billing**

The Student Accounts Office generates an electronic bill (E-bill) for tuition and fees based on class registration on the date it is processed. In the absence of registration, an E-bill will be generated for other charges assessed to the student account such as room, dining or other miscellaneous. The Student Accounts Office sends all E-Bill notifications via email to the student's email address. The E-bill notification includes the balance due, the due date, and a link to the University's billing and payment portal, QuikPAY.

If the student would like a billing notification sent to their parents, guardian or another person, they must add that person as an Authorized Payer on his/her QuikPAY account. Authorized Payers receive electronic E-bill notification and access to view, print and pay the bill.

**Billing Cycle**

Binghamton University generates semester E-bill statements in August for the fall term and in January for the spring term. Students will receive a monthly E-bill statement via email if new semester charges are assessed due to changes to class registration, housing assessment or meal plan, as well as miscellaneous charges, along with any past due balance owed. All bills are issued the first week of the month.

It is important to make payment immediately for balances due to avoid holds and late fees. The Student Accounts Office encourages students and their authorized payers to check their QuikPAY account weekly throughout the semester to ensure all balances are paid in full.

**Due Date & Fees**

If payment is not made in full by the due date on the E-bill statement, the account is subject to a $30 fee.

**Payment Plan**

Binghamton University has partnered with Nelnet Business Solutions to offer an affordable, web-based semester payment plan. The payment plan provides students with the opportunity to divide the balance due into equal installments for a specified number of months. The payment plan option is offered to students and families interest-free. Depending on when you enroll, the plan allows students and families to spread the balance into monthly payments over a period of up to four months (Fall: Sep., Oct., Nov., Dec.; Spring: Feb., Mar., Apr., May). A non-refundable enrollment fee of $40 per term is required to activate the payment plan. Payment plans are available for the Fall and Spring terms only, and you must re-enroll each semester. Payment plans must be processed online through the student's QuikPAY account. Semester payment plans cannot be processed in the Student Accounts Office.

**Holds**

Accounts that have not signed up for a payment plan and still have a balance on their account at the end of the sixth week of classes will have an Accounts Receivable (AR) hold placed on their record. An AR hold prevents the student from registering for upcoming semesters, receiving grades, receiving official academic transcripts and receiving their diploma.
Collection

As a New York State agency, Binghamton University is required by Section 18 of the New York State Finance Law to follow certain collection procedures for past due debts.

Past due balances owed to the University that are not paid in full by the end of the term will be forwarded to a collection agency or the NYS Attorney General's Office. Once a student's account is sent to a collection agency or the NYS Attorney General's Office, the student is made ineligible to attend the University until the past due balance is paid in full. Any registration for a future term will be cancelled. The student will be assessed additional collection costs, penalties and interest. The debt will be reported to the major credit bureaus, thus negatively impacting the student's credit rating.

Per State Finance Law, § 18, State agencies are authorized to assess interest or late payment penalty charges on overdue debt. State agencies or their representatives may charge collections fees to cover the estimated cost of processing, handling and collecting delinquent debts. If the debt is not paid within 90 days of your presumed receipt of the Section 18 notice, the amount can be as much as 22 percent of the outstanding debt. Per § 302.1(j) of Chapter V, Title 8 of the Official Compilation of Codes, Rules and Regulations, no person shall receive credit or other official recognition for work completed satisfactorily, or be allowed to re-register, until all tuition, fees and all other charges authorized by Binghamton University have been paid or student loan obligations have been satisfied. Per State Finance Law Section § 19, State agencies are authorized to charge a return check fee when a check/electronic check is dishonored. Per State Tax Law §171-f, State agencies are authorized to certify to the Department of Taxation and Finance that past due legally enforceable debts should be offset against any tax refunds, contracts or other State payments.

Paying Your Bill

HOW TO PAY YOUR BILL:

2. Find the "Student Tools" menu. Click on the "Student Accounts" menu. Click on the "QuikPAY-Web Payments" and re-enter your username and password.
3. Once in QuikPAY, click on "View Accounts" to view, print and pay the bill. Payment can be made by an electronic check or savings payment (account and routing numbers required) or with a credit card (we accept all major credit cards).
4. If paying by mail, print your E-bill statement and mail to:

   Student Accounts
   P.O. Box 6003
   Binghamton, NY 13902-6003

   Please make your check or money order payable to Binghamton University and write the student's Binghamton University ID number on the check. Payments must be received in the office by the due date listed on your E-bill statement.

HOW TO ADD AN AUTHORIZED PAYER:

2. Find the "Student Tools" menu. Click on the "Student Accounts" menu. Click on the "QuikPAY-Web Payments"
and re-enter your username and password.

3. On the left menu in QuikPAY you will find an "Add Authorized Payer" link. If the student would like the E-bill notification sent to his/her parents, guardian or another person, they MUST add that person/s as an Authorized Payer on their QuikPAY account. This is the only way for anyone other than the student to receive an E-bill notification and to gain access to view, print and pay your student's bill.

Each time an E-bill statement is posted, the student and any Authorized Payers listed on his/her account will receive an E-bill notification via email. The student's E-bill notification will be sent to their Binghamton University email account.

**Refunds**

If there is an overpayment on the student's account, the refund will be issued payable to the student regardless of the source of payment. The only refund issued to someone other than the student is the payment made by a Parent PLUS Loan that exceeds the charges on the account.

Paper refund checks are printed once a week. Students are notified via email to their Binghamton University email account to pick up their refund check. If the refund check is not picked up within 14 days, the check is mailed to the permanent address listed in the student's record.

Students who sign up for Direct Deposit will receive their refund within two business days (depending on the bank). If the student prefers to receive refunds directly in his/her checking or savings account, they may sign up for Direct Deposit in the BU Brain.

**Privacy Protection**

Federal regulations and student privacy protection policies prohibit us from giving detailed information to callers unless they:

1. provide the University ID (BNumber) for the student and
2. are the student or an "Authorized Payer"

For the student's protection, email correspondence with the Student Accounts Office will be limited to general process and policy information only.

**Confirmation of Enrollment**

**What is Confirmation of Enrollment?**

We are required to confirm students’ acceptance of charges and their review of required policies, and to be assured students have reviewed and understand the Board of Trustees policies when they enroll in classes. We ask students to certify their understanding by completing the Confirmation of Enrollment form. If students fail to certify their understanding, we cannot offer them enrollment. Students will automatically be removed from their courses if they do not complete this process by the fifth day of classes.

Students are asked to certify their understanding by completing the Confirmation of Enrollment process every term.

By "Confirming Enrollment," I agree to:

- Accept financial liability for tuition and fees.
- Understand that changes to registration will be assessed according to the SUNY Board of Trustees refund/adjustment schedule (see Tuition Refunds/Adjustment Schedule).
Understand that all billing notification is electronic and it is my responsibility to monitor my account and give access to authorized payers.

Agree to make payment by the established deadline and acknowledge that late and/or partial payments are subject to additional fees.

Understand that outstanding balances will result in a hold that will prohibit access to all registration activities and transcripts.

Authorize Binghamton University to use any available financial aid to pay any balance due.

Financial Aid

Financial Aid and Student Records works with students to explore all federal and state funding options available. Financial aid consists of grants, loans, scholarships and part-time employment. Basic responsibility for financing higher education rests with students and their families; assistance from federal/state/institutional resources is offered to help families finance their student's education.

How to Apply for Financial Aid

Students applying for financial assistance must file a Free Application for Federal Student Aid (FAFSA) each year. The FAFSA is the standard application for federal, state and institutional aid. Students must file online at http://www.fafsa.ed.gov/. New York state residents should also complete a Tuition Assistance Program (TAP) application upon completion of the FAFSA. The TAP link is provided on the FAFSA confirmation page. If missed, students can complete and sign a TAP application online with New York State Higher Education Services Corporation (HESC) at http://www.hesc.ny.gov. Students apply for most forms of financial assistance listed in this publication by filing these forms and submitting any other documentation that is requested to the school or HESC. More detailed information about the financial aid process, types of aid, guidelines, etc. is available at http://www.binghamton.edu/financial-aid/.

Recommended FAFSA Filing Dates

It is recommended that returning students (other than newly admitted students) who wish to be considered for financial aid administered by the University complete and submit their FAFSA by March 1 (undergraduate students) or April 1 (graduate students) for the fall semester and November 15 for the spring semester. FAFSAs can still be submitted after these dates; they must be received before the last day of the student's enrollment during that aid year. Campus-based funding is limited and awarded on a first-come, first-served basis, with priority given to students who file by the recommended deadline, demonstrate the greatest financial need and academic achievement.

Information Required to Determine Eligibility for Financial Aid

In most cases, a financial aid award offer will be made without all of the required documentation being received. However, no funds will be disbursed to the student until all of the required documentation has been received and a financial aid counselor has reviewed the student’s application to verify the accuracy of the information provided. Students are notified via their official Binghamton email address if additional information is needed or a change is made in eligibility based on the documents submitted and information verified.

A delay should be expected in the processing of a financial aid application if:

- the FAFSA is not signed, completed correctly or in a timely manner
- the requested documents are not received in a timely manner
- the requested documents submitted are incomplete or illegible
If a student fails to submit the required documentation by the deadline provided, any financial aid funds offered will be rescinded.

**Eligibility Criteria**

To receive federal/state-funded financial aid, students must meet general eligibility criteria established by the federal government/state agency and coordinated through Financial Aid and Student Records. Applicants must be matriculated students who are U.S. citizens or eligible non-citizens; not be in default on any student loans or owe a refund on a federal grant; registered with Selective Service, if required; and making satisfactory academic progress (see Determination of Satisfactory Academic Progress section) and also visit http://www.binghamton.edu/financial-aid/services/academic-progress/index.html. In some cases, as noted, part-time students may receive federal or state-funded financial aid. Non-matriculated students may be eligible for federally-funded loans during a one-time, 12-consecutive-month period, if taking approved prerequisite coursework only. Some aid programs, as noted, are restricted to undergraduate students.

**Additional Funding Needs**

*Study Abroad:* Federal and state grants and loans you receive during the fall and spring semesters may be used to cover study-abroad charges for Binghamton University or another SUNY program. If you plan to attend a winter or summer abroad program, loans may be the only available aid and will be deducted from your fall or spring financial aid package. If you are attending a SUNY program, New York state’s Tuition Assistance Program (TAP) will be applied. If you’re attending a non-SUNY program, TAP is not available. Students who have met all degree requirements prior to attending a study abroad semester are not eligible for financial aid for the subsequent study abroad semester.

*Summer or Winter Session(s):* Attending Summer Session and/or Winter Session is/are often a way to accelerate one's degree. Limited financial aid sources for the summer are available for matriculated, Binghamton University undergraduate and graduate students in good academic standing. Students enrolled for at least six (6) credits during Summer Session may be eligible for Federal Direct Student Loans, Federal Parent Loans, Alternative Loans, and New York state Tuition Assistance Program (TAP) grants (more TAP details below). Students may be eligible for Pell Grant funding for Winter Session only if registered for less than full time in the spring semester. Students may be eligible for a Pell Grant for Summer Session at less than 6 credits. Receipt of Pell Grant funding in summer will reduce the amount available for spring, if attending summer, fall and spring semesters during the aid year.

**Responsibilities of Financial Aid Recipients**

Financial-aid recipients are expected to complete the FAFSA application process annually by the recommended filing dates and deadlines, and to submit required documentation in a timely manner. Students must meet requirements for measuring satisfactory academic progress (SAP) toward a degree. (See Satisfactory Academic Progress section below for further information.) Students are obligated to report receipt of any additional outside sources, such as scholarships, grants or loans, to Financial Aid and Student Records.

**Adjustments to Aid Offers**

Federal, state or institutional financial aid is an offer based on full-time enrollment and analysis of the information provided on the FAFSA and/or reports of financial assistance received on behalf of the student from another agency or group. The University reserves the right to make adjustments to financial aid offers due to unusual family circumstances, changes in enrollment or residency, income verification or failure to provide required documentation. See the following webpage for specifics about Special Circumstances and appeals: http://www.binghamton.edu/financial-aid/funding-needs/special-circumstances.html.
The University further reserves the right to make proportionate adjustments in campus-administered financial aid if federal or state funding to the University changes and/or if more students accept their aid packages than anticipated. Students who do not meet the requirements determined by the University, are required to repay any financial aid funds they have received. Students who withdraw from the University before the end of an academic term may be required to repay a portion of their financial aid. For more information about withdrawal, go to [http://www.binghamton.edu/registrar/students/course-registration/semester-withdrawal.html](http://www.binghamton.edu/registrar/students/course-registration/semester-withdrawal.html).

Again, since the aid is an offer, it may be adjusted at a later date due to the following reasons:

- changes in funding;
- corrections made to information on the FAFSA;
- financial aid or scholarships received from outside sources exceed level of need or cost of attendance;
- substantial change in family’s financial situation;
- change in enrollment status (i.e., full time to part time);
- withdrawal during the refund period or during the semester (refund schedule is available in the Student Accounts Office);
- results from verification differ from original application;
- graduate tuition scholarships not previously considered (i.e., tuition waivers);
- resident assistants (RAs) that receive room and board credit;
- enrollment in courses that exceed or do not fulfill graduation requirements;
- change in student’s grade level;
- change in residency (state residency or commuter status);
- subsequent knowledge of loan default status;
- failure to make satisfactory academic progress;
- incomplete application;
- failure to meet eligibility requirements;
- applicable National Collegiate Athletics Association (NCAA) guidelines;
- retaking of passed courses (if more than once)

Should there be a revision to your initial offer, notification will be sent to the student's Binghamton University email address.

**Additional Terms and Conditions**

- To be considered for financial aid, students must file a new FAFSA each academic year. A financial aid offer reflects the amount of funds available for the current academic year. Aid offers may differ each year based on FAFSA information, availability of funds and grade level of the eligible student.
- Notifications are sent via email to all students. Students are instructed to go online to Binghamton University’s portal, and login to BU BRAIN Self Service, Financial Aid tab, to view, print, accept or decline student loans.
- Most components of a financial aid offer, except earnings from Federal Work Study employment, are credited by semester to a student’s account. If financial aid, excluding Federal Work Study earnings, exceeds the University’s charges, a refund is issued.
- An offer that includes an estimated New York state TAP Grant is an approximation of eligibility based on information provided on the FAFSA. Students are required to complete and sign a TAP application online with
New York State Higher Education Services Corporation (HESC) before actual and final eligibility for TAP is determined. An actual TAP grant may differ from the estimated amount, depending on documented information provided by the applicant to the state agency and verification of state tax return income.

- TAP or any tuition scholarship is a financial resource. Therefore, it is included in the financial aid package and may affect eligibility for other funding sources.
- An offer of Federal Work Study (FWS) does not guarantee a job.
- Once employed, a student participating in FWS receives a biweekly paycheck based on the number of hours worked in a given pay period up to the Federal Work Study amount.
- If there are unusual family circumstances (such as loss of employment or high medical expenses), students may file an appeal based on special circumstances. See the following webpage for more information: http://www.binghamton.edu/financial-aid/funding-needs/special-circumstances.html.
- Graduate students may apply for graduate assistantships or fellowships through their respective academic departments. In most cases, the assistantship also includes a tuition scholarship. If the student should receive a tuition scholarship, it means that the tuition is paid by the department for a specific number of credit hours.
- Graduate assistants will receive funding based on the contract agreement with the Graduate School. This offer may be withdrawn after the first two weeks of the term depending upon availability of positions. A graduate student who is offered a Graduate Federal Work Study (GFWS) Assistantship receives his or her assignment from the Graduate School. However, an offer of FWS does not guarantee a job.
- Financial Aid and Student Records is notified of students receiving tuition scholarships by the Graduate School and/or academic departments. If notified after a financial aid package is completed, the package must be adjusted so that the student is not over-awarded. A revision email notice will be sent to the student.
- Students are required to notify Financial Aid and Student Records of any scholarship received (even if the scholarship is given directly to the student).
- All financial aid resources must be used for educational expenses only.

How a University Withdrawal Affects Aid Eligibility

The University is required to review a student's record if they withdraw from the University and receive federal financial aid in order to calculate the amount of aid that a student has earned. For this reason, it is extremely important that prior to withdrawing, students consult with Financial Aid and Student Records.

The formula used to calculate the percentage of federal aid earned due to a withdrawal: Number of calendar days in attendance during the term = percentage of aid earned divided by the number of calendar days in the term (if greater than 60 percent, no aid adjustment).

In other words, federal regulations state that once a student has attended more than 60 percent of the term, the student is considered to have earned 100 percent of their aid and no adjustment to aid is needed. Likewise, any "unearned" aid must be returned to the federal government.

Grants

Federal Pell Grants

Pell grants are available to help full-time or part-time, matriculated undergraduate students pay for their educational expenses. Usually, only students with the highest levels of need are eligible for these grants. In 2017-18, Federal Pell Grants range from $593 to $5,920 and are based on enrollment, which is frozen the day after the add/drop deadline each semester. For complete details, please visit: http://www.binghamton.edu/financial-aid/types-of-aid/grants/federal-grants/pell.html.
Federal Supplemental Educational Opportunity Grants (SEOG)

SEOG grants provide assistance to matriculated undergraduate students with “exceptional need.” Financial Aid and Student Records is responsible for selecting eligible students and determining the amount of the award based on need and funds available. The maximum SEOG award is $500 per aid year. For complete details, please visit: http://www.binghamton.edu/financial-aid/types-of-aid/grants/federal-grants/fed-supp-eop-grant.html.

Educational Opportunity Program (EOP) Grants

Grants are awarded to students admitted/enrolled in the Educational Opportunity Program (EOP) and are based on financial need. These New York state grants range from $1,000 to $2,000. For details about EOP, see the section under Undergraduate Admissions and visit: https://www.binghamton.edu/eop.

Tuition Assistance Program (TAP)

TAP provides grants to full-time, matriculated undergraduate students, which range from $500 to $5,165 in 2016-17. Limits for minimum and maximum awards for 2017-18 are determined by pending action of the New York State Legislature. Applicants must be New York state residents and U.S. citizens or eligible non-citizens; be matriculated and enrolled full time in a degree program; meet income criteria; and be making satisfactory academic progress. Students may receive TAP funding for up to eight semesters of study as an undergraduate. For complete details, please visit: http://www.binghamton.edu/financial-aid/types-of-aid/grants/new-york-state-grants.html. TAP is not available to graduate students.

Part-Time TAP

Part-Time TAP may be available for matriculated students taking 6 to 11 credits who in the previous academic year have earned two consecutive semesters of 12 credits each (24 credits total) and maintained a “C” average.

Aid for Part-Time Study (APTS)

APTS is an undergraduate grant program financed by New York state and awarded by Financial Aid and Student Records. The program provides aid to eligible, part-time undergraduate students to help pay tuition expenses up to $1,000 per semester.

To be considered for an award, students must be matriculated; enrolled in 3-11 credit hours; maintain satisfactory academic progress; be residents of New York state; be either U.S. citizens or eligible non-citizens; meet the income limits; not be in default of a federal student loan; and have not exhausted Tuition Assistance Program (TAP) eligibility. Students must submit an application by the deadline listed on the application. Applications are available in Financial Aid and Student Records and online at http://www.binghamton.edu/financial-aid/ beginning July 1. For complete details, please visit: http://www.binghamton.edu/financial-aid/types-of-aid/grants/new-york-state-grants.html#APTS.

State University of New York Empire State Diversity Honors Scholarship Program

The University participates in the SUNY Diversity Honors Scholarship Program, which provides assistance to undergraduates who are residents of New York state and have demonstrated high academic achievement and who will reflect the diversity of the student body. Awards for 2016-17 are $1,000; awards for 2017-18 are determined by pending action of the New York State Legislature. No application is required.

Loans

Loans are financial aid awards that must be repaid. They are funded through federal or private sources. Use an
online calculator to determine payments at http://www.binghamton.edu/financial-aid/services/cost-calculator.html or see the Repayment Estimator chart below:

Ten-Year Loan (120 Equal Payments)

<table>
<thead>
<tr>
<th>Amount Borrowed</th>
<th>$5,000</th>
<th>$10,000</th>
<th>$15,000</th>
<th>$20,000</th>
<th>$25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Federal Subsidized &amp; Unsubsidized Loans - 4.45% interest rate monthly payment</td>
<td>$51</td>
<td>$103</td>
<td>$155</td>
<td>$206</td>
<td>$258</td>
</tr>
<tr>
<td>Graduate/Professional Federal Unsubsidized Loan - 6.0% interest rate monthly payment</td>
<td>$56</td>
<td>$111</td>
<td>$166</td>
<td>$222</td>
<td>$277</td>
</tr>
<tr>
<td>Federal Parent PLUS/Graduate PLUS Loan - 7% interest rate monthly payment</td>
<td>$58</td>
<td>$116</td>
<td>$174</td>
<td>$232</td>
<td>$290</td>
</tr>
</tbody>
</table>

Federal Perkins Loans

This low-interest loan is offered to matriculated, undergraduate students with "exceptional need." Binghamton students are awarded up to $2,000 (based on grade level). No interest is charged while the student is enrolled at least half-time. Interest is a fixed rate of 5 percent and repayment begins nine months after the student graduates or falls below 6 credits, with a maximum of 10 years to repay. More details at: http://www.binghamton.edu/financial-aid/types-of-aid/loans/fed-undergrad-perkins-loans.html. Important note: According to the Department of Education, the Perkins Loan Program is expected to end on September 30, 2017. No replacement loans are anticipated at this time.

Federal Nursing Loans

To be considered for a Nursing Loan, undergraduate or graduate students must be accepted for admission or enrolled at least half-time in the Decker School of Nursing. The amount of this loan is based on financial need and ranges from $3,000 to $5,200 per academic year, based on grade level. No interest is charged while the student is enrolled in at least 6 credits. Interest is a fixed rate of 5 percent and repayment begins nine months after the student leaves school, with a maximum of 10 years to repay. More details at: http://www.binghamton.edu/financial-aid/types-of-aid/loans/federal-nursing-loan.html.

Federal Direct Subsidized Loans

The Federal Direct Subsidized Loan is a need-based program that allows eligible freshmen to borrow federal funds up to $3,500 per academic year; sophomores up to $4,500; juniors and seniors up to $5,500. The federal government pays the interest while the student is in school. Students must be enrolled in at least 6 credits. Loans are generally repaid over a ten-year period, but other repayment options are available. Interest is a fixed rate and an origination fee is automatically deducted from the loan before it is disbursed. Congressional action is required to determine interest rates and fees each year. More details at: http://www.binghamton.edu/financial-aid/types-of-aid/loans/fed-direct-sub-unsub-loans.html. Beginning July 1, 2012, graduate students are not eligible for subsidized loan funds.

Federal Direct Unsubsidized Loans

The Federal Direct Unsubsidized Loan is available to students who may not qualify for a Federal Direct Subsidized Loan, or who may qualify for only a partial Direct Subsidized Loan. Students must be enrolled in at least 6 credits. The borrower is responsible for the interest that accrues while in school and during the six-month grace period. Interest is a fixed rate and an origination fee is automatically deducted from the loan before it is disbursed.
Congressional action is required to determine interest rates and fees each year. The combined loan total (both subsidized and unsubsidized) may not exceed the federally set annual limits: freshmen, $5,500; sophomores, $6,500; juniors and seniors, $7,500; and graduate students, $20,500 (eligible for unsubsidized only). Additional funding is available through this program for independent undergraduate students and dependent students whose Parent PLUS Loans have been denied. More details at: http://www.binghamton.edu/financial-aid/types-of-aid/loans/fed-direct-sub-unsub-loans.html.

**Federal Direct Graduate PLUS Loans**

Federal Direct Graduate PLUS Loans are available to eligible graduate and professional students enrolled in at least 6 credits. Students may borrow up to the cost of attendance minus other estimated financial assistance each academic year. In addition, students must not have an adverse credit history. Interest is a fixed rate and an origination fee is automatically deducted before the loan is disbursed. Congressional action is required to determine interest rates and fees each year. Borrowers may choose to begin repayment within 60 days after final disbursement of the loan for that academic year or defer payment until 6 months after the student graduates or falls below 6 credits. Note: Interest does accrue during periods of deferment. More details at: http://www.binghamton.edu/financial-aid/types-of-aid/loans/fed-grad-plus-loan.html.

**Parent Loan for Undergraduate Students (PLUS)**

Parents may borrow up to the cost of attendance, minus other aid, per academic year for each matriculated dependent enrolled in at least 6 credits. These loans are part of the Federal Direct Loan Program, whereby federal funds are borrowed directly from the Department of Education. Interest is a fixed rate and an origination fee is automatically deducted before the loan is disbursed. Congressional action is required to determine interest rates and fees each year. Parent PLUS borrowers may choose to begin repayment within 60 days after final disbursement of the loan for that academic year or defer payments until 6 months after the student graduates or falls below 6 credits. Note: Interest accrues during the periods of deferment. More details at: http://www.binghamton.edu/financial-aid/types-of-aid/loans/parent-plus-loan.html.

**Alternative Loans**

Many banks offer a variety of credit and/or collateral-based loans that students and/or parents may apply for. Alternative loans are for educational purposes only. Once approved by the lender, Financial Aid and Student Records will be sent an electronic or paper request to certify the loan. Certification is based on eligibility criteria such as enrollment and academic progress verification, and is limited to the cost of attendance minus other financial aid received, including federal loans. Lenders offer a variety of terms and repayment options. Please note that the interest rates and fees are variable and may be higher than federally-funded loans. Students/families are encouraged to take advantage of all federal loan options first and research alternative loans thoroughly before borrowing. More details: http://www.binghamton.edu/financial-aid/types-of-aid/loans/alternative-loans.html.

**Emergency Loans or Short-Term Collateralized Loans**

Emergency short-term loans are available to students enrolled at the University. Supported by the Binghamton University Foundation and the University Women through the Wanda Bartle Student Loan Fund, emergency loan funds are administered by the Foundation for students in good financial standing with the University. More details are available at https://www.binghamton.edu/operations/policies/office-of-the-provost/student-loan-program.html.

**Federal Work Study (FWS)**

This need-based program provides employment on- and off-campus to eligible students as an opportunity to earn money to help defray college expenses and offers meaningful work experiences. Off-campus jobs are with area
employers, contributing to the local business community. FWS is offered to eligible students new to the University, on a first-come, first-served basis. FWS is also offered to eligible continuing students who held a FWS job in the previous academic year. An offer of FWS does not guarantee placement in a FWS job. Most graduate FWS awards are in the form of assistantships and must be applied for through the University’s Graduate School. Students employed through FWS work an average of eight (8) to ten (10) hours per week. More details at: http://www.binghamton.edu/financial-aid/types-of-aid/student-employment/index.html.

Other On- and Off-Campus Employment

Regardless of financial need, students may find information about part-time on- and off-campus employment by visiting the Student Employment website at http://www.binghamton.edu/financial-aid/types-of-aid/student-employment/index.html. In addition, you can review job listings on the hireBING website at https://binghamton-csm.symplicity.com/students/. Many students find jobs in a variety of offices and departments on campus, as well as at various community businesses.

Studying away from Campus

On a limited basis (required coursework not offered at Binghamton University; hardship; special circumstances), Binghamton University permits the use of federal financial aid for studying away from campus. Approvals are based on one of the noted circumstances, as well as on the premise that the study-away experience will complement and enhance a student’s overall educational experience. The student must obtain approval to verify academic requirements and complete a consortium agreement by the semester deadline before financial aid may be considered and processed. Request for Approval of a Financial Aid Consortium and Consortium Agreements forms are available in Financial Aid and Student Records.

Satisfactory Academic Progress

There are Satisfactory Academic Progress (SAP) guidelines for undergraduate and graduate students receiving federal and/or New York state aid, in addition to academic policy set forth by Binghamton University. For details related to federal and/or state aid guidelines, go to: http://www.binghamton.edu/financial-aid/services/academic-progress/index.html.

Note: Where any question of eligibility exists, students or prospective students should contact Financial Aid and Student Records.

Federal Financial Aid

Federal regulations require that students meet specific standards that include both qualitative (grade point average) and quantitative (coursework completed — i.e., attempted vs. earned and within the maximum time frame) measures of satisfactory academic progress (SAP) to receive Title IV student financial assistance — i.e., Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (SEOG), Federal Work Study, Federal Perkins Loan, Federal Nursing Loan, Federal Direct Loan [subsidized and unsubsidized]. Students must meet these standards whether or not they received Title IV funding during a prior period of enrollment. Students who fall below the minimum standards at the end of a term may be eligible for Title IV financial aid in the following term and will be considered in "Federal Warning" for one semester only. Students are expected to meet SAP requirements in subsequent terms or they will lose Title IV eligibility. For more detailed information about federal SAP, visit the following Financial Aid webpage: http://www.binghamton.edu/financial-aid/services/academic-progress/index.html.

SAP Review: Academic records are reviewed at the end of each semester, including Summer, to determine SAP eligibility for the following semester. The academic progress of students readmitted to the University is reviewed at the time of readmission. Students who have lost federal aid eligibility and believe that a correction of an error, a
grade change or the recording of summer courses and grades will re-establish eligibility for federal aid, must have
the necessary changes reflected on their academic record (transcript) in order to be considered eligible for aid for
that semester. Any changes processed subsequent to the end of the semester (within the aid year) will not entitle the
student to retroactive reinstatement of federal aid for that semester unless exceptional circumstances have been
approved by the appropriate school official.

Appeals: Students who fail to meet the minimum standards, may appeal the loss of aid if there are extraordinary or
unusual circumstances beyond their control that resulted in their failure to meet the standards. Documentation of
these circumstances is required as part of the appeal review process. An assessment of the student’s academic
situation, ability to regain satisfactory academic progress by the end of the appeal period and special needs, if any,
are part of this process. For complete details, visit http://www.binghamton.edu/financial-aid/services/academic-
progress/appeals-academic-progress.html.

State Financial Aid

The following are state aid programs administered by Higher Education Services Corporation (HESC) and the New
York State Education Department:

- Tuition Assistance Program (TAP)
- Regents Awards for Children of Deceased and Disabled Veterans
- Memorial Scholarship for Families of Deceased Firefighters, Volunteer Firefighters, Police Officers, Peace
  Officers and Emergency Medical Service Workers
- Veterans Tuition Awards
- World Trade Center Memorial Scholarship
- NYS Scholarship for Academic Excellence
- Robert C. Byrd Honors Scholarship Program
- Aid for Part-time Study Program
- Part-time Tuition Assistance Program (Part-time TAP)
- NYS STEM Incentive Program
- NY-AIMS Scholarship
- Masters in Education Teacher Incentive Scholarship

To be eligible for the above listed programs students must meet the following requirements:

- Meet one of the United States citizenship requirements
- Meet New York State residency requirements (except for World Trade Center Memorial Scholarship
  Recipients)
- Enroll as a full-time student (except for awards designated above as part-time), courses that do not count
towards a student's degree also do not count for determining enrollment status
- Be matriculated in a degree program
- Must have a declared major if student has 56 or more accumulated credits
- Meet the good academic standing, academic progress and program pursuit requirements listed below
- Must have a U.S. high school diploma, or the recognized equivalent

All undergraduate students must meet the conditions of academic progress and program pursuit in this section of the
Publication to continue receiving state financial assistance.

**Academic Progress:** The academic progress chart in this section of the publication states the number of graduation credits and the minimum grade-point average students must meet to remain eligible for future state payments. Academic performance expectations are quite low at the beginning, allowing for a time of adjustment to college work, but after several semesters, the expectations more closely approximate the overall minimum of 2.0 GPA necessary to qualify for a degree.

**State Student Aid Satisfactory Academic Progress Chart**

*State Aid Academic Progress Chart for Bachelor’s Degree as proposed by the Governor in the 2011-12 New York State Executive Budget*

<table>
<thead>
<tr>
<th>Before Being Certified for This Payment</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>10th**</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Student Must Have Accrued at Least This Many Credits</td>
<td>0</td>
<td>6</td>
<td>15</td>
<td>27</td>
<td>39</td>
<td>51</td>
<td>66</td>
<td>81</td>
<td>90</td>
<td>105</td>
</tr>
<tr>
<td>With at Least This Grade Point Average</td>
<td>0.00</td>
<td>1.5</td>
<td>1.8</td>
<td>1.8</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

For example, note on the chart for the bachelor’s degree that students must complete 27 credits with a 1.8 GPA to be eligible for the fourth payment of a New York state award. Thus, a student who has accrued 26 or fewer credits is not eligible for the fourth payment of a New York state award. Likewise, a student with less than a 1.8 GPA is not eligible for a fourth payment of a New York state award. The student needs to reach the stated minimums to be eligible for the next award. (See “Appeals”.) **Although the academic progress standards allow 10 semesters for completion of a bachelor’s degree, the maximum award period at the undergraduate level is four years, except for approved five-year degree programs or in the case of EOP students.

Transfer students may be granted beneficial placement. Beneficial placement is determination of placement on the chart in accordance with either the number of payments a student has received or the number of credits earned, whichever is more beneficial to the student.

**Undergraduate Program Pursuit:** In addition to meeting the criteria outlined on the Academic Progress Chart, State Education Department regulations require students who receive New York state awards to complete a minimum number of credits toward the degree each semester as follows:

- In each semester of the first year of New York state awards, students must complete a minimum of six credits of course-work with grades of A, B, C, D, F, P or I.
- In each semester of the second year of New York state awards, students must complete a minimum of nine credits of coursework with grades of A, B, C, D, F, P or I.
- In each semester of the third and fourth years of New York state awards, students must complete a minimum of 12 credits of coursework with grades of A, B, C, D, F, P or I.

Grades of I must be made up within one semester to have the credits counted.

Students who do not complete the minimum number of credits in a given semester are ineligible for New York State financial aid in the following term or until additional credits are completed to reach the minimum level.
Only courses that count toward a student’s degree may be used for meeting the program-pursuit requirement.

**Appeals**: Students who fall below the minimum criteria under Academic Progress or Program Pursuit may be eligible to receive one appeal during their undergraduate career. The appeal is intended to accommodate only extraordinary or unusual circumstances, that is, circumstances beyond the student’s control and not merely the result of poor judgment or academic irresponsibility. Documentation of these circumstances by a third party is required as part of the appeal review process. Appeals are first routed through the appropriate academic advisor and then forwarded to Financial Aid and Student Records for approval. Procedures for recommending the grant appeals, by academic officers, follow University policies relating to appeals procedures for academic suspension from the University. If granted, the appeal becomes part of the student’s financial aid record and the student is expected to make minimum progress thereafter.

The maximum number of Tuition Assistance Program (TAP) semester payments is eight for an undergraduate student. Students who participated in a five-year undergraduate degree program or EOP are granted exceptions to the above semester payment schedule. The satisfactory program-pursuit levels depend on the total number of payments students have received (including any payments as undergraduates). Students who fail to meet the prescribed standards for academic progress are ineligible for state financial assistance until the minimum standards have been met through additional coursework.

**Assistantships and Fellowships**

All applicants to the Graduate School are evaluated and considered for fellowships and assistantships. To be considered for University funding, students must submit completed applications by the published application deadline. Application and funding deadlines vary by program. See deadlines. International applicants should generally apply at least one month before these deadlines. While there is no general funding application, certain programs, departments, schools and colleges may have specific funding requirements.

Decisions on the awarding of assistantships and fellowships are made by the department or school/college to which the applicant is seeking admission. Applicants for fellowship and assistantship support are notified by the department or school/college as soon as possible after decisions have been made. Assistantship and fellowship awards to new and continuing students are made on a competitive basis, normally for a period of one academic year. The graduate committee of the program determines the procedures and criteria for renewal of the award in subsequent academic years.

Recipients of assistantships and fellowships must pursue a full-time program of study. The recipient’s obligation to provide service in exchange for the stipend and/or tuition scholarship is clearly described in the letter of appointment, as is the stipend/tuition scholarship amount and other important terms and conditions of the appointment. Students receiving an assistantship or fellowship are expected to agree to and sign the appropriate terms and conditions statements, which are available in the Funding section of the Graduate School website.

**Tuition Scholarships for Assistants and Fellows**

Scholarships covering part or all of the cost of tuition may be awarded to enrolled graduate students who qualify on the basis of merit, pursuant to guidelines established by the chancellor of the State University of New York.

Tuition scholarship recipients who are eligible must establish New York state residency before classes begin. In the second year, and before classes begin, the student must then apply for residency using the Application for New York State Residency Status for Tuition Billing Purposes, which is available from and must be filed with Student Accounts. International students and students who remain financially dependent on their parents are not eligible and therefore need not apply for residency.

Tuition scholarship support is used to establish financial aid loan eligibility. Students who apply for financial aid will
find their eligibility reduced by the amount of the tuition scholarship at the time the scholarship is applied and should consult with their financial aid counselor.

Tuition scholarship funds may not be used to cover any courses that are not graduate courses including: 100-, 200- or 300-level courses, 400-level courses not individually approved for graduate credit, courses taken on an audit basis or physical education courses.

Students who withdraw or reduce enrollment from full-time to part-time prior to the last day of the semester forfeit the tuition scholarship award. Such students become liable for repayment of any tuition covered by tuition scholarship funds.

Tuition scholarship awards provide for remission of tuition only; fees may not be waived. Students receiving a tuition scholarship are expected to agree to and sign the appropriate terms and conditions statements, which are available in the Funding section of the Graduate School website.

Individual departments, in conjunction with the Graduate School, are required to ensure that students meet the above terms and conditions. By signing the form, the student agrees to meet them. The student's failure to meet them will result in a temporary hold on his or her paycheck.

### Enrollment Requirements and Employment Limitations

A student holding a fellowship, assistantship or traineeship appointment must maintain full-time enrollment throughout the period of the award. Since the award of an assistantship or fellowship carries the expectation that the recipient is a full-time student, students receiving these stipends may not concurrently be otherwise employed without special permission from the Graduate School. A student’s total obligation may not exceed 20 hours per week. Students holding full-time jobs are not eligible for fellowships or assistantships.

### Teaching and Research Requirements for Graduate Students, Assistants and Trainees

A significant number of master’s and doctoral students hold assistantships or traineeships awarded by the University to enable them to pursue study toward their degrees. As in the case of fellowships or scholarships, these assistantships and traineeships are awarded on a competitive basis, with academic merit being the primary determining criterion, but with financial need also taken into account in some cases.

Research assistants help faculty members in their research work. Graduate assistants and trainees usually assist faculty in research efforts and may also assist in the teaching of undergraduate courses. Teaching assistants focus on helping faculty in the teaching of courses. Research Foundation appointments for full-time graduate students performing duties related to their educational requirements may carry the title of research project assistant. The assistants in all of these categories normally serve approximately 10 to 20 hours per week in research or teaching while pursuing regular full-time study toward their degrees.

These research and teaching assignments are in accordance with the requirement stipulated in guidelines issued by the chancellor of the State University of New York to the effect that all graduate degree candidates are required to demonstrate mastery both of research capability and of teaching competence. In every instance, the research or teaching service performed by assistants is conducted under the supervision and evaluation of a faculty mentor. This service is apprenticeship training in partial fulfillment of the requirements of their master’s or doctoral degree programs, as stipulated by the chancellor of the State University of New York; these requirements must be fulfilled in an equivalent manner by all degree candidates. Assignments as assistants or trainees, therefore, are intrinsic to the teaching and research apprenticeships required for the completion of degree requirements. At the same time, the stipends support the most academically meritorious students in completing their degree requirements in the shortest possible time.
Officers of Administration

Harvey G. Stenger, President

Donald G. Nieman, Executive Vice President for Academic Affairs and Provost

James Broschart, Vice President for Advancement

JoAnn Navarro, Vice President for Operations

Brian T. Rose, Vice President for Student Affairs

Bahgat Sammakia, Vice President for Research

Laura Bronstein, Dean of College of Community and Public Affairs

Elizabeth Chilton, Dean of Harpur College of Arts and Sciences

Upinder Dhillon, Dean of School of Management

Curtis Kendrick, Dean of Libraries

Gloria Meredith, Founding Dean of School of Pharmacy and Pharmaceutical Sciences

Mario Ortiz, Dean of Decker School of Nursing

Krishnaswami Srihari, Dean of Thomas J. Watson School of Engineering and Applied Science

Susan Strehle, Dean of Graduate School

Patrick Elliott, Director of Athletics

Chancellor’s and University Awards for Excellence

The Chancellor’s Award program was first instituted in 1972 by the State University of New York.

Nael Abu-Ghazaleh, Associate Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching 2005-06.


Allison F. Alden, Assistant Professor, Public Administration, College of Community and Public Affairs: Chancellor’s Award for Excellence in Professional Service, 2004-05.


David L. Anderson, Associate Vice President and Dean of Students: University Award for Excellence in Professional Service, 1983-84.

Richard E. Andrus, Associate Professor, Geological Sciences and Environmental Studies, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 2001-02.

Nancy P. Appelbaum, Associate Professor, History, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2004-05.
Joanne Ardune, Assistant to Chairperson, Economics, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Professional Service, 2014-15.*

John Arthur, Professor, Philosophy, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Teaching, 1991-92.*

A. Serdar Atav, Professor of Nursing, Decker School of Nursing:  *Chancellor’s Award for Excellence in Teaching, 2002-03.*

Bruce Avolio, Professor, School of Management:  *University Award for Excellence in Research, 1999-2000.*

Ellen H. Badger, Director, Office of International Student and Scholar Services:  *Chancellor’s and University Awards for Excellence in Professional Service, 1988-89, University Award for Excellence in International Education, 2009-10.*

Susan L. Bane, Professor, Chemistry, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2011-12.*

Bat-Ami Bar On, Associate Professor, Philosophy, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Teaching, 1999-2000.*

Jeffrey S. Barker, Associate Professor, Geological Sciences and Environmental Studies, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Teaching, 2003-04.*

David Bartine, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences:  *Chancellor’s and University Awards for Excellence in Teaching, 1987-88.*

Tammara Behonick, Assistant Dean, College of Community and Public Affairs:  *Chancellor’s Award for Excellence in Professional Service, 2013-14.*

Martin P. Bidney, Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Teaching, 1979-80.*

Donald D. Blake, Associate Dean for Academic Affairs, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Professional Service, 1982-83.*


Lisa V. Blitz, Assistant Professor, Social Work, College of Community and Public Affairs:  *Chancellor’s Award for Excellence in Faculty Service, 2012-13.*

George Bobinski, Associate Dean, School of Management:  *Chancellor’s Award for Excellence in Professional Service, 2016-17.*

Patricia Bonamo, Bartle Professor, Biology, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Teaching, 1975-76.*

Don Boros, Professor, Theatre, Harpur College of Arts and Sciences:  *Chancellor’s and University Awards for Excellence in Teaching, 1997-98.*

Kathleen H. Bowman, Senior Stenographer, Faculty Senate Office:  *University Award for Excellence in Classified Service, 1988-89.*

Douglas Bradburn, Associate Professor, History, Harpur College of Arts and Sciences:  *Chancellor’s Award for Excellence in Teaching, 2009-10.*
Louis Braiotta Jr., Associate Professor, Accounting, School of Management: *Chancellor’s and University Awards for Excellence in Teaching, 1988-89.*

John S. Bridge, Professor, Geological Sciences and Environmental Studies, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2004-05.*

Mary X. Britten, Associate Professor, Decker School of Nursing: *Chancellor’s and University Awards for Excellence in Teaching, 1996-97.*

Mary X. Britten, Associate Professor, Decker School of Nursing: *Chancellor’s Award for Excellence in Faculty Service, 2003-04.*

Karen M. Bromley, Professor, School of Education: *Chancellor’s Award for Excellence in Teaching, 1999-2000.*

Cheryl Brown, Director, Undergraduate Admissions: *Chancellor’s Award for Excellence in Professional Service, 2007-08.*

Howard Brown, Associate Professor, History, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2003-04; Chancellor’s Award for Excellence in Faculty Service, 2014-15.*

James D. Brownridge, Nuclear Instrumentation and Health Specialist, Physics, Applied Physics and Astronomy, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Professional Service, 1981-82.*

Roberta Brundege, Secretary 1, College of Community and Public Affairs: *University Award for Excellence in Classified Service, 2002-03.*

Priscilla Brunner, Secretary 2, School of Education: *University Award for Excellence in Classified Service, 2003-04.*

Kathleen Brunt, Assistant Dean for Academic Affairs, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Professional Service, 2011-12.*

Judith Bryant, Secretary 1, Art, Harpur College of Arts and Sciences: *University Award for Excellence in Classified Service, 1994-95.*

Deborah J. Bundy, Secretary 1, School of Management: *University Award for Excellence in Classified Service, 2004-05.*

C. Beth Burch, Professor, School of Education: *Chancellor’s Award for Excellence in Teaching, 2006-07.*

Annette Burnett, Secretary 1, Anderson Center of the Performing Arts: *University Award for Excellence in Classified Service 2005-06.*

Elisa Camiscioli, Assistant Professor, History, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2007-08.*

David A. Campbell, Assistant Professor, Public Administration, College of Community and Public Affairs: *Chancellor’s Award for Excellence in Teaching, 2009-10.*

Sandra Card, Associate Librarian, University Libraries: *Chancellor’s Award for Excellence in Librarianship, 2012-13.*

Frank Cardullo, Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: *Chancellor’s Award for Excellence in Faculty Service, 2009-10.*

Elizabeth Carter, Director, Discovery Program, Center for Learning and Teaching: *Chancellor’s Award for Excellence in Professional Service, 2005-06.*
Larry Cass, Director of Student Accounts: Chancellor’s Award for Excellence in Professional Service, 2006-07.

George Catalano, Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching, 2006-07.

John W. Chaffee, Professor, Asian and Asian American Studies, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in International Education, 2003-04.


Subimal Chatterjee, Associate Professor, Marketing, School of Management: Chancellor’s Award for Excellence in Teaching, 2003-04.

Lubna N. Chaudhry, Associate Professor, Human Development, College of Community and Public Affairs: Chancellor’s Award for Excellence in Teaching, 2014-15.

Dennis Chavez, Director, Student Financial Aid and Records: Chancellor’s Award for Excellence in Professional Service, 2013-14.

Zu-yan Chen, Professor, Asian and Asian American Studies, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2008-09.

Sungdai Cho, Associate Professor, German, Russian, and East Asian Languages, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2005-06.

Joseph Church, Associate Professor, English, General Literature, and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2007-08.

Rita Christopher, Secretary 2, Decker School of Nursing: University Award for Excellence in Classified Service, 1999-2000.

David Cingranelli, Professor, Political Science, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Faculty Service, 2007-08.

Anne B. Clark, Associate Professor, Biological Sciences, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2007-08.


Charles R. Cobb, Professor, Anthropology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2004-05.

Jaimee Wriston Colbert, Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Faculty Service, 2012-13.

Meredith Coles, Associate Professor, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2013-14.

Michael Colwell, Sign Painter, Physical Facilities: University Award for Excellence in Classified Service, 2005-06.

Michael J. Conlon, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1978-79.
Jane M. Conner, Associate Professor, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2002-03.

James Constable, Professor, Electrical and Computer Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s and University Awards for Excellence in Faculty Service, 2007-08.

Jeanne S. Constable, Stenographer, Philosophy, Harpur College of Arts and Sciences: University Award for Excellence in Classified Service, 1989-90.

Lorraine Corwin, Agency Program Aide, Undergraduate Admissions: Chancellor's Award for Excellence in Classified Service, 2008-09.

Patricia Coyle, Calculations Clerk 1, Student Accounts: University Award for Excellence in Classified Service, 2001-02

Heather Crandall, Secretary 1, Liberty Partnership Program and Gear Up Program: University Award for Excellence in Classified Service, 2006-07.

Marcia Craner, Associate Vice President for Alumni and Development: Chancellor’s and University Awards for Excellence in Professional Service, 1998-99.

Scott A. Craver, Associate Professor, Electrical and Computer Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor's Award for Excellence in Faculty Service, 2013-14.

Richard S. Culver, Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s and University Awards for Excellence in Teaching, 2000-01.

Stefanie Czebiniak, Secretary 1, English, General Literature, and Rhetoric, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Classified Service, 2008-09.

Terrence Deak, Professor, Psychology, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2010-11.

Heather DeHaan, Assistant Professor, History, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2011-12.

José Delgado-Frias, Associate Professor, Electrical Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s and University Awards for Excellence in Teaching, 1993-94.

Upinder S. Dhillon, Dean, School of Management: Chancellor’s and University Awards for Excellence in Teaching, 1995-96.

Steven R. Dickman, Professor, Geological Sciences, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 2000-01.

Eric Dietrich, Associate Professor, Philosophy, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1998-99.

Martin C. Dillon, Distinguished Teaching Professor, Philosophy, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1973-74.

Patricia M. Di Lorenzo, Professor, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2006-07.

Shelley D. Dionne, Associate Professor, School of Management: Chancellor’s Award for Excellence in Teaching,
Anita Knopp Doll, Interim Associate Vice President for Communications and Marketing: Chancellor’s Award for Excellence in Professional Service, 2002-03.


Jeffrey B. Donahue, Director, Educational Communications Center: Chancellor’s and University Awards for Excellence in Professional Service, 1986-87.


Thomas L. Dublin, Professor, History, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1999-2000; Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2005-06.

Melvyn Dubofsky, Distinguished Professor, History and Sociology, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1995-96.

Richard Eckert, Associate Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching, 1998-99; University Award for Excellence in International Education, 2007-08.


Lois J. Einhorn, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1982-83.

John J. Eisch, Distinguished Professor, Chemistry, Harpur College of Arts and Sciences: University Award for Excellence in Research, 1991-92.

Sarah Elbert, Associate Professor, History, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1997-98.

C. Robert Emerson, Professor, Systems Science and Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Faculty Service, 2003-04.

B. Jean Fairbairn, Director, Services for Students with Disabilities: Chancellor’s Award for Excellence in Professional Service, 2008-09.

Gina Fleming, Secretary I, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Classified Service, 2014-15.

John J. Fletcher, Adjunct Lecturer, Health and Wellness Studies, Decker School of Nursing: Chancellor’s Award for Excellence in Adjunct Teaching, 2016-17.


Mark Fowler, Associate Professor, Electrical and Computer Engineering, Thomas J. Watson School of Engineering: Chancellor’s Award for Excellence in Teaching, 2006-07; Chancellor’s Award for Excellence in Faculty Service 2011-12.
John Frazier, Professor, Geography, Harpur College of Arts and Sciences: **Chancellor’s Award for Excellence in Faculty Service, 2009-10.**

Jessica Fridrich, Associate Professor, Electrical and Computer Engineering, Thomas J. Watson School of Engineering: **Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2006-07.**

Randy L. Friedman, Assistant Professor, Philosophy and Judaic Studies, Harpur College of Arts and Sciences: **Chancellor's Award for Excellence in Teaching, 2011-12.**

Rose Frierman, Senior Director, Alumni Relations: **Chancellor's Award for Excellence in Professional Service, 2013-14.**

Christopher Fynsk, Professor, Comparative Literature, Harpur College of Arts and Sciences: **Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2002-03.**

Marilyn Gaddis Rose, Professor, Comparative Literature, Harpur College of Arts and Sciences: **University Award for Excellence in International Education, 2002-03.**

Randy L. Friedman, Assistant Professor, Philosophy and Judaic Studies, Harpur College of Arts and Sciences: **Chancellor’s Award for Excellence in Teaching, 2011-12.**

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Marilyn Gaddis Rose, Professor, Comparative Literature, Harpur College of Arts and Sciences: **University Award for Excellence in International Education, 2002-03.**

Martha Gahring, Secretary II, President's Office: **Chancellor's Award for Excellence in Classified Service, 2016-17.**

Pamela J. Gay, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: **Chancellor’s and University Awards for Excellence in Teaching, 1997-98.**

James F. Geer, Professor Emeritus, Systems Science, Thomas J. Watson School of Engineering and Applied Science: **University Award for Excellence in Graduate Teaching, 1986-87.**

Diane Geraci, Librarian, University Libraries: **Chancellor’s and University Awards for Excellence in Librarianship, 1988-89.**

Kanad Ghose, Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: **Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2005-06.**

Brandon Gibb, Associate Professor, Psychology, Harpur College of Arts and Sciences: **Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2012-13.**

Maria Mazziotti Gillan, Professor, English, General Literature, and Rhetoric, Harpur College of Arts and Sciences: **Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2007-08.**

Sandy Glemby, Secretary 1, Political Science, Harpur College of Arts and Sciences: **University Award for Excellence in Classified Service, 2006-07.**

Douglas J. Glick, Associate Professor, Anthropology, Harpur College of Arts and Sciences: **Chancellor’s Award for Excellence in Teaching, 2012-13.**

Frances Goldman, Assistant to the Director, Asian and Asian American Studies Program: **Chancellor’s Award for Excellence in Professional Service, 2005-06.**

Ronald Gonzalez, Professor, Art, Harpur College of Arts and Sciences: **Chancellor's Award for Excellence in Scholarship and Creative Activities, 2012-13.**

Suronda Gonzalez, Director, Global and International Studies: **University Award for Excellence in International Education, 2011-2012.**

Charles Goodman, Associate Professor, Philosophy and Asian and Asian American Studies, Harpur College of Arts and Sciences: **Chancellor's Award for Excellence in Teaching, 2011-12.**
Madhusudhan Govindaraju, Assistant Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: Chancellor's Award for Excellence in Teaching, 2008-09; Chancellor's Award for Excellence in Faculty Service, 2016-17.

Joseph R. Graney, Associate Professor, Geological Sciences and Environmental Studies, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2004-05.

Vicki Griffin, Senior Staff Assistant, Provost's Office: Chancellor's Award for Excellence in Professional Service, 2015-16.

Douglas Griswold, Maintenance Assistant, Physical Facilities: Chancellor's Award for Excellence in Classified Service, 2016-17.

Robert Guay, Professor, Philosophy, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Teaching, 2010-11.


Alan H. Haber, Professor, Biological Sciences, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1996-97.

Sylvia Hall, Assistant Vice President for Human Resources: Chancellor’s Award for Excellence in Professional Service, 2007-08.

Marion D. Hanscom, Librarian Emerita, University Libraries: Chancellor’s and University Awards for Excellence in Librarianship, 1984-85.


Kathryn Hastings, Secretary 2, Human Resources: Chancellor's Award for Excellence in Classified Service, 2011-2012.

William Haver, Associate Professor, History, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1992-93.

Robyn Henderson, Assistant to the Director, Career Development Center: Chancellor's Award for Excellence in Classified Service, 2012-13.

Floyd R. Herzog, Director/Producer, Anderson Center for the Performing Arts: University Award for Excellence in International Education, 2006-07.

Leslie S. Heywood, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1996-97; Chancellor's Award for Excellence in Scholarship and Creative Activities, 2008-09.

Sally Holbert, Clerk 2, Career Development Center: University Award for Excellence in Classified Service, 1993-94.

Douglas Holmes, Professor, Anthropology, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2013-14.

Alta Hooker, Secretary 2, Graduate School: University Award for Excellence in Classified Service, 2007-08.

Albrecht W. Inhoff, Professor, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Studies, 2003-04.

Margaret Iwobi, Lecturer, Computer Science, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s and University Awards for Excellence in Teaching, 2001-02.

Carolyn H. Jackson, Personnel Associate: Chancellor’s Award for Excellence in Professional Service, 1976-77.

Gary D. James, Professor, Decker School of Nursing, Chancellor’s Award for Excellence in Teaching, 2008-09.

Kimberly S. Jaussi, Associate Professor, School of Management: Chancellor’s Award for Excellence in Teaching, 2013-14.


David M. Jenkins, Professor, Geological Sciences and Environmental Studies, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Studies, 2003-04.

Angelique Jenks-Brown, Associate Librarian, University Libraries: Chancellor’s Award for Excellence in Librarianship, 2011-2012.

Gladys M. Jiménez-Muñoz, Associate Professor, College of Community and Public Affairs: Chancellor’s and University Awards for Excellence in Teaching, 2000-01.

Matthew D. Johnson, Associate Professor, Psychology, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Teaching, 2012-13.

Barry E. Jones, Associate Professor, Economics, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Teaching, 2013-14.

Wayne E. Jones, Associate Professor, Chemistry, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 2000-01, Chancellor's Award for Excellence in Scholarship and Creative Activities, 2016-17.

Gerald E. Kadish, Professor, History and Classical and Near Eastern Studies, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1975-76.

Surinder S. Kahai, Associate Professor, School of Management: Chancellor’s Award for Excellence in Teaching, 2002-03.

Wulf Kansteiner, Assistant Professor, History, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2005-06.

Janet Keesler, Assistant Dean, Thomas J. Watson School of Engineering and Applied Science: Chancellor's Award for Excellence in Professional Service, 2015-16.

Thomas Kelly, Professor, School of Management: Chancellor's Award for Excellence in Faculty Service, 2008-09; Chancellor's Award for Excellence in Teaching, 2015-16.


Clifford R. Kern, Associate Professor, Economics, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1973-74.
Mohammed T. Khasawneh, Professor, Systems Science and Industrial Engineering, Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching, 2010-11.

Anthony D. King, Professor, Art History, Harpur College of Arts and Sciences: University Award for Excellence in Research, 1998-99.

Kelly A. Kinney, Associate Professor, English, General Literature & Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Faculty Service, 2014-15.

Eugene M. Klimko, Associate Professor, Mathematical Sciences, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1978-79.

Celia Klin, Assistant Professor, Psychology, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1998-99; Chancellor’s Award for Excellence in Faculty Service, 2012-13.

George J. Klim, Distinguished Professor, Systems Science, Thomas J. Watson School of Engineering and Applied Science: University Award for Excellence in Research, 1995-96; Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2004-05.

David Klotzkin, Associate Professor, Electrical and Computer Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching, 2016-17.

Christopher Knapp, Associate Professor, Philosophy, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2009-10.

Barbara Knighton, Secretary, Center for Medieval and Renaissance Studies, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Classified Service, 2008-09.

Peter L. K. Knuepfer, Associate Professor, Geological Sciences and Environmental Studies, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Faculty Service, 2004-05.

LeAnne Kocak, Secretary I, Dean’s Office and Student Affairs Administration, College of Community and Public Affairs: Chancellor’s Award for Excellence in Classified Service, 2012-13.

Karen Kocan, Administrative Aide, Human Resources: Chancellor’s Award for Excellence in Classified Service, 2015-16.

Laurie Kolosky, Senior Circulation Assistant, University Libraries, Chancellor’s Award for Excellence in Classified Service, 2014-15.


Jonathan Krasno, Professor, Political Science, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2010-11.

Katharine C. Krebs, Director of International Programs: Chancellor’s and University Awards for Excellence in Professional Service, 2001-02.

Fredrick J. Kull, Associate Professor Emeritus, Biology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1974-75.

Sarah S. Lam, Associate Professor, Systems Science and Industrial Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching, 2012-13.

Leslie C. Lander, Associate Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Faculty Service, 2005-06.

Ricardo R. Laremont, Associate Professor, Sociology, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 2000-01.

Rosamaria LaValva, Associate Professor, Italian, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1993-94.

Youjung Lee, Assistant Professor, Social Work, College of Community and Public Affairs: Chancellor's Award for Excellence in Faculty Service, 2015-16.

Richard E. Lee, Professor, Sociology and Fernand Braudel Center, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Faculty Service, 2011-12.

Alistair Lees, Professor, Chemistry, Harpur College of Arts and Sciences: University Award for Excellence in Research, 2001-02; Chancellor's Award for Excellence in Teaching, 2013-14.

Mark F. Lenzenweger, Professor, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2005-06.

Leslie A. Levene, Assistant to the Chair, History, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Professional Service, 1985-86.

Harold W. Lewis, Associate Professor, Systems Science and Industrial Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching, 2013-14.

Michael J. Lewis, Associate Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching, 2007-08.

Jay Ligas, Principal Mail Clerk, Campus Mail Services: Chancellor’s Award for Excellence in Classified Service, 2009-10.

Stephen A. Lisman, Professor, Psychology, Harpur College of Arts and Sciences: University Award for Excellence in Graduate Teaching, 1987-88; Chancellor’s Award for Excellence in Faculty Service, 2005-06.

Adalberto López, Associate Professor Emeritus, History, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1972-73.

Donald Loewen, Associate Professor, German, Russian, and East Asian Languages, Harpur College of Arts and Sciences: University Award for Excellence in Teaching, 2007-08.

Tim K. Lowenstein, Professor, Geological Sciences, Harpur College of Arts and Sciences: University Award for Excellence in Research, 2000-01.

Paul Loya, Assistant Professor, Mathematical Sciences, Harpur College of Arts and Sciences: University Award for Excellence in Teaching, 2007-08.

Steven J. Lynn, Professor, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in
Scholarship and Creative Activities, 2002-03.

Steven D. Machlin, Technical Director, Anderson Center for the Arts: *Chancellor’s and University Awards for Excellence in Professional Service, 1990-91.*


Patrick H. Madden, Associate Professor, Computer Sciences, Thomas J. Watson School of Engineering and Applied Science: *Chancellor's Award for Excellence in Faculty Service, 2014-15.*

Dina C. Maramba, Associate Professor, Student Affairs Administration, College of Community and Public Administration: *Chancellor's Award for Excellence in Teaching, 2013-14.*

William G. Martin, Professor, Sociology, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2009-10.*

Wendy Martinek, Assistant Professor, Political Science, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2006-07.*

Michael D. McDonald, Political Science, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Faculty Service, 2009-10.*


Thomas McCabe, Electrician, Physical Facilities: *University Award for Excellence in Classified Service, 2002-03.*

Anne R. McCarthy, Secretary 2, Dean’s Office, Harpur College of Arts and Sciences: *University Award for Excellence in Classified Service, 1995-96.*


Michael F. McGoff, Associate Provost for Planning and Budget, Office of the Provost: *Chancellor’s Award for Excellence in Professional Service, 2003-04.*

Roy McGrann, Associate Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: *Chancellor’s Award for Excellence in Teaching, 2007-08.*


Daniel McKinney, Adjunct Lecturer, Mathematical Sciences, Harpur College of Arts and Sciences: *Chancellor's Award for Excellence in Adjunct Teaching, 2013-14.*

Donna Mendelson, Lecturer, Department of English, General Literature, and Rhetoric, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2003-04.*

Weiyi Meng, Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: *Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2007-08.*

Sandra D. Michael, Professor, Biology, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Faculty Service, 2003-04.*
Robert J. Micklus, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1985-86.

Ronald N. Miles, Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s and University Awards for Excellence in Teaching, 1996-97.

Ralph Miller, Professor, Psychology, Harpur College of Arts and Sciences: University Award for Excellence in Research, 1996-97.

Andrew Milnor, Associate Professor, Political Science, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1995-96.

Debi Prasad Mishra, Associate Professor, Marketing, School of Management: Chancellor’s Award for Excellence in Teaching, 2004-05.

Cheryl Monachino, Senior Staff Associate, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Professional Service, 2016-17.

Silvana Monaco, Supervising Janitor, Physical Facilities: Chancellor’s Award for Excellence in Classified Service, 2015-16.

Rachelle M. Moore, Librarian, Head of Reference, University Libraries: Chancellor’s and University Awards for Excellence in Librarianship, 1985-86.

Rosmarie Morewedge, Associate Professor, German, Russian and East Asian Languages, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1984-85; University Award for Excellence in International Education, 2000-01, Chancellor's Award for Excellence in Faculty Service, 2008-09.

Lindsay Lake Morgan, Assistant Professor, Decker School of Nursing: Chancellor’s Award for Excellence in Teaching, 2005-06.

Carrie A. Moylan, Assistant Professor, Social Work, College of Community and Public Affairs: Chancellor's Award for Excellence in Teaching, 2015-16.

Bruce T. Murray, Professor, Mechanical Engineering, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2009-10.

David E. Murrish, Associate Professor, Biological Sciences, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1988-89.

Kim Murphy, Assistant to the Chair, Electrical and Computer Engineering, Watson School of Engineering and Applied Science: Chancellor's Award for Excellence in Professional Service, 2010-11.

Charles A. Nelson, Professor, Physics, Applied Physics and Astronomy, Harpur College of Arts and Sciences: University Award for Excellence in Research, 1999-2000.

Cheryl Nestlerode, Secretary I, Provost's Office: Chancellor's Award for Excellence in Classified Service, 2016-17.

Francis X. Newman, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: University Award for Excellence in International Education, 2001-02.

Linda O'Branski, Secretary, German, Russian, and East Asian Languages, Harpur College of Arts and Sciences: University Award for Excellence in Classified Service, 1991-92.

Thomas O'Brien, Associate Professor, School of Education: Chancellor’s and University Awards for Excellence in
Robin S. Oggins, Associate Professor, History, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1975-76.

Ingeborg Majer O’Sickey, Assistant Professor, German, Russian and East Asian Languages, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 2001-02.

Steven R. Ortiz, Associate Professor, History, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2014-15.


Robert Palmer, Associate Professor, Student Affairs, College of Community and Public Affairs: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2014-15.

Neil C. Pages, Assistant Professor, German, Russian, and East Asian Languages, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2005-06.

Paul Parker, Director, Sponsored Funds Administration, Research and Sponsored Programs: Chancellor’s and University Awards for Excellence in Professional Service, 1993-94.

Vincent A. Pasquale, Assistant Dean for Administration, School of Management: Chancellor’s and University Awards for Excellence in Professional Service, 1991-92.

Richard E. Pastore, Professor, Psychology and Linguistics, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Faculty Service, 2004-05.

Nancy Paul, Director, Career Development Center: University Award for Excellence in International Education, 2008-09; Chancellor’s Award for Excellence in Professional Service, 2012-13.

Donald Paukett, Assistant Vice President for Administrative Affairs: Chancellor’s Award for Excellence in Professional Service, 2007-08.

Max A. Pensky, Associate Professor, Philosophy, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1997-98.


Brian H. Perry, Senior Academic Advisor and Coordinator of Undergraduate Advising, School of Management: Chancellor’s Award for Excellence in Professional Service, 2003-04.

Timothy B. Perry, Professor, Music, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2004-05.

Susan J. Peters, Music Director, Department of Theatre, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Professional Service, 1989-90.


Philip M. Piaker, Distinguished Service Professor Emeritus, Accounting, School of Management: Chancellor’s Award for Excellence in Teaching, 1974-75; University Award for Excellence in Teaching, 1984-85.
Richard P. Pindell, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 1974-75.*


James Pitarresi, Associate Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: *Chancellor’s and University Awards for Excellence in Teaching, 1998-99.*

Florenz Plassmann, Associate Professor, Economics, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2006-07.*

Dora E. Polachek, Visiting Associate Professor of French, Department of Romance Languages, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2003-04; University Award for Excellence in International Education, 2004-05.*

Solomon W. Polachek, Distinguished Professor, Economics, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2004-05.*

Mark Poliks, Professor, Biological Sciences, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2016-17.*

Michelle Ponczek, Director, Course Building and Academic Space Management, *Chancellor’s Award for Excellence in Professional Service, 2014-15.*

Dmitry Ponomarev, Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: *Chancellor’s Award for Excellence in Scholarly and Creative Activities, 2015-16.*

Herbert B. Posner, Associate Professor, Biological Sciences, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 1978-79.*

Laura Potter, Secretary 2, Harpur College of Arts and Sciences Dean's Office: *Chancellor’s Award for Excellence in Classified Service, 2009-10.*

Marjorie Pratt, Secretary 2, Mathematical Sciences, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Classified Service, 2010-11.*

Joshua M. Price, Assistant Professor, School of Education and Human Development: *Chancellor’s Award for Excellence in Teaching, 2002-03.*

Jean Quataert, Professor, History, Harpur College of Arts and Sciences: *Chancellor’s and University Awards for Excellence in Teaching, 1998-99; Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2009-10.*

Richard E. Quest, Director of Chemistry Laboratories, Harpur College of Arts and Sciences: *University Award for Excellence in Professional Service, 1984-85.*

Juliann S. Quinn, Secretary 1, School of Education and Human Development: *University Award for Excellence in Classified Service, 1998-99.*

Norman Quinn, Associate Director of Operations, Computing Services: *Chancellor’s Award for Excellence in Professional Service, 2004-05.*

Beverly Rainforth, Division of Education, School of Education and Human Development: *Chancellor’s Award for Excellence in Teaching, 2005-06.*

Martin H. Raish, Associate Librarian, University Libraries: *Chancellor’s and University Awards for Excellence in*

Theodore C. Rector, Associate Dean, School of Education and Human Development: Chancellor’s and University Awards for Excellence in Professional Service, 2000-01.

Richard Reeves-Ellington, Visiting Professor Emeritus, School of Management: University Award for Excellence in International Education, 2000-01.

Patricia L. Reynolds, Director of Advancement Services, Binghamton University Foundation: Chancellor’s and University Awards for Excellence in Professional Service, 2000-01.

Mark E. Reisinger, Associate Professor, Geography, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2008-09.

Sara Reiter, Professor, School of Management: Chancellor's Award for Excellence in Faculty Service, 2016-17.

G. Philip Rightmire, Professor, Anthropology, Harpur College of Arts and Sciences: University Award for Excellence in Research, 1990-91.

Philip Rogers, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1972-73.

Liz Rosenberg, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: University Award for Excellence in Teaching, 1983-84.

Benita Roth, Associate Professor, Sociology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2006-07.

Lloyd Rozboril, Laboratory Equipment Designer, Psychology, Harpur College of Arts and Sciences: University Award for Excellence in Classified Service, 1993-94.

Eriks Rozners, Professor, Chemistry, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Scholarly and Creative Activities, 2015-16.

Nadia M. Rubaii, Associate Professor, Public Administration, College of Community and Public Affairs, Chancellor’s Award for Excellence in Faculty Service, 2013-14.


Omowunmi Sadik, Professor, Chemistry, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2010-11.

Bahgat G. Sammakia, Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2009-10.

Kelvin A. Santiago-Valles, Associate Professor, Sociology, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1997-98.

Sharon Santobuono, Associate Director of Advising Services, Thomas J. Watson School of Engineering: Chancellor’s Award for Excellence in Professional Service, 2006-07.

Daryl Lee Santos, Associate Professor, Systems Science and Industrial Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Teaching, 2004-05; Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2010-11.
Karin Sauer, Professor, Biological Sciences, Harpur College of Arts and Sciences: *Chancellor's Award for Excellence in Scholarship and Creative Activities, 2016-17.*

Lisa M. Savage, Professor, Psychology, Harpur College and Arts and Sciences: *Chancellor's Award for Excellence in Scholarship and Creative Activities, 2014-15.*

Hiroki Sayama, Associate Professor, Systems Science and Industrial Engineering, Thomas J. Watson School of Engineering and Applied Science: *Chancellor’s Award for Excellence in Teaching, 2015-16.*

Steve P. Scalet, Assistant Professor, Philosophy, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2003-04.*

Wayne Schneider, Operations Director, Physical Facilities: *Chancellor’s Awards for Excellence in Professional Service, 2009-10.*

Andrew Scholtz, Associate Professor, Classics, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Faculty Service, 2015-16.*

Jean Schrader, Secretary 1, School of Education and Human Development: *University Award for Excellence in Classified Service, 2001-02.*

John Schwartz, Chief of Police, University Police: *Chancellor’s Award for Excellence in Professional Service, 2008-09.*

Oktay Sekercisoy, Senior Director for Global Strategy, Education Abroad, and International Partnerships: *Chancellor’s Award for Excellence in Professional Service, 2015-16.*

Mark Selden, Professor, Sociology and History, Harpur College of Arts and Sciences: *University Award for Excellence in Research, 1995-96.*

Jill A. Seymour, Academic Advisor, School of Education and Human Development: *Chancellor’s and University Awards for Excellence in Professional Service, 1985-86.*

Tonia Shadduck, Secretary 2, Dean’s Office, Harpur College of Arts and Sciences: *University Award for Excellence in Classified Service, 1998-99.*

Edward J. Shephard, Jr., Associate Librarian, University Libraries: *Chancellor’s Award for Excellence in Librarianship, 2011-12.*

Julian Shepherd, Associate Professor, Biological Sciences, Harpur College of Arts and Sciences: *Chancellor’s and University Awards for Excellence in Teaching, 1999-2000.*

Orly Shoer, Lecturer, Jewish Studies, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 2016-17.*

Thomas A.P. Sinclair, Professor, Public Administration, College of Community and Public Affairs: *Chancellor’s Award for Excellence in Faculty Service, 2010-11.*

Kathryn K. Sklar, Distinguished Professor of History, Harpur College of Arts and Sciences: *University Award for Excellence in Research, 1997-98; Chancellor’s and University Awards for Excellence in Scholarship and Creative Activities, 2001-02; Chancellor’s and University Awards for Excellence in Teaching, 2001-02.*

Victor A. Skormin, Professor, Electrical Engineering, Thomas J. Watson School of Engineering and Applied Science: *University Award for Excellence in Graduate Teaching, 1989-90; Chancellor’s Award for Excellence in Scholarship and Creative Studies, 2003-04.*
Charlotte Skuster, Associate Librarian, University Libraries: *Chancellor’s and University Awards for Excellence in Librarianship, 1994-95.*


Margaret Slavik, Secretary 1, Office of International Student and Scholar Services: *University Award for Excellence in Classified Service, 1994-95.*

William P. Smotherman, Professor, Psychology, Harpur College of Arts and Sciences: *University Award for Excellence in Research, 1992-93.*

Linda Spear, Distinguished Professor, Psychology, Harpur College of Arts and Sciences: *University Award for Excellence in Research, 1998-99.*

Norman E. Spear, Distinguished Professor, Psychology, Harpur College of Arts and Sciences: *University Award for Excellence in Research, 1994-95.*

Gale A. Spencer, Associate Professor, Decker School of Nursing: *Chancellor’s and University Awards for Excellence in Teaching, 1994-95.*

James H. Spring, Senior Associate Director of Admissions: *Chancellor’s and University Awards for Excellence in Professional Service, 1987-88.*

K. Hari Srihari, Professor, Systems Science and Industrial Engineering, Thomas J. Watson School of Engineering and Applied Science: *Chancellor’s and University Awards for Excellence in Scholarship and Creative Activities, 2001-02; University Award for Excellence in International Education, 2013-14.*

Ann B. Stahl, Associate Professor, Anthropology, Harpur College of Arts and Sciences: *Chancellor’s and University Awards for Excellence in Teaching, 1996-97.*

Nancy E. Stamp, Professor, Biological Sciences, Harpur College of Arts and Sciences: *Chancellor’s and University Awards for Excellence in Teaching, 1994-95.*

Debbie Standard, Dean's Secretary, School of Management: *Chancellor's Award for Excellence in Classified Service, 2010-11.*

Bonnie Stanton, Secretary 1, University Health Service: *University Award for Excellence in Classified Service, 2000-01.*

Sandra Starke, Vice Provost, Enrollment Management: *Chancellor's Award for Excellence in Professional Service, 2010-11.*

John H. Starks, Associate Professor, Classical Studies, Harpur College of Arts and Sciences: *Chancellor's Award for Excellence in Teaching, 2014-15.*

Michael E. Starzak, Professor, Chemistry, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Teaching, 1980-81.*

Lawrence C. Stedman, Associate Professor, School of Education and Human Development: *Chancellor’s and University Awards for Excellence in Teaching, 1994-95.*

Eugene Stevens, Professor, Chemistry, Harpur College of Arts and Sciences: *Chancellor’s Award for Excellence in Faculty Service, 2010-11.*
Dana E. Stewart, Associate Professor, Romance Languages, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Faculty Service, 2013-14.

Jennifer Stoever-Ackerman, Assistant Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2013-14.


Susan Strehle, Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1977-78; Chancellor’s Award for Excellence in Faculty Service, 2004-05.

Paul Stroud, Associate Director for Operations, Office of Residential Life: Chancellor’s and University Awards for Excellence in Professional Service, 1994-95.

Heather Struck, Pre-Law Director/Advisor, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Professional Service, 2006-07.

James B. Sullivan, Senior Advisor-Transfer Coordinator: Chancellor’s and University Awards for Excellence in Professional Service, 2001-02.

Douglas Summerville, Associate Professor, Electrical and Computer Engineering, Thomas J. Watson School of Engineering: Chancellor’s Award for Excellence in Faculty Service, 2006-07; Chancellor’s Award for Excellence in Teaching, 2011-12.

Masatsugu Suzuki, Professor, Physics, Applied Physics, and Astronomy, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2009-10.

John Tagg, Professor, Art History, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 2001-02.


Sarah Thompson, Lecturer, Health and Wellness Studies, Decker School of Nursing: Chancellor’s Award for Excellence in Teaching, 2016-17.

Nancy Tittler, Instructor, German and Russian Studies, Harpur College of Arts and Science: Chancellor’s Award for Excellence in Teaching, 2016-17.

John E. Titus, Associate Professor, Biological Sciences, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1990-91.

Albert Tricomi, Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1973-74.

Elizabeth G. Tucker, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Teaching, 1992-93, Chancellor’s Award for Excellence in Faculty Service, 2008-09.

Pamela Turrigiano, Assistant to Chair, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Professional Service, 2010-11.

Zerksis D. Umrigar, Adjunct Lecturer, Computer Science, Thomas J. Watson School of Engineering and Applied
Science: Chancellor's Award for Excellence in Adjunct Teaching, 2016-17.


Shelene Van Kuren, Undergraduate and Graduate Secretary, Electrical and Computer Engineering, Thomas J. Watson School of Engineering and Applied Sciences: Chancellor's Award for Excellence in Classified Service, 2012-13.

Adrian Vasiu, Professor, Mathematical Sciences, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2014-15.

John Vernon, Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: University Award for Excellence in Research, 1993-94.

Nina M. Versaggi, Director Public Archaeology Facility, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Professional Service, 2004-05.

Tony Villecco, Assistant to the Chair, Africana Studies, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Classified Service, 2009-10.

Alvin P. Vos, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 1974-75; Chancellor’s Award for Excellence in Faculty Service, 2006-07.


Andrew Walkling, Dean's Assistant Professor, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Teaching, 2010-11.

Immanuel Wallerstein, Distinguished Professor Emeritus, Sociology, Harpur College of Arts and Sciences: University Award for Excellence in Research, 1989-90.

Barbara Walling, Secretary 1, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: University Award for Excellence in Classified Service, 2000-01.

Julie Wang, Associate Librarian, University Libraries: Chancellor's Award for Excellence in Librarianship, 2013-14.

Qianghua Wang, Professor, Theatre, Harpur College of Arts and Sciences: University Award for Excellence in International Education, 2008-09.

Caryl Ward, Associate Librarian, University Libraries: Chancellor's Award for Excellence in Librarianship, 2016-17.

Erin Washburn, Associate Professor, Graduate School of Education: Chancellor's Award for Excellence in Teaching, 2016-17.

Eileen C. Way, Associate Professor, Philosophy, Harpur College of Arts and Sciences: Chancellor's and University Awards for Excellence in Teaching, 1995-96.

Dorothy L. Weir, Secretary 1, Advising Office, Thomas J. Watson School of Engineering and Applied Science: University Award for Excellence in Classified Service, 1996-97.

Donald D. Weiss, Associate Professor, Philosophy, Harpur College of Arts and Sciences: Chancellor's and University Awards for Excellence in Teaching, 1994-95.


Kelly Wemette, Director of Strategic and Fiscal Planning, Office of Vice President for Academic Affairs: Chancellor's Award for Excellence in Professional Service, 2011-12.

Deanne L. Westerman, Assistant Professor, Psychology, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2002-03.

M. Stanley Whittingham, Professor, Chemistry, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2006-07.

Diane R. Wiener, Assistant Professor, Social Work, College of Community and Public Affairs: Chancellor’s Award for Excellence in Teaching, 2008-09.


Cathy Wilding, Principal Animal Caretaker, Laboratory Animal Resources: Chancellor's Award for Excellence in Classified Service, 2013-14.

Karen Williams, Secretary I, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor's Award for Excellence in Classified Service, 2015-16.


David Sloan Wilson, Professor, Biological Sciences, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Scholarship and Creative Activities, 2002-03.

Thomas M. Wilson, Professor, Anthropology, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Scholarship and Creative Activites, 2011-12.

Leo Wilton, Associate Professor, Human Development, College of Community and Public Administration: Chancellor's Award for Excellence in Teaching, 2011-12.


Mary Woolson, Senior Director of Development, Chancellor’s Award for Excellence in Professional Service, 2002-03.

Francis T. Wu, Professor, Geological Sciences and Environmental Studies, Harpur College of Arts and Sciences: University Award for Excellence in Research, 1997-98.

N. Eva Wu, Professor, Electrical and Computer Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2008-09.

Wei Xiao, Professor, Economics, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Teaching, 2016-17.

Francis J. Yammarino, Professor of Management, School of Management: University Award for Excellence in Research, 2000-01.
Lijun Yin, Associate Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Sciences: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2013-14.

Vanessa Young, Senior Academic Advisor, Equal Opportunity Program: Chancellor's Award for Excellence in Professional Service, 2016-17.

Mohammad Younis, Associate Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Sciences: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2011-12.

Lisa Yun, Associate Professor, English, General Literature and Rhetoric, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Faculty Service, 2006-07.

Stephan A. Zahorian, Professor, Electrical and Computer Engineering, Thomas J. Watson School of Engineering and Applied Sciences: Chancellor's Award for Excellence in Faculty Service, 2015-16.


Linda Zanrucha, Keyboard Specialist 1, Sociology, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Classified Service, 2010-11.

Thomas Zaslavsky, Professor, Mathematical Sciences, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Teaching, 2009-10.

Zhongfei (Mark) Zhang, Professor, Computer Science, Thomas J. Watson School of Engineering and Applied Science: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2012-13.

Chuan-Jian Zhong, Professor, Chemistry, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Scholarship and Creative Activities, 2008-09.

Guangwen Zhou, Professor, Mechanical Engineering, Thomas J. Watson School of Engineering and Applied Science: Chancellor's Award for Excellence in Scholarly and Creative Activities, 2015-16.

William L. Ziegler, Professor, Computer Science, Watson School of Engineering and Applied Science: Chancellor’s Award for Excellence in Faculty Service, 2010-11.

Harald Zils, Assistant Professor, German and Russian Studies, Harpur College of Arts and Sciences: Chancellor's Award for Excellence in Teaching, 2015-16.

Melissa Zinkin, Professor, Philosophy, Harpur College of Arts and Sciences: Chancellor’s Award for Excellence in Teaching, 2002-03.

Jane L. Zuckerman, Assistant to the Chair, Music, Harpur College of Arts and Sciences: Chancellor’s and University Awards for Excellence in Professional Service, 1990-91.

Binghamton University Council

Kathryn Grant Madigan, Esq., Chair

Linda H. Biemer

Anthony F. Fiala Jr.

Dennis McCabe
The Board of Trustees is the governing body of the State University of New York. It consists of 17 members, 15 of whom are appointed by the governor, by and with consent of the New York State Senate. In addition, the president of the Student Assembly serves as student trustee and the president of the University Faculty Senate serves as an ex-officio trustee.

University Centers and Doctoral Granting Institutions

University at Albany
Binghamton University
University at Buffalo
Stony Brook University
SUNY Downstate Medical Center
Upstate Medical University
College of Environmental Science and Forestry
College of Optometry
NYS College of Ceramics at Alfred University
NYS College of Agriculture/Life Sciences at Cornell University
NYS College of Human Ecology at Cornell University
NYS College of Industrial/Labor Relations at Cornell University
NYS College of Veterinary Medicine at Cornell University

University Colleges

SUNY Brockport
Buffalo State College
SUNY Cortland
Empire State College
SUNY Fredonia
SUNY Geneseo
SUNY New Paltz
SUNY Old Westbury
College at Oneonta
SUNY Oswego
SUNY Plattsburgh
SUNY Potsdam
Purchase College

Colleges of Technology

Alfred State College
SUNY Canton
SUNY Cobleskill
SUNY Delhi
Farmingdale State College
Maritime College
Morrisville State College
SUNY Institute of Technology

Community Colleges

Adirondack
Broome
Cayuga County Clinton
Columbia-Greene
Corning
Dutchess
Erie
Fashion Institute of Technology
Finger Lakes
Binghamton University Donor-Funded Scholarships and Other Student Aid

Binghamton University offers its own institutionally-based scholarships, fellowships and awards through the auspices of the Binghamton University Foundation. The Foundation assists over 1,900 students with support totaling nearly $2.8 million annually. Funds have been made available for these programs through the generosity of donors who wish to support the educational aspirations of Binghamton University students.

Scholarships

The Binghamton University Foundation, in partnership with the Office of Financial Aid and Student Records, administers over 360 scholarships. These scholarships are awarded to students based on criteria established by the donor and contained in the scholarship gift agreement. Selection criteria might include matriculation status, school and department affiliation, financial need, academic achievement, community service, county residency, grade level and expected graduation date. Interested applicants should refer to the Office of Financial Aid and Student Records website (http://www2.binghamton.edu/financial-aid/types-of-aid/scholarships/) for a listing of available scholarships.

All need-based scholarships require the filing of the Free Application for Federal Student Aid (FAFSA). The FAFSA is processed by an external agency in contract with the U.S. Department of Education. Information regarding financial aid eligibility of FAFSA filers is received by the Office of Financial Aid Services shortly after the FAFSA has been processed by the federal contractor. The University-recommended filing date for financial aid is March 1. Newly admitted students should file the FAFSA no later than January 1 to be considered. Early filing of the FAFSA is advised for current students for need-based scholarship consideration.

Scholarship recipients are notified by the Binghamton University Foundation and funding is applied directly to the recipient's financial aid package.

Awards

The Binghamton University Foundation awards program administers more than 140 achievement-based awards. Consideration for these awards is given to students who have been nominated by faculty, staff or fellow students.
Award recipients are selected by representatives of the various academic departments or organizations that sponsor the award to recognize excellence and to honor students for exemplary service. No application process exists for awards.

Awards recipients are notified by the Binghamton University Foundation and funding is provided directly to the student at the conclusion of the spring semester.

Fellowships and Other Direct Student Aid

A number of benefactors have established fellowships or assistantships for graduate students at Binghamton University. Graduate students supported by a fellowship have no work requirements, allowing the recipients to devote their time exclusively to the pursuit of their graduate degrees. Some fellowships include a partial or full-tuition scholarship. Teaching and Graduate Assistants work approximately 20 hours per week and receive an academic year stipend. Most teaching and graduate assistants also receive a tuition scholarship.

In addition, donors have established several research grants to provide reimbursement of expenses related to student research activities. Application, selection and notification for these types of student aid are made through sponsoring departments.

For more information about donor-provided student aid, please visit the Binghamton University Foundation website (http://www.binghamton.edu/giving/) or contact:
Director of Donor Relations
Division of Advancement
Binghamton University
PO Box 6000
Binghamton, NY 13902-6000
607-777-6927

Student Life

Information on offices and programs within the Division of Student Affairs, including the Office of the Dean of Students, New Student Programs, Off-Campus Services and Transportation, Residential Life, the University Union, Center for Civic Engagement, Campus Recreation, and the Career Development Center, can be found in the Student Handbook.

Student Rights and Responsibilities

The Code of Student Conduct outlines University rules for student conduct, student rights and conduct procedures. Students are responsible for reading this document and knowing the contents. These rules and procedures seek to provide an environment in which the rights of all members of the University community are protected. For more information, please see the Code of Student Conduct.

Student Conduct Process

Student conduct at Binghamton University is based on the Code of Student Conduct. For more information, please see the Code of Student Conduct.

Student Association

The Student Association (SA) is the independent representative organization that all undergraduate students automatically join upon attending Binghamton University. Entirely student run, its officers are elected by the student
body in March and September. Over 300 student groups are chartered by the SA, which collectively provide academic and social programming open to all undergraduate students throughout the academic year. The SA’s community councils, organized by residential area on and off campus, foster a shared sense of community among students. The Programming Board puts on large scale events such as Spring Fling, Binghamton’s annual music festival. Harpur’s Ferry, the SA’s student-run ambulance service, is recognized on the national level as the only agency in the country to win the National Collegiate EMS Agency of the Year Award twice. Off Campus College Transport (OCCT), the 21 bus fleet that is many student's primary means of transportation, is run by the SA. In addition to its own operations, the SA serves as an advocacy organization for University issues important to students and has representation on many University governance committees. To learn more about the SA and how to get involved, visit http://binghamtonsa.org, email getinvolved@binghamtonsa.org, or visit its office during business hours at University Union West 203 (to the right of M&T Bank above the Marketplace).

Graduate Student Organization

The Graduate Student Organization (GSO) is an organization that represents all Binghamton University graduate students. The mission of the GSO is to liaise between graduate students and university entities to ensure that graduate student needs are met. The GSO executive board consists of the president, vice president, treasurer, graduate assistant to the president, vice president for multicultural affairs and office manager. The office is located in Old Rafuse Hall, Rooms 114 and 116, and can be reached at 607-777-4247. For up-to-date information, please visit the GSO website at http://gso.binghamton.edu.

Intercollegiate Athletics

The intercollegiate athletic program offers 21 varsity teams (11 men’s and 10 women’s) and competes in the National Collegiate Athletic Association (NCAA) Division I, America East Conference. A highly successful and competitive program, varsity sports for men include baseball, basketball, cross country, golf (Big Sky Conference); lacrosse, soccer, swimming and diving (Eastern College Athletic Conference), tennis (Mid-American Conference), track and field (indoor and outdoor), and wrestling (Eastern Intercollegiate Wrestling Association). Binghamton’s women’s teams compete in basketball; cross country; lacrosse; soccer; softball; swimming and diving; tennis; track and field (indoor and outdoor); and volleyball. Additional opportunities to participate in varsity programs are available as student athletic trainers, managers, cheerleaders, dance squad, kickline and pep band. Altogether, close to over 500 Binghamton students have direct involvement with intercollegiate athletic programs each year, and are joined by thousands of supporters from the student body and the greater Binghamton community. As permitted by NCAA legislation, Binghamton University awards athletes financial aid or scholarships. Scholarship opportunities are available in all 21 varsity sports.

Intercollegiate athletic programs are conducted in accordance with the regulations of the NCAA; consequently, all prospective and continuing student athletes must meet NCAA academic and athletic standards. Incoming students may obtain information about the NCAA Eligibility Center from their high school guidance offices or visit the website at http://www.ncaaeligibilitycenter.org/. Questions involving eligibility should be directed to Binghamton’s NCAA compliance officer (607-777-2798) in the Intercollegiate Athletics Program.

Eligibility for Intercollegiate Athletics

In order for students to be eligible for both practice and competition in intercollegiate athletics at Binghamton University, they must fulfill the following requirements:

- Student-athletes must be full-time matriculated students (“full time” at Binghamton University means enrollment in a schedule of 12 credit hours per semester).
- Student-athletes must be in good academic standing (Binghamton University defines “good academic standing” as a minimum cumulative grade-point average of 2.0 for all University courses taken for credit).
(NCAA Progress-Toward-Graduation requirements are: end of third semester, 90% of 2.0 equals 1.80; end of fifth semester, 95% of 2.0 equals 1.90; end of seventh and ninth semester, 100% of 2.0.)

- Student-athletes must pass a minimum of six credit hours per semester.
- Additionally, student-athletes must meet “Progress Toward Degree Requirements.”
- Student-athletes must pass 24 credit hours before they enter their second year of full-time enrollment.
- Student-athletes must have passed 18 credit hours since the beginning of the previous fall term or since the beginning of the preceding regular two semesters (hours earned during the summer may not be used to fulfill this requirement).
- By the beginning of their third year of full-time enrollment, student-athletes must declare a major.
- Additionally, student-athletes must fulfill 40 percent of their degree requirements by the beginning of their third year of full-time enrollment, 60 percent by the beginning of their fourth year of full-time enrollment, 80 percent by the beginning of their fifth year of full-time enrollment, if applicable. This applies to both transfer and continuing student-athletes.
- The NCAA Eligibility Center must certify the eligibility (academic and amateurism) of all incoming freshmen for practice and competition.
- All incoming transfers must meet the appropriate transfer requirements in order to be eligible for practice and competition.

**Academic Advising**

Undergraduates in each of the schools rely on their academic advising office for curricular information.

Harpur College uses a dual advising structure. Harpur Academic Advising provides students with general degree planning assistance. Students can obtain advice concerning majors or programs in Harpur College through departmental advising. Each of the professional schools provide academic advising through their respective advising offices.

Academic advising for graduate students is conducted through the programs, departments and schools in which they are registered. Non-matriculated undergraduate students and students in the Older Adult Auditor Program should seek academic advising in Harpur College Academic Advising.

**University Counseling Center**

The University Counseling Center (UCC) is dedicated to promoting psychological well-being that enriches personal and academic growth. The UCC provides short-term counseling to Binghamton University students. Staff use a variety of techniques, theoretical orientations and programs in their work with students. Training professionals is also an important component of UCC’s work on campus. The UCC connects with students, faculty and staff in a variety of ways in order to serve students. Call 607-777-2772 for appointments. See [http://www.binghamton.edu/counseling/](http://www.binghamton.edu/counseling/) for more information about UCC services, programs and staff, as well as links to additional resources.

**Interpersonal Violence Prevention Program**

The mission of the Interpersonal Violence Prevention Program ([http://www2.binghamton.edu/ivp/index.html](http://www2.binghamton.edu/ivp/index.html)), housed within the Division of Student Affairs, is to reduce the risk of interpersonal violence to Binghamton University students and to minimize the traumatic impact to students after any assaults through education, coordination, and advocacy. Call 607-777-3062 for additional information.

**Decker Student Health Services Center**
All students born on or after January 1, 1957, are required to submit proof of immunity to measles, mumps and rubella. All students are also required to acknowledge receipt of information about meningitis and meningococcal vaccine and identify whether or not they have chosen or declined to be vaccinated. These are New York State Public Health Laws and a condition of class registration. Details about immunization requirements are available under the For New Students option at [http://www.binghamton.edu/health/](http://www.binghamton.edu/health/). Immunization information is entered online at [https://myhealth.binghamton.edu/](https://myhealth.binghamton.edu/) in accordance with the instructions found in the Education section of that site. Questions may be directed to the Decker Student Health Services Center at 607-777-2221.

All students must complete the Mandatory Tuberculosis Screening questions in the online medical history form found at [https://myhealth.binghamton.edu/](https://myhealth.binghamton.edu/) and may (if indicated) need to provide proof of a negative PPD, negative IGRA, or chest x-ray performed in the U.S. or Canada within one year prior to entrance to Binghamton University. This information must be submitted to the Decker Student Health Services Center online no later than the fifth Friday after classes begin, in the student’s first semester of full-time status or readmission. It is recommended that students complete the entire online medical history form. A physical examination is encouraged.

New students may submit their completed forms online at the time of admission and send supporting documentation to the Decker Student Health Services Center. After entering their information online, transfers may submit copies of their health forms from their former schools as documentation, providing they contain all the information required by the Decker Student Health Services Center.

The Decker Student Health Services Center, located in the Health Service building, is open Monday through Friday, from 8:00 a.m. to 4:45 p.m., when classes are in session; summer and holiday hours vary. The clinic is staffed by physicians, including a part-time psychiatrist, nurse practitioners, registered professional nurses, and an HIV test counselor. Walk-in services are available from 8:00 a.m. to 11:00 a.m. with scheduled appointments in the afternoon. Urgent care needs are evaluated throughout the day. The Decker Student Health Services Center does not have an inpatient (overnight) service. Emergency medical care is provided by a student-run ambulance service 24 hours per day, seven days each week, year round.

Office visits are prepaid by the student health fee; no office charge is incurred at the time of the visit. The health fee also makes many medications and common medical supplies available at no cost when ordered by the Decker Student Health Services Center medical staff. However, students are responsible for paying bills related to most laboratory tests, certain elective immunizations and injectable medications, and any off-campus referrals.

The Decker Student Health Services Center does not routinely issue medical excuses for missed classes, exams, papers and other academic assignments. Students are encouraged to make individual arrangements with their instructors when illness interferes with coursework. Students may sign release-of-information forms to allow the Decker Student Health Services Center staff to discuss their medical problems with their instructors, should the instructor choose to phone the clinic.

All student health records are confidential, and no information is released to anyone without the signed authorization of the student to do so. Exceptions to this policy are in cases of a court-ordered subpoena, where concern is for the safety of the student or others or when the Health Service Center is required to report certain conditions to the public health department.

Students sometimes have medical problems or accidents requiring care that is not provided at the Health Service Center. Care in the community is often very costly, and for this reason all students are strongly advised to carry adequate insurance.

DOMESTIC STUDENTS: Undergraduate students taking 12 or more credits are required to enroll in the student sickness and accident plan unless information is submitted naming an alternate coverage. Information on the process to waive the Student Sickness and Accident Plan can be found at [http://www2.binghamton.edu/student-accounts/inswaiver.html](http://www2.binghamton.edu/student-accounts/inswaiver.html). Graduate students, part-time students and dependents of enrolled students are
encouraged to consider enrolling in this campus program, but are not obligated to do so.

INTERNATIONAL STUDENTS: International students are required to enroll in a separate health insurance program, which is different from the domestic student health insurance plan described above. Information regarding international student health insurance can be found on the Office of International Student and Scholar Services website at http://www2.binghamton.edu/isss/health-insurance/index.html.

Web-based information about the Decker Student Health Services Center is available at http://www.binghamton.edu/health/.

International Student and Scholar Services

The Office of International Student and Scholar Services provides programs and services for Binghamton University students who are in the United States on non-immigrant visas. The office is the central reference source for 2,777 international students and approximately 70 international scholars on campus (Fall 2016 enrollment figures). Services include issuance of required federal visa documents; assistance with immigration regulations governing enrollment, employment and travel; administering the mandatory health and accident insurance program; and publishing a monthly electronic newsletter, which provides important and timely information on a variety of topics. The office conducts an orientation program for all new international students, coordinates a variety of cross-cultural programs and acts as liaison between students and other University offices, student groups and U.S. and foreign government agencies.

International students on non-immigrant visas are required to visit the Office of International Student and Scholar Services when they arrive on campus, and are encouraged to maintain close contact with the office throughout the year.

Services for Students with Disabilities

Binghamton University is firmly committed to the provision of equal access and opportunity for all students, regardless of disability. Services for Students with Disabilities (SSD) offers a wide range of assistance to Binghamton University students with physical, learning, or other disabilities. Students registering with SSD are respected as adults and are expected to take an active role in the arrangement and management of their services and accommodations.

Key services include supportive counseling, consultation, advocacy for appropriate reasonable accommodations, access to adaptive computer technology, and the loan of specialized equipment. Physical access features include automatic doors on all academic buildings, accessible on-campus housing through Residential Life, and assistive listening systems for patrons with hearing impairments in the various lecture halls and the Anderson Center for the Arts. Off-Campus College Transport operates wheelchair-accessible transportation to, from, and on campus; and disability parking is available at strategic locations throughout the campus.

For a comprehensive overview of office philosophy, disability documentation guidelines and support services, we invite you to visit the SSD website at http://www.binghamton.edu/ssp/. Students with questions or requests related to their individual needs may visit us in the University Union (Room UU-119) or contact us by phone (607-777-2686 voice/TT), mail (Services for Students with Disabilities, Binghamton University, PO Box 6000, Binghamton, New York 13902-6000), or e-mail (ssd@binghamton.edu).

Veterans Services

The University welcomes veterans. The Admissions Office recognizes the maturity of veterans as a positive factor and is sensitive to the impact that extenuating circumstances may have upon academic records. For these reasons, admission criteria for veterans often vary from those used for other applicants. Each veteran is urged to submit, as
part of the application, a personal statement on his or her behalf and a military transcript if available, which the Admissions Office will consider carefully as the admission decision is made.

Enrolled students may be eligible for educational benefits from the Veterans Administration under Chapter 30 — Montgomery GI Bill; Chapter 31 — Vocational Rehabilitation; Chapter 32 — Veterans Educational Assistance Program; Chapter 33 — Post 9/11 GI Bill; Chapter 35 — Survivors/Dependents; Chapter 1606 — Selected Reserves; Chapter 1607 — Reserve Education Assistance Program; or Section 901 — Educational Assistance Test Program.

Upon acceptance to the University and prior to each semester of attendance, veterans who are enrolling should contact the TRIO/Veterans Office in order to complete and submit the appropriate forms relating to their benefits.

**Academic Credit from Military Transcript**

Binghamton University will award one credit for Basic Training in one of the branches of the U.S. military, as indicated on the Joint Services Transcript or the ACE transcript; additional credits may be awarded for other military experience and will be evaluated on an individual basis by the academic advising offices. Students with foreign military service on a college transcript should contact their academic advising office for more information. If a student produces a college or university transcript which shows more than one credit for basic training, the number of credits on that transcript may awarded to the student.

**Eight Keys to Veterans’ Success**

Binghamton University recognizes the significant value that student veterans bring to our campus and believe that it is important that we ensure that veterans receive the best possible educational experience. We are committed to implementing, and sharing, promising practices as outlined in the “Eight Keys to Veterans' Success.”

- Create a culture of trust and connectedness across the campus community to promote well-being and success for veterans.
- Ensure consistent and sustained support from campus leadership.
- Implement an early alert system to ensure all veterans receive academic, career, and financial advice before challenges become overwhelming.
- Coordinate and centralize campus efforts for all veterans, together with the creation of a designated space for them (even if limited in size).
- Collaborate with local communities and organizations, including government agencies, to align and coordinate various services for veterans.
- Utilize a uniform set of data tools to collect and track information on veterans, including demographics, retention, and degree completion.
- Provide comprehensive professional development for faculty and staff on issues and challenges unique to veterans.
- Develop systems that ensure sustainability of effective practices for veterans.

**Campus Pre-School and Early Childhood Center**

The Campus Pre-School and Early Childhood Center offers full- and half-day programs for children from 18 months of age through pre-K. It is open from 7:30 a.m. to 5:30 p.m., Mon.-Fri., for child care. The center is staffed with dedicated professionals who offer developmentally appropriate opportunities to advance perceptual skills, large and small motor coordination, science and nature study, socialization, art, music and movement in a nurturing classroom atmosphere. Children are encouraged to develop independence and celebrate the joy of discovery in a safe,
Enrollment

The Campus Pre-School and Early Childhood Center gives enrollment priority to children of students, then to faculty and staff. Children from the Binghamton community are enrolled as space permits. There is usually a waiting list, so contact the office at 607-777-2695 for an information packet. Tuition discounts are available to Binghamton University graduate and undergraduate students.

The Campus Pre-School and Early Childhood Center is a not-for-profit corporation operating under a formal memorandum of understanding with the University. It is accredited by the National Association for the Education of Young Children and licensed by the state of New York. The facility is located behind the East Gym.

Alumni Association

The Alumni Association is Binghamton University's umbrella organization for the promotion and coordination of alumni engagement. All Binghamton University graduates are automatically members of the Alumni Association. Binghamton's alumni network is more than 127,000 strong, and spans across the world.

Working with a number of campus partners, the Alumni Association offers many opportunities for graduates to be engaged with the University as a volunteer. The association also reaches out to alumni through a wide variety of programs and events such as Homecoming, held each fall.

B-connected, Binghamton University’s virtual alumni community, allows graduates to access an alumni directory, and post personal and professional updates. The Alumni Association website, Binghamton University Magazine, e-newsletter Alumni Connect and Alumni Association Facebook page are major communication links with alumni.

University Degree Programs

Enrollment in other than registered or otherwise approved programs may jeopardize a student’s eligibility for certain student aid awards. The following undergraduate programs have been registered by the State Education Department for Binghamton University.

Degree Programs by Academic Unit

Arts and Sciences

Fine Arts and Humanities Division

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**Inter/Cross Disciplinary Programs**

**Environmental Studies**

Environmental Studies: Environmental Chemistry | 163  | BA | Environmental Studies |
Environmental Studies: Environmental Chemistry | 164  | BS | Environmental Studies |
Environmental Studies: Public Policy | 263  | BA | Environmental Studies |
Environmental Studies: Public Policy | 264  | BS | Environmental Studies |
Environmental Studies: Ecosystems | 363  | BA | Environmental Studies |
Environmental Studies: Ecosystems | 364  | BS | Environmental Studies |
Environmental Studies: Earth Sciences and Natural Resources | 463  | BA | Environmental Studies |
Environmental Studies: Earth Sciences and Natural Resources | 464  | BS | Environmental Studies |
Environmental Studies: Public Policy | 563  | BA | Environmental Studies |
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### College of Community and Public Affairs

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### Disaster Management
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- **Title**: Disaster Management

### Nursing Education
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- **Title**: Nursing Education

### Nursing
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- **Title**: Family Nursing

### Family Nurse Practitioner
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- **Title**: Family Nurse Practitioner

### Family Nursing
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### #Gerontological Nurse Practitioner
- **Degree**: CERT
- **Title**: #Gerontological Nurse Practitioner

### Adult/Gerontological Nurse Practitioner
- **Degree**: CERT
- **Title**: Adult/Gerontological Nurse Practitioner

### #Gerontological Nursing
- **Degree**: MS
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### Adult/Gerontological Nursing
- **Degree**: MS
- **Title**: Adult/Gerontological Nursing

### Community Health Primary Care Nurse Practitioner
- **Degree**: CERT
- **Title**: Community Health Primary Care Nurse Practitioner

### Community Health Nursing
- **Degree**: MS
- **Title**: Community Health Nursing

### Nursing
- **Degree**: PHD
- **Title**: Nursing

### School of Pharmacy and Pharmaceutical Sciences

#### Pharmacy
- **Degree**: PharmD
- **Title**: Pharmaceutical Science

### Thomas J. Watson School of Engineering

#### Biomedical Engineering

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**Estimate of Adjunct Faculty and Teaching Assistants**

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<tr>
<td>Engineering Design</td>
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<tr>
<td>ESL</td>
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<tr>
<td>Geography</td>
<td>5</td>
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<tr>
<td>Geological Sciences and Environmental Studies</td>
<td>1</td>
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<tr>
<td>German and Russian Studies</td>
<td>3</td>
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<tr>
<td>Health and Wellness</td>
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<td>History</td>
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<td>Human Development</td>
<td>2</td>
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<tr>
<td>Institute for Global Studies</td>
<td>1</td>
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<tr>
<td>Judaic Studies</td>
<td>3</td>
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<tr>
<td>Latin American and Caribbean Area Studies (LACAS)</td>
<td>2</td>
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<tr>
<td>Linguistics</td>
<td>1</td>
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<tr>
<td>Mathematical Sciences</td>
<td>12</td>
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<tr>
<td>Management</td>
<td>30</td>
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<tr>
<td>Mechanical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>Music</td>
<td>27</td>
</tr>
<tr>
<td>Philosophy Int &amp; Cultural</td>
<td>2</td>
</tr>
<tr>
<td>Physics, Applied Physics and Astrology</td>
<td>5</td>
</tr>
<tr>
<td>Political Science</td>
<td>3</td>
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<tr>
<td>Psychology</td>
<td>7</td>
</tr>
<tr>
<td>Public Administration</td>
<td>1</td>
</tr>
<tr>
<td>Romance Languages</td>
<td>12</td>
</tr>
</tbody>
</table>
The Fleishman Center for Career and Professional Development at Binghamton University views experiential learning as a crucial component of a college education. "Experiential learning encompasses a wide variety of enriching opportunities for students, including service learning, volunteering, student organization leadership and campus involvement, faculty-led research and projects, education abroad, student employment/work-study, cooperative education, and internships." (National Association of Colleges and Employers, NACE.) Our staff encourages students to engage in these experiences to enrich the depth of their career development and exploration.

In addition to communicating with students regarding the importance of gaining internship and other experience and supporting internship and part-time job listings in hireBING by Handshake, the Fleishman Center offers academic courses to support students' career development in this area. A signature program for the Fleishman Center is the Career Development Centralized Internship Program (CDCI 385, 395, 491, 496), which is the largest credit-bearing internship program at Binghamton. Open to undergraduates from all majors, the CDCI Program provides opportunities for students to earn from 2-12 credits for their internship experience during any semester. A course on career exploration (CDCI 200) is also offered.
Binghamton University undergraduate and graduate students may also earn credit for internships through their academic departments.

The Fleishman Center for Career and Professional Development is a comprehensive career center serving all Binghamton undergraduate and graduate students. The Center encourages students to engage in opportunities early in their college years to explore career options and build career-readiness competencies. For more information visit the Fleishman Center online or in the University Union.

**Genocide and Mass Atrocity Prevention (GMAP) Minor**

The Institute for Genocide and Mass Atrocity Prevention offers a minor in Genocide and Mass Atrocity Prevention (GMAP). The GMAP minor allows students to combine and supplement their major curricular requirements with a closely integrated set of undergraduate courses exploring the historical, conceptual, and practical issues and challenges surrounding the prediction and prevention of mass atrocities globally. This interdisciplinary minor encourages students to: 1) study historical and contemporary instances of genocides and mass atrocities from a variety of disciplinary and methodological approaches; 2) gain familiarity with the basic political, moral and legal concepts and theories by which we understand the origins, characteristics, and context of real and threatened atrocities; and 3) explore deeply and critically current approaches for identifying risk factors for impending atrocities, deploying a spectrum of mechanisms designed to mitigate such risks, and assessing the degree of success of those mechanisms.

The GMAP Minor requires six courses, including a core course and courses drawn from three distribution categories.

- The core course is GMAP 480 (cross-listed with PHIL 480 and CCPA 480B): Essentials of Genocide and Mass Atrocity Prevention (Prerequisite: junior standing. Offered every fall semester).
- At least one course from each of the three categories:
  - GMAP 381 or 481. Historical and Contemporary Studies category
  - GMAP 382 or 482. Concepts and Theories category
  - GMAP 383 or 483. Practices and Methodologies category
- The remaining two courses can be drawn from any of the three categories.

The following additional conditions apply:

- At least four of the six required courses must be upper-division
- No more than two courses from the GMAP minor may count toward a student’s major
- Students must earn a grade of C or better in all courses applied to the GMAP minor
- Students interested in the minor must be advised by one of the Institute Co-Directors for the purposes of course selection and declaring the minor.

As of 2017, the following classes are recognized as meeting the requirements of the three GMAP categories. Additional courses will be added as appropriate.

(A) **Historical and Contemporary Genocide and Mass Atrocity Case Studies Courses (GMAP 381 or 481)**

- AAAS 454. Unresolved Issues: Wars in Asia
- AAAS 282Q. Migration and Human Rights in Korea and Japan
- COLI 380B. Holocaust Literature
- GERM 380P. War Stories
- JUST 345/HIST 345. The Holocaust
- HIST 381. Borderlands of East Central Europe
- PLSC 380A. Political Violence in Latin America
- SOC 300. Genocide: Rwanda, Darfur, Bosnia-Herzegovina
- SOC 302. Sociology of Latin America
- WGSS 382D. Human Trafficking in History

(B) Concepts and Theories Category Courses (GMAP 382 or GMAP 482)

- AFST 380T/HDEV 379/LACS 382P. Migration, Citizenship, and Human Rights
- AFST 380/HDEV 351/LACS 380G/WGSS 382C. Forms of Global Violence
- AAAS 480I. Social Justice
- ANTH 480G. Global Social Movements
- ARAB 480C. War Crimes and Global War
- HIST 333. Human Rights Since 1945
- HDEV 351. Multiple Forms of Global Violence
- HDEV 342. Intro to Human Rights Theory and Practice
- PHIL 458. Violence, Non-Violence, and War
- PHIL 458. Foundations of International Law
- PHIL 456. Refugees
- PLSC 380D. International Organizations
- PLSC 380N. Introduction to Human Rights
- PLSC 380. Dynamics of Civil Wars
- PLSC 486C. Terrorism
- PLSC 486L. Crisis, Development, and Human Rights
- PLSC 485O. Human Rights and Oppression
- SOC 326. Global Criminal and Social Justice

(C) Practices and Methodologies Category Courses (GMAP 383 or GMAP 483)

- ANTH 480. Global Health
- ECON 314. Economy of Developing Countries
- GEOG 465. Remote Sensing and GIS
- GEOG 482. Race, Ethnicity, and Location
- HIST 286. Gender, Genocide, and Humanitarian Aid
- HDEV 365. Psychology of Racism
- HDEV 352. Immigrant and Refugee Health
- HIST 380M/HDEV 361. Global Migration Flows and Processes
- HIST 480. History and Memory
- PHIL 457. Transitional Justice
- PLSC 389Z. Human Rights: Issues for Debate
- PLSC 486Y. Foreign Intervention Problems
- PLSC 380I. Conflict Resolution
- SOC 305. Social Research Methods

**Study-Abroad Programs**

Binghamton University encourages students to study abroad as valuable preparation for an increasingly interdependent world. Study-abroad programs provide opportunities to live and learn in societies around the globe. Semester, academic year, summer, winter and short study tours are generally available. Many disciplines are represented, and study in the major is normally possible and encouraged. Graduate study may be possible at some sites.

Binghamton University currently sponsors the programs listed below on an ongoing basis. For details, see [https://binghamton-oip.terradotta.com/](https://binghamton-oip.terradotta.com/)

**Argentina**
Social Movements and Human Rights (SIT)

**Australia**
Murdoch University

**Austria**
University at Graz

**Canada**
Language and Culture in Quebec Summer Program

**Chile**
Doing Business in Emerging Markets Winter Program

**China**
Chinese Business Language and Culture at Fudan University
Soochow University

**Costa Rica**
Tropical Ecology and Conservation Short Term Program

**Dominican Republic**
Decker School of Nursing Winter Program

**France**
Art and Archaeology at Peyre Blanque Summer Program
French Language and Liberal Arts at the University of Paris (Sorbonne)

**Germany**
German STEM Summer Program
University of Leipzig

**Ghana**
Global Health and Culture Summer Program

Italy
Lorenzo de Medici Institute Semester in Florence or Rome
Lorenzo de Medici Institute Summer in Florence, Rome, or Tuscany
Lorenzo de Medici Three Cities Semester Program

Japan
Kokugakuin University

Malawi
Service Learning and Community Development Summer Program

Montenegro
Art in Montenegro Summer program

Morocco
Al Akhawayn University in Ifrane Semester Exchange
Al Akhawayn University in Ifrane Summer Program

The Netherlands
Utrecht School of Economics
Utrecht University
International Perspectives on Sexuality and Gender (SIT)

Peru
Service Learning and Language Immersion Program

South Korea
Hanyang University Summer Program
KAIST Semester Exchange
Korea University Semester Exchange

Spain
Summer Language, Literature and Culture in Madrid

Turkey
Bilkent University Exchange
Bosphorus University Semester Exchange
Bosphorus University Summer Program
Koc University Semester Exchange
Middle East Technical University Semester Exchange

United Kingdom
Lancaster University
The London School of Economics and Political Science Semester in London Program
University of Bath
University of East Anglia
University of Edinburgh
University of Nottingham

Vietnam
Brockport Vietnam Program

Binghamton students may also study abroad on programs sponsored by other campuses of the State University of New York. Credits are normally transferable to Binghamton. Cooperative policies within SUNY allow students to maintain their residency on such programs. Students are urged to begin planning for study abroad as early as possible, ideally in the freshman year. For further information, contact the Office of International Education and Global Initiatives (IEGI), OH 240.

University Summer Session

The Summer Session is composed of three terms within an 11-week period (Term I, late May-June; Term II, July-August; Term III, variable dates) during which a wide variety of both traditionally taught and online learning courses are scheduled in most upper- and lower-division areas of the University curriculum. A Summer Session website, http://www.binghamton.edu/clt/summer-session/, lists the courses to be offered. A schedule of classes for Summer Session is also available on the BU BRAIN. Students may earn up to 16 hours of academic credit (a maximum of eight credits in Term I and maximum of eight credits in Term II). Binghamton University students should contact the financial aid office to determine eligibility for financial aid during the Summer Session. The Center for Learning and Teaching administers Summer Session.

University Winter Session

The Winter Session is composed of a single four-week term that runs from mid-December to mid-January. Winter Session hosts a select variety of traditionally taught and online learning courses from across the upper- and lower-division areas of the University curriculum. A Winter Session website, http://www.binghamton.edu/clt/winter-session/, lists the courses to be offered. A schedule of classes for Winter Session is also available on the BU Brain. Students may earn up to 4 hours of academic credit during Winter Session; financial aid is not available during Winter Session. The Center for Learning and Teaching administers Winter Session.

Non-Degree Students

Advising

The Harpur College Academic Advising Office offers advising to all undergraduate Binghamton University non-degree (non-matriculated) students. At Binghamton University, a non-degree student is approved to take courses, but is not admitted into a degree program or a declared major. Non-degree students must apply and be approved after certain criteria are met, after which students are free to take any classes that are open at the time of registration.

University-Wide Courses

University-wide courses, offered under the UNIV rubric, are credit-bearing courses whose subject matter is not accommodated in existing University departments or schools. UNIV courses are open to all undergraduate students, regardless of school. Students may count no more than eight credits of UNIV courses toward graduation.

Binghamton University Scholars Program

Each year, Binghamton University invites a small number of outstanding incoming freshmen to join the Binghamton University Scholars Program, a highly selective all-University four-year honors program for students of exceptional merit. The mission of the Scholars program is to provide incoming students of exceptional merit with a four-year commitment to an intellectually stimulating program of both curricular and extracurricular activities that connect
students to each other and the best minds across the University and beyond, with a goal to provide Scholars with foundations and opportunities in:

- Leadership
- Intellectual curiosity
- Civic engagement
- Integrity
- Building community
- Balance and well-being
- Diversity of perspectives
- Creativity, innovation and the entrepreneurial spirit
- Experiential/active learning
- Effective communication

All freshmen Scholars live in the Newing College residential community as part of the Scholars Learning Community and have the option to remain in Scholars housing for all four years. Graduates of the Scholars program earn "President's Honors" or "All-University Honors" recognition upon graduation.

The Binghamton University Scholars curriculum includes:

- A freshmen experience course, SCHL 127, Thinking Like Leonardo da Vinci
- Service learning and engagement in SCHL 227, If Not Us, Who? If Not Now, When?
- The opportunity to take courses created for, and offered only to, Scholars
- Special experiential-learning and capstone-project opportunities in the junior and senior years

For further program details, visit http://www2.binghamton.edu/scholars.

English Language Institute (ELI)

The English Language Institute serves international undergraduate and graduate students as well as students who have graduated from American high schools. Its goal is to help students improve their ability to use English in an academic context so that they may achieve their academic potential. Undergraduate students register for an ELI course after taking an English Language Assessment given during International Student Orientation or by special arrangement with the director of the program. Undergraduate students receive credit for ELI courses. Graduate students may register themselves for courses and will receive between one and four credits that count toward the number of hours they need to be full-time students, but no course credit. ELI classes are for full-time, matriculated students, but limited spaces are available for non-matriculated students as well.

College of Community and Public Affairs - Undergraduate

Admission

The procedure for candidates applying for admission to the College of Community and Public Affairs (CCPA) is essentially the same as for other students applying for admission to the University. Specific information may be found in the general section on Admission in this publication.

Undergraduate Academic Policies
The college generally follows the academic policies announced in this publication; however, students should be aware of the following policies pertinent to CCPA undergraduates only. Students are expected to be familiar with and to observe the regulations in this section.

All matriculated students follow the requirements for graduation listed in the Bulletin current at the time they are admitted to the degree program. However, students who interrupt enrollments for more than two consecutive semesters are governed by the Bulletin in effect when they are readmitted.

Upon the advisor’s recommendation and an approved petition through the department chair, students may elect a later Bulletin under which they fulfill these degree requirements; however, they may not use a combination of requirements from different Bulletins. When courses required in older Bulletins are no longer offered, or in other special cases, course substitution may be made with the approval of the department chair.

**Program Load and Planning**

The term “full-time student” is applied to a person carrying 12 credits or more. The maximum number of credits a student may take, without the special approval of the advisor and department chair, is 18.

A student may drop below 12 credits without consent and be classified as a part-time student.

Students are enrolled in a major when accepted into the school. The CCPA undergraduate academic advisor, peer advisors and the department chair provide assistance in program planning for students.

**Grade Policies**

Students taking CCPA undergraduate courses are graded in one of two ways:

- A, A–, B+, B, B–, C+, C, C–, D, F; or
- Pass/Fail.

Under the normal grading system, students choose the first option. However, undergraduates in CCPA may elect the Pass/Fail option for a total of four courses while a student at Binghamton University and receive a P (pass) or F (fail) rather than a traditional grade. Courses taken for a Pass/Fail option may not be used to complete major requirements or the general education requirements. Mandatory Pass/Fail courses do not count as part of the four total courses. A course taken on the Pass/Fail option is calculated into the student’s grade-point average only if the student receives an F.

The grading option for a course may be changed (either from normal to Pass/Fail, or vice versa) at any time up until the course-withdraw deadline, usually during the ninth week of the semester.

**Repeating Courses**

Students may retake courses in which they have received a passing grade, or C or better in core courses required for the major, by submitting a special petition to the faculty member teaching the course and the CCPA undergraduate academic advisor. This provision allows a student to demonstrate mastery of a given subject matter most notably (but not exclusively) in foundation courses, on which successful performance in later courses may depend. If approved, the repeated course does not count toward rate of progress. That is, when a student repeats a course previously passed, both grades appear on the transcript, but only the first grade is counted in the grade-point average (GPA) calculations for rate-of-progress purposes.

Students may retake courses in which they have received a failing grade, or below the minimum required grade of C in core courses required for the major. When a student repeats a course previously failed or below the minimum grade of C in core courses required for the major, both grades appear on the transcript, and both are counted in the
GPA. Students are encouraged to speak with the CCPA undergraduate academic advisor as they make their decision about repeating any failed course.

**Notation of Incomplete**

A notation of Incomplete, rather than a grade, may be reported by the instructor when a student has made substantial progress, but has not been able to complete a course. In addition, the student must have a valid reason, because of illness or other justifiable circumstances, for requesting an Incomplete. The questions of substantial progress, potential to pass the course, and a valid reason for the request are decided by the instructor. When requesting an Incomplete, the student must:

- complete the Contract for Fulfilling an Incomplete form, which is signed by the student and the instructor;
- specify in the contract how the course will be completed, by what date the work will be completed, and specifically list all outstanding assignments (tests, papers, presentations) to be completed;
- submit the contract to the CCPA undergraduate academic advisor, who ensures that the student is in compliance with department rules governing the number of Incomplete credits a student may carry at one time. A student may not carry more than eight credits of Incompletes at any time;
- when necessary, include the signature of any additional instructor needed for successful completion of the course. This circumstance may occur when the original faculty member is on sabbatical or no longer teaching the course. A student must first obtain the secondary instructor’s signature before having the original instructor sign the form.

An Incomplete becomes an F at the end of the semester following that in which the Incomplete was granted, unless a Change of Grade form is submitted by the instructor. It is the student’s responsibility to ascertain that the coursework has been completed according to the contract, and the new grade is submitted by the instructor. An extension of the deadline must be approved by the CCPA undergraduate academic advisor on a Request for Extension of Incomplete Grade in an Undergraduate Course form, and is approved only in highly unusual circumstances.

**Withdrawal from a Course**

If a student withdraws from a course after the official deadline to drop a course, the instructor may assign a grade of WP (Withdrawn Passing) or WF (Withdrawn Failing). The grade of WP does not count as a course taken. A WF is equivalent to an F.

If a student wishes to withdraw from a course, they are required to withdraw by the University course withdrawal deadline. If students face special circumstances and wish to withdraw from a course after the withdrawal deadline, they may petition through the department advising office. Students must present documented circumstances beyond their control for consideration of their request to withdraw from a class.

**Grade Changes**

No changes from one letter grade to another and no extensions of an Incomplete are permitted after 12 months from the date of the last day of class in the semester in which a course was offered.

**Academic Standing**

The faculty in the College of Community and Public Affairs (CCPA) expect academic excellence for our students.

Students must maintain a minimum of a 2.0 cumulative grade point average (GPA) to make satisfactory progress toward the BS degree. A minimum of a 2.0 cumulative GPA is required of students for graduation.
The GPA is calculated on a 4.0 system using the following grade-point equivalents:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Equivalent</th>
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<tbody>
<tr>
<td>A</td>
<td>4.0</td>
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<tr>
<td>A–</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B–</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C–</td>
<td>1.7</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
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</tbody>
</table>

The assessment of satisfactory progress to degree will be conducted for students at the end of the fall and spring semesters. The failure to maintain a minimum of a 2.0 cumulative GPA at the end of a semester will result in the student’s academic probation. As such, an academic probation notation will be placed on the student’s internal academic transcript.

Students who do not achieve a minimum of a cumulative 2.0 GPA in a subsequent semester following academic probation may be subject to academic suspension from Binghamton University. An academic suspension notation will be placed on a student’s internal academic transcript. Students that receive academic suspension may be readmitted to the University after one year. Please note that students may be re-admitted to the University after one semester upon the successful completion of 12 credits or more with earning a grade of B or better in all courses taken at an accredited college or university.

Students who do not have the minimum of a 2.0 cumulative GPA in the semester following academic suspension, or any subsequent semester, may be subject to permanent academic dismissal from the University. Please note that a student will not be suspended or dismissed if the student’s semester GPA is greater than a 2.0 GPA.

In cases where students demonstrate continuous unsatisfactory academic performance, including but not limited to, a consistent pattern of failing grades, multiple withdrawals and/or a low cumulative GPA, these circumstances may result in receiving a letter of academic warning. The letter of academic warning will indicate that academic probation will occur in the event that the student does not improve his/her academic performance in a subsequent semester. Those students that continue to demonstrate unsatisfactory academic performance in any subsequent semester may be subject to academic probation followed by academic suspension and ultimately academic dismissal from the University.

**Dean’s List**

To qualify for the CCPA Dean’s List at the end of the fall or spring semesters, a student must have completed at least 16 credit hours for a letter grade with a 3.75 or better semester GPA and have no missing or incomplete grades. Recognition is given for each semester in which students meet these criteria. The award is noted on the student’s academic transcript.

**Graduation with Honors**

Students with outstanding academic records receive honors upon graduation. To qualify, students must meet the cumulative grade-point averages specified below, have at least 48 graded Binghamton University credits and have no missing grades or Incompletes. Honors are awarded as follows:

- 3.50-3.69 GPA: cum laude
- 3.70-3.84 GPA: magna cum laude
- 3.85-4.00 GPA: summa cum laude
The appropriate graduation honors are indicated on the diploma and on the final transcript.

**Withdrawal and Readmission**

If students who withdraw from the College of Community and Public Affairs wish to remain in good standing, they must follow a formal withdrawal procedure. Mere absence from class does not constitute withdrawal. Withdrawal applications may be obtained from the Registrar's Office website under Forms or from the CCPA Undergraduate Academic Advising Office, either in person or through the mail. A grade of W is assigned when the student has withdrawn from all courses and thus from the University. Grades of W do not count as courses taken.

CCPA applies the same withdrawal and readmission policies as established for the University, except that CCPA students may drop below a three-course program without consent.

Undergraduate students must apply for readmission through the Undergraduate Admissions Office.

**Grievance Procedure**

Students should first try to resolve any grievance with their instructor. If, after meeting with the course instructor, the student wishes to pursue further action, he or she should meet with the department chair to discuss options. A copy of the CCPA Grievance Procedure is available from the CCPA Dean’s Office.

**Financial Aid**

College of Community and Public Affairs students are eligible to participate in the University’s financial aid program. Aid is available to full-time and selected part-time matriculated students. Students interested in obtaining financial aid should contact the Financial Aid and Student Records Office as soon as possible to determine their eligibility.

**Activities and Student Services**

All CCPA students are eligible to receive the services provided for all students at Binghamton University and to participate in its various student activities. Students should be familiar with the Bulletin sections that deal with services for students and student activities.

**Awards and Prizes**

See the Scholarships, Awards and Fellowships section of the University Bulletin.

**Department of Teaching, Learning and Educational Leadership - Undergraduate**

**Education Minor**

Note: There are no undergraduate teacher education programs in the Department of Teaching, Learning and Educational Leadership.

The education minor provides undergraduate students at Binghamton University with insight into careers in educational fields and is taken in conjunction with a student's major area of study. The minor provides a strong foundation for further work in education at the graduate level and provides pertinent information and experiences that expands the students’ understanding of career opportunities as classroom teachers; educational and career counselors; school building, district and business administrators; education law; or other potential educational careers in settings in New York, across the U.S., and internationally. The education minor is open to any student on
campus, even if they do not plan a career in education. The minor is open to students with a general interest in Education and understanding the major role it plays in our society.

The education minor consists of 16 credits at the 300 level or above with two required courses and two elective courses. Students must receive at least a C grade for courses (or a Pass grade if students take EDUC 491 or 497) to fulfill requirements for the minor. See [https://www.binghamton.edu/gse/teacher-education/minor/education_minor.html](https://www.binghamton.edu/gse/teacher-education/minor/education_minor.html) for more information about the Department of Teaching, Learning and Educational Leadership's undergraduate minor.

Human Development - College of Community and Public Affairs

Human Development

The human development bachelor's program allows students to explore individual, social and structural aspects of human development as a basis of understanding principles that benefit themselves and others by (a) achieving a solid foundation in the theories and research defining the field of human development; (b) engaging in a critical exploration of social, cultural, economic, historical and political frameworks and the ways in which individuals, families and communities are situated within them; (c) developing the understanding and skills needed to enhance and promote diversity, equity and social justice; and (d) fostering a complex understanding of human conditions.

Our courses stress collaborative education and a multicultural curriculum, and our faculty strive to build supportive relationships with and among our students.

Learning objectives woven throughout our flexible curriculum encourage students to:

- think critically;
- analyze social issues;
- effectively express ideas verbally and in writing;
- apply knowledge by linking theory and practice;
- understand and use technology;
- develop an understanding of self and others as situated in history and community;
- develop an understanding for global-local issues and relations of power;
- develop a human rights based perspective to the empowerment of individuals and communities;
- demonstrate an understanding of how oppression affects the process of development;
- demonstrate knowledge, sensitivity and skill in working with diverse populations;
- and engage in a critical analysis of the concept of human service in the social and institutional context of politics, history and economics.

Courses are situated in the social sciences, but also cross these and other disciplinary boundaries, applying what students learn to a variety of human services settings, including social services, schools, child-care organizations, the criminal justice system, healthcare agencies, mental health programs, community development organizations, and many others for which a human development understanding provides a useful grounding.

Undergraduate Major Program

The Department of Human Development offers the bachelor of science in human development. This undergraduate degree is designed to prepare students for careers in which they will work with people, in communities and organizations, addressing complex social problems such as poverty, drug and alcohol abuse, victimization, equity
and justice. Students design their own individualized plans of interdisciplinary study within the general framework of the program requirements based upon their specific personal, educational and career goals.

The undergraduate curriculum is organized in three core areas: (1) Theories of Human Development, (2) Social Action and Policy, and (3) Working with Individuals and Groups. Theoretical courses examine core concepts that relate to human development across the lifespan including but not limited to child and adolescent development, as well as death, dying and bereavement. Social Action and Policy courses explore how the influence of macro- and micro-level processes interface individuals and communities. Working with Individuals and Groups courses examine the philosophies, strategies and techniques for working effectively with individuals, organizations and communities; they also emphasize sociocultural factors that influence practice.

Required Course Prerequisites

The following courses are required prerequisites to begin the major in Human Development: three lower-level social science courses (any 100- or 200-level) including psychology, sociology and another social science course outside of psychology and sociology (e.g., anthropology, political science, history, economics, etc.). Once these courses are completed with a grade of C or better, and once students have sufficient credit hours to constitute sophomore 2 standing, they are eligible to take HDEV 200, the first course in Human Development.

Degree Requirements

Credit Requirements to Qualify for a Baccalaureate Degree from CCPA

A minimum of 124 credits required for graduation.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Liberal Arts and Sciences (including courses used to fulfill General Education requirements and free electives)</td>
<td>60 cr.</td>
</tr>
<tr>
<td>Upper Division - 300 and 400 level courses in HDEV</td>
<td>36 cr.</td>
</tr>
<tr>
<td>In Residence - courses satisfactorily completed in HDEV department</td>
<td>40 cr.</td>
</tr>
</tbody>
</table>

Other Requirements to Qualify for a Baccalaureate Degree from CCPA

- Earn a minimum of 124 credit hours, including transfer credits, with a cumulative GPA of at least 2.0 and a minimum GPA of at least 2.0 in the major program.
- No more than eight credit hours in internship and independent study courses may be applied toward the 124 credit total for degree.
- No more than ten credit hours of health and wellness (HWS) courses and up to 2 credits of outdoor pursuit courses (OUT) having a general education designation, may be applied toward the 124-credit total for degree. Outdoor pursuit courses that do not meet the general education requirement will not count toward the degree. For transfer students, eight credits of wellness courses and two credits of physical activity courses may be applied toward the degree.
- Meet general education requirements as stated in the University Bulletin
- Complete the specified requirements in the major program in which they are candidates for the degree.
- Not be on probation or under disciplinary action, and pay or make a satisfactory adjustment of all tuition, fees or other bills incident to their attendance at the University.
- Be recommended by the faculty of the College of Community and Public Affairs.
Be admitted to the degree by the State University Trustees, by formal action.

The College of Community and Public Affairs (CCPA) reserves the right to make changes in the requirements listed above for graduation, except that no increase in total credit hours required for graduation shall retroactively affect any student already matriculated in CCPA when the change is made.

Health and Wellness (HWS) Requirements

Ten elective credits of health and wellness (HWS) courses may be applied toward the degree. Up to 2 credits of outdoor pursuit courses (OUT) with a General Education designation may be applied toward the degree. Outdoor pursuit courses without the General Education designation will not apply toward the degree. For transfer students, eight credits of wellness courses and two credits of physical activity courses may be applied toward the degree.

Independent and Internship Study Policy

Students are restricted to a maximum of eight credit-hours for independent study and internship courses toward the degree. Independent study or internship courses may be taken for 1-4 credits only. Specific academic guidelines for independent and internship study courses are available on the CCPA Human Development website or in the Department of Human Development.

Major Course Requirements

A total of 10 four-credit human development courses are required for the human development major. Four core courses (HDEV 200, HDEV 300, HDEV 400, HDEV 475) and two courses from each of the Core Learning Areas (Theories of Human Development, Social Action and Policy and Working with Individuals and Groups) are required for the human development major.

Core Courses

Students will select three introductory classes from three different social science disciplines (one must be from psychology, one must be from sociology, one must be from a different social science discipline [i.e., anthropology, economics, geography, history, political science]).

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDEV 200. Introduction to Human Development</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HDEV 300. Social Science Research Methods</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HDEV 400. Social Justice</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HDEV 475. Practicum in Human Development</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Core Learning Areas

Students are required to select two additional courses from each of the following three Core Learning Areas.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HDEV 301-339. Theories of Human Development</td>
<td>8 cr.</td>
</tr>
</tbody>
</table>
Sequencing of Core Courses

HDEV 200 (Introduction to Human Development) is a prerequisite for HDEV 300 (Social Science Research Methods). HDEV 300 is a prerequisite for HDEV 400 (Social Justice). HDEV 400 is a prerequisite for HDEV 475 (Practicum in Human Development). These courses cannot be taken simultaneously as each one provides a critical preparation for the subsequent course. In general, students will begin the sequence of courses when they have sufficient credit hours to constitute sophomore 2 standing.

Grade Policies for Core Courses

Core courses in human development (HDEV 200, HDEV 300, HDEV 400, HDEV 475) must be completed with a grade of C or better. Core courses may not be taken on a Pass/Fail basis. All courses from the Core Learning Areas (Theories of Human Development, Social Action and Policy, and Working with Individuals and Groups) must be completed with a grade of C or better. Courses from the Core Learning Areas may not be taken on a Pass/Fail basis. The three required lower division social sciences courses (psychology, sociology, and outside of social sciences) must be completed with a grade of C or better. These lower division social sciences courses may not be taken on a Pass/Fail basis. For this requirement, please note that one course must be from psychology, one course must be from sociology, and one course must be from a different social science discipline (e.g., history, political science, geography, anthropology, economics).

Core Course Learning Objectives

Introduction to Human Development (HDEV 200)

In this course, students will:

- Contextualize the history and evolution of the study of human development and the social sciences in the United States and internationally.
- Examine the concept of development more broadly and across disciplines.
- Explore the research approaches of the social science disciplines.
- Understand interdisciplinarity and comprehend its significance for the study of human development.
- Analyze the relevance of social science perspectives for the study of real world problems and social relations.
- Understand the substantive and methodological programmatic underpinnings in the Department of Human Development, Binghamton University, including 1) critique of service, 2) multiculturalism, 3) translating theory into practice, and 4) action research.
- Understand practice requires an equitable and socially just process.
- Undertake the exercises of conducting library research, writing a literature review, and compiling a bibliography.
- Receive feedback on the process of writing critically and have an opportunity to further develop skills in this area.

Social Science Research Methods (HDEV 300)
In this course, students will:

- Explore the different ways of knowing (epistemologies) including scientific research.
- Understand the processes and institutions that are responsible for the production of social science research including the political contexts and processes of those institutions.
- Examine the ethics of different research projects in their design and uses. Students will be introduced to human subjects protections and review.
- Be introduced to the concepts of social science research, including hypothesis, measurement, reliability, measurement validity, design, sampling, sampling bias, and internal and external validity. They will also gain familiarity with some common fallacies including correlation versus causation, errors in logic, ad hoc explanations, and false generalization.
- Learn about different philosophies and methodologies of quantitative and qualitative research, their advantages and disadvantages. Analysis will include the compatibility of different methodologies and how they frame the participants of their research.
- Be introduced to participatory research strategies as a means to address some of the shortcomings of traditional research paradigms. Students will explore how researchers can be agents of social change.
- Gain skills and confidence to find scholarly articles on a given topic, then read, evaluate, and critique the methods used in the articles. Learn how to read and provide a critique of quantitative and qualitative social science findings as reported in scholarly journals, but also in project reports, updates to funders, and the popular media (print, broadcast, Internet).

Social Justice (HDEV 400)

In this course, students will:

- Understand social justice in its forms including distributive (how resources are distributed), sense of justice (how justice and injustice feel), procedural (how one is treated), restorative (how remedies are made), and scope of justice (who is understood to be deserving).
- Examine the dynamic variation across race, class, gender, ethnicity, disability, and sexuality identity formation, differential treatment based on marginalized identities at varying societal levels, and responses to the structural arrangements that affect people's lives within local and global contexts.
- Develop critical consciousness and awareness of privilege in connection with dynamics of power and powerlessness that have an impact on the work of, and personal lives of practitioners in communities.
- Demonstrate the acquisition and/or proficient use of analytical skills in terms of critically examining socio-historical, -cultural, -political, and -economic contexts.
- Consider the meaning of justice in a global context by exploring the various consequences of globalization.

Practicum in Human Development (HDEV 475)

In this course, students will:

- Engage in a systematic internship process whereby student learning is maximized by simultaneously participating in fieldwork experiences, seminar activities, and by interacting with students working in a variety of other field settings.
- Integrate theories in the study of human development with an understanding of practice in the human services from a critical perspective.
- Develop multicultural competence in the areas of self-awareness, knowledge, and skills that enables an
individual to work effectively as a practitioner in the field of human development and to understand how multi-layered constructions of difference affect the delivery of services.

- Demonstrate an ability to provide a critique of service of micro- and macro-sociopolitical processes through an exploration of the impact of social structures and asymmetrical power relationships (i.e., political, economic, social, legal) in communities.

- Evaluate how conceptions of empowerment and equity prevalent in the human development and related literatures actually play out in practice.

- Explore the role of a social change agent and advocate in relation to institutional structures.

- Discuss and analyze the internal practices of organizations and social service agencies.

- Critically examine the concepts of empowerment, helping, intervention and service.

- Understand the ethical considerations in a practicum experience as well as their consideration in organizations.

- Gain an in-depth understanding of a human services practicum site, its "clients," various stakeholders, and programmatic goals.

Core Learning Area Descriptions

Theories of Human Development (HDEV 301-339)

Goal: Understanding theoretical orientations and applying knowledge to particular populations.

Courses in this area will examine human growth and development across the lifespan from conception to life’s ending. Students will learn about traditional as well as new directions in developmental theories. A solid grounding in a broad range of theories will provide a basic background for students’ work as practitioners across developmental domains such as physical, cognitive, and social emotional development. Students will learn foundational areas in traditional human developmental theories, place theories in historical context, and will discover the applications and limitations of theoretical concepts. Students will understand how theories develop, change and drive research, as well as how theories can be useful for understanding developmental trajectories. A key emphasis will be an application of developmental theories and concepts to work as practitioners. Students will examine how social context, as a major approach to the study of development, provides a central focus and understanding of people’s lives and their work as practitioners.

Social Action and Policy (HDEV 340-379)

Goal: Influencing public discourse and the social world.

Courses in this area will explore the relationship between social policy, ideology, and activism. Students will be introduced to the processes that shape and develop social policy, including the historical background and competing societal values and interests that underlie enactment of social policy and the development of programs to address social problems. They will gain an understanding of the organizational, bureaucratic, political, and legislative processes that influence policy development and implementation. In addition, students will develop skills to critically evaluate existing policies and how those policies impact practice. This critical inquiry will lead students to consider the importance of social and institutional change through activist practice. Activism can be defined as participating in social issues discussions and activities within communities, organizations, and institutions. For some, this means working within institutions to make them live up to their objectives. These activists understand their role as making current social institutions work effectively and justly. For others, activism is social change that would involve the dismantling of current social institutions and replacing them with other visions. Students will have the opportunity to
investigate how various strategies have developed to bring about meaningful social change within people's lives and contexts.

**Working with Individuals and Groups (HDEV 401-479)**

**Goal:** Learning professional skills and developing skill sets.

Courses in this area will introduce students to major principles and theories of individual and group practice. A key emphasis will be placed on integrating theory and practice and making applications of this learning to various kinds of work settings. Students will explore ethical, legal, and professional issues as well as major concepts, techniques and approaches used in individual and group practice. One of the central aims of courses in this area is to provide an interdisciplinary analysis of how individuals and groups function within families, institutions, and social structures. In this context, these courses will provide students with opportunities to move beyond more traditional principles of individualism and universalism through broadening the scope of interdisciplinary inquiry including exploring social stratifications and relations of power in individual and group identities. In particular, students will consider how people's daily life experiences as well as their individual psychologies (i.e., cognitions, attitudes, behaviors, challenges, emotions, expectations, motivations, needs, wants) and world view may be linked to structural differences in resources and opportunities, as well as assumptions about themselves and others.

**Human Development Minor in Immigration Studies**

The Department of Human Development in the College of Community and Public Affairs offers a minor in Immigration Studies. The objective of this interdisciplinary minor is to grapple with the complex and multiple ways in which citizenship is defined and experienced at global, societal, institutional, community, and individual levels. The key focus is on the effect of contemporary conceptualizations of citizenship and their translation into policies and actual everyday practices on the lives of those deemed as immigrants, refugees, or the displaced. The minor applies a social justice and rights-based philosophy to an examination of citizenship, immigration, emigration, and immigrant lives in transnational, national, and local contexts. A key emphasis of the minor is to explore the intersectionality of discourses on belonging, justice, and displacement in a variety of global, national, and localized contexts. The requirements for the Human Development minor in Immigration Studies are as follows:

- A minimum of six courses including four core courses and two elective courses.
- The four core courses will be taken within the Department of Human Development:
  1. HDEV 361. Global Migration Flows and Processes
  2. HDEV 379. Migration, Citizenship, and Social Justice
  3. HDEV 465. Researching Immigrant Lives
  4. HDEV 475. Practicum in Human Development (this is the capstone course for the minor and must focus on immigrant populations)

- The two elective courses may be taken outside the Department of Human Development.
- The two electives may be selected from courses that focus on immigration and immigrant related issues offered across BU in different departments. These courses must be approved by the Human Development department chair.

1. The first elective course will focus on immigration/immigrants with a historical emphasis (e.g., courses in History; Sociology; Geography; English; Africana Studies; Latin American and Caribbean Area
The second elective will be a course that focuses in-depth on one specific immigrant community, population, or context (e.g., courses in History; Sociology; Geography; English; Africana Studies; Latin American and Caribbean Area Studies; and Asian and Asian American Studies have been identified)

- If students are interested in the Human Development minor in Immigration Studies, they should complete an application form, which can be found on the department's website.
- For participation in the Human Development minor in Immigration Studies, a student must have declared a major (HDEV or other) and completed at least 56 credits.
- For human development students, at least four of six courses for the Immigration Studies minor must be in addition to courses counted toward fulfillment of the human development major.
- For students outside of human development, at least four of the six courses for the Immigration Studies minor must be in addition to courses counted toward the fulfillment of the student’s major.
- At least four of the six courses for the Immigration Studies minor must be completed at Binghamton University.
- Courses for the minor in Immigration Studies must be completed with a grade of C or better. These courses may not be taken on a Pass/Fail basis.

**College of Community and Public Affairs - Graduate**

Binghamton University’s College of Community and Public Affairs (CCPA) provides an array of programs for its students, preparing CCPA graduates to work with individuals, communities and organizations for the public good and focusing specifically on social services, local government, schools, institutions of higher education and nonprofit organizations.

The College of Community and Public Affairs offers an interdisciplinary doctoral program leading to the PhD in Community and Public Affairs.

The Department of Public Administration offers a graduate program leading to the master of public administration (MPA) degree and also offers graduate certificates.

The Department of Social Work offers both full-time and part-time graduate programs leading to the master of social work (MSW) degree and also offers graduate certificates.

The Department of Student Affairs Administration offers a graduate program leading to the master of science (MS) in student affairs administration.

The Department of Teaching, Learning and Educational Leadership offers graduate programs that lead to graduate degrees and certificates (MSEd, MAT, MS, CAS, EdD) in education and school leadership and also offers an undergraduate minor in education.

The Department of Human Development offers an undergraduate program leading to the bachelor of science (BS) in human development.

**Doctoral Program in Community Research and Action (PhD)**

The PhD program in Community Research and Action prepares students for academic or policy-related careers as public scholars focused on addressing critical community issues (e.g., educational inequality, racism, gender-based violence). Applied research on community issues such as healthcare policy for aging populations, substance abuse
prevention in schools, as well as sustainable communities, are strengthened through the integration of diverse theories and research methods. Our curriculum draws from varied disciplines (e.g., anthropology, demography, criminology, geography, sociology and psychology) to research the dynamic interplay among individuals, the organizations serving them, as well as the communities (including schools and college campuses) in which they are embedded. Students entering our program typically have several years of practice experience in a variety of fields (e.g., education, counseling, human services, public administration, social work and student affairs administration) as well as a commitment to social justice, health and well-being, human rights, public service, social welfare, and/or community transformation.

Students in our program are guided to conceptualize their research topics across multiple levels of analysis (individual, organizational, community and societal), emphasizing the importance of interdisciplinary approaches for community inquiry. Within this work, our students are encouraged to focus on issues of race, class, sexuality, faith tradition, ethnicity, gender, and physical ableness. Community-based research methods (e.g., multilevel structural equation modeling, social network analysis, critical ethnography, geographic information systems and youth-led participatory action research) are also a unique focus within our program. In all of our courses, we emphasize the importance of researchers as public scholars working in collaboration with communities as we seek understanding and solutions.

Students are encouraged to collaborate with faculty to develop research studies that advance individual, organizational, and/or community health and wellness, build empowerment and seek social justice. Working alongside faculty in schools and communities, as well as on college campuses, students in our program are researching issues such as local food insecurity, community collaboration with public schools and gender-based violence on college campuses. Graduates of our Community Research and Action doctoral program are trained for careers as public scholars in a variety of settings including academia, research institutions, and policy institutes.

Admission

Applicants for the doctoral program should have a master's degree in counseling, human development, psychology, public administration, social work, sociology, political science, student affairs, education, or another related social science discipline or profession.

Students are admitted to the program once per year. Applications received by December 1 will be given full consideration for admission and funding the following fall. Applications received after this date will be given equal consideration, but support can only be given to the extent funds are available. Completed applications for admission to the doctoral program must follow the guidelines outlined by the Graduate School at Binghamton University.

The Community Research and Action Doctoral Program Committee will evaluate applications. Competitive funding packages including tuition, annual stipend and comprehensive health insurance are available for highly qualified candidates who intend to study full-time. Individuals who would like to pursue the degree on a part-time basis may also apply, although courses are typically only offered during the day.

Applications must include:

1. official transcripts of all undergraduate and graduate level coursework,
2. curriculum vitae or resume,
3. well substantiated written statement of approximately 2-3 (single-spaced) pages that describes: (a) the applicant's training and professional background as well as interest in public scholarship on community and social issues; (b) research interests and associated relationships(s) to social justice, health and well-being, human rights, public service, social welfare and/or community transformation; (c) career goals (academic, research, or policy-related) associated with pursuing a research degree; and (d) two or three faculty members in the College of Community and Public Affairs who could be potential advisors and why,
4. three (3) letters of recommendation from individuals familiar with the applicant’s academic background and record that address potential for advanced graduate study,

5. a writing sample, and

6. if an international student, proof of English proficiency and immigration and financial documentation. TOEFL minimum: 100 (internet-based TOEFL) or 600 (paper-based TOEFL). IELTS minimum: 7.0. PTE Academic minimum: 68. Scores must be submitted from a test taken in the last 18 months. Students who have received a college or university degree from an institution in the United States, United Kingdom (England, Northern Ireland, Scotland and Wales), Ireland, Australia, New Zealand or some Canadian provinces are not required to submit TOEFL, IELTS or PTE Academic scores.

Selected applicants will be invited to interview with faculty in January or February. Applicants are typically notified, in writing, of final admissions decisions in March.

**Graduate Assistantships**

Award of assistantship positions is merit-based and competitive. Assistantships provide recipients with a tuition scholarship as well as an academic year (10-month) stipend. Graduate Assistants are expected to work 20 hours/week during the term of their appointment (semester or academic year). Half-time assistantships typically require 10 hours of work per week.

Binghamton University is also committed to supporting all students. One means is through the Clifford D. Clark Diversity Fellowship for Graduate Students, named for a former president of the university (1975-1990), and funded by the State University of New York and an endowment fund. Clifford D. Clark Diversity Fellowships are merit-based and designed to recruit and support students who have been admitted to graduate study and contribute to the diversity of the student body. The funding package includes academic year stipends, full tuition scholarships, guaranteed award periods, research and travel opportunities, and other benefits.

All domestic graduate students are encouraged to complete the Free Application for Financial Aid (FAFSA) form. The annual deadline for completing the FAFSA is April 1. All tuition scholarship support is used to establish financial aid loan and Federal Work Study eligibility. Students who have applied for financial aid assistance should be aware that a tuition award and/or a fellowship award does affect the amount of loan eligibility. For more information about student financial aid eligibility or other financial aid related questions, contact the Office of Financial Aid Services at (607) 777-2428 or email finaid@binghamton.edu. Several federal Work-Study positions are also available on campus for graduate students who qualify on the basis of financial need. This program is open only to U.S. citizens and permanent residents of the United States.

Scholarships may also be available to qualified students and often require completion of the FAFSA for screening. Please contact the PhD Program Director for more information about university, college, and program scholarships and associated eligibility criteria.

**Transfer Credit and Course Substitution Requests**

Normally, no doctoral courses completed in another program or at another institution will be accepted. Additionally, substitutions for a core course are unusual and will only be allowed in extreme circumstances and must be approved by the Doctoral Program Committee. Students who wish to substitute a core course must consult with the faculty instructor for the course they are proposing to transfer or substitute to make sure they will be able to meet the learning objectives for that course. A written request for substitutions for core courses, including the academic justification and the summary of the conversation with the faculty instructor, must be forwarded to the PhD Program Director who will present the request to the Doctoral Program Committee. If approved, the course substitution should be clearly documented on the Program of Study and documentation of the approval from the Doctoral Program Committee attached. For transfer credits, each student must submit an official "Application for Transfer Credit"
request through his or her faculty advisor to PhD Program Director for approval. If approved, then the Director will forward the application as a request for the Graduate School’s approval.

Degree Requirements

The requirements for the PhD in Community Research and Action include core courses (15 credit hours), research courses (17 credit hours) and elective courses (9 credit hours) for a total of 41 post-master’s credits. Selection of elective courses is carefully made using a named cognate or minor area of study (e.g., health systems, social justice and education, qualitative research) defined by students in consultation with their advisors. The table that follows summarizes these requirements by major category and recommends how electives could be distributed throughout the doctoral program. In addition to maintaining an overall GPA of 3.0, students are required to repeat any course required for the degree when they have earned a grade of a C+ or lower.

Co-teach a course under the supervision of a Binghamton University faculty member. This experience should give the student significant experience in teaching with opportunities to include the development and/or revision of a syllabus, facilitation of up to 50% of class sessions with the observation of the faculty of record, and split grading of major course assignments along with the faculty supervisor. Students will participate in Proseminar II: The Scholarship of Teaching and Learning during the semester they co-teach (offered every spring semester).

Pass comprehensive examination that occurs when all coursework is completed and before the dissertation proposal. Students must successfully pass the comprehensive examination in order to advance to candidacy and proceed to the dissertation proposal.

Complete a traditional or three-paper dissertation that establishes students as independent scholars in their area of expertise. In addition to the traditional format, alternatively, the dissertation may include chapters that are a series of publishable papers or published journal articles. Complete dissertations typically range from 150-200 pages.

<table>
<thead>
<tr>
<th>Required Core Courses (these or equivalents are required)</th>
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<tbody>
<tr>
<td>CCPA 610</td>
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<td>CCPA 611</td>
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<td>CCPA 612</td>
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<td>CCPA 650</td>
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<td>CCPA 651</td>
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<table>
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<tr>
<th>Sample Research Courses</th>
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<tbody>
<tr>
<td>CCPA 600</td>
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<tr>
<td>CCPA 680X</td>
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<td>CCPA 699</td>
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**Sample Electives (recommend a minimum of 1 elective from list or graduate bulletin)**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>ANTH 571C</td>
<td>Cultures of Capitalism</td>
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<tr>
<td>ANTH 572K</td>
<td>International Health</td>
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<tr>
<td>EDUC 510X</td>
<td>Issues in Education</td>
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<td>HIST 536C</td>
<td>Race and Slavery in America</td>
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<td>HIST 540D</td>
<td>History of Sexuality Modern US</td>
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<td>HIST 545A</td>
<td>Race, Place, and Nation Latin America</td>
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<td>HIST 592</td>
<td>Historiography</td>
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<td>HIST 560C</td>
<td>Cultures of Catastrophe</td>
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<td>HIST 560M</td>
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<td>NURS 623</td>
<td>Theoretical Frameworks re: Health Promotion</td>
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<td>Rural People and Community in Met Society</td>
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<td>SOC 604</td>
<td>Theoretical Studies</td>
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<td>Social Dynamics of Punishment</td>
</tr>
<tr>
<td>SOC 690D</td>
<td>Feminism and Commonwealth</td>
</tr>
</tbody>
</table>

**Course Sequencing**

The following is the recommended course sequence for full-time students.

**Year One**
Fall (9 credits)
- CCPA 600: Research Design (3 credits)
- CCPA 610: Positionality, Social Justice, and the Politics of Knowledge Production (3 credits)
- CCPA 650: Interdisciplinarity and Community Inquiry (3 credits)

Spring (9 credits)
- CCPA 603: Quantitative Analysis (3 credits)
- CCPA 611: Conceptualizing and Researching Community (3 credits)
- CCPA 651: The Scholarship of Teaching and Learning (3 credits)
- Complete Program of Study Meeting

Year Two

Fall (12 credits)
- CCPA 602: Qualitative Analysis (3 credits)
- CCPA 612: Power and Policy for Social Change (3 credits)
- Elective (3 credits; must be 500 level or above)
- Advanced research course: (3 credits)

Spring (9 credits)
- Advanced research course: (3 credits)
- Elective (3 credits; must be 500 level or above)
- Elective (3 credits; must be 500 level or above)

Summer
- Comprehensive Examination (must be completed by August for third year funding)

Year Three

Fall (1 credit)
- CCPA 699: Dissertation Seminar (1 credit)
  - Dissertation Proposal

Spring (1 credit)
- CCPA 699: Dissertation Seminar (1 credit)

Year Three/Year Four
- Dissertation Defense

The PhD Program Director and Doctoral Program Committee

The PhD Program Director is responsible for the day-to-day functioning of the program including recruitment, admission and oversight of student advisement. The Director is also responsible for advising incoming students
during their first semester of study. The PhD Program Office maintains records on each doctoral student’s progress through the program as well as associated forms for major milestones.

The PhD Program Director also chairs the Doctoral Program Committee. The committee includes full-time faculty members from the various departments in the college who are actively engaged with the doctoral program. In addition to faculty representation, doctoral program staff also serve on the committee. At times, students will be asked to join the committee to share their perspectives on emerging academic issues. The Doctoral Program Committee sets policies and procedures related to admission, recruitment and student advising. Final decisions regarding doctoral students in the program rests with the PhD Program Director and the Doctoral Program Committee.

Program of Study Meeting

The program of study meeting will take place by the end of the second semester of study. The program of study meeting will establish the student’s committee which must include: (1) a primary advisor; (2) a secondary advisor; and (3) an interdisciplinary consultant (i.e., faculty member from another academic discipline or profession; can be within CCPA or across Binghamton University). The primary advisor must be a tenure-line faculty in CCPA and 1 of the remaining 2 committee members must also be a tenure-line faculty in CCPA. The meeting will be an opportunity for committees to meet with students to discuss their progress in the program and a program of study. For this meeting, students will complete a formal program of study (please see PhD Program Director for template). Students will schedule a one-hour program of study meeting with their committee to review these documents and discuss their progress in the program. Additionally, the meeting will provide the opportunity to problem solve any issues that have emerged during coursework, particularly related to performance in individual classes and the implications of such for future success in the program. The formal program of study will be filed with the student’s records and can be amended with the written approval of committee members.

Comprehensive Examination

The purpose of the comprehensive examination is to assess students’ mastery of program objectives and development of expertise within their concentration. The comprehensive examination will take place only after students complete all of their coursework (with the exception of enrollment in required Dissertation Seminars). Administration of comprehensive exams may occur during any semester depending on the student’s progression through the programs and the availability of committee members.

Committee members will develop three questions that address theory and research as well as the application of both to real world practice. These questions will be grounded in the core learning from the program as well as the students’ area of concentration. Students will have two weeks (14 days) to complete their take home examination. Responses to each question should be a minimum of 15-20 pages, double-spaced, and include references using Microsoft Word. The comprehensive exam questions will be administered by email and the responses should be submitted to the Primary Advisor. The Primary Advisor will distribute an electronic copy of the written response to members of the student’s committee via email.

Committee members will evaluate the written comprehensive examination within two weeks (14 days). Students will also schedule a 2-hour oral examination with their committee members to receive feedback and respond to additional questions. This examination should especially focus on areas the students need to demonstrate further proficiency beyond the level demonstrated in the written responses. Primary Advisors should communicate to students which areas those might be prior to the meeting so they can adequately prepare. Committee members will evaluate the students’ responses (both written and oral) as high pass, pass, or fail. Two-thirds of the committee must evaluate performance on the exam as pass and/or high pass for a student to advance to candidacy. All/or portions of the comprehensive examination may be repeated (using new questions) once, and will be scheduled no sooner than 4 weeks and no longer than 12 weeks from the previous oral examination date. Students must retake the
comprehensive examination and be evaluated as passing by two-thirds of committee members before proceeding with the dissertation proposal. Failure of a second comprehensive examination will result in immediate dismissal from the program.

Students have five years to complete the doctorate after passing the comprehensive examination.

**Additional Learning Experiences**

Students will participate regularly in Community Research and Action doctoral seminars in which faculty, visiting scholars and students give presentations. Attendance and presentations at professional meetings are expected.

**Advising and Mentoring**

All students are assigned to the Director of the PhD program for temporary advising. An informed decision on an advisor is made after students have had the chance to spend time with the temporary advisor, had opportunities to connect with other faculty, and become integrated into the program. The role of the temporary advisor is to help mentor the student into the pedagogy of PhD studies, provide initial guidance on course sequencing and scheduling, identify potential advisors and committee members for students, and support students in navigating challenges encountered in the doctoral program. Students are expected to formalize their choice of Primary Advisor, secondary advisor, and interdisciplinary consultant by the end of their second semester through the program of study meeting.

*Primary Advisors* focus on guiding students' research, involving students in the larger research community (e.g., co-authoring papers, manuscript reviews, introducing them to colleagues, nominating them for awards), finding financial support and supporting their efforts to find a position after graduation (e.g., strong recommendations, contacts). The Primary Advisor will also: (1) ensure that the integrity and quality of the work is up to the high academic standards of the Community Research and Action doctoral program and the Graduate School and assure that all procedures are carried out fairly, (2) ensure that comprehensive examinations and dissertation defenses are conducted in a timely fashion, (3) arrange and conduct all meetings, and (4) confirm that requirements set forth by the committee are implemented in the final version of the dissertation. The Primary Advisor must be a tenure-line faculty in CCPA.

The *secondary advisor* will assist with professional socialization providing additional opportunities for students to learn about the complexities of research, higher education, and related career trajectories. Students are encouraged to utilize secondary advisors for additional guidance in completing major program milestones, professional mentorship and support.

The *interdisciplinary consultant* will bring an enriching disciplinary perspective to the student's program. Interdisciplinary consultants will help students to consider previously unfamiliar theories and methods that may contribute to the sophistication of their developing research programs. This person must represent a discipline unique from that of the primary and secondary advisor.

Either the secondary advisor or interdisciplinary consultant must also be a tenure-line faculty in CCPA.

Students are also reminded that they can change advisors if research interests change and/or working styles are not compatible. In such cases, students should consult with their primary or secondary advisors, or the Director of the PhD Program, to make advising changes.

**Graduate Application For Degree**

Doctoral degree students must file a Graduate Application For Degree (GAFD) form at the beginning of the semester in which they plan to complete all degree requirements and graduate. This serves as notification to both the Graduate School and the Director of a student's intent to graduate. The GAFD can be accessed from the Graduate
School website. A student can also go directly to the University's Commencement website to file the GAFD. The GAFD is valid for one semester only. If a student files a GAFD but fails to graduate, she or he must submit a new application for degree in the following semester or the next semester of intended completion.

**Dissertation**

When the student and Primary Advisor have agreed upon the focus for the dissertation research, committee membership will be reviewed and, if necessary, revised so that the most appropriate advisors and committee members will be available to support the student through the stages of designing and conducting the research, analyzing the data and writing the dissertation. The dissertation committee must have a minimum of three members and will also include an outside examiner.

**Dissertation Formats**

Students in the Community Research and Action doctoral program will have the option of completing the dissertation in its traditional format or an alternative three-paper format.

The traditional format includes a minimum of five chapters: Chapter 1 introduces the dissertation study, conceptual framework, and problem statement; Chapter 2 is a review of the literature; Chapter 3 describes the research methods; Chapter 4 presents the results of findings of the study (may include additional chapters if a qualitative dissertation); and Chapter 5 discusses the results (or findings) in the context of the conceptual framework and literature reviewed.

The three-paper format includes sharply focused and thematically linked manuscripts targeted to journals identified by students in consultation with their committee members. Representing the student's original scholarship and sole authorship, the first could be a review of the literature and the second and third papers should be empirical. Alternatively, all three papers can be empirical with their own brief review of the literature. Although the papers should be publishable, they do not need to be accepted for publication prior to the dissertation defense. All three papers must be sole authored. The three-paper dissertation also requires an introductory and closing chapter.

Completed dissertations typically range from 150-200 pages in length.

**Proposal Defense Meeting**

When the student and Primary Advisor have agreed upon a potential dissertation topic, the student must have a two-hour proposal defense meeting to obtain committee approval before the research is carried out, regardless of whether completing the traditional or three-paper format. The proposal meeting should be scheduled by students only after passing comprehensive examinations and receiving approval to do so from Primary Advisors (this typically occurs within 3-6 months after passing comprehensive exams).

Students are responsible for initiating these arrangements through the program staff of the doctoral program several weeks ahead of time. The student is responsible for completing all Human Subjects forms (if required) for the research proposal and for arranging and scheduling the proposal meeting (two hours) so that all members of the committee can be present. The student-prepared written proposal should be given to the committee members a minimum of two weeks before the meeting.

For the traditional dissertation format, students should prepare: (a) a cover page; (b) a table of contents; (c) Chapter 1; (d) Chapter 2; (e) Chapter 3; (f) references; and (g) appendices.

Students electing to complete the three-paper dissertation option must submit a proposal organized and detailed by the following headings: (a) summary of the proposal and aims of the research (1-3 pages); (b) detailed review of the literature highlighting current knowledge, critiquing and synthesizing previous research, and identifying gaps the
dissertation will address (5-10 pages); (c) if applicable, any pilot work the student has done in support of the
dissertation; and (d) a separate and detailed outline for each of the three papers (5 pages each or 15 pages total).

Preparation for the dissertation proposal should include a 15-20 minute presentation of the aims and scope of the
proposed project for the committee. After the presentation, the committee will ask specific questions of students
about the project and make recommendations for strengthening the proposed research. At the conclusion of the
proposal meeting, it is customary for the Primary Advisor to request that everyone except the examining committee
leave the room, so that the members may reach a decision about how to move forward. The committee must
unanimously approve the dissertation proposal. After the meeting, the Primary Advisor and the student will meet to
discuss required revisions. Students are expected to make revisions to their dissertation proposals and send to
committee members within 30 days.

**Dissertation Defense**

When the student has completed writing the dissertation and has made revisions to the satisfaction of the Primary
Advisor, the final oral defense of the dissertation can be scheduled. The student should expect to submit several
drafts of the dissertation to the Primary Advisor. The Primary Advisor is expected to ensure that the dissertation is in
near final form before allowing the meeting to be scheduled. Committee members and the PhD Program Director
must unanimously approve the dissertation before the defense can be scheduled. With unanimous approval, a
request to add an outside examiner will be initiated by the PhD Program Director. The request should be submitted
no later than one month before the defense.

After the student's program has been notified of the appointment of an outside examiner, the PhD Program Director,
in conjunction with the Primary Advisor, may proceed to schedule the final oral examination. The examination will be
two hours in length and will begin with a 20-30 minute presentation of the research by the candidate. Because of the
time required to give adequate consideration to the student's research, the student should submit the dissertation to
the committee well in advance of the final oral defense. Normally, two weeks is recommended; the student should
consult the committee. No member of an examination committee can be expected to participate in a dissertation
defense if that member has not had at least two weeks to read and consider the dissertation.

The final oral examination is open to any person wishing to attend and will be advertised to the broader campus
community. The final defense is a public examination and the Primary Advisor is responsible for ensuring that the
examination is open and impartial, including that it provides reasonable opportunities for outside observers to
participate. Members of the committee must be given sufficient time to question the candidate about the dissertation.
At the conclusion of the examination, it is customary for the Primary Advisor to request that everyone except the
committee leave the room, so that the members may reach a decision. This procedure should not be invoked at any
other time during the examination and should not preclude any questions from either committee members or outside
observers.

At the final examination, the student will be required to respond to questions (examiners and audience) concerning
the dissertation and to defend the validity of the dissertation.

To pass, the student must receive the unanimous approval of the dissertation examining committee approved by the
Graduate School. All members of the examining committee who accept the dissertation in partial fulfillment of
requirements for the doctorate shall so attest by their signatures on the "Recommendation for Award of Doctoral
Degree" form. If the outside examiner does not signify approval in this manner, he or she should give the reason for
dissent by submitting a separate memorandum to the Dean of the Graduate School within three business days of the
examination.

If at the final examination the examiners generally approve of the dissertation but require significant changes and are
not yet prepared to sign the "Recommendation for Award of Doctoral Degree" form, the Primary Advisor will
coordinate with other members of the committee to compile all required changes and will inform the student of the
scope and substance of those changes. The examining committee will establish how the changes will be reviewed and approved.

Following the oral exam and approval of the dissertation, the PhD Program Director submits to the Graduate School the signed "Recommendation for Award of Doctoral Degree" form, indicating that the student has now fulfilled all academic requirements for the doctoral degree and has successfully defended the dissertation. Members of the dissertation examining committee sign the "Recommendation for Award of Doctoral Degree" form.

The Dean of the Graduate School may void any dissertation defense that is not carried out in accordance with the policies and procedures of the Graduate School. In addition, upon recommendation of the Dean's appointed outside examiner, the Dean may declare a dissertation defense null and void.

Remote Participation in Dissertation Defenses via Videoconferencing and Other Devices

Normally, all dissertation defenses take place on campus and require the full attendance of the dissertation committee including the Outside Examiner. However, at the discretion of the College, and with the unanimous consent of all members of the dissertation committee and the student, committee members or the outside examiner may participate in the defense via real-time videoconferencing. In special cases (undue hardship), the student may also request to have the oral presentation of their dissertation via video-conferencing. Similarly, if in exceptional circumstances one member of the dissertation committee cannot be present (either physically or virtually), he or she may submit questions and comments in writing. Such arrangements must be approved in advance by the PhD Program Director and must have the unanimous consent of all other members of the dissertation committee and the student. In all instances, the Primary Advisor and the outside examiner must be physically or virtually present to observe the process.

Any of the above situations must be endorsed by the PhD Program Director and will require pre-approval of the Graduate School. All videoconferencing and other virtual media arrangements must meet the Graduate School's expectations.

Final Copy of Dissertation

Dissertations must be submitted to the Graduate School electronically. Students are responsible for submitting their final dissertation and contacting the Graduate School for specific guidelines.

PhD Milestone Summary

The table below summarizes the major milestones for doctoral students. Please note that the suggested milestones do not include summers in semester counts. Because individual circumstances may vary, students are strongly encouraged to consult with their Primary Advisor about the suggested pacing of the program. Please remember that students must be admitted to candidacy (i.e., successfully pass their comprehensive examination) within five years of admission to the Graduate School and doctoral candidates must complete all requirements for the degree, including the dissertation, within five years after admission to doctoral candidacy. A student may petition for an extension of the time limit by submitting a request to the PhD Program Director. The Director, if s/he endorses the request, then forwards it to the Graduate School for final action by the Vice Provost and Dean of the Graduate School.
<table>
<thead>
<tr>
<th>Milestone</th>
<th>Complete by the end of (full-time students):</th>
<th>Complete by the end of (part-time students):</th>
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<td>Semester 2</td>
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Public Administration (MPA) - Graduate

College of Community and Public Affairs

Mission

The mission of the Department of Public Administration is to develop individual and institutional capacity for community-based public practice. The MPA degree does this by preparing students for positions of responsibility in local government administration and nonprofit administration.

The Program

The master of public administration (MPA) program is fully accredited by the National Association of Schools of Public Affairs and Administration (NASPAA). The MPA is a 42-credit hour professional degree (40 hours for in-career students with at least three years of public and/or nonprofit administrative experience) and may be completed on either a full- or part-time basis. Students must earn a GPA of 3.0 or better in their first twelve credits in the MPA Program. Any students who fail to meet this standard will be severed from the MPA Program. Students who earn a grade of B- or below in any core (required) course must repeat that course and earn a grade of B or better. Students who fail to earn a B or better grade the second time they take a core (required) course will be severed from the MPA Program.

The Curriculum

Overview

Students admitted into the MPA program are required to complete 42 hours of coursework with a cumulative grade-point average of 3.0. All students, including those with regular admission status, are required to earn a B or better in their first twelve credits towards their MPA degree. In addition, candidates must receive a B or higher grade in all required (core) courses. Students may retake any course only one time for credit provided their original grade was B- or lower.

The 42-credit hour MPA program consists of seven "core" or required courses (25 credits), twelve credits of electives, a two-credit internship, and an E-portfolio course (3 credits) which serves as a culminating experience and provides students an opportunity to demonstrate their competencies.

Basic Skills Courses
Students may complete one or more of the basic skills courses (PAFF 502 - Basic Computer Skills; PAFF 503 - Introduction to Administrative Systems) while in the MPA program. Additionally, the MPA faculty strongly encourages all students who receive feedback that their background or skills need development to request admission into these courses. These courses do not count towards the MPA degree.

**The MPA**

The MPA program is a 42-credit hour program composed of 1) a core of seven courses (25 cr.), where students are introduced to the knowledge and skills they need for professional public service; 2) four elective courses (12 credits); 3) and internship (2 credits) to practice application of learning; and 4) an E-portfolio course (3 credits) to demonstrate competencies.

**Core Courses**

The core courses provide students with an introduction to essential knowledge, skills and abilities, and provide a preliminary opportunity to obtain feedback on their competencies in key areas.

1. Research Design & Methods (4 cr.)
2. Foundations of Public Service (4 cr.)
3. 21st Century Governance (4 cr.)
4. Budgeting & Financial Management (4 cr.)
5. Evidence-Based Decision Making (4 cr.); to fulfill this requirement, students will complete one of the following courses: Policy Analysis, Program Evaluation, or Performance Analysis
6. Managing People in Organization (3 cr.); to fulfill this requirement, students will complete one of the following courses: Human Resource Management, Organization Theory, Project Management or Managing Networks
7. Managing Information and Technology (2 cr.)

**Electives (4 courses = 12 credits)**

The elective credits are designed to allow students to have some flexibility to design a program of study that best meets their individual professional aspirations. As their elective coursework, students may opt to take a three-course sequence in order to receive advanced training and professional preparation in a particular area.

The Department of Public Administration offers two certificates:

- Nonprofit Management and Leadership
- Local Government Management and Leadership

The Department also has relationships with the Decker School of Nursing for students interested in health policy administration and with the Geography Department for students interested in environmental policy. Dual-degree students complete elective courses in the discipline of their other degree. Students are not required to complete a certificate; students may select any combination of graduate electives in consultation with their MPA advisor.

**Application of Learning**

As a professional degree program, the MPA must certify a student's ability to apply knowledge and to link theories to practice, which takes time and effort. In order to demonstrate competency in this area, students take a two-credit
Culminating Experiences/Demonstration of Competencies

The MPA program — as a condition of continued accreditation and as part of our responsibility to the profession — must assess the competencies of each student before degree completion. To do this, students take an e-portfolio class in which they prepare an e-portfolio of their work in the program. The e-portfolios are designed to help students synthesize and apply material from across the MPA curriculum, and demonstrate their competencies in key areas.

Internship

Because the MPA is a professional degree, the faculty has a responsibility to future employers of our graduates and to the communities that those graduates will serve to ensure that students have essential competencies and demonstrate a high level of professionalism. Beyond completion of the required courses and credit hours, eligibility for internship placement and registration for the capstone course are contingent upon the student's receiving satisfactory assessments and MPA program authorization to proceed to the internship and capstone.

An internship in a public or nonprofit organization provides the student with an opportunity to apply knowledge and skills from their courses to a work setting. It is also a way for the program to demonstrate to professional public service organizations the contributions that MPA students can make to their organizations. Student performance in an internship is a direct reflection on the program. As such, the program has a responsibility to ensure that students have demonstrated not only the acquisition of knowledge and skills, but also a level of professionalism, maturity and reliability expected of an MPA student. Additionally, based on a student’s selection of courses and performance within those individual courses, some types of internship placements may be more suitable than others. The assessments are designed to provide both the MPA internship coordinator and the student with information on whether the student has demonstrated necessary levels of competence for an internship placement, if there are particular types of internships that would be appropriate for the student, or if there are particular competencies that need to be demonstrated before an internship placement can be authorized.

Following completion of 18 credit hours which must include PAFF 510 (Research Design and Methods), PAFF 520 (21st Century Governance) and PAFF 521 (Foundations of Public Service) and contingent upon satisfactory evaluations from the MPA faculty, students complete a 300-hour public administration internship. Students pursuing a local government or nonprofit certificate are generally expected to complete an internship in that sector (nonprofit or local government). Interns are expected to engage in professional tasks and projects in areas such as the development, planning, implementation and/or analysis/evaluation of policy, finance, management, supervision, strategy, program and other administrative functions. Students intending to complete their internships must register for the 2-credit PAFF 594 course to earn credit.

It is the student’s responsibility to identify and contact possible internship sites. They may contact the internship coordinator for assistance, if needed. After meeting with the internship coordinator and the site supervisor to discuss possible activities and responsibilities, a memorandum of understanding (MOU) defining the scope of work and specifying the goals, expectations, products/outcomes, conditions and relevant policies and procedures will be developed by the student. This MOU must be signed by the student, the site supervisor and the internship coordinator prior to the commencement of the semester during which the internship will be completed. The student may not begin his/her internship without the MOU being signed by all parties and submitted to the internship coordinator.

The student is responsible for maintaining a journal or log of his/her internship experiences throughout the semester. A group meeting and at least one individual meeting will take place with the internship coordinator early in the semester. It is the student’s responsibility to raise and address issues with the appropriate supervisor (internship coordinator and/or site supervisor) as needed. The internship coordinator will also have periodic contact with the site supervisor.
The intern will be expected to evaluate his/her experience at the end of the internship. The site supervisor will also evaluate the intern. Both forms must be completed and submitted by the end of the semester in order to receive a grade (either “Satisfactory” or “Unsatisfactory”) for the internship.

Students may be granted a waiver at time of admission if they show that they possess at least 3 years of public and/or nonprofit administrative experience. Students who receive waivers will not need to register for the internship course. To obtain a waiver, the student must submit a written request for a waiver, along with documentation of the extent and nature of work experience (e.g., a resume and job description). The internship coordinator and the director of graduate studies will review all internship waiver requests. A copy of the waiver documentation will be maintained in the student’s file and the student will receive written notification from the internship coordinator regarding whether or not the waiver was granted.

MPA students who are currently working in public or nonprofit administrative positions, but who do not have sufficient professional experience to qualify for an internship waiver, have an option to complete their internship at their place of work. These students will register for the internship course, complete a MOU and proceed with the process as described above.

More in-depth requirements, forms and additional information regarding the internship are located on the MPA website.

E-portfolio

The e-portfolio course is the culminating experience of the MPA program and the place where students are required to demonstrate the full range of competencies. In their e-portfolios, students compile representative materials from their courses (papers, reports, memos, policy briefs, etc.) and/or by developing new products to demonstrate: core competencies, certificate competencies (if applicable), transferable skills obtained from the internship, and reflection on the MPA program experience. Successful completion of the e-portfolio course is the final assessment of the student’s readiness for graduation.

Because the e-portfolio course is intended for students to demonstrate the knowledge they have acquired through the core MPA courses, it is incumbent on the faculty to ensure that students have demonstrated the necessary preparation before enrolling in the e-portfolio course. Permission to enroll in the e-portfolio course is contingent upon satisfactory completion of at least six of the seven core courses and satisfactory completion of the internship (or evidence of an official waiver).

The program will make every effort to ensure that students who are permitted to enroll in the e-portfolio course have the knowledge and skills to be successful; it is possible that on occasion students who are authorized to enroll in the course will not demonstrate the expected competencies in the capstone course. Students who take the e-portfolio course and then do not demonstrate competence in one or more of the required areas will be counseled on an individual professional development plan and the steps necessary for successful completion of the e-portfolio. Depending on the individual circumstances, students may have to continue revisions of the e-portfolio after the end of the e-portfolio semester, repeat the e-portfolio course in a subsequent semester, or take additional courses or independent studies. In exceptionally rare circumstances, where professional development plans do not result in the required level of competency, a student may fail the e-portfolio course and be unable to complete the MPA degree.

Academic Advising

All students are assigned a faculty advisor during the orientation for new students. Faculty advisors assist students in planning their curriculum and provide additional academic counseling as needed. Students are required to meet with their advisors once a semester. Failure to meet this requirement may result in severance from the program.

Graduation
Following the student’s satisfactory completion of coursework (including any required prerequisites), and the e-portfolio, the program recommends to the Graduate School that the candidate be awarded the MPA degree.

**Combined (Undergraduate/Graduate) Degree Programs**

The Department of Public Administration offers several combined-degree programs with undergraduate majors including:

- Political Science (BA) – Public Administration (MPA)
- Asian and Asian-American Studies (BA) – Public Administration (MPA)
- Spanish (BA) – Public Administration (MPA)
- French (BA) – Public Administration (MPA)
- Italian (BA) – Public Administration (MPA)
- Theater (BA) – Public Administration (MPA)
- Environmental Studies (BA) – Public Administration (MPA)
- Judaic Studies (BA) – Public Administration (MPA)
- Philosophy, Politics, and Law (BA) – Public Administration (MPA)
- Economics (BA) – Public Administration (MPA)
- Latin American and Caribbean Area Studies Program (LACAS BA) – Public Administration (MPA)
- Philosophy (BA) – Public Administration (MPA)

These combined-degree programs allow exceptional students to complete both the BA and MPA in five years of full-time study. Undergraduate students who are interested in the combined degree should apply for conditional admission to the MPA program at the end of their junior year after consulting with their academic advisor. To be eligible for admission to a combined-degree program, students must possess academic qualifications at the end of their junior year that allow conditional admission into the master’s program. Students should begin the application process early in the junior year by submitting the materials required for the standard application for admission to the MPA program. Because of the challenging nature of combined-degree programs, only highly qualified students are admitted (those who have either: (1) a minimum undergraduate GPA of 3.2 and a minimum major GPA of 3.5 OR (2) a minimum undergraduate GPA of 3.5). During the senior year, students apply formally to the Graduate School. All admissions to combined-degree programs are conditional due to the nature of the program; regular admission status as a graduate student is only granted after the senior/4th year is completed satisfactorily.

**Dual (Graduate) Degrees**

The MPA program currently offers three dual-degree opportunities that allow students to pursue two master’s degrees concurrently:

- Public Administration (MPA) – Social Work (MSW)
- Public Administration (MPA) – Nursing (MS)
- Public Administration (MPA) – Student Affairs Administration (MS)

Students interested in pursuing either of the dual-degree programs should contact the director of graduate studies for additional information.

**Certificate Programs**
There are several graduate certificate programs available at Binghamton University that may be completed independent of a master’s degree, as part of the MPA studies or in conjunction with another graduate major. The two certificate programs directly linked to the MPA curriculum include:

- Non-Profit Administration
- Local Government Administration

**Non-Profit Administration Certificate**

The 15-credit Graduate Certificate in Non-Profit Management prepares students for service in the nonprofit sector, specifically professional management positions and volunteer board and community leadership activities. Students are required to complete:

- PAFF 551. Introduction to Management and Leadership in Not-for-Profit Organizations (3 cr.)
- PAFF 552. Issues in Not-for-Profit Administration (3 cr.)
- PAFF 527. Budgeting and Financial Management (4 cr.)
- PAFF 526. Managing Information and Technology (2 cr.)

Students may substitute an alternative to PAFF 552 with approval from the Department Chair if the Department has not made the PAFF 552 course available to students in time for their graduation.

An additional three credits from the following list:

- PAFF 514. Proposal Preparation and Grant Management (3 cr.)
- PAFF 553. Nonprofit Innovation and Social Enterprise (3 cr.)
- PAFF 554. Strategy Development in Nonprofit Organizations (3 cr.)
- PAFF 558X. Advanced Topics in Not-for-Profit Management (3 cr.)
- PAFF 559. Workshop in Not-for-Profit Management (var. cr.)

**Local Government Administration Certificate**

The 15-credit Graduate Certificate in Local Government Management is for individuals interested in positions in cities, counties, towns or villages. Students are required to complete:

- PAFF 580. Forms and Structures of Local Government (3 cr.)
- PAFF 581. Functions and Services of Local Government (3 cr.)
- PAFF 527. Budgeting and Financial Management (4 cr.)
- PAFF 526. Managing Information and Technology (2 cr.)

An additional three credits from the following list:

- PAFF 531. Law for Administrators (3 cr.)
- PAFF 532. Intergovernmental Relations (3 cr.)
- PAFF 538. Advanced Topics in Public Management (3 cr.)
- PAFF 581. Local Government Financial Management (3 cr.)
- PAFF 582. Emerging Issues in Local Government Management (topics vary, may be repeated for credit), (3 cr.)
Courses offered in other departments with a clear local government focus as approved by the director of Graduate Studies (for example, certificate students would be encouraged to complete courses on issues related to land use planning, economic development, GIS mapping and spatial analysis)

Shenzhen, China Study Abroad Opportunity

The Department of Public Administration has an exchange program with Shenzhen University in China. Through the program, students may travel to China as part of a course on contemporary China. For the course, students tour several Chinese cities and study at Shenzhen University. The course and study abroad opportunity may be offered either in the winter or summer terms.

Service Learning in Peru

The Department of Public Administration in collaboration with the Office of International Programs (OIP) and the Center for Civic Engagement (CCE) have developed an innovative short-term study abroad program to Peru that combines interdisciplinary academic study of sustainable development and ethical considerations of international service learning.

The Program is organized around an academic course which begins prior to leaving the United States in late Spring and continues during a three-week study abroad experience in Cusco, Peru in June. The course provides an opportunity for students of diverse backgrounds and interests to learn about the dynamics of sustainable development with a focus on the Andean Region in Latin America. It situates local sustainable-development practice within its interconnection between environmental issues, economic viability, social equity as well as cultural identity. The course is designed to help students develop knowledge and skills that enable them to reflect on local development and their own roles in international service. Service learning is put into action when U.S. students work together with Peruvian community-based nonprofit organizations.

Admission

Consideration for admission to the MPA program is open to all individuals with a BA or a BS degree from a recognized college or university that meets the admission requirements of Binghamton University’s Graduate School. The Graduate School can be contacted via its webpage: http://www.binghamton.edu/grad-school/; by phone at 607-777-2151; or at gradadmission@binghamton.edu.

All students applying to the MPA program must submit their application materials through the Graduate School. Application materials include an application form, transcripts, two letters of recommendation, personal statement, and a résumé.

Those wishing to be considered for a graduate assistantship must have their applications in by a January deadline; applications are considered on a rolling basis until the April deadline; and any applications received after April are accommodated on a space available basis or are deferred until the next semester. Applications are accepted for both fall and spring semesters.

Each applicant is given a score based on his/her undergraduate GPA, letters of recommendation, personal statement, and work experience. Each applicant’s undergraduate GPA (or graduate GPA if the student has taken more than 12 credits at the graduate level) may then be “adjusted” based on the letters of recommendation (-0.2 to +0.2 points), personal statement (-0.2 to +0.2 points), work experience (0 to +0.2 points), and quality of university and/or degree program if known (-0.2 to +0.2 points). The admissions committee can deny admission if an applicant’s letters of recommendation and/or personal statement are below an acceptable level. When evaluating the letters of recommendation, the admissions committee looks for evidence of academic achievement, community involvement and personal characteristics that enables them to foster an institutional culture that advances democratic administration and governance. In the personal statement, the committee assesses the student’s
commitment to public and/or nonprofit administration as well as his/her ability to communicate in writing. Significant work experience (five or more years in the public or nonprofit sector) can earn applicants a positive adjustment to their admissions scores; however, the lack of work experience does not result in a penalty.

**Guaranteed Admission for SUNY Graduates**

Guaranteed admission for some SUNY graduates is designed to accommodate the strongest applicants from six of the most competitive SUNY schools. The program is open to students who hold a Bachelor's degree with a GPA of 3.5 or higher from:

- Binghamton University
- University at Albany
- University at Buffalo
- State University of New York College of Environmental Science and Forestry
- State University of New York at Geneseo
- Stony Brook University

Students who meet these requirements and apply by the stated deadlines are guaranteed admission into the Master of Public Administration program.

**Transfer of Credits**

Students may request a transfer of up to 12 graduate credits from other institutions or programs (including MPA courses taken as non-matriculated students) when these courses have been taken within five years of the time of entry into the program. Requests for transfer of credits from institutions other than Binghamton University must be accompanied by an “Application for Transfer Credit” form. Requests to apply credits from other programs at Binghamton University, or from non-matriculated status, must be made in writing to the director of graduate studies.

**Financial Assistance**

**Graduate Assistantships**

Each year the Provost's Office allocates funds for graduate assistantships to the College of Community and Public Affairs. The stipend level is a fixed amount, and the department will determine whether assistants will qualify for a tuition scholarship. Funding for these positions is provided by the state of New York, and is therefore subject to a degree of uncertainty and change from year to year. Currently, graduate assistants qualify for health insurance coverage. Students may receive assistantships for a semester or an academic year.

There are four possible sources of funding for graduate assistants in the MPA program:

1. University allocations provided on a “formula” basis from the Provost's Office. One full-time assistant is equal to one line. One-half line can be used to pay for a student for one semester or half the student's costs for two semesters.

2. The Clifford D. Clark Diversity Fellowships for Graduate Students. This is a two-year fellowship that is funded half through the MPA department and half through the Graduate School. The Clifford D. Clark Diversity Fellowships for Graduate Students are named for a former president of the university (1975–1990), and are funded by the State University of New York and an endowment fund. Clark Fellowships are merit-based and designed to recruit and support students who have been admitted to graduate study and contribute to the diversity of the student body in the graduate program in which enrollment is sought. The funding package includes an academic year stipend, full tuition...
scholarship, health insurance, a guaranteed award period (with satisfactory academic progress), research and travel opportunities, and other benefits. Candidates for a Clark Fellowship must:

- be U.S. citizens or have permanent resident status;
- be newly admitted to a graduate program; and
- demonstrate how they will contribute to the diversity of the student body in their program.

For full details (including procedures for nomination, stipend levels, award period, etc.), see http://www.binghamton.edu/grad-school/new-and-current-students/clifford-clark-fellowship.html.

3. Departmental funding. The program may award assistantships using its own funds (either a portion of the state account, or Income Fund Reimbursable accounts).

4. Grant and contract funds. These awards are dependent upon the availability of resources created by the successful grant and contract activity of MPA program faculty.

Program faculty determine recipients of assistantships from University and departmental funding and makes recommendations to the Graduate School for Clark Fellowships. Assistantships funded by grant and contract funds should be awarded by the principal investigator(s) to students in good standing who meet their specific needs.

Selection Process for Graduate Assistants

Continuing Assistants

Each year CCPA determines the number of assistantship lines available to the Department of Public Administration. Continuing students with previous support have the highest priority for an assistantship provided they:

- have not exceeded their eligibility of four academic year semesters; and
- are in good standing with the program.

An assistant is in good standing if he or she has earned at least a 3.0 in every course; is making timely progress toward completion of the degree; and has a positive written evaluation from the faculty supervisor(s). The department's administrative assistant will provide a copy of the faculty evaluation to the student and place the original report in the student's departmental file. Graduate assistants' performance will be evaluated at the end of each semester after grades have been submitted, and any graduate assistant who is no longer in good standing will lose their graduate assistantship even if this change occurs midway through the contract period.

New Assistants

Currently enrolled students not receiving support and newly accepted students must notify the MPA program assistant of their interest in an assistantship by the due date published by the Graduate School. The MPA admissions committee will review the academic files of all students who have applied for new assistantships and will rank them according to the following criteria:

- demonstrated ability to meet the academic rigors of graduate school as determined by undergraduate academic transcripts and writing samples;
- demonstrated leadership ability;
- demonstrated intellectual curiosity; and
- good citizenship.

At the discretion of the admissions committee, it (or a subcommittee) may interview applicants to determine who will
receive new assistantships.

Job Description for University, Clark Fellowship and Departmental Awards

Graduate assistants must be in good academic standing at all times. Graduate assistants in the Department of Public Administration assist faculty in their research activities and may support other department initiatives. The activities include but are not limited to: conducting literature reviews; securing funding for research; collecting, organizing and analyzing data; and writing research papers and reports. Because of their close association with department faculty, their fellow students will perceive graduate assistants to be leaders within the program. Therefore, graduate assistants are expected to attend all department and CCPA-sponsored activities such as lectures, colloquia and social events and will actively support the MPA Graduate Student Organization. Their faculty supervisor may assign other duties.

At the discretion of the admissions committee, it (or a subcommittee) may interview applicants to determine who will receive new assistantships.

Tuition Scholarships for Graduate Assistants

A supported student with less than 24 hours of graduate credits is eligible for a tuition scholarship for up to 12 credit hours (in-state rates) per semester. After 24 credit hours have been taken, a student is qualified for a tuition scholarship of only 9 credit hours per semester (in-state rates).

Work Requirements for Graduate Assistants

Assistants receiving a full tuition scholarship and stipend shall work 20 hours per week.

Research Assistantships

From time to time, faculty write grants or win contracts to conduct work. The faculty member who is the principal investigator (PI) of a grant or contract may hire research assistants to assist him or her with the project. The PI may fund a research assistant position for a semester, an academic year or a summer. The terms of employment for the research assistant are negotiated between the PI and the assistant and the PI has sole authority for determining whether the RA is making satisfactory progress and should be renewed or not. All RA positions are temporary and contingent upon the availability of grant or contract funds. Financial assistance, including for research/teaching, partial tuition offset and fellowships (limited availability), is available to some qualified applicants. The MPA admissions committee will develop and publish criteria for making financial aid decisions, including application deadlines for awards.

Academic Honesty, Professionalism, and Code of Ethics

Public administrators are expected to adhere to the highest ethical standards as they are entrusted by the citizenry with the implementation of public policy. Consequently, the Department of Public Administration takes violations of the Academic Honesty Code very seriously. However, the faculty understands the pressures of graduate school and urges students to seek consultation if they feel they are unable to complete assignments properly in a timely fashion. It is recognized that most students do not intend to plagiarize, but do so because of concerns that their work will not “make the grade.”

The Academic Honesty Code can be reviewed online at the University Bulletin: http://bulletin.binghamton.edu/. In the event a violation of the Honesty Code is suspected, the College of Community and Public Affairs’ procedures for resolving academic honesty cases will be followed.

The Department of Public Administration also holds students, faculty and staff to the Code of Ethics of the American
The American Society for Public Administration (ASPA) exists to advance the science, processes and art of public administration. The society affirms its responsibility to develop the spirit of professionalism within its membership, and to increase public awareness of ethical principles in public service by its example. To this end, we, the members of the society, commit ourselves to the following principles:

I. Serve the Public Interest

Serve the public, beyond serving oneself.

ASPA members are committed to:

1. Exercise discretionary authority to promote the public interest.
2. Oppose all forms of discrimination and harassment, and promote affirmative action.
3. Recognize and support the public's right to know the public's business.
4. Involve citizens in policy decision-making.
5. Exercise compassion, benevolence, fairness and optimism.
6. Respond to the public in ways that are complete, clear and easy to understand.
7. Assist citizens in their dealings with government.
8. Be prepared to make decisions that may not be popular.

II. Respect the Constitution and the Law

Respect, support and study government constitutions and laws that define responsibilities of public agencies, employees, and all citizens.

ASPA members are committed to:

1. Understand and apply legislation and regulations relevant to their professional role.
2. Work to improve and change laws and policies that are counter-productive or obsolete.
3. Eliminate unlawful discrimination.
4. Prevent all forms of mismanagement of public funds by establishing and maintaining strong fiscal and management controls, and by supporting audits and investigative activities.
5. Respect and protect privileged information.
6. Encourage and facilitate legitimate dissent activities in government and protect the whistleblowing rights of public employees.
7. Promote constitutional principles of equality, fairness, representativeness, responsiveness and due process in protecting citizens' rights.

III. Demonstrate Personal Integrity

Demonstrate the highest standards in all activities to inspire public confidence and trust in public service.
ASPA members are committed to:

1. Maintain truthfulness and honesty and not to compromise them for advancement, honor or personal gain.
2. Ensure that others receive credit for their work and contributions.
3. Zealously guard against conflict of interest or its appearance: e.g., nepotism, improper outside employment, misuse of public resources or the acceptance of gifts.
4. Respect superiors, subordinates, colleagues and the public.
5. Take responsibility for their own errors.
6. Conduct official acts without partisanship.

IV. Promote Ethical Organizations

Strengthen organizational capabilities to apply ethics, efficiency and effectiveness in serving the public.

ASPA members are committed to:

1. Enhance organizational capacity for open communication, creativity and dedication.
2. Subordinate institutional loyalties to the public good.
3. Establish procedures that promote ethical behavior and hold individuals and organizations accountable for their conduct.
4. Provide organization members with an administrative means for dissent, assurance of due process and safeguards against reprisal.
5. Promote merit principles that protect against arbitrary and capricious actions.
6. Promote organizational accountability through appropriate controls and procedures.
7. Encourage organizations to adopt, distribute and periodically review a code of ethics as a living document.

V. Strive for Professional Excellence

Strengthen individual capabilities and encourage the professional development of others.

ASPA members are committed to:

1. Provide support and encouragement to upgrade competence.
2. Accept as a personal duty the responsibility to keep up-to-date on emerging issues and potential problems.
3. Encourage others, throughout their careers, to participate in professional activities and associations.
4. Allocate time to meet with students and provide a bridge between classroom studies and the realities of public service.

Enforcement of the Code of Ethics shall be conducted in accordance with Article II, Section 5 of the 1999 Bylaws. In 1981 the American Society for Public Administration's National Council adopted a set of moral principles. Three years later in 1984, the Council approved a Code of Ethics for ASPA members. In 1994 the Code was revised.
Social Work (MSW) - Graduate
College of Community and Public Affairs

Our Vision
The Binghamton University Department of Social Work is a renowned leader in educating and empowering advanced generalist social work practitioners to promote racial, social, economic and environmental justice and support for individuals, families, groups, organizations and communities.

Our Mission
Social work is built upon a strong foundation of social justice advocacy, activism and a commitment to the worth and dignity of all. The mission of the Binghamton University Master of Social Work program is to proudly contribute to the profession as leaders in our work for equity, justice and inclusion.

The mission of the master of social work program is to prepare social workers for autonomous, knowledge-based, advanced generalist practice within an integrated community of scholars, practitioners and learners.

Our Goals
Our teaching, advising and student engagement focus is designed to ensure that all graduates of the MSW program are:

- Critically conscious, reflective and autonomous thinkers and practitioners;
- Equipped with skills to respond to the inter-connected matrix of social justice related privileges and oppressions to educate, advocate for and promote social equity and well-being;

Who:

- Integrate research and respect for the wisdom of clients and consumers to inform their practice;
- Base their practice on a foundation of paradigms that include social constructionism, critical consciousness, anti-oppression and strengths- and empowerment-based theories and models of macro, mezzo and micro systems;
- Develop social work practice and intervention skills informed by ecological systems, developmental, trauma recovery, cognitive, behavioral and relational theories.
- To educate students to be adept at working across service delivery systems, using an empowerment, strengths-based approach and respecting human diversity;
- To prepare students for advanced generalist social work practice in public and not-for-profit agency settings, for the purpose of enhancing human well-being, preventing and alleviating human suffering and advancing social and economic justice;
- To prepare students to work ethically with clients and client systems across the entire life span and to be sensitive to the biological, social, psychological, spiritual and cultural aspects of diverse client populations; and
- To train students to appreciate the importance of human community to the health of individuals, families, organizations and neighborhoods and to promote the development of healthy and just communities.
Degree Requirements

This is a 64-credit-hour program that may be completed on either a full- or part-time basis. The full-time program may be completed in two traditional academic years (four semesters). The part-time program may be completed in three and a half academic years and requires taking summer classes.

The curriculum is divided into two levels: the generalist practice and the advanced generalist practice.

Generalist Practice Curriculum

- 32 credits

Advanced Generalist Practice Curriculum

- 32 credits

Field Practicum

Field instruction is a pivotal and integral part of the MSW curriculum. In the field, students acquire practice experience, developing competence in the skills that will help them attain their personal and professional goals within a framework of social work values and ethics.

The program requires 1,020 hours of field placement.

Capstone Project

The capstone project will offer students the opportunity to integrate and apply learning in order to demonstrate mastery of social work knowledge, skills, practice behaviors, ethics and values necessary for evidence-based advanced generalist practice. In their final week, students will be presented with an advanced generalist case study and, in teams, will develop a poster presentation which illustrates their assessment and intervention in micro, mezzo and macro levels of practice.

Admission

Successful performance in graduate social work education requires maturity, emotional stability, sensitivity and responsiveness in relationships, capacity for self-awareness, a concern for the needs of others, ability in abstract reasoning, conceptual and critical thinking and strong communication skills. These attributes are crucial to practice ethically and competently. These are the attributes that will be assessed in the admissions process. Applicants should also evidence a genuine interest in working with disenfranchised people and a readiness to assume professional responsibilities.

Academic requirements are:

- a bachelor’s degree from an accredited college or university of recognized standing;
- a cumulative undergraduate grade-point average of at least a B (3.0 on a 4.0 scale);
- undergraduate studies that include a minimum of 24 credit hours in the liberal arts and sciences, with a minimum of 15 credit hours in the social sciences including (psychology, sociology, anthropology, economics and political science). Applicants are strongly advised to have taken undergraduate courses in social science research methods and statistics;
- a personal essay; and
- three letters of recommendation.
Applicants will be required to participate in group or individual interviews.

**Changing to Full-Time or Part-Time Tracks**

Part-time students who wish to transfer to the full-time curriculum should make their request known to the Director of Admissions and Student Services. Decisions on whether to approve such requests are determined by a first come, first served basis and whether there is space available in the desired cohort.

**Dual MPA/MSW Degree**

The College of Community and Public Affairs provides students with an opportunity to simultaneously pursue the master of public administration (MPA) degree and the master of social work (MSW) degree.

**Transfer of Credit**

Graduate courses successfully completed at another institution’s CSWE-accredited MSW program may be accepted for credit toward the MSW degree, in lieu of any of the required courses, provided such courses covered content similar to that taught in Binghamton University’s required courses.

A minimum grade of B is required for transfer credit. Graduate courses for which transfer credit is sought must have been taken within the last five years in order to be considered.

Request for Transfer Credit Forms are available from the MSW department office. Course syllabi must be submitted with the form to the department office for consideration.

Academic credit is not given for life experience or previous work experience.

**MSW Curriculum for Full-Time Students**

**Year 1**

**Generalist Practice Curriculum (32 hours)**

**Fall Semester**

SW 504. Foundations of Scientific Inquiry w/Social Systems (3 cr.)
SW 505. Human Behavior in the Social Environment (3 cr.)
SW 510. Generalist Social Work Practice I (3 cr.)
SW 515. Social Welfare Policy and Programs (3 cr.)
SW 591. Field Instruction I (4 cr.)

**Spring Semester**

SW 503. Diversity and Oppression (3 cr.)
SW 511. Generalist Social Work Practice II (3 cr.)
SW 512. Generalist Social Work Practice III (3 cr.)
SW 506. Psychopathology and Psychopharmacology (3 cr.)
SW 592. Field Instruction II (4 cr.)

**Year 2**

**Advanced Generalist Practice Curriculum (32 hours)**

**Fall Semester**
SW 521. Advanced Social Work Practice with Individuals (3 cr.)
SW 522. Advanced Social Work Practice with Organizations (3 cr.)
SW 523. Advanced Social Work Practice with Groups (3 cr.)
SW XXX. Elective (3 cr.)
SW 593. Field Instruction III (4 cr.)

Spring Semester

SW 524. Advanced Social Work Practice with Families (3 cr.)
SW 525. Advanced Social Work Practice with Communities (3 cr.)
SW 520. Evaluation of Social Work Practice (3 cr.)
SW XXX. Elective (3 cr.)
SW 594. Field Instruction IV (4 cr.)

MSW Curriculum for Part-Time Students

Year 1

Generalist Practice Curriculum (32 hours)

Fall

SW 504. Foundations of Scientific Inquiry w/Social Systems (3 cr.)
SW 510. Generalist Social Work Practice I (3 cr.)

Spring

SW 503. Diversity and Oppression (3 cr.)
SW 506. Psychopathology and Psychopharmacology (3 cr.)

Summer

SW 505. Human Behavior in the Social Environment (3 cr.)
SW 511. Generalist Social Work Practice II (3 cr.)

Year 2

Fall

SW 515. Social Welfare Policy and Programs (3 cr.)
SW 591. Field Instruction I (4 cr.)

Spring

SW 512 Generalist Social Work Practice III (3 cr.)
SW 592. Field Instruction II (4 cr.)

Advanced Generalist Practice Curriculum (32 hours)

Summer

SW 524. Advanced Social Work Practice with Families (3 cr.)
SW 523. Advanced Social Work Practice with Groups (3 cr.)

Year 3
Fall
SW 521. Advanced Social Work Practice with Individuals (3 cr.)
SW 522. Advanced Social Work Practice with Organizations (3 cr.)

Spring
SW XXX. Elective (3 cr.)
SW 525. Advanced Social Work Practice with Communities (3 cr.)

Summer
SW XXX. Elective (3 cr.)
SW 593. Field Instruction III (4 cr.)

Year 4

Fall
SW 527. Evaluation of Social Work Practice (3 cr.)
SW 594. Field Instruction IV (4 cr.)

Social Work Program Core Competencies

The Department of Social Work’s mission is to prepare social workers for autonomous, knowledge-based, advanced
generalist practice within an integrated community of scholars, practitioners and learners. The principles that guide
the program are:

- a focus on people's strengths;
- a celebration of human diversity;
- the application of multi-system practice methods to promote human well-being and fair, equitable
  communities;
- a commitment to social justice;
- a focus on working with diverse clients from a bio-psycho-social-spiritual-cultural perspective across the entire
  life span;
- a focus on social work practice and collaboration with clients and organizations in public and not-for-profit
  settings.

The well-being of clients and the integrity of the social work profession are our top priorities.

In order to remain in good standing in the Department of Social Work, all students as stated in the NASW Code of
Ethics, “... must not allow their own personal problems, psychosocial distress, legal problems, substance use, or
mental health difficulties to interfere with their professional judgment and performance or to jeopardize the best
interests of people for whom they have a professional responsibility” (p. 23, NASW Code of Ethics).

The Department of Social Work has developed a list of core competencies that when clearly and consistently
observed and followed, allows students to be successful in the program.

<table>
<thead>
<tr>
<th>Standards</th>
<th>Skills and Essential Behaviors</th>
<th>Descriptors/Examples</th>
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</table>
| **Professional Ethics** | Demonstrates an understanding of, adheres to and promotes the NASW Code of Ethics.  
Demonstrates an understanding and appreciation of the value of diversity. Works effectively and responsibly with people who are of differing races, ethnicities, abilities, ages, classes, genders, sexual orientations, religious beliefs and/or nationalities, etc.  
Shows respect and effectively advocates for the rights of others.  
Demonstrates a commitment to ending social and economic injustice.  
Maintains and demonstrates comprehension of professional boundaries.  
Is committed to clients' freedom of choice and self-determination.  
Is consistently honest and demonstrates integrity by being truthful about one's own background, experiences and qualifications.  
Refrains from sexually harassing others, making of verbal or physical threats or abusing others in physical, emotional, verbal or sexual ways.  
Refrains from being involved in sexual relationships with clients or participating in dual relationships with clients where conflicts of interest may develop or exist.  
Utilizes clinical supervision effectively and demonstrates a willingness to ask for help. | Maintains confidentiality.  
Demonstrates openness to working with diverse groups and individuals of different backgrounds including fellow students, colleagues and clients.  
Asks supervisor and instructors for help when needed.  
Follows through with commitments.  
Maintains clear boundaries. For example, does not socialize with clients. |
| **Self–Awareness** | Demonstrates ability to acknowledge how one's own attitudes, beliefs, biases and personal and past experiences affect professional judgment, decision-making, thinking, behavior and relationships.  
Shows willingness and ability to assess and reflect on strengths and identify areas for improvement.  
Is open to feedback and constructive criticism.  
Demonstrates a level of self-awareness and an ability to express how one is perceived by others.  
Demonstrates an ability to self-critique, and an ability to assume full responsibility to protect peers, colleagues, research participants, clients, and others from the adverse consequences of personal performance problems and behaviors. | Demonstrates self reflection in class, internship, process recordings, group work and written course exercises.  
Makes necessary adjustments to professional and/or academic workloads in the face of personal difficulties that may adversely impact the quality of academic work or practice with clients.  
Takes initiative in gaining knowledge as needed.  
Makes changes based on feedback and constructive guidance. |
<table>
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<tr>
<th>Communication</th>
<th>Communicates responsibly, respectfully and effectively with colleagues, faculty, staff, administrators, field instructors and clients, etc.</th>
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<tr>
<td></td>
<td>Utilizes effective listening and empathic skills in order to establish rapport.</td>
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<td></td>
<td>Demonstrates ability and willingness to listen to others and is open to feedback.</td>
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<td>Advocates effectively in a constructive manner according to NASW guidelines.</td>
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<td>Utilizes institutional channels first in order to effectively resolve conflicts.</td>
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<td>Demonstrates respect for the professional expertise of fellow agency workers, students in class and program faculty and staff, etc.</td>
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<td></td>
<td>Receives, comprehends and responds appropriately and timely to verbal, non-verbal and written forms of communication, including emails sent from the Social Work Department and field agency personnel.</td>
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<td>Expresses feelings and ideas in a way that can be understood by others.</td>
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<td></td>
<td>Participates cooperatively as a productive member of the classroom, agency task groups and teams.</td>
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<td></td>
<td>Maintains commitments to clients, students and colleagues.</td>
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<td></td>
<td>Voices opinions and feedback in a productive and non-judgmental manner.</td>
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<td>Demonstrates effective, respectful ways to advocate for self and others.</td>
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<td></td>
<td>Prepares written documents that are clear, concise, accurate and complete and that reflect correct grammar and APA citation and referencing guidelines.</td>
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<td>Follows agency guidelines for record keeping.</td>
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<tr>
<th>Readiness</th>
<th>Is open and committed to learning from colleagues, classroom and field instructors.</th>
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<td></td>
<td>Seeks out and utilizes help when needed and responsibly addresses one’s own health and emotional challenges that may interfere with scholastic and professional performance.</td>
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<td>Is able to distinguish between facts and inference.</td>
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<td>Is able to draw conclusions based on relevant information and evidence.</td>
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<td>Demonstrates ability to think critically.</td>
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<td>Demonstrates an ability to write clearly with appropriate grammar and sentence construction.</td>
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<td></td>
<td>Takes initiative with basic tasks in agencies such as making phone calls, taking messages, calling agencies to gain information about their services, locating resources in the community.</td>
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<td>Demonstrates ability to include relevant and applicable literature in presentations, research and written work.</td>
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<td>Assessments of clients reflect comprehensive, inclusive and relevant data.</td>
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<td>Demonstrates use and knowledge when working with clients through the use of process recordings.</td>
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<td>Demonstrates willingness to take initiative.</td>
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<td>Can identify problem solving steps to resolving challenges.</td>
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<td>Able to communicate ideas clearly in writing.</td>
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<tr>
<th>Professional Behavior</th>
<th>Shows willingness and ability to effectively prioritize, manage and complete tasks on time and observe and meet deadlines.</th>
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<tr>
<td></td>
<td>Arrives on time to all classes, meetings and field agency required hours.</td>
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<td>Seeks professional help and consultation when needed.</td>
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<td>Consistently follows through with commitments including group work assignments, field work and assignments.</td>
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<td>Utilizes thoughtful and informed judgment in making professional decisions.</td>
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<td>Demonstrates an ability to be flexible in responding to changing needs and priorities of the field agency and clients.</td>
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<td>Demonstrates appearance and demeanor that are appropriate to the roles and settings encountered during the educational process, including field practice experiences.</td>
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<td>Communicates in advance whenever there is an interruption of planned attendance or task completion and identifies alternatives for task completion to instructors, field instructors, field liaisons and academic advisors.</td>
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<td>Is able to form and sustain professional relationships.</td>
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<td>Voices concerns to field instructor and/or liaison in a respectful manner and in accordance with agency and field protocols and policies.</td>
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<td></td>
<td>Keeps field instructor, liaison, instructors and staff apprised of issues that may arise and works proactively with all parties to alleviate issues.</td>
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### Social Work Program Advancement Policy

**Purpose:**

The faculty and staff of the Binghamton University Department of Social Work are responsible for creating an educational environment that fosters student growth, academic success and professional development. When students apply to the program, they sign an academic contract agreeing to advance their professional development and to have it assessed by social work faculty and staff throughout their time in the program. The Social Work Department Advancement Policy supports this responsibility by addressing criteria including academic, professional and ethical conduct (e.g., being respectful; displaying integrity and honesty; addressing concerns in a clear and constructive manner; responding to evaluation and criticism with appropriate self-reflection and modification of behavior), to ensure that graduates of the program have the necessary professional conduct to effectively serve clients. When there are concerns about a student’s academic/professional conduct, the Social Work Department may institute the Advancement Policy as a way to address such behavior.

The nature of the social work profession demands that practitioners use sound professional judgment and exercise professional and ethical conduct in all aspects of their work. When there is evidence of unprofessional behavior (e.g., cheating, plagiarism, misuse of university property, verbally or physically abusive behavior, behavior that is counter to the National Association of Social Workers Code of Ethics or other unprofessional conduct), the Social Work Department has the right and responsibility to terminate the enrollment of the student. Alternatively, any student, who, at any time in the program is determined by the Social Work Department faculty and administration to have engaged in unprofessional behavior may be required to participate in the Social Work Advancement Process to assess and support their professional readiness for social work practice. Students will not be approved for graduation if they have unexecuted/unresolved concern(s) in relation to the Advancement Policy on file.
Process and Procedure:

Students will advance automatically from semester to semester unless they are informed otherwise. Problems in academic/professional and/or ethical behavior may be identified at any point in the semester by faculty members (full-time and adjunct), field instructors or staff.

Any faculty members (full-time or adjunct), field instructors, or staff who identify a concern regarding a student’s professional behaviors will confer with the Director of Admissions and Student Services to determine if the behavior can be handled inside of the class/field structure. If not, the involved party(ies) will put their concerns in writing and share them with the academic advisor and student.

1. The academic advisor will meet with the student to construct a written plan that will be signed by the two of them with the goal being to resolve the professional and/or ethical deficiency. The plan shall state with specificity: (1) the concern(s); (2) the actions to be undertaken by the student; (3) how success with the plan will be determined; and (4) date(s) by which the student must demonstrate the completion of and compliance with the plan.

2. If unable to reach consensus in the development of the plan, if the student does not agree that there is a concern, if the plan is not fulfilled and/or if concerns escalate, the written documents with evidence regarding the concerns will be brought to the Social Work Grievance Committee[1] Chair via email from the student’s advisor.

3. The Grievance Committee Chair will notify the Grievance Committee within 5 business days [2] of receipt of the email from the student’s academic advisor. The email should be posted as received by 5:00 p.m. on the 5th day. If the Grievance Committee Chair is the person identifying the concern or is unavailable (such as may be the case over the summer session), the Social Work Department Chair shall convene the Grievance Committee.

4. The Chair of the Grievance Committee will convene the Grievance Committee within 10 business days from receipt of the email from the student’s academic advisor to review any documents submitted by the student and gathered and submitted by the academic advisor. The Grievance Committee Chair will notify the student and the advisor of the meeting date. The student and advisor must submit any additional documents via email no later than 5 business days before the meeting date. The email should be posted as received by 5:00 p.m. on the 5th day.

The Grievance Committee will consider the concern(s) as explained by the academic advisor and person(s) identifying the concerns(s) and the response of the student. The student may be accompanied at the meeting by an advocate who is permitted to communicate directly with the student but who is not allowed to directly address the Grievance Committee.

At the culmination of the meeting, the Grievance Committee may choose to:

• Dismiss the concern as not being substantiated or having no merit;

• Place conditions on the student’s advancement in the program;

• Recommend the student be suspended for a period of time or dismissed from the program.

If further questions need to be answered prior to making a final determination, the Grievance Committee has the right to question the student and/or others involved in putting forward the concern(s) after the meeting. The Grievance Committee shall notify the student and the academic advisor of their decision via email and certified mail within 20 working days of the Grievance Committee meeting. The email should be posted as received by 5:00 p.m. on the 20th day.

[1] The Grievance Committee will consist of two faculty members (one of whom will serve as Chair of the Grievance Committee), one professional staff member and one student representative.
“Business days” refers to any day in which the University is in operation.

Appeal Process:

If the student, the academic advisor and/or individual(s) expressing the concern(s) is/are dissatisfied with the decision of the Grievance Committee or if the Grievance Committee is unable to reach consensus, the matter can be appealed to the Social Work Department Chair. In the case of disagreement with the decision, the academic advisor, instructor-of-record, or student must put in writing the reasons why they believe that the decision should be re-examined. The written document must be submitted to the Social Work Department Chair via email within 10 business days of receiving notice of the decision from the Grievance Committee. The final decision regarding the student’s advancement rests with the Social Work Department Chair. The Social Work Department Chair shall notify the student and academic advisor of the decision via email and certified mail within 10 business days of receiving the written document from the party(ies) in disagreement with the Grievance Committee’s decision. The email should be posted as received by 5:00 p.m. on the tenth day.

As noted in the College of Community and Public Affairs (CCPA) by-laws, in order to pursue and be granted an appeal beyond the Social Work Department Chair, with the Dean of CCPA, there must be submitted a “written claim of abrogation of due process and/or new information.” In such cases as an appeal goes to the Dean, and as cited from the CCPA by-laws, “there will be no further recourse after the Dean’s decision.”

Department of Social Work Grade Appeal Process and Procedure

1. To appeal a final course grade, the student must put in writing the reasons why s/he believes that the grade should be changed, citing perceived unfairness in the grading process. The student must submit this written appeal via e-mail to the instructor-of-record for the course (field/non-field) within ten 10 business days of receiving notice of the grade from the instructor-of-record or registrar – whichever is first. The email should be posted as received by 5:00 p.m. on the 10th day.

2. Upon receipt of the written appeal, the instructor-of-record will consider the student’s appeal and respond to the student in writing via email within 20 business days with a final decision. The email should be posted as received by 5:00 p.m. on the 20th day.

3. If the student is not satisfied with the instructor-of-record’s decision, the student must put in writing the reasons why s/he still believes that the grade should be changed, and attach a copy of the original appeal document that was written to the instructor-of record and the instructor’s response to this appeal. These documents must be forwarded via email to the Chair of the Grievance Committee within 10 business days from the date that the student received written notification from the instructor-of-record’s decision. The e-mail should be posted as received by 5:00 p.m. on the 10th day. If the Grievance Committee Chair is the instructor-of-record, then the appeal goes to the Department Chair.

4. The Grievance Committee Chair (or Department Chair if the Grievance Committee Chair is the instructor-of-record) will notify the Grievance Committee of the appeal and will schedule a meeting within 20 business days for the committee to review the documents submitted by the student and instructor-of-record. If further questions need to be answered prior to making a final determination, the committee has the right to question the student, instructor-of-record or other relevant individuals in writing or by phone. When necessary, the committee has the right to request more written material. The Grievance Committee shall notify the student and the instructor-of-record of the committee’s decision via e-mail and certified mail within 20 working days of the Grievance Committee meeting. The email should be posted as received by 5:00 p.m. on the 20th day.

5. If either the student or instructor-of-record is dissatisfied with the decision of the Grievance Committee, they may appeal the decision to the Department Chair. If the instructor-of-record is the Department Chair, then the final decision rests with the Grievance Committee providing that the committee’s decision is unanimous. The student
must put in writing the reason why s/he still believes the grade should be changed and attach all original documents from the original appeal to the instructor-of-record, the instructor’s written response to the original appeal, all documents submitted to the grievance committee, the letter of notification regarding the Grievance Committee’s decision and any other relevant documents. These will be emailed to the Social Work Department Chair within 10 business days of written notification of the Grievance Committee’s decision. The email should be posted as received by 5:00 p.m. on the 10th day. The final decision regarding the student’s grade appeal rests with the Social Work Department Chair.

6. If the instructor-of-record is the Department Chair and the Grievance Committee’s decision is not unanimous, then the Dean of the College of Community and Public Affairs (CCPA) will review the written record and make the final determination.

7. As noted in the College of Community and Public Affairs (CCPA) by-laws, in order to pursue and be granted an appeal with the Dean of CCPA, there must be a submitted a “written claim of abrogation of due process and/or new information.” In such cases as an appeal goes to the Dean, and as cited from the CCPA by-laws, “there will be no further recourse after the Dean’s decision.”

[1] "Business days" refers to any day in which the University is in operation.

[2] The Grievance Committee will consist of two faculty (one of whom will serve as Chair of the Grievance Committee), one professional staff and one student representative.

Withdrawal

It is the policy of the Department of Social Work that students who are considering withdrawal from the program meet their advisors to discuss the challenges they are facing and explore options that may help support their continuation in the program.

Any students wishing to withdraw from the program should take the following steps:

1. If the decision is made to withdraw, the student must provide, in writing, to the advisor their wish to withdraw, a brief description of the reason(s) they are withdrawing and an effective date of withdrawal and must complete the Graduate Student Withdrawal Form.

2. The student must also submit a copy of the letter and the Graduate Student Withdrawal Form to the Graduate School, who will then forward the information to the appropriate campus departments (i.e., Student Accounts, Registrar, etc.).

3. The student must inform all faculty from whom they are currently receiving instruction (i.e., for the courses in which the student is currently enrolled).

Social Work Contract

I agree to the following academic contract:

Social workers serve a wide variety of client systems that could include the poor, victims, as well as perpetrators of abuse, people with different sexual orientations, those with racially and ethnically diverse backgrounds, people of all ages, persons from diverse religious, spiritual and cultural backgrounds, and many other aspects of human diversity. Social work services should be provided without prejudice and/or imposition of the worker’s values on clients.

* I have read and understand the National Association of Social Workers Code of Ethics and agree to adhere to
I have read the Binghamton University Department of Social Work Performance Standards for Admission, Matriculation and Graduation (next page), and agree to adhere to the standards therein.

I will continue my professional development through regular self-assessment of my academic and personal aptitude and performance.

I will continue my professional development, taking seriously faculty assessments of my academic and professional aptitude and performance. This includes discussion with faculty about their observations underlying their evaluations and the steps I might take when improvement is warranted.

I understand and agree that the faculty and staff may share with other faculty, staff and administrators, field instructors and other staff at field agencies, information about student situations in connection with professional development and academic concerns arising in the social work program. Faculty and staff will make every effort to keep confidential any student information that the faculty or staff member feels is not necessary to discuss concerning the student in connection with professional development and academic concerns. As appropriate, faculty and staff will discuss with students the scope of the information being shared.

I will become familiar with all course and program requirements and accept responsibility for taking all required courses in the correct sequence.

I understand that although I am admitted to the MSW program, if my professional development is deemed unsatisfactory by the social work faculty, the MSW program has the right and responsibility to request reassessment of my suitability for the program. The social work faculty, in turn, will provide academic instruction and professional advising to assist with the learning and professional development process.

Student Affairs Administration Program — Graduate

College of Community and Public Affairs

Mission Statement

The mission of the Department of Student Affairs Administration is to prepare student service professionals for career opportunities in two- and four-year institutions of higher education.

The Program

The Master of Science in Student Affairs Administration (MSAA) degree program at Binghamton University prepares graduates for entry- to mid-level management positions in two- and four-year institutions of higher education. The MSAA program is ideally suited for those who wish to pursue positions including academic advising, admissions and enrollment management, career development and placement, financial aid, health services, judicial affairs, leadership development, multicultural affairs, non-traditional and commuter student services, residential life, services for students with disabilities, student activities, and student development and involvement. Coupled with sufficient professional experience, the MSAA may also serve as the foundation for students wishing to become deans of students or vice presidents for student affairs. Graduates of the MSAA program may also acquire skills that are desirable in organizations outside of academia. The curriculum for the MSAA degree program was designed to meet the American College Personnel Association (ACPA) Professional Preparation Commission Standards and the CAS Standards for Master's Level Student Affairs Professional Preparation Programs.

The MSAA degree program is grounded in both student development theory and the concept of theory-to-practice-to-theory. Thus, an underlying goal of the program is to prepare professionals who have working knowledge of how student development theory is used in practice and how practice serves to inform future theory development.
Graduates will be comfortable discussing research relevant to their selected areas of work within student affairs and to feel qualified to contribute to knowledge production at a level appropriate to their experience. A secondary goal of the proposed program is to prepare administrative leaders and personnel who are comfortable working with people of diverse backgrounds in positions that require decision-makers to respond to department/unit situations while taking into consideration how their decisions impact other systems (i.e., departments and/or divisions) within the institution. The MSAA degree program, coupled with sufficient professional experience, may also serve as the foundation and entry point for persons desiring careers as deans of students, and assistant vice presidents for student affairs.

Program Goals and Learning Outcomes

Program Goals

- To prepare professionals who have working knowledge of how student development theory is used in practice and how practice serves to inform future theory development;
- To prepare graduates to discuss research relevant to their selected areas of work, contributing to knowledge production at a level appropriate to their experience; and
- To prepare administrative leaders and personnel who are comfortable working with diverse people in positions that require them to respond to department/unit situations while taking into consideration how their decisions impact other systems within an institution.

Learning Outcomes and Academic Content

The overall academic content of the program has been structured to enhance the students' ability to think reflectively, work independently and collaboratively with others, as well as be able to investigate and analyze situations in student affairs specifically and higher education in general, both verbally and in writing using technological aids where appropriate. More specifically, upon completion of the program, graduates should be able to perform the following:

- Define the role and function of student affairs work in higher education within philosophical and historical frameworks, as well as the broader context of higher education;
- Articulate the current status of the field and discuss contemporary issues facing the profession;
- Articulate an understanding of how student development theory (e.g., psychosocial, cognitive-structural, typologies and person-environment interaction models) is used in practice;
- Discuss leadership principles and strategies used in practice;
- Demonstrate in behavior and practice the rudiments of effective leadership;
- Interpret research significant to the profession and conduct related scholarship at an elementary level;
- Identify factors affecting human and organizational behavior;
- Translate theoretical knowledge about the development of individuals and organizations into meaningful practice;
- Articulate an understanding of how various systems of oppression (e.g., racism, sexism, classism, homophobia, ageism, etc.), impact student development and the role of advocacy in student affairs work; and
- Develop multicultural competency that enables engagement with diverse students and others with effectiveness and confidence.

The Curriculum
As of fall 2010, the 45 minimum credit-hour program serves the needs of students who desire to pursue graduate studies in either full- or part-time formats. The curriculum includes 27 credit hours of student affairs-related coursework, 12 minimum credit hours in a cognate area, a 3-credit hour research methods course, and a minimum 3-credit hour internship. SAA students must maintain a cumulative grade-point average of 3.0 and must receive a B or higher grade in all required courses to graduate.

Full-time students should be able to complete the coursework and finish a comprehensive examination in two years of study. The exact duration for part-time students will depend on whether they choose to take at least 6 credit hours per semester and attend classes during the summer. The program curriculum was designed to meet the American College Personnel Association (ACPA) Professional Preparation Commission Standards. An outline of the program is as follows:

**Required Core Curriculum**

SAA 510. Introduction to Student Personnel Services

SAA 511. College Student Development: Theory, Research, and Practice

SAA 512. The Culture of the American College Student

SAA 513. Organization and Administration of Higher Education

SAA 514. Law in Higher Education

**Required Educational Research Course**

Select SAA 515  OR  SAA 580I:

SAA 515. Research Methods in Higher Education  OR

SAA 580I. Qualitative Research Methods  OR

Any other research course — student must have permission from their SAA Advisor to take an alternate research course for qualifying credit toward SAA Degree.

**Program Requirement**

*Comprehensive examination:* The examination is designed to assess the student's knowledge and comprehension of core courses taken in the program. In the event of failure, a student will be permitted to retake the examination only once, before he or she will be terminated from the program permanently.

The examination must be taken after five core courses are completed — SAA 510, SAA 511, SAA 512, SAA 513 and SAA 514. The examination may not be taken in the student's final or graduating semester.

**Recommended Cognate Areas**

(Minimum of 12 credit hours required)

Cognate in Public Administration (4 courses)
PAFF 521. Foundations of Public Service (required) (4 cr.)

Choose 3 courses from the following list:

PAFF 520. 21st Century Governance (4 cr.)

PAFF 525. Public Ethics and Democratic Government (3 cr.)

PAFF 526. Managing Information & Technology (2 cr.)

PAFF 534. Human Resource Mgmt: Pub/Npf (3 cr.)

PAFF 535. Organizational Theory (3 cr.)

PAFF 536. Managing Networks (3 cr.)

PAFF 537. Organizational Behavior (3 cr.)

PAFF 527. Budgeting and Financial Management* (4 cr.)

*NOTE: PAFF 527 prerequisites require getting permission from the Director of the Student Affairs Administration program to substitute PAFF 510 for SAA 515.

Credit hours for the Student Affairs cognate in Public Administration will vary depending on the actual courses chosen (12-14 cr.).

Student Affairs Focus

Students may select from a list of elective courses in Student Affairs.

Required Internship Experience (minimum 3 credit hours)

Internships provide new professionals an opportunity to gain invaluable practical experience under the leadership of an experienced practitioner. Through working in student affairs units, students learn how to apply the theory and concepts they are learning in the classroom to real life situations. They also gain a better sense of their particular areas of interest within student affairs and have a chance to develop the skills they will need to be successful in the field. Therefore, all students are required to participate in at least one internship experience while enrolled in the program. However, it is recognized that some students in the program will be experienced professionals enrolled in order to gain advanced academic credentials and/or training for upward mobility. Therefore, students who have professional experience in the field of Student Affairs (i.e., 3 to 5 years) may be exempt from having to complete the internship experience at the discretion of the faculty advisor. Students will be required to take an additional course in the major areas of study as a replacement. Because the internship experience is designed to expand the student’s current knowledge of theory and practice, students will not be permitted to work in an assignment where they have previous work experience or currently serve as a graduate assistant.

Students will be permitted to register for the internship experience only after they have fully matriculated into the program, completed the 15 credit-hour student affairs core curriculum, obtained a grade-point average of B or better, passed the comprehensive exam, and submitted a completed Internship Proposal with signatures indicating approval by the site supervisor where they intend to work and their faculty advisor.

The internship format options are as follows:

1. Full-time[1] (12 hrs/wk) for one academic semester (spring or fall) (minimum 13 weeks).
3. Half-time for one academic semester of (spring or fall) plus 78 hours in summer semester.
4. Summer internship – 156 hours.
7. Half-time for one academic semester plus 78 hours in summer = 156 hours.

Admission Requirements

Consideration for admission into the Master of Science in Student Affairs Administration will be selective and applicants will be expected to have an academic record and informed interest in pursuing the program consistent with Binghamton University's norms for graduate study. Admission is open to all individuals with a BA or a BS degree from a recognized college or university who meet the admissions requirements of Binghamton University's Graduate School.

All official Graduate School application materials are available through their website or by calling/writing the Graduate School. Contact info for the Graduate School can be found here. Please submit the following materials to the Graduate School through the online application:

- Online graduate degree application with graduate degree application fee
- Transcripts from each college or university attended
- Two (2) letters of recommendation from instructors or professors who can attest to the applicant's academic ability for graduate study. Applicants who have been out of college for at least three years may submit current letters of reference from employment supervisors or others affiliated with their employment who can attest to their ability to perform successfully and professionally and to the likelihood of success in a graduate program
- A personal statement as part of the Graduate School application that addresses the applicant's interest in the program, career goals, and current skills and experiences relative to their current or intended career in student affairs
- Résumé or CV

Submit these materials via instructions on the Graduate School website.

Application Deadlines

Fall
Applications for the fall semester are considered on a rolling basis. It is strongly recommend that prospective students wishing to be considered for a Graduate Assistantship or other departmental funding submit applications by February 1. Students applying after that date may be eligible for an assistantship or other financial support; however, preference will be given to students who apply by February 1. Although February 1 is the deadline for consideration for departmental funding, the Student Affairs Administration department will consider applications submitted at any point throughout the year.

Spring
Applications for the spring semester are considered on a rolling basis. Although, October 15 is the deadline for consideration for departmental funding, the Student Affairs Administration department will consider applications submitted at any point throughout the year. NOTE: Funding may be limited or unavailable for spring semesters.
Student Affairs Administration Fast-Track Application Process

The fast-track application option is designed to streamline the application process for applicants who finished/or will finish their bachelor’s degree with a GPA of 3.5 or higher. Prospective students who meet this criterion are able to apply to the Student Affairs Administration program simply by submitting their transcripts, a personal statement and resume. No letters of recommendation are required. Individuals who wish to apply to the SAA program through the fast-track application process should email the Director of Admissions and Student Services. Applicants will then receive instructions on how to submit their information through Binghamton University's Graduate School application portal.

International applicants

International students should also submit proof of English proficiency (such as Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or PTE Academic scores) as part of their admissions application. The use of English, both in terms of understanding spoken and written language and in terms of communicating that understanding, is a necessary prerequisite for graduate work in the Department of Student Affairs Administration because communication is integral to the profession.

See the Graduate School website for details about the admissions requirements — including the proof of English proficiency and the immigration and financial documentation — for international students. International students must also follow all of the above requirements. Records of international applicants require special evaluation and, therefore, should be submitted as early as possible.

Following the submission of admission applications, three SAA faculty members will begin reviewing application materials to determine the applicant's potential for academic success. After reviewing application materials, faculty recommendations are then made and sent to the Graduate School. The ultimate decision to offer admission into the SAA program rests with the Graduate School at Binghamton University.

Note:

Applicants should be aware that some states and institutions require background checks before employment. For positions that require professional licensure, states may restrict or deny professional licensure for people with felony convictions, misdemeanor convictions, or actions taken against them by a professional organization. In addition, students admitted to the program are required to satisfactorily complete an internship. For placement into an internship, offices and agencies may require personal information and conduct background checks. Offices and agencies have the right to refuse placements. Students may be required to and so then must obtain malpractice insurance before they are placed in internships with these requirements. The insurance agency requires disclosure of personal information including convictions and may or may not issue insurance coverage. Therefore, while the Department of Student Affairs Administration will work diligently to place students in internships, students admitted into the program are not guaranteed internship placement in an office or agency which is a requirement for graduation.

Transfer Credits

Students may be permitted to transfer up to 12 credit hours of prior graduate-level student affairs-related coursework into the proposed program, but only at the discretion of and with approval by the chair of the program. Consideration will be given for courses taken within the last five years in which a B or higher was earned. Academic credit is not given for life experience or previous work experience.

Dual SAA/MPA Degree Program
The SAA program offers a dual-degree opportunity with the master of public administration (MPA) program that allows students to pursue two master’s degrees concurrently. Interested students should contact the department offices of both programs for additional information.

**Selected Academic Policies**

Below are selected department and university policies. For a full listing of each area’s policies, please refer to the respective websites.

**Academic Advising**

Incoming students will be assigned a faculty advisor to assist them in developing a proposed program of study (POS) to use as a guide toward degree completion. New students will be required to attend an orientation session at the beginning of their program and meet with their academic advisor (i.e., in person or via e-mail) at least once each semester, before registering for the subsequent semester’s coursework. In the event it becomes necessary, the program director will substitute as the faculty advisor for a student until another advisor is assigned.

**Independent Study**

Matriculated students with good academic standing (a GPA over 3.0) may request up to three credits of independent study, by providing a proposed faculty sponsor with a detailed memorandum outlining the objectives of the study program and an Independent Study Course Registration Form. Faculty members are not required to accept independent study requests, and it is the faculty member’s prerogative to reject or amend a student’s proposal. Independent study projects are generally reserved for students desiring to pursue a specific line of inquiry. In most cases, faculty members will not approve independent study requests by students in their first year of graduate study or when an appropriate seminar is available to the student. Nor will they approve two independent student projects in a single semester. Independent studies cannot be used as a substitute for core courses. Once a faculty member signs an independent study memorandum and a course registration form, and it is approved by the program, a copy will be filed in the student’s record. It will be the contracted agreement between the student and the faculty sponsor. A final copy of the student's completed project will be filed with the student's program records.

**Supervision of Students**

The faculty advisor is the primary person who will assist the student in developing a proposed program of study (POS) that outlines courses needed for degree completion. The role of the faculty advisor is to assess the academic and professional background of the student, review his/her professional goals and approve the student's proposed program of study. The faculty advisor should meet with the student to discuss these issues during the student's first semester in the program, or in the case of part-time students, shortly after the student completes nine credit hours of coursework. Generally speaking, the faculty advisor will serve as the student’s mentor and guide. However, students are encouraged to develop professional relationships with all of the faculty in the program.

**Evaluation of Student Progress - Program of Study**

The proposed program of study is a written plan between the student and the Department of Student Affairs Administration that outlines the recommended courses the student should take to satisfy degree requirements. An up-to-date copy of the program of study will be maintained in the student's file in the Student Affairs Administration department office. The POS can be modified at a later date if additional learning experiences (e.g., courses) are desired, but all students must have a completed POS on file by the end of the first semester or completion of 15 credit hours of coursework, whichever comes first. Completed programs of study will be monitored by the program office, and the department chair will contact the student’s academic advisor in the event that the plan is not filed with
the program office by the end of the first semester or completion of 15 credit hours for full-time students or completion of nine credit hours for part-time students to resolve the issue.

Continuous Registration and Leave of Absence

All matriculated students must enroll in at least one credit per fall and spring semester until they graduate; this is considered continuous registration. Summer registration is not required. However, students must register during the semester they plan to complete the program. Students who fail either to maintain continuous registration or request a leave of absence must reapply to the program (which means paying an additional application fee to the University). Other charges may apply. A leave of absence is granted for exceptional circumstances of hardship (family illness, etc.). Normally, leaves are granted for up to one year. All students must be registered during the semester in which they graduate.

Graduation and Commencement Information

Students must submit an application for degree on the Graduate School's website, contact the Department of Student Affairs Administration secretary and check with their advisors to make sure they have completed all requirements for degree. The Department of Student Affairs Administration will then process a Recommendation for Award of Degree and send to the Graduate School for processing.

Students are responsible for contacting the commencement department regarding participation in commencement and if tickets are needed. Students must order the appropriate cap, gown, etc. from the University Bookstore by their deadline.

All students must be registered for at least one credit in the semester they complete their degree requirements and graduate.

Student Advancement Policies and Procedures

Student Advancement Policy

The purpose of this policy is to create a process which will allow a timely and positive intervention when students are identified by faculty, internship supervisors, or student peers as experiencing problems which interfere with their progress in the SAA program. Through this policy, the SAA program exercises its responsibility to the student affairs administration profession to determine whether students have demonstrated the required level of achievement in the areas of classroom performance, professional and ethical behavior, necessary to interact positively in organizations of higher education.

Advancement Requirements

Advancement of students from one semester to the next is contingent upon satisfactory progress each semester. Evaluation of student progress in class courses and in internships is based upon criteria as stated in syllabi, in internship placement agreements, and on skill, competencies, and personal behaviors listed below.

Academic Performance:

- At minimum, a "B" average (3.0 GPA) must be maintained in all work taken as part of the requirements for the degree.
- Students are required to earn a "B" or better in all core classes and research methods.
- A grade of "C" in any three courses or a grade of "F" in any course will result in AUTOMATIC dismissal from
the SAA program.

**Professional Performance:**

1. Students are expected to obtain and analyze data, synthesize information and reach sound judgments.

2. Students are expected to plan and implement effective professional practices.

3. Students are expected to relate well with university supervisors, colleagues and students.

4. Students are expected to demonstrate a commitment to and skill in self-evaluation.

5. Students are expected to respond to evaluation, testing and criticism with appropriate modification of behavior.

**Ethical Performance:**

1. Students are expected to demonstrate honesty and integrity in all aspects of their academic program.

2. Students are expected to adhere to the American College Personnel Association's (ACPA) Code of Ethical Principles and Standards in all interactions with peers, staff, full-time and adjunct faculty, internship instructors, and all other members of the university community.

**Advancement Process and Procedures**

Advancement is a process intended to assure that each student maintains adequate progress in gaining the skills, competencies and behaviors required for graduation and ethical professional student affairs administration practice.

Students will advance automatically from semester to semester unless they are informed otherwise. Problems in academic, professional or ethical behavior may be identified at any point in the semester by faculty (full-time and adjunct) or staff. Additionally, the faculty will review students currently enrolled each semester. The individual expressing the concern, if someone other than the student's advisor, will confer with the student's advisor (or the Department Chair if the individual is the student's advisor) to determine whether the concern justifies the formal process set forth below.

1. Any faculty member (full-time or adjunct) or staff, who identifies a concern regarding a student's academic performance, professional behavior, or ethical conduct, shall immediately notify the student, the student's advisor, and the Department Chair. The notice needs to be in writing and specify in what ways the student is failing to meet the advancement requirements.

2. The person identifying the concern shall meet with the student, the student's advisor and the Department Chair. They shall develop a written plan to resolve the academic, professional or ethical deficiency. The plan shall state with specificity the concern(s), the actions to be undertaken by the student and the date by which the student must demonstrate the completion of and compliance with the plan. The plan must allow a reasonable period of time for completion, but shall not allow more than one semester beyond the semester in which the concern is expressed. The plan must be signed by all the participants of this meeting. If unable to reach consensus, the concern shall be returned to the Department Chair who will confer with the Dean regarding the concern. A written copy of the final plan must be filed with the Department Chair.

3. Students who have unresolved concern(s) (i.e., concern[s] for which the written plan is in the process of development or the written plan remains executory) on file with the Department Chair at the end of the semester shall be notified by the Chair that they are advanced on a probationary basis. Notwithstanding the foregoing, students will not be approved for graduation if they have unresolved concern(s) on file.

4. The student's advisor shall, on or before the date specified in the plan for resolution of the concern, consult with
the person who identified the concern under Item 1 above. If the student's advisor is the person identifying the concern, then he/she will consult with the Department Chair. They will determine whether or not the student has completed the actions designated in the plan and whether the concern has been resolved. This decision will be reported in writing to the Department Chair.

• If the concern(s) is resolved, the Department Chair shall provide the student a copy of the report.

• If the concern(s) is not resolved, the Department Chair shall notify the student in writing and provide a copy of the report. The Department Chair, in consultation with the Dean, will consider further action.

The action may include:

1. Dismissing the concern as having no merit

2. Placing conditions on the student's advancement in the program

3. Recommending the student be suspended for a period of time

4. Recommending the student be dismissed from the program

The Department Chair will notify the student in writing.

Professional Ethics

Currently, there is no national accrediting body governing student affairs administration programs. However, the American College Personnel Association (ACPA, http://www.myacpa.org) serves as one of the leading organizations for student affairs that provides administration, policy and practice-related oversight in the United States. ACPA also provides a national conference and numerous professional development opportunities for professionals in the field. Students are expected to be familiar with, and adhere to, ACPA's Code of Ethical Principles and Standards that govern the profession. These Ethical Principles and Standards can be found at http://www.myacpa.org/sites/default/files/Ethical_Principles_Standards.pdf.

Academic Honesty

The Department of Student Affairs Administration takes violations of the Academic Honesty Code very seriously. However, the faculty understands the pressures of graduate school and urges students to seek consultation if they feel they are unable to complete assignments properly in a timely fashion. It is recognized that most students do not intend to plagiarize, but do so because of concerns that their work will not "make the grade."

The Academic Honesty Code can be reviewed in the University Bulletin section on Academic Policies and Procedures for All Students. In the event a violation of the Honesty Code is suspected, the College of Community and Public Affairs' procedures for resolving academic honesty cases will be followed. The CCPA Ethics and Integrity procedures can be viewed at the following link: http://www.binghamton.edu/ccpa-new/services/policies.html.

Department of Teaching, Learning and Educational Leadership

NOTE: The Department of Teaching, Learning and Educational Leadership is undergoing a transition to a three-credit course structure currently awaiting New York State Education Department approval. See the department website for the most up-to-date information about Department of Teaching, Learning and Educational Leadership programs and related requirements.

Programs
The College of Community and Public Affairs (CCPA) Department of Teaching, Learning and Educational Leadership offers programs leading to the master of arts in teaching (MAT), the master of science in education (MSEd) and the master of science (MS) in educational studies. Combined-degree options in math, the sciences, and French or Spanish (a combination of undergraduate BA or BS in the discipline and graduate MAT in teacher education) are also offered. Most programs culminate in teacher certification in New York State. The school also offers a certificate of advanced studies (CAS) in educational leadership, and a doctorate of education (EdD) in educational theory and practice.

The Department of Teaching, Learning and Educational Leadership focuses on the post-baccalaureate preparation of pre-service and in-service teachers. Pre-service programs (for students who do not have an undergraduate degree in education or initial certification to teach) are offered in Childhood/Early Childhood Education, Grades B-6; and Adolescence Education, Grades 7-12 in biology, chemistry, Earth science, English, French, mathematics, physics, social studies and Spanish. In-service programs (for students who already have an undergraduate degree in education and initial certification) are offered in Adolescence Education, Grades 7-12 (same subject areas as above), Literacy Education, Birth-Grade 6 and Grades 5-12; and Special Education, Early Childhood, Grades B-2; Childhood, Grades 1-6; Early Childhood and Childhood, Grades B-6; and Adolescence, Grades 7-12. All coursework and New York State Teacher Certification requirements must be successfully completed in order to receive New York State Teacher or Administrator Certification.

**Note regarding Taskstream:** For most graduate students enrolled in the Department of Teaching, Learning and Educational Leadership, a one-time access fee will be charged to enroll in Taskstream, a software data management system. Consult the department for more information.

The New York State Division of Veterans' Affairs, Bureau of Veterans Education approves education programs for the training of veterans to use veterans' education benefits from the VA. Any veteran wishing to attend Binghamton University’s Department of Teaching, Learning and Educational Leadership under the provisions of state and federal laws should contact the Registrar to make an application to use veteran's education benefits. The Registrar is the Certifying Official for the college. Veterans must follow the same procedure for admission that applies to other applicants.

The following degree programs are offered:

**Master of Arts in Teaching (MAT), Grades 7-12 (Pre-service)**

- Biology Adolescence Education
- Chemistry Adolescence Education
- Earth Science Adolescence Education
- English Adolescence Education
- French Adolescence Education
- Mathematics Adolescence Education
- Physics Adolescence Education
- Social Studies Adolescence Education
- Spanish Adolescence Education

**Combined-Degree Options, BA/MAT and BS/MAT**

- Mathematics (BA) and Master of Arts in Teaching (MAT) Mathematics Adolescence Education, Grades 7-12
- Biology (BA) and Master of Arts in Teaching (MAT) Biology Adolescence Education, Grades 7-12
- Chemistry (BA) and Master of Arts in Teaching (MAT) Chemistry Adolescence Education, Grades 7-12
• French (BA) and Master of Arts in Teaching (MAT) French Adolescence Education, Grades 7-12
• Geological Sciences (BA) and Master of Arts in Teaching (MAT) in Earth Science Adolescence Education, Grades 7-12
• Geological Sciences (BS) and Master of Arts in Teaching (MAT) in Earth Science Adolescence Education, Grades 7-12
• Physics (BA) and Master of Arts in Teaching (MAT) in Physics Adolescence Education, Grades 7-12
• Spanish (BA) and Master of Arts in Teaching (MAT) in Spanish Adolescence Education, Grades 7-12

Master of Science in Education (MSEd):

• Adolescence Education, Grades 7-12, in biology, chemistry, earth science, English, French, mathematics, physics, social studies or Spanish (in-service)
• Early Childhood and Childhood Education, Grades Birth-6 (pre-service)
• Literacy Education, Birth-Grade 6 (in-service)
• Literacy Education, Grades 5-12 (in-service)
• Special Education, Birth-Grade 2 (in-service)
• Special Education, Birth-Grade 6 (in-service)
• Special Education, Childhood, Grades 1-6 (in-service)
• Special Education, Adolescence, Grades 7-12 (in-service)
• Teaching English to Speakers of Other Languages (TESOL) Education, PreK-12 (in-service)

Master of of Arts (MA) in Teaching English to Speakers of Other Languages (TESOL) Education

Master of Science (MS) in Educational Studies

Certificate of Advanced Studies (CAS) in Educational Leadership

Doctorate of Education (EdD) in Educational Theory and Practice

Please browse the Department of Teaching, Learning and Educational Leadership website for up-to-date information about programs.

New York State Teacher Certification Examinations

The state of New York mandated that after April 9, 2001, results of New York State Teacher Certification Examinations must be made available in university bulletins and program information for prospective students.

Annual Institution Report for Binghamton University

Individuals seeking a New York State Certificate for Teaching the common branch subjects in pre-kindergarten through Grade 6 or academic subjects in the secondary grades 7 through 12, i.e., English, a science (biology, chemistry, Earth science, physics) or social studies, must achieve qualifying scores on a set of assessments called the New York State Teacher Certification Examinations (NYSTCE) as part of the requirements for certification. Accreditation requires that pass rate data for both teacher certification and school leadership assessments be posted on an institution's website.

The NYSTCE program consists of the
Educating All Students Test (EAS);
Educative Teacher Performance Assessment (edTPA);
Content Specialty Tests (CSTs).

The purpose of these examinations is to ensure that certified teachers possess the knowledge and skills needed to be effective educators in New York State schools.

Please see http://www.binghamton.edu/gse/about-the-school/accreditation.html to view pass rate data for Binghampton University's Department of Teaching, Learning and Educational Leadership.

Application to Teacher Education Programs

The procedures for applicants to programs in the Department of Teaching, Learning and Educational Leadership are outlined in the general section on Graduate Admission in this publication. Please review the Department of Teaching, Learning and Educational Leadership's website for up-to-date application requirements and program information. A 3.0 GPA is highly desirable. The department also requires a personal statement that includes why the applicant has chosen teaching as a vocation, the values and concerns the applicant brings to the study of education, present and future professional goals, and the contributions the applicant hopes to make to the field of education. This statement should be a narrative essay of approximately 1,000 words (four to five typewritten pages, double spaced). In addition, a résumé including current employment, previous professional education experience (including student teaching), volunteer work and other experiences with children and youth is strongly encouraged. Applicants already possessing initial teacher certification must also submit documented proof of licensure.

Students are encouraged to apply year-round to the Department of Teaching, Learning and Educational Leadership's master's degree programs. Priority deadlines are October 15 to be considered for spring admission and February 1 to be considered for fall admission. Applications received after those priority deadlines will gladly be considered on a space-available basis. Note: Application to the Childhood and Early Childhood Education Program occurs once per year (February 1 to be considered for fall admission, although applications will be considered after that date as space permits). All students wishing to be considered for a graduate assistantship (or other funding opportunities) must express their interest as soon as possible.

Academic Policies and Procedures

Students are referred to the Graduate Information in Academic Policies and Procedures in this publication.

Grievance Procedure

See your faculty advisor if you have a concern that you have not been able to resolve regarding your academic program or particular courses or professors. You may request a copy of the Department of Teaching, Learning and Educational Leadership grievance procedure from the CCPA Dean's Office.

Master of Arts in Teaching

Adolescence Education, Grades 7-12

The master of arts in teaching degree in adolescence education is a program for students who have an undergraduate degree in biology, chemistry, English, geology (Earth science), mathematics, physics, romance languages (French or Spanish) or social studies, and who are seeking certification to teach that subject in grades 7-12 in New York State. Students who complete this degree will be eligible for initial certification. See

Admission

Applicants must have a baccalaureate degree with sufficient academic background in the prospective area of teaching to take graduate work in the discipline (NYSED stipulates a minimum of a 30 credit "major"). All applicants must have college-level study or the equivalent in a language other than English. It is recommended that applicants have a pre-admission consulting session with a graduate advisor in the MAT program in the Department of Teaching, Learning and Educational Leadership. Assuming all prerequisite undergraduate requirements have been met, the MAT degree requires at least three semesters of full-time study (or the equivalent of part-time study). Students may begin their degree program in either the fall or spring semester. However, students will be admitted for the spring semester only if space permits. Matriculated students must successfully complete the required 100 clock hours (minimum) of fieldwork prior to being admitted to the fall (student teaching) semester.

In all MAT programs, a minimum of 42 credits is required: 22 credits in education, 12 credits in the academic discipline and eight credits in supervised student teaching. A grade of B or better must be earned in both SEC 593 and SEC 594, and an overall average of B or better must be obtained to graduate. Admission to student teaching depends on earning B or better in SEC 593, completing satisfactory field experiences, and demonstrating appropriate dispositions for teaching.

Biology Adolescence Education, Grades 7-12

Applicants should have an undergraduate degree in biology. The applicant's undergraduate work must be acceptable to the Biological Sciences Department in Harpur College, as well as to the Department of Teaching, Learning and Educational Leadership. Applicants with fewer than 24 equivalent hours of biology are required to take additional intermediate-level courses to be eligible to apply to this program.

Minimum Requirements for Degree

<table>
<thead>
<tr>
<th>Education Courses</th>
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<tbody>
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<tr>
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<td>4</td>
</tr>
<tr>
<td>SEC 502. English as a Second Language for Content-Area Teachers</td>
<td>2</td>
</tr>
<tr>
<td>SEC 593. Philosophical and Theoretical Foundations in the Pedagogy of Science</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject-Area Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 credits in graduate-level biological sciences courses</td>
</tr>
<tr>
<td>(BIOL 591, 599 and 699 may not be taken for credit toward the MAT degree)</td>
</tr>
</tbody>
</table>
Supervised Student Teaching  

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SEC 590/591. Pre-Service Practicum in Teaching I and II</td>
<td>8</td>
</tr>
</tbody>
</table>

Students must complete a portfolio associated with SEC 594.

Chemistry Adolescence Education, Grades 7-12

Applicants should have an undergraduate degree in chemistry. The applicant's undergraduate work must be acceptable to the Chemistry Department in Harpur College, as well as to the Department of Teaching, Learning and Educational Leadership. Students without appropriate undergraduate preparation in chemistry are required to take additional credit hours in consultation with the graduate director in chemistry to be eligible to apply to this program.

Minimum Requirements for Degree

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</tbody>
</table>

Subject-Area Courses

A minimum of 12 credits in graduate-level chemistry.

Coursework is selected based on the area placement examinations.

Supervised Student Teaching  

<table>
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Students must complete a portfolio associated with SEC 594.

Earth Science Adolescence Education, Grades 7-12

Applicants are generally expected to have the equivalent of an undergraduate major in geology or a related Earth science. The applicant's undergraduate work must be acceptable to the Geological Sciences Department in Harpur College, as well as to the Department of Teaching, Learning and Educational Leadership. Students without appropriate undergraduate preparation may be admitted with the stipulation that they take additional coursework in geology or the cognate sciences.
### Minimum Requirements for Degree

#### Education Courses

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<td>4</td>
</tr>
</tbody>
</table>

#### Subject-Area Courses

12 credits in graduate-level geological sciences courses.

(GEOL 599 may not be taken for credit toward the MAT degree.)

#### Supervised Student Teaching

<table>
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</table>

Students must complete a portfolio associated with SEC 594.

### English Adolescence Education, Grades 7-12

Applicants must have an undergraduate degree in English. The applicant's undergraduate work must be acceptable to the English, General Literature and Rhetoric Department in Harpur College, as well as to the Department of Teaching, Learning and Educational Leadership. Students without appropriate undergraduate preparation in English are required to take additional credit hours in consultation with the graduate director in English to be eligible to apply to this program.

#### Minimum Requirements for Degree

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</tr>
<tr>
<td>SEC 593. Philosophical and Theoretical Foundations in the Pedagogy of English</td>
<td>4</td>
</tr>
</tbody>
</table>
Subject-Area Courses

12 credits in English courses

Elective courses are chosen in consultation with the director of graduate programs in English and education. They should complement the student's undergraduate studies in reinforcing academic preparation: English language, composition, and literature. Students with a weak background in any of these areas may be required to take additional courses.

Supervised Student Teaching

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</table>

Students must complete a portfolio associated with SEC 594.

Mathematics Adolescence Education, Grades 7-12

Applicants are expected to have the equivalent of an undergraduate degree in mathematics. The applicant's undergraduate work must be acceptable to the Mathematical Sciences Department in Harpur College, as well as to the Department of Teaching, Learning and Educational Leadership. Students without appropriate undergraduate preparation in mathematics are required to take additional courses in consultation with the MAT coordinator in mathematics to be eligible to apply to this program.

Minimum Requirements for Degree

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<td>SEC 593. Philosophical and Theoretical Foundations in the Pedagogy of Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>SEC 594. Curriculum and Teaching in Mathematics</td>
<td>4</td>
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</tbody>
</table>

Subject-Area Courses

12 credits in mathematical sciences courses. Courses are selected in consultation with the MAT advisor in the Department of Teaching, Learning and Educational Leadership.
Supervised Student Teaching  Credits

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Students must complete a portfolio associated with SEC 594.

**Physics Adolescence Education, Grades 7-12**

Applicants must have a solid core of undergraduate physics and related sci-tech/engineering and mathematics courses that, at a minimum, include 12 credits of introductory physics (including four credits of modern physics), 16 credits of calculus (including differential equations), 10 credits of sci-tech courses (computers, electronics, etc.) and four credits of introductory chemistry or a physical science. The applicant's undergraduate work must be acceptable to the Physics, Applied Physics and Astronomy Department in Harpur College, as well as to the Department of Teaching, Learning and Educational Leadership. Students without appropriate preparation in physics (and related areas) are required to take additional courses in consultation with the graduate director in physics to be eligible to apply to this program.

**Minimum Requirements for Degree**

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</table>

**Subject-Area Courses**

The MAT-physics advisory/guidance committee examines each student's credentials and determines the most appropriate course of study in light of the student's background. The total minimum requirement is 12 credits of graduate-level physics.

Applicants with less than a bachelor's degree in physics may need to take additional coursework in graduate physics.

Undergraduate courses that are not already co-listed as graduate courses may be taken as a part of graduate independent studies (PHYS 581 A-X). Additional projects under the direct supervision of a physics faculty project supervisor focus on translating the course content into experiments, demonstrations and/or lesson plans appropriate for Grades 7-12 physical science/physics classes or teacher workshops.

Supervised Student Teaching  Credits

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Students must complete a portfolio associated with SEC 594.
Romance Languages Adolescence Education (French or Spanish), Grades 7-12

Applicants should have an undergraduate major in either French or Spanish. The applicant’s undergraduate work must be acceptable to the Romance Languages Department in Harpur College, as well as to the Department of Teaching, Learning and Educational Leadership. Students without appropriate undergraduate preparation are required to take additional intermediate and upper-level courses to be eligible to apply to this program.

Minimum Requirements for Degree

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<td>SEC 593. Philosophical and Theoretical Foundations in the Pedagogy of Romance Language</td>
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</tr>
<tr>
<td>SEC 594. Curriculum and Teaching in French or Spanish</td>
<td>4</td>
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</table>

Subject-Area Courses

12 credits in Romance Language courses

Supervised Student Teaching

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Students must complete a portfolio associated with SEC 594.

Social Studies Adolescence Education, Grades 7-12

Applicants are expected to have an undergraduate degree in the social sciences or a similar program. The major should have included at least 30 credit hours of undergraduate work in one area of concentration (e.g., anthropology, economics, geography, history, political science or sociology) and 30 additional hours in the distribution, i.e., in social sciences other than one’s area of concentration. Students who have not met the above course requirements must take additional undergraduate courses to be eligible to apply to this program. Applicants to the MAT/social studies program whose undergraduate major was history must submit a copy of a research paper, or its equivalent, as part of the application materials.

Minimum Requirements for Degree

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SEC 502. English as a Second Language for Content-Area Teachers 2
SEC 593. Philosophical and Theoretical Foundations in the Pedagogy of Social Studies 4
SEC 594. Curriculum and Teaching in Social Studies 4

Subject-Area Courses

12 credits in social science courses

Supervised Student Teaching

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Students must complete a portfolio associated with SEC 594.

Combined-Degree Option in Mathematics (BA) and Master of Arts in Teaching (MAT)
Mathematics Adolescence Education, Grades 7-12

(128 credits BA and 42 credits MAT)

This program combines the undergraduate program in mathematics (BA), excluding the BA mathematics actuarial science track, and the Master of Arts in Teaching (MAT) program. The combined program provides an opportunity for a limited number of outstanding liberal arts students to graduate in five years with a mathematics BA and an MAT degree. The number of mathematics courses in the combined program is the same as for the BA and MAT done separately. Transfer students from 2- and 4-year colleges are NOT eligible to apply for this accelerated program; only students who began their freshman year at Binghamton University's Harpur College and have at least a minimum GPA of 3.4 (both in their discipline and overall) are eligible.

The following is a sample course sequence for the combined program. Students who are interested in the combined program are advised to meet with the MAT mathematics coordinator in the Department of Teaching, Learning and Educational Leadership and the MAT mathematics advisor in the Mathematical Sciences Department at the beginning of their sophomore year to ensure that all requirements are met in a timely manner and to learn about applying for the MAT component of the program. Additional information about combined-degree programs is also available at http://www.binghamton.edu/grad-school/academic-programs/accelerated-degrees/index.html.

<table>
<thead>
<tr>
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<td>Term</td>
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<tr>
<td>S2</td>
<td>MATH 222</td>
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| S3   | MATH 304    | 4       |
|      | Gen Ed/Harpur Requirement | 4 |
|      | Gen Ed/Harpur Requirement | 4 |
|      | MATH 330    | 4       |

| S4   | MATH 323    | 4       |
|      | Undergraduate Elective | 4 |
|      | Gen Ed/Harpur Requirement | 4 |
|      | Gen Ed/Harpur Requirement | 4 |

| S5   | MATH >330, 3XX, or 4XX. (1st of a pair) | 4 |
|      | MATH >330, 3XX, or 4XX | 4 |
|      | Gen Ed/Harpur Requirement | 4 |
|      | Gen Ed/Harpur Requirement | 4 |

| S6   | MATH >330, 3XX, or 4XX. (2nd of a pair) | 4 |
|      | MATH >330, 3XX, or 4XX | 4 |
|      | Gen Ed/Harpur Requirement | 4 |
|      | Gen Ed/Harpur Requirement | 4 |

| S7   | MATH >330, 3XX or 4XX | 4 |
|      | *MATH 5XX | 4 |
|      | Gen Ed/Harpur Requirement | 4 |
|      | *LTRC 519 | 4 |
NOTE: The starred courses are counted in the undergraduate degree requirements and GPA. As 500-level courses, they are graduate courses and also satisfy the requirements for the MAT degree.

**Combined-Degree Option in BA in French or Spanish and MAT in French or Spanish Adolescence Education (Grades 7-12)**

(128 credits BA and 42 credits MAT)

The combined program provides an opportunity for a limited number of outstanding liberal arts students to graduate in five years with a BA and an MAT degree. To be eligible for the combined program, a student must have entered Binghamton University at the beginning of their freshman year and completed the ensuing five semesters at Binghamton University with a cumulative grade point average of 3.4 or better in his/her major discipline and overall. (Transfer students are not eligible for the combined program, but may apply to the MAT program.)

The following is a sample course sequence for the combined program. Students who are interested in the combined program are advised to meet with the MAT romance languages coordinator in the Department of Teaching, Learning and Educational Leadership and the romance languages advisor in Harpur College at the beginning of their sophomore year to ensure that all requirements are met in a timely manner and to learn about applying for the MAT component of the program. Additional information about combined-degree programs is also available at [http://www.binghamton.edu/grad-school/academic-programs/accelerated-degrees/index.html](http://www.binghamton.edu/grad-school/academic-programs/accelerated-degrees/index.html).

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150 Credits
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<th>Course Code 2</th>
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<td>FREN 3xx</td>
<td>SPAN 344</td>
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<td>S5</td>
<td>FREN 361 or 362</td>
<td>SPAN 360 or 370</td>
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<td>FREN 481x</td>
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<td></td>
<td>FREN 445</td>
<td>SPAN 4xx</td>
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<td>FREN 451</td>
<td>SPAN 4xx</td>
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<tr>
<td>S8</td>
<td>FREN 481x</td>
<td>SPAN 4xx</td>
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<tr>
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<td>FREN 4xx</td>
<td>SPAN 4xx</td>
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</table>

(Up to here fulfills requirements for graduation with the BA in French 126 credits)

<table>
<thead>
<tr>
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<th>SEC 590/591</th>
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<table>
<thead>
<tr>
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<tr>
<td></td>
<td>FREN 5XX</td>
<td>SPAN 5XX</td>
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</tr>
</tbody>
</table>

150 credits

**Combined-Degree Options in Science: BA/MAT and BS/MAT**

The special combined 3/2 BA/MAT (biology, chemistry, earth science and physics) and 3/2 BS (earth science only)/MAT programs accommodate the needs of a select group of Harpur College students who wish to efficiently combine an undergraduate science degree with a graduate level teacher certification program. **Transfer students from 2- and 4-year colleges are NOT eligible to apply for this accelerated program; only students who began their freshman year at Binghamton University’s Harpur College and have a minimum GPA of 3.4 (both in their discipline and overall) are eligible.** Students should declare their interest in this option as soon as possible to insure proper undergraduate course selection. This combined program includes the entire current Harpur science BA (or BS) degree program and the current NYSED registered MAT (biology, chemistry, earth science and physics) programs. Eighteen (18) credits of graduate education coursework is counted in the undergraduate degree requirements and GPA, and also considered in the awarding of the MAT (courses occur during the students’ fourth year of study). The combined program saves the student one semester of time relative to the separate, sequentially taken BA/BS and MAT degrees. Additional information about combined-degree programs is also available at [http://www.binghamton.edu/grad-school/academic-programs/accelerated-degrees/index.html](http://www.binghamton.edu/grad-school/academic-programs/accelerated-degrees/index.html).

What follows are sample course sequences from each of these combined-degree programs.

**Combined-Degree Option in Biology (BA) and Master of Arts in Teaching (MAT) Biology**
## Adolescence Education, Grades 7-12

(126 BA and 40 MAT credits)

<table>
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<th>Semester</th>
<th>Course</th>
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<td>CHEM 107</td>
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<td>S2</td>
<td>BIOL 118 or BIOL 117</td>
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<tr>
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<td>CHEM 108</td>
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<tr>
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<td>MATH 147</td>
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<td>S4</td>
<td>BIOL 301 or 311</td>
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<td>CHEM 332</td>
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<td>S5</td>
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<tr>
<td>S6</td>
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Up to here fulfills requirements for graduation with the BA in biology: 126 credits

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<td>BIOL 5XX</td>
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Total number of credits for combined degree: 152 credits

(vs. 126 + 42 = 168 credits for the separate BA + MAT)

**Combined-Degree Option in Chemistry (BA) and Master of Arts in Teaching (MAT) Chemistry Adolescence Education, Grades 7-12**

(126 BA and 40 MAT credits)

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<td>PHYS 121/131</td>
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**S10**

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**= 154 credits**

**Combined-Degree Option in Geological Sciences (BA) and Master of Arts in Teaching (MAT) in Earth Science Adolescence Education, Grades 7-12**

(126 BS and 42 MAT credits)

**S1**

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**S2**

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<td>S3</td>
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Combined-Degree Option in Geological Sciences (BS) and Master of Arts in Teaching (MAT) in Earth Science Adolescence Education, Grades 7-12

(126 BA and 42 MAT credits)

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= 152 credits
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Combined-Degree Option in Physics (BA) and Master of Arts in Teaching (MAT) in Physics Adolescence Education, Grades 7-12

(126 BA and 42 MAT credits)

<table>
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S7

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S8

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<td>SEC 393D</td>
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<td>Undergrad elective</td>
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Up to here fulfills requirements for graduation with the BA in physics, including 18 credits of graduate education coursework that are counted in the undergraduate degree requirements and GPA, and (as 500-level graduate courses) satisfy the requirements for the MAT degree.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SEC 590/591</td>
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S10

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<tr>
<td>PHYS 5XX</td>
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<td>PHYS 5XXf</td>
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**Master of Science in Education (MSEd)**

**Adolescence Education**

For students who already hold certification in biology, chemistry, Earth science, English, French, mathematics, physics, social studies or Spanish, this program combines advanced study and practice in both an academic area and in professional education, enhancing the teaching and leadership abilities of secondary school educators. Completion of this degree and other requirements leads to professional certification in New York State as a teacher in grades 7-12 in one of the above areas. See [www.highered.nysed.gov/tcert](http://www.highered.nysed.gov/tcert) for information about teacher certification regulations.
Students must complete the degree within five years of matriculating in the program and must earn a cumulative average of B or better in order to graduate.

Minimum Requirements for Degree

This program requires a minimum of 36 credit hours. All courses must be selected with the advice and approval of the student's faculty advisor, based on the student's strengths, academic background and professional experience.

Required Courses

24-28 required credits consisting of:

- 8 to 12 credits in arts and sciences;
- 12 credits in discipline-specific pedagogy that will typically include SEC 593, Philosophical and Theoretical Foundations in the Pedagogy (of the discipline), SEC 594, Curriculum and Teaching (in the discipline), and SEC 592, Final Integrative Study;
- 4 credits in a research/assessment course (e.g., EDUC 541, Applied Research Techniques, or an alternative approved by the advisor).

Elective Courses

8 to 12 credits

These elective courses are typically education courses drawn from the categories of psychology and cultural foundations, literacy and learning, special education and research/assessment. They may also include additional coursework in the discipline as deemed necessary by the advisor.

Childhood & Early Childhood Education, Grades B-6, Pre-Service Program

Binghamton University’s pre-service program in Childhood and Early Childhood Education is an innovative master’s degree program that leads to multiple New York State teaching certifications, allowing graduates to work with children from birth through grade six in a number of different roles. During this two-year, full-time program, students take a range of courses and work with children in several different fieldwork and student teaching placements. These experiences will offer opportunities to make connections between theory and practice and to develop the knowledge, skills and dispositions necessary to help all students be successful in school. Under the guidance of top-tier professors and highly-qualified teachers in partnership schools and early childhood programs, students become teachers with clearly-defined commitments as well as the ability to make a real difference in the lives of children and their families.

In order to prepare students to understand and respond to children’s diverse needs and abilities, there are two pathways toward the master's degree:

1) Childhood, early childhood and literacy.

2) Childhood, early childhood and special education.

Both pathways involve intensive, rigorous coursework and field experiences (including summer and winter sessions) among a small cohort of graduate students. Close faculty-student relationships and meaningful friendships develop among students, and between students and their mentor teachers. A strength of this program is faculty who work closely together with the same goal in mind: to collaborate to prepare highly-qualified teachers who maximize
educational opportunities for all children by providing engaging learning experiences that are challenging and relevant to their lives.

Students are eligible to apply to this pre-service program if they have completed a bachelor’s degree in the liberal arts with a GPA of 3.0 or higher. Please be aware that New York state requires certain course concentrations to be completed prior to beginning this master’s program. For information, please visit http://www2.binghamton.edu/gse/teacher-education/pre-service/msed-child-early.html for contact details or phone 607-777-5322) as soon as possible for a transcript review to determine if there are outstanding prerequisites. For complete details about application procedures, please refer to http://www2.binghamton.edu/gse/teacher-education/apply.html.

Please see http://www2.binghamton.edu/gse/teacher-education/pre-service/msed-child-early.html for information about this program and its requirements.

**Literacy Education**

The programs in literacy education provide academic study and supervised field experiences at the elementary or secondary school levels for students already holding certification in elementary education, childhood education, special education, speech/language or a grade 7-12 academic subject. Individuals are prepared to assume leadership roles as competent and qualified literacy teachers, specialists and consultants. The completion of this degree and other requirements leads to New York State Certification as a Literacy Teacher. See www.highered.nysed.gov/tcert for information about teacher certification regulations.

Students must complete the degree within five years of matriculating in the program and must earn a cumulative average of B or better to graduate.

**Literacy Education, Birth-Grade 6**

**Minimum Requirements for Degree**

This program requires a minimum of 36 credit hours. For students who have completed some program requirements prior to matriculation, other appropriate courses may be taken as electives with the advisor's approval.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SPED 501. Introduction to Special Education</td>
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<tr>
<td>LTRC 506. Early Language and Emergent Literacy</td>
<td>4</td>
</tr>
<tr>
<td>LTRC 513. Language and Literacy Instruction for English Language Learners in K-12 Classroom</td>
<td>4</td>
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<tr>
<td>LTRC 515. Current Research, Theory, and Practices in Literacy Instruction</td>
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<tr>
<td>LTRC 516. Writing Instruction and Literacy for the Content Areas</td>
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<tr>
<td>LTRC 517. Culturally Diverse Literature for Children and Adolescents</td>
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<tr>
<td>LTRC 518. Literacy Assessment and Teaching (prerequisite: LTRC 515)</td>
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<td>EDUC 541. Applied Research Techniques</td>
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Supervised Practicum

<table>
<thead>
<tr>
<th>Course Description</th>
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<tbody>
<tr>
<td>LTRC 592. Practicum and Seminar in Literacy Leadership</td>
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</table>

Students concurrently complete a position paper that includes a literature review and a research component.

Literacy Education, Grades 5-12

Minimum Requirements for Degree

This program requires a minimum of 36 credit hours. For students who have completed some program requirements prior to matriculation, other appropriate courses may be taken as electives with the advisor's approval.

Required Courses

<table>
<thead>
<tr>
<th>Course Description</th>
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<tbody>
<tr>
<td>LTRC 513. Language and Literacy Instruction for English Language Learners in K-12 Classrooms</td>
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<tr>
<td>LTRC 515. Current Research, Theory, and Practices in Literacy Instruction</td>
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<tr>
<td>LTRC 517. Culturally Diverse Literature for Children and Adolescents</td>
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<tr>
<td>LTRC 518. Literacy Assessment and Teaching (prerequisite: LTRC 515)</td>
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<tr>
<td><strong>OR</strong></td>
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<tr>
<td>LTRC 521. Literacy Assessment and Instruction for Secondary Students (prerequisite: LTRC 515)</td>
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<tr>
<td>LTRC 519. Adolescent Learners and Literacy for the Content Areas</td>
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<tr>
<td>EDUC 530. Adolescent Psychology and Education</td>
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<tr>
<td>EDUC 541. Applied Research Techniques</td>
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<tr>
<td>SPED 500. Special Education for Content Area Teachers</td>
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Supervised Practicum

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>LTRC 592. Practicum and Seminar in Literacy Leadership</td>
<td>4</td>
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</tbody>
</table>

Students concurrently complete a position paper that includes a literature review and a research component.

Additional Certification in Literacy

Note: Students must apply for the additional certification on their own via NYSED individual transcript review.

The Department of Teaching, Learning and Educational Leadership offers two options:

Program 1 - Additional Certification in Literacy (for those holding certification in ELED, SPED or SECED)

This 20-credit/(5-course) option enables graduates of education programs who hold certification in ELED, SPED or SECED to seek literacy certification (either B-6 or 5-12 depending on grade levels of the initial certification). Upon completion, students must apply for the additional certification on their own through NYSED.
To seek a certification in literacy (in addition to certification in ELED, SPED or SECED):

Apply as a non-matriculated student to the Graduate School (fee $50). You will take courses as a non-matriculated student.
Send a letter of application for the "Program 1 - Additional Certification in Literacy for Those Holding an Initial Cert. in ELED, SPED or SECED" to the Graduate School of Education.
Include a copy of your certification.
When accepted, you will be assigned an advisor who will review your transcript and help plan your coursework and practicum experience.

Program 2 - Additional Certification in Literacy - (ONLY for Binghamton University literacy program graduates already holding a literacy certification)

This 10-credit option enables Binghamton University literacy program graduates to seek certification in an additional grade concentration. Graduates must apply and be admitted to the Additional Certification in Literacy Program (B-6 or 5-12). Upon completion, students must apply for the additional certification on their own through NYSED.

To seek an additional certification in literacy (ONLY for Binghamton University literacy program graduates already holding a literacy certification):

Apply as a non-matriculated student to the Graduate School (fee $50). You will take courses as a non-matriculated student.
Send a letter of application for the "Program 2 - Additional Certification in Literacy (B-6 or 5-12)" to the Department of Teaching, Learning and Educational Leadership.
Include a copy of your certification.
Include a copy of your current literacy certification and the date you received your MSEd from Binghamton.
When accepted, you will be assigned an advisor who will meet with you and oversee the practicum and coursework.

Students currently certified in B-6 literacy who seek 5-12 literacy certification will take:
LTRC 519. Adolescent Learners and Literacy for the Content Areas (4 cr.)
EDUC 530. Adolescent Psychology in Education (4 cr.)
LTRC 593. Practicum in Literacy Leadership (2 cr.)

Students currently certified in 5-12 literacy who seek B-6 literacy certification will take:
LTRC 513. Language and Literacy Instruction for English Language Learners in K-12 Classrooms (4 cr.)
LTRC 516. Writing Instruction and Literacy for the Content Areas (4 cr.)
LTRC 593. Practicum in Literacy Leadership (2 cr.)

Students must identify a cooperating teacher and make their own arrangements to complete a 50-hour practicum (LTRC 593 - 2 cr.). This can be in a regular public school-based setting, a summer school setting, or an academic school-based extended-day program. The student must secure a practicum supervisor from among Binghamton literacy program faculty, and this supervisor must approve the site for the practicum. Students are strongly encouraged to complete a practicum that is separated from current teaching grade placement by two or more grade levels (i.e., a 5th grade teacher with B-6 cert. who seeks 5-12 cert. is encouraged to seek a practicum at upper middle or high school level).

Requirements for the 50-hour practicum include:

* Complete and document a subset of competencies based on the IRA Standards for Reading Professionals (attached)
* Keep a record of dates and time spent in the 50-hour practicum setting
* Obtain the cooperating teacher's written evaluation of practicum teaching
* Maintain a reflective journal related to practicum work and complete a self-assessment at the conclusion of the practicum
* Meet with Binghamton University supervisor to submit above materials and receive a grade.

**Special Education**

This program provides teachers with initial certification the knowledge and skills to fulfill various special educator roles in today’s schools and communities. Sufficient flexibility exists for graduates of early childhood, childhood, adolescence or special education undergraduate programs to deepen their skills in the field, link special education programs and services to the broader context of general education, and extend their knowledge and skills to work more effectively with students with disabilities.

Four program options are available, corresponding with the age/grade level of the applicant's initial certificate:

- Early Childhood Special Education - Birth to Grade 2 - (requires initial certification in Early Childhood Education)
- Early Childhood and Childhood Special Education - Birth to Grade 6 - (requires initial certification in Early Childhood and Childhood Education)
- Childhood Special Education - Grades 1 to 6 - (requires initial certification in Childhood Education)
- Adolescence Special Education - Grades 7 to 12 - **(requires initial certification in a Secondary Content Area)

**Special Education, Early Childhood (Birth to Grade 2) AND Early Childhood and Childhood (Birth to Grade 6)**

**Minimum Requirements for Degree**

This program requires a minimum of 36 credit hours. This program is for students who have initial certification to teach grades birth to grade 2, or birth to grade 2 AND grades 1-6.

**Prerequisite**

SPED 501. Introduction to Special Education (or equivalent)

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<td>SPED 504. Developing Programs for Young Children with Disabilities</td>
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<tr>
<td>SPED 506. Early Language and Emergent Literacy</td>
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<td>SPED 521. Proactive Approaches to Behavior Management</td>
<td>4</td>
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<td>SPED 522. Collaboration with Families and Staff</td>
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<td>SPED 523. Assessment in Special Education</td>
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<td>SPED 528. Special Education Technology</td>
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<td>SPED 541. Instructional Approaches for Inclusive Elementary Classrooms</td>
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<td>SPED 564. Educating Students with Severe Disabilities in Inclusive Settings</td>
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Supervised Practicum

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<tbody>
<tr>
<td>SPED 595. In-Service Practicum and Seminar in Special Education</td>
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Students concurrently complete a Capstone Intervention Project during the last semester of enrollment.

**Special Education, Childhood (Grades 1 to 6)**

**Minimum Requirements for Degree**

This program requires a minimum of 36 credit hours. This program is for students who have initial certification to teach grades 1-6.

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 501. Introduction to Special Education (or equivalent)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 521. Proactive Approaches to Behavior Management</td>
<td>4</td>
</tr>
<tr>
<td>SPED 522. Collaboration with Families and Staff</td>
<td>4</td>
</tr>
<tr>
<td>SPED 523. Assessment in Special Education</td>
<td>4</td>
</tr>
<tr>
<td>SPED 528. Special Education Technology</td>
<td>4</td>
</tr>
<tr>
<td>SPED 541. Instructional Approaches for Inclusive Elementary Classrooms</td>
<td>4</td>
</tr>
<tr>
<td>SPED 564. Educating Students with Severe Disabilities in Inclusive Settings</td>
<td>4</td>
</tr>
</tbody>
</table>

**Elective Courses**

Students take at least two electives (eight credits), selected in consultation with their advisor.

<table>
<thead>
<tr>
<th>Supervised Practicum</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 595. In-Service Practicum and Seminar in Special Education</td>
<td>4</td>
</tr>
</tbody>
</table>

Students concurrently complete a Capstone Intervention Project during the last semester of enrollment.

**Special Education, Adolescence (Grades 7 to 12)**

**Minimum Requirements for Degree**

This program requires a minimum of 36 credit hours. This program is for students who already have certification to teach in grades 7-12.

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 500. Foundations of Special Education for Content Area Teachers (or equivalent)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Required Courses**
Elective Courses

Students must take at least two electives (eight credits) in consultation with their advisor.

<table>
<thead>
<tr>
<th>Supervised Practicum</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 595. In-Service Practicum and Seminar in Special Education</td>
<td>4</td>
</tr>
</tbody>
</table>

Students concurrently complete a Capstone Intervention Project during the last semester of enrollment.

TESOL Education (MA and MSEd, Grades Pre K-12)

The TESOL program offers the Master of Arts (MA) and the Master of Science in Education (MSEd) degrees.

The MA TESOL enables graduates to teach in English as a Second/Foreign Language (ESL/EFL) programs on college campuses or in other English programs across the globe. This track is also suitable for international students who wish to be involved in English education around the world, such as ESL programs in higher education or other intensive English programs. Note: The MA in TESOL does not lead to New York State teacher certification.

The MSEd TESOL is designed for those already possessing (or about to possess) New York State teacher certification and who are looking to teach English as a New Language (ENL) in pre K-12 settings.

Students will be immersed in multi-layered theoretical and practical approaches to teaching English as a second language, from language acquisition and literacy development to effective ESL pedagogies and history about ELLs (English Language Learners). Students taking classes full-time will complete this program in just three semesters, with their studies culminating in either a capstone project or master’s thesis.

TESOL Courses (32 Credits)

The following is a list of courses students may take while pursuing a TESOL degree.

NOTE: Students must possess 12 credits of college foreign language to be eligible for either the MA or MSEd in TESOL.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 504</td>
<td>Foundations of Bilingual &amp; Multilingual Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 529</td>
<td>Grammar for English Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 580D</td>
<td>Special Topics in TESOL</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 581</td>
<td>Linguistics for Teachers of ELLS</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>EDUC 583</td>
<td>Second Language Acquisition</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDUC 584</td>
<td>Curriculum, Methods, and Assessment for ELLS</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDUC 585</td>
<td>Global Contexts for TESOL, Sociolinguistic Approaches</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDUC 587</td>
<td>L2 Reading, Writing, &amp; Technology</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDUC 588</td>
<td>Content-based ESL Curriculum and Instruction</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDUC 595</td>
<td>TESOL Capstone Project or Thesis</td>
<td>3 credits</td>
</tr>
<tr>
<td>LTRC 518</td>
<td>Language &amp; Literacy Assessment &amp; Teaching</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

**Supervised Practicum**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 591</td>
<td>Practicum in TESOL</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Students concurrently complete a position paper that includes a survey of the literature and an action research component.

**Master of Science (MS) in Educational Studies**

This program is designed for those interested in the general study of education. It serves three types of people:

1. Teachers interested in obtaining a master's degree in education, but who work in a subject area other than the certification areas offered by Binghamton's Department of Teaching, Learning and Educational Leadership (i.e., other than childhood & early childhood education, special education, literacy, or adolescence education in English, foreign language, mathematics, science or social studies).

2. Professionals working in schools in non-teaching positions or those in community colleges, human service agencies, or other settings dealing with students or schools, who would benefit from a greater understanding of educational foundations.

3. Teachers and educators from other countries who desire graduate study in the field of education, but who are not interested in teacher certification.

**Program Requirements**

The program consists of 36 credits, with a minimum of 24 credits taken in the Graduate School of Education. The student must take at least 4 credits in each of three educational areas: foundations of education, teaching and learning and research. The following lists are representative examples of courses in each area.

**Foundations**

EDUC 501. Crucial Issues in Education

EDUC 504. Multiculturalism and the Practice of Schooling

EDUC 530. Adolescent Psychology and Education

ELED 502. Child Growth and Development

**Teaching and Learning**
Research

LTRC 515. Current Research, Theory, and Practices in Literacy Instruction
EDUC 541. Applied Research Techniques

These examples are illustrative, not exhaustive. Other courses would be appropriate as determined by the student's advisor.

In addition to the coursework, a final culminating research-based master's paper or project is required for this degree. This would involve a formal research paper on a major educational issue or a research report of a field-based study (15-20 pages).

Alternatively, if the student is teaching, this could involve presenting a reflective portfolio of teaching and curricular materials, including a review of relevant research.

The student's paper supervisor in consultation with the student will determine the focus and scope of the paper or project. (The paper supervisor should be a Department of Teaching, Learning and Educational Leadership faculty member familiar with or interested in the student's research or curricular area; the supervisor is not necessarily the student's program advisor.)

Certificate of Advanced Studies (CAS) in Educational Leadership

The Certificate of Advanced Studies (CAS) prepares prospective educational leaders to serve in PreK-12 schools and school districts. The program is designed for part-time, post-master's students who work full time as teachers or other kinds of educational professionals in elementary and secondary schools. Successful completion of CAS coursework and other requirements will permit Binghamton University to recommend qualified students to the State Education Department for either or both NYS administrative certifications: School Building Leader (SBL-Initial), and/or School District Leader (SDL-Professional). CAS graduates may pursue future employment as staff developers, curriculum coordinators, program directors, assistant principals, principals, assistant superintendents, superintendents or other PreK-12 educational leaders and administrators.

Potential applicants are encouraged to explore the Department of Teaching, Learning and Educational Leadership website for other essential information about admissions, program requirements, internships, personal plans, NYS standards for school leaders and frequently asked questions about the Educational Leadership CAS. Please note that Reference Forms, Personal Statements, Resume, and several other CAS admissions requirements differ from those of the generic graduate application for Binghamton University.

Admission to the CAS in Educational Leadership

There are both University and program-specific requirements for CAS applications. Completed applications are welcome anytime.

To be considered for admission to the CAS program, you need:

- A baccalaureate from an accredited institution of higher education or from an institution authorized by the NYS Board of Regents to confer degrees;
- A master's degree of at least 30 graduate credit-hours in a teaching, or closely related field;
• A minimum of **three years paid, full-time classroom teaching** and/or pupil personnel service in PreK-12 public or non-public schools; and

• A copy of your **permanent** or **professional** certification in classroom teaching or pupil personnel service.

Additional admission requirements particular to the educational leadership program include:

• A **personal statement** that focuses on (a) your prior leadership experiences; (b) any special skills or contributions to the field of education; (c) why you wish to pursue administrative leadership certification at this time in your career; and (d) your leadership goals for the future. (Please note that these required foci differ from the generic Graduate School instructions. Also note that this is an important part of your application. Be as specific as possible, including examples where appropriate. Aim for 3-4 type-written, double-spaced pages);

• Two completed **CAS Reference Forms** from supervisors, school, or district administrators who know your work and can assess your accomplishments and leadership potential. (These forms are unique to the Educational Leadership CAS and are required instead of general letters of recommendation); and

• A **résumé** that includes complete professional employment history, with dates and locations.

• **Graduate Record Examination** (General Test only) sent to code 2535. Take the GRE in time for an official score report to be received by the application deadline. Graduate Record Examination (General Test only) sent to code 2535. Take the GRE in time for an official score report to be received by the application deadline.

You are also required to follow the University's established graduate admissions procedures (see http://www.binghamton.edu/grad-school/), including:

• Completed **application Forms**

• Application **fees**

• Official **transcripts**

**Minimum Requirements for the CAS**

The CAS is an eight-course, 32 credit-hour program of study, beyond a completed master's degree of at least 30 credit-hours in a teaching or closely related field. The 32 CAS credit-hours consist of seven (7) required courses and one (1) elective. One of the required courses is an internship, accompanied by a seminar. Electives are selected in consultation with the faculty advisor, and may be taken in relevant graduate programs across campus.

The CAS also requires students to pass the NYS School District Assessment and to develop a Personal Plan for Self-Improvement and Continuous Learning, consistent with current NYS standards. The Personal Plan is updated, refined and discussed with the faculty advisor at three defined checkpoints during the program of study.

Required courses are:

• **EDUC 606. Curriculum Leadership**

• **EDUC 608. School Finance and Business Operations**

• **EDUC 609. Assessment for Student Learning and School Improvement**

• **EDUC 672. Processes of Supervision and Staff Development**

• **EDUC 673. Leadership in Educational Settings**

• **EDUC 675. Planning and Policy Development in Education**

• **EDUC 692. Internship**
Doctorate of Education (EdD) in Educational Theory and Practice

The Doctorate of Education (EdD) in Educational Theory and Practice program integrates theory, knowledge, research and practice to increase understanding of and improve teaching and learning within the broader institutional, social, organizational and political context of early childhood, elementary, secondary and postsecondary educational settings and related fields.

Four major themes guide this program for advanced study:

- Reflective professional practice (critical analysis of actions, goals and ethics)
- Educational Theory
- Diversity and Social Justice
- Research Methodologies

This program admits only a small number of students each year, thus providing the opportunity for close relations not only among students but also between students and faculty.

The program emphasizes a “broadening” experience, where students gain breadth and depth through the required core and research courses, careful planning of electives, and learning alongside a cohort of students with diverse backgrounds and experiences. The intent is to foster constructive and insightful discourse across professional areas and research interests.

The doctoral program is designed with both collective and individualized elements. All students will take core courses that emphasize theories and research methods used in addressing meaningful educational and social issues. These courses have both applied and theoretical contributions for addressing complex and multilayered problems. In these classes, students will be encouraged to refine their own research questions through the integration of theories and methods across disciplines and professional fields.

At the same time, the program encourages specialized and focused study within this broadened perspective. Assignments for core courses, a flexible electives requirement, independent study, graduate assistantships (for full-time students) and dissertation research all provide opportunities to address more specialized scholarly interests.

Admission

The Department of Teaching, Learning and Educational Leadership EdD program enrolls students who will benefit from rigorous doctoral studies in educational theory and practice. At a minimum, applicants are expected to have at least three years of experience in a school or related setting and a master's degree in education or related field.

Students are admitted to the program once per year. Competitive funding packages including tuition, annual stipend and comprehensive health insurance are available for highly qualified candidates who intend to study full time. Applications received by February 1 will be given full consideration for admission and funding. Applications received after this date will be given equal consideration, but support can only be given to the extent funds are available.

All applicants are strongly encouraged to reach out to two to three Department of Teaching, Learning and Educational Leadership faculty members (note all tenure-line faculty in the Department of Teaching, Learning and Educational Leadership can serve as advisors) who have similar research interests and who could serve as potential advisors prior to submitting an application.
Applicants to the EdD Program are requested to submit the following materials:

- The Graduate School **Online Application** and **Application Fee**

- **Official transcripts** of all undergraduate and graduate-level coursework

- **Personal statement** – a well-substantiated written statement of approximately four to five pages, double-spaced, that describes: (a) the applicant's training and professional background; (b) research interests including specific fields of inquiry; (c) two or three faculty members in the Graduate School of Education who could be potential advisors and why; (d) career goals related to pursing a doctoral degree

- **Writing sample** - a critical analysis (four to five pages), with reference citations, of an educational issue of national importance

- **Curriculum vitae or resume**

- **Letters of recommendation** – At least two letters of recommendation from individuals familiar with the applicant's ability to assume the responsibilities of rigorous academic study at the doctoral level

- **Official Graduate Record Examination scores** (General Test only)

- **Interview** – In some cases, applicants will be asked to come to campus for an interview with the program coordinators. All applicants can request such an interview.

Completed applications for admission to the doctoral program must follow the guidelines outlined by the Graduate School. Additional application materials required for international students can be found on the Graduate School webpage. Applicants are typically notified in writing of final admissions decisions in March.

**Degree Requirements**

The coursework requirements for the EdD program include seven mandatory core courses and five electives, for a minimum of 48 credit hours; a B average must be maintained. Efforts to build greater flexibility and opportunities for specialization into the research sequence are ongoing. Additional coursework (beyond 48 credits) may be determined in consultation with and the approval of the student's program advisor.

<table>
<thead>
<tr>
<th>Education Core Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 601. Contemporary Philosophical and Social Issues in Education</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 602. Curriculum Theories, Designs and Evaluation</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 603. Theories of Learning and Instructional Design</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 604. Integrative Doctoral Seminar on Reflective Practice</td>
<td>4</td>
</tr>
</tbody>
</table>
Research Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 620. The Research Process in Education</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 621. Seminar on Quantitative Research</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 622. Seminar on Qualitative Research</td>
<td>4</td>
</tr>
</tbody>
</table>

**Elective Courses**

Students are required to complete a minimum of 20 credits of elective courses. In consultation with the student's advisor, these requirements may be fulfilled by any combination in the Department of Teaching, Learning and Educational Leadership (at the doctoral level, i.e., courses numbered 600 and above) and/or in other departments at the University (at the graduate level, i.e., courses numbered 500 and above). Courses from other academic units numbered 500-599 are not acceptable if they are cross-listed with Education.

Comprehensive Examination: Portfolio and Oral Review

The comprehensive examination for the EdD program includes a portfolio of work and an oral review. The main purpose is to assess a student's knowledge of educational theory and practice and ability to undertake advanced-level dissertation work. While traditional comprehensive examinations (take-home or sit-down examinations) have their strengths, Department of Teaching, Learning and Educational Leadership believes that its approach is more in keeping with the needs of reflective practitioners and will provide the opportunity for an enhanced learning experience for the student.

Dissertation

Upon admission to candidacy for a doctoral degree (after successful completion of all coursework and passing the comprehensive examination), the student chooses a dissertation committee consisting of three faculty members.

A student's doctoral dissertation must represent original and significant scholarly inquiry. The student arranges to meet regularly with her or his dissertation advisor and dissertation committee during the process of researching and writing the dissertation.

On the approval of the dissertation by its readers, the candidate is expected to defend it in an oral examination.

Residency Requirement

Currently there is no requirement that students enroll full time for any part of the program, although they are strongly encouraged to do so. Several fellowships and graduate assistantships are available each year to full-time students.

**Decker School of Nursing**

Undergraduate Programs

The Decker School of Nursing (DSN) is registered by the New York State Education Department and is accredited by the Commission on Collegiate Nursing Education (CCNE). The Decker School is a member of the American Association of Colleges of Nursing (AACN).
Decker School of Nursing undergraduate programs lead to the Bachelor of Science degree with the major in nursing. These programs prepare graduates to provide high-quality health care in complex environments, foster commitment to lifelong learning and the moral and ethical values of nursing, and promote social responsibility through community service.

Upon pre-licensure program completion, graduates are eligible to take the national licensure examination National Council Licensure Examination for Registered Nurses (NCLEX-RN) to become licensed. Graduates are prepared for beginning professional practice in a variety of settings, such as hospital, community health and long-term care agencies. The programs also provide the foundation for continuing education at the graduate level.

Program Options

Students may be admitted to the DSON as a freshman or transfer student. Freshmen complete all prerequisite and most General Education coursework before beginning upper-division nursing courses. Degree requirements are completed in a traditional four-year time frame. Transfer students complete all prerequisite and some or all of the General Education requirements at other colleges or universities and may enter the program with one or more years of college, prior preparation in nursing (LPNs and RNs), or as second-degree students.

Special program options are available as follows:

- An accelerated baccalaureate track program is available to students admitted to the DSON who have earned a baccalaureate or higher degree in another field and who are interested in a career change to professional nursing. Candidates for the program must have completed all prerequisite courses to the nursing major and be able to study full time for one calendar year. Admission to the program is selective, requiring a minimum cumulative grade-point average of 3.0 in prior academic work and in courses prerequisite to the nursing major to be considered for the program.
- An RN accelerated track program is available to registered nurse students. Students who have practice experience as a registered nurse, who have completed all courses prerequisite to the nursing major, the majority of the General Education requirements and a significant number of elective credits are eligible for consideration. Registered nurses with a degree in another field or who have taken a significant number of courses in other colleges are eligible. Candidates for the program must have a cumulative grade-point average of 3.0 in prior academic work, including courses prerequisite to the nursing major.
- A part-time study option is available for students wishing to extend the upper-division nursing coursework beyond the traditional four semesters. A program plan is developed for the student in consultation with a faculty advisor.

Course sequencing for students in part-time or accelerated programs may differ from the sample curriculum plan.

Admission

The procedure for candidates applying for admission is the same as for other students applying for admission to Binghamton University. Specific information may be found in the general section on Admissions in this publication.

Students admitted into another undergraduate school at Binghamton University may apply for admission to the DSON at the sophomore or junior level.

Admitted students eligible for one of the accelerated programs must apply in writing to the DSON in order to be considered for the specific program.

Transfer Student Admission
The University holds general articulation agreements with a significant number of community colleges within the SUNY system. Information about specific transfer mechanisms between programs may be found at the transfer counseling office of the community college or at DSON.

The Decker School of Nursing has no limit on the number of transfer credits allowed, given that coursework is completed with a grade of C– or better.

Transfer credits requirements for the RN to BS program include 20 credits of nursing coursework to meet upper division nursing course requirements for students that are licensed graduates of associate degree programs in nursing. An additional 32 credits of nursing coursework is required and must be completed at Binghamton University in order to meet degree requirements for RN to BS students. The remaining credits required for the degree will be made up of General Education courses, prerequisite courses, and general elective courses to total 126 credits. RNs with diplomas earned from hospital schools of nursing complete prerequisites, General Education courses, and general electives towards the degree. Diploma RNs are required to earn 24 nursing credits by passing three Excelsior College Examinations with scores of C– or better: Adult Nursing, Mental Health Nursing, and Maternal Child Nursing.

Note: Transfer of credit by exam is limited to 32 credits.

The Decker School of Nursing has developed policies and procedures by which students with baccalaureate nursing credit from another program may transfer some portion of that credit to meet nursing course requirements at Binghamton University. Information about specific transfer credit mechanisms is available at the DSON.

Readmission

In accordance with University policy, DSON students who withdraw from all classes during a semester may register for the following semester without applying for readmission. Upon their return, these students will continue to follow the DSON program in the University Bulletin in effect at the time of their matriculation to the University.

Students who apply for readmission to the Decker School of Nursing after withdrawal from Binghamton University for a minimum of two semesters must submit an Application for Readmission to the Undergraduate Admissions Office. Decisions regarding readmission are based upon:

- academic standing of a minimum cumulative GPA of 2.0 at the time of withdrawal;
- required personal interview with the director of student services or the director of undergraduate programs;
- review of college transcripts for all colleges/universities attended since withdrawal;
- review of student's personal statement, including the reason for seeking readmission, description of career goals and employment history; and
- review of student's assessed potential for success.

Students who meet these criteria for readmission may be readmitted to complete the DSON program detailed in the University Bulletin at the time of the readmission, if the student has been absent two or more semesters (not including summers) before returning. Students readmitted prior to advance registration for that semester are permitted to advance register for courses.

Academic Policies

Students in the Decker School of Nursing are subject to all general regulations listed in the Academic Policies section of this publication. A complete description of all policies pertaining to undergraduate nursing students is contained in the Decker School of Nursing Undergraduate Programs Student Handbook.
Advanced Placement Credit

Advanced placement examinations with a score of 3 or better are approved for credit. Specific information is available in the University Bulletin.

Completion and Transfer of Prerequisite Course Credit

A. Policy for transfer of nursing prerequisite courses for junior-level Traditional Track nursing students:
   - Official or unofficial transcript(s) for all prerequisite courses must be received by Decker Student Services by noon on Wednesday of the second week of the fall semester. Official transcript(s) must be received before credit can be transferred.
   - If official or unofficial transcript(s) are not received by the deadline specified above, the student will be withdrawn from all nursing classes and given two options of:
     - registering for non-nursing courses;
     - withdrawing from the University; if the student chooses to withdraw, the student must complete the University's withdrawal form and submit it to the Registrar's Office by the add/drop deadline.

B. Policy for transfer of nursing prerequisite courses for Baccalaureate Accelerated Track nursing students:
   - Official or unofficial transcript(s) for all prerequisite courses must be received by Decker Student Services by 5 p.m. on Monday of the final week of summer Term I. Official transcripts must be received before credit can be transferred.
   - If the official or unofficial transcript(s) are not received by the deadline specified above, the student must withdraw from all summer Term II and fall nursing classes, prior to the start of summer Term II. Withdrawal from Summer Session must be processed by the Registrar's Office.

Grading System

Grades in courses offered by the University are normally recorded as follows: A, A–, B+, B, B–, C+, C, C–, D and F.

A grade of C– or higher in nursing courses is required for progression in the nursing curriculum. A grade of D or less in a nursing course will require repeating that course.

A cumulative grade-point average is computed for all courses and the following values are assigned to these letter grades:

A = 4.0
A– = 3.7
B+ = 3.3
B = 3.0
B– = 2.7
C+ = 2.3
C = 2.0
C– = 1.7
D  = 1.0
F  = 0.0

Grades of I (Incomplete), W (Withdrawn) and AU (Audit) may be given. These grades are not included in cumulative totals.

For all non-nursing courses, the following applies:

**General Education and Prerequisite Requirements**

A. *General Education*: Students are encouraged to meet the General Education requirements prior to entering upper-division nursing coursework. A number of the General Education requirements also fulfill prerequisites for the upper-division nursing coursework. (A full description of General Education requirements is found elsewhere in this publication.) All General Education courses that double as nursing curriculum prerequisites must be taken for a letter grade and passed with a C– or better. All other General Education courses must be taken for a letter grade and passed with a D or better, unless the only grade option for a course is Pass/Fail. The General Education requirements of the University apply to all students entering the University who do not hold a baccalaureate or higher degree.

B. *Prerequisites*: The following courses, or their equivalent(s), are required prerequisites for the nursing major. The following prerequisite courses must be completed with a C– or better before starting the upper-division nursing curriculum:

- two composition courses;
- one descriptive statistics course;
- eight science courses, including:
  - one course in introductory biology (waived for students who have successfully completed microbiology and two semesters of human anatomy and physiology at another institution);
  - one course in microbiology;
  - two courses in human anatomy and physiology;
  - two courses in general chemistry (including principles of inorganic, organic and biochemistry);
  - one course in introductory psychology; and
  - one course in developmental psychology.

**Exceptions to DSON Prerequisite/Co-requisite Policy for Licensed RNs**

Two exceptions to completion of prerequisite requirements exist for licensed RNs enrolling in non-accelerated program tracks.

1. Statistics may be taken prior to or concurrently with NURS 360 (Socialization II: Nursing Research).
2. Chemistry prerequisites (Chemistry I and Chemistry II) may be taken prior to or concurrently with the respective pathophysiology required courses: NURS 351 (Pathophysiology I) and NURS 361 (Pathophysiology II).

**General Electives**

All additional credits needed to meet the DSON requirement of 126 credits for graduation, exclusive of nursing courses, prerequisites and the General Education requirements, may be taken Pass/Fail. Nursing elective credit
beyond the required two credits may be taken Pass/Fail at the discretion of the instructor. The grading option for all electives must be chosen by the drop deadline.

**Adding/Dropping Courses**

Students requesting to add or drop courses after the add/drop deadline must seek approval of the DSON through the Student Services Office. Grades are recorded according to the established systems of the respective schools of Binghamton University.

**Academic Warning, Probation, Suspension and Dismissal**

Students in the Decker School of Nursing must maintain a cumulative GPA of 2.0. Students whose end-of-semester GPA is below 2.0 or whose cumulative GPA falls below 2.0 will receive one of the following academic actions:

1. **Academic Warning**

   - Students whose GPA at the end of a current semester falls below a 2.0 for that semester, but whose cumulative GPA is 2.0 or higher, will receive a letter of academic warning. The purpose of the academic warning letter is to notify the student that initial academic probation will result if the cumulative GPA falls below 2.0 in the next semester.

   - If a Decker School of Nursing student completes the first semester of freshman year with a GPA of less than 2.0, the student will receive a letter of academic warning rather than being placed on initial academic probation (see 2). This exception will apply only in this case, and after the first semester, academic policies will apply as per the *Decker School of Nursing Student Handbook*.

2. **Initial Academic Probation**

   - If the student's cumulative GPA falls below 2.0 at the end of the semester, the student will be placed on academic probation. The designation "Academic Probation" will be placed on the student's internal transcript. The purpose of academic probation is to serve notice to students that the quality of their work is below an acceptable level and that continuation of unsatisfactory work will result in academic dismissal from the Decker School of Nursing.

3. **Continuing Academic Probation**

   - If the student has been placed on initial academic probation in the preceding semester and the GPA of the current semester is at least 2.0 but the cumulative GPA is less than 2.0, the student will be placed on continuing academic probation. The designation "Academic Probation" will continue to be placed on the student's internal transcript, and the student will remain on continuing academic probation until the cumulative GPA is at least 2.0.

4. **Academic Suspension/Dismissal**

   - If the student has been placed on academic probation and fails to achieve a GPA of at least 2.0 in the next semester, the student will receive notice of academic suspension. This suspension prevents enrollment in all University courses for a period of one semester, excluding Summer Session. If the student receives a failing grade and/or a withdrawal grade in any core nursing course with a subsequent D, W, or F the student will receive notice of academic dismissal from the program and may seek inter-University transfer if desired.

A full-time student normally completes the degree in the DSON in a four- to five-year period. The requirements to complete the nursing degree must be met within six years from the time the student is enrolled in the first nursing course.
Nursing courses in which a student receives a D, F or W may be repeated only once, regardless of the number of credits the course carries. Failure to pass the course on the second attempt will result in student dismissal from the Decker School.

5. Repeating a Course

- Students may repeat a general education course or elective course if they receive a withdrawn (W) or fail (F). Students must repeat a prerequisite liberal arts course or science course if they receive a D, W, or F. Students who wish to repeat an equivalent prerequisite course at another college or university may do so according to the transfer credit policy.

- Students may repeat two core nursing courses if they receive a D, W, or F in the course on the first attempt. (See academic dismissal.) A grade of D, W, or F will require that a student completes a Plan for Academic Success. Students would be required to meet with the course coordinator and their advisor, and to create a plan of remediation. Any subsequent D, W, or F in core nursing courses will result in dismissal from the DSON.

Class and Laboratory Attendance

The DSON adheres to University policy pertaining to attendance in class. In addition, attendance for all laboratory experiences is mandatory. Students must notify their instructors if they are unable to meet this commitment because of illness or other circumstances beyond their control. All course-related assignments must be completed as indicated in course syllabi unless prior arrangements are made with course faculty.

Clinical Laboratory Requirements

The DSON will not provide opportunities for clinical experiences for students who fail to meet the requirements/responsibilities as outlined below.

Health Evaluations

The Decker School of Nursing (DSON) has formal affiliations with healthcare agencies for student clinical laboratory experiences. Healthcare agencies must comply with the New York State (NYS) Department of Health Code 405.3, which includes health requirements necessary for all persons engaged in patient contact. Agencies may have additional health requirements over and above those mandated by NYS (i.e., substance-abuse screening; removal of artificial/acrylic nails). The DSON must comply with NYS and agency requirements prior to student placement in the clinical agency.

Prior to enrollment in clinical nursing courses, all students are required to submit an annual health evaluation. The health evaluation must include:

- a physical examination documented on the Decker School of Nursing Student Annual Health Evaluation form;
- two Mantoux Tuberculin tests prior to enrollment in clinical nursing courses and one annually thereafter; students with a positive reaction are required to have a chest x-ray and show evidence of follow-up health care; some agencies require a Mantoux Test or chest x-ray (if indicated) within six months of a student's clinical placement and students would be expected to oblige by this request;
- documented evidence of current immunization to tetanus-diphtheria;
- documented evidence of immunization or serologic evidence of immunity (titers) to measles, mumps and rubella (a document prepared by a licensed laboratory, physician, physician assistant or nurse practitioner is acceptable);
- proof of varicella (chicken pox) immunity as documented by varicella immunization series, date of diagnosis of
varicella disease, or a varicella titer report or document, prepared by a healthcare provider;
- documented evidence of immunization to Hepatitis B, prepared by a healthcare provider; those electing not to receive the Hepatitis B series must sign a Statement of Declination.
- seasonal flu vaccine. Any student that does not receive the seasonal flu vaccine must wear a mask in all patient areas.

Agencies have the right to request this information from the DSON and students are required to sign a waiver authorizing the release of this information by the DSON. Failure to sign a release may lead to a delay/denial of clinical placement.

**Training in Infection Control and Blood-Borne Pathogens and HIPAA**

Clinical agencies require that students have annual training in infection control and blood-borne pathogens, and HIPAA. Relevant content is presented to students through the DSON. Registered nurse (RN) students employed in healthcare agencies, who have received the above training through their places of employment and can provide documentation of such, may satisfy this requirement. Some agencies have very specific training that they require students to participate in prior to the beginning of a clinical experience and students are expected to oblige by such requests.

**Cardiopulmonary Resuscitation Certification**

Prior to enrollment in clinical nursing courses, all students are required to submit evidence of annual cardiopulmonary resuscitation (CPR) certification (including AED training) at the Professional Rescuer level. Decker School of Nursing does not accept online CPR training. CPR certification is required every other year.

**Health Insurance**

All DSON students enrolled in clinical nursing courses are required to submit proof of current personal health insurance. This documentation should be submitted prior to beginning any clinical experience.

**Malpractice and Liability Insurance**

All students enrolled in clinical nursing courses are required to purchase malpractice and liability insurance. Currently that is done through the University. The cost of this insurance currently is $35 per semester, but is subject to change each semester. RN students who may have their own malpractice and liability insurance policy are also required to purchase this malpractice and liability insurance, as it provides coverage for their practice as a student in clinical nursing courses.

**Release of Personal Information**

Some agencies, in order to protect clients, require information related to students’ past employment and documentation as to whether they have ever been convicted of a criminal offense, including misdemeanors and felonies, other than vehicular violations. Students may be asked to respond to such questions.

**Criminal Background Checks/Drug Screening**

Clinical agencies may require criminal background checks for everyone working in the facility, including students. DSON students participating in a clinical experience may be required to undergo a criminal background screening and/or drug screen. In addition, some agencies may require more stringent background screening, including fingerprinting. The student may be required to have a yearly criminal background screening by an approved agency as determined by the DSON. Documentation will be due prior to the start of the semester in accordance with the due
dates for all other clinical requirements (health forms, proof of CPR, etc.). The student is responsible for all costs associated with these requirements.

Reports from criminal background check and/or drug screening are stored online at a password protected site, currently Castle Branch. After the student signs a release each year, the DSON will assume responsibility for releasing verification of a clear criminal background check to the clinical agency. Any student who delays, fails or refuses to provide a criminal background check and/or drug screening to the Decker School by the due date will be unable to attend clinical, which may result in course failure. Positive criminal background check results may hinder a student's opportunity for state licensure. DSON recommends a student contact his/her state board of licensure to clarify any concerns regarding licensure. Should a student be convicted of a criminal offense between the first and second background screening, he/she must immediately disclose this to the DSON for review with the clinical site. The clinical site will determine whether the student will be permitted to continue to participate in clinical. Any such incident may jeopardize the student's enrollment at the University and licensure.

Disclaimer: The Criminal Background Screening procedure does not ensure the security of students, patients, faculty or staff.

Medical Document Manager

Currently, DSON uses Castle Branch as the medical document manager. All DSON health requirements are uploaded by the student to this site.

Uniforms

Students are required to purchase uniforms beginning in the junior year of the nursing curriculum for selected clinical experiences. Student ID cards are worn as a name badge and must be visibly displayed as a required piece of the student nurse uniform. Plastic holders are used to display the ID card and are attached to the uniform with a pocket clip or on a break-away lanyard worn around the neck, available for sale at any uniform shop and the University Bookstore. The complete student nurse Uniform Policy of the Decker School is posted via the Decker School of Nursing Undergraduate Student Handbook.

Medical Equipment

Students are required to purchase basic medical equipment prior to the first clinical course in the nursing curriculum. Information for acquiring required equipment is included in the advising memo sent prior to the start of the fall semester for Traditional Track junior students and prior to the Summer Session for Baccalaureate Accelerated Track (BAT) students. That information is also located on the Decker School of Nursing Undergraduate website.

Transportation

The University assumes no responsibility for providing transportation for travel from campus to the clinical health agencies used for student clinical experiences. Students arrange their own transportation to clinical agencies and affiliated sites. Some clinical experiences require students to travel up to a 50 mile distance away from campus. There may be parking costs at some clinical agencies.

Professional Ethics and Academic Honesty

Students are expected to comply with the University Rules for Student Conduct and the policies related to professional ethics and academic honesty and as stated in the Decker School of Nursing Undergraduate Programs Student Handbook.

Additional Expenses
Students in the nursing program should expect to incur costs for additional items related to clinical practice and preparation. These costs are in addition to the standard University tuition and fees. Included are fees for the Innovative Simulation and Practice Center for courses NURS 321, NURS 352, NURS 353, NURS 362, NURS 363, and NURS 471. The simulation fee of $300 is charged only once per semester. An additional fee for NCLEX-RN test preparation program is charged to all prelicensure students; resources associated with the program are integrated into all coursework. The fee for NCLEX-RN preparation material is $440 total, divided over several semesters.

Academic Honors

Dean's List

Decker School of Nursing has a Dean's List for all students who have an outstanding academic record. To qualify for inclusion in the Dean's List for that semester, students must meet the following criteria:

- be matriculated in Decker School of Nursing;
- have a minimum GPA of 3.5;
- have completed at least eight credits for that semester;
- no incomplete or missing grades are allowed on a student's transcript when being considered for Dean's List.

Dean's List is noted on the student's official transcript for each semester it is achieved.

Graduation with Honors

Students with outstanding academic records receive college-wide honors upon graduation. To qualify, students must meet the cumulative grade-point averages specified below, have at least 48 graded Binghamton University credits, and have no Missing Grade (MG) or Incomplete (I) grades on their transcript.

Honors are awarded as follows:

3.50-3.69 GPA: *cum laude*
3.70-3.84 GPA: *magna cum laude*
3.85-4.00 GPA: *summa cum laude*

The appropriate graduation honors are indicated on the diploma and on the final transcript.

Sigma Theta Tau International

Sigma Theta Tau International, The International Honor Society of Nursing, recognizes outstanding graduate and undergraduate students, faculty and practitioners of nursing. Candidates for membership in the Zeta Iota chapter of Binghamton University must have demonstrated:

- superior scholastic achievement;
- academic integrity; and
- professional leadership potential and/or marked achievement in the field of nursing.

Eligibility for membership in the Zeta Iota chapter is by invitation to students who have completed at least half of the courses in the nursing major, have a GPA of 3.0 and above and rank in the top 35 percent of their class in scholarship.

Awards
Honors Program

The purpose of the Decker School of Nursing's Honors Program is to recognize and foster academic excellence in highly motivated undergraduate nursing students. Honors program experiences and seminars will provide enhanced educational experiences to prepare future leaders in professional nursing. The outcome is the completion of a major independent scholarly project or thesis under the guidance and approval of a faculty member. To qualify for admission to the honors program, a student must be an admitted student to the nursing program with junior status and will be enrolled in junior nursing courses. Honors students must have a grade-point average of 3.5 for both cumulative coursework and prerequisites in order to be considered. Applications are accepted in the fall semester of the junior year with courses in subsequent semesters. Further information related to application process and coursework expectations are located in the Decker School of Nursing Undergraduate Programs Student Handbook.

Degree Requirements

To qualify for the Bachelor of Science degree with the major in nursing, the student must:

- complete a minimum of 126 semester hours as defined by the Decker School of Nursing curriculum;
- complete the General Education course requirements for a degree;
- be in residence at DSON during the last 30 credits immediately preceding graduation, unless specifically exempted from this requirement by a duly designated committee of the faculty;
- achieve an overall cumulative GPA of 2.0, with a cumulative GPA of 2.0 in nursing courses;
- pay or satisfactorily adjust all fees and bills;
- not be under any disciplinary action;
- be duly recommended by the University faculty;
- have been admitted to the degree by formal action by the State University Trustees.

Major Requirements

Satisfactory completion of specific courses in the social, behavioral and natural sciences is required for admission to the first course in the nursing sequence. Refer to Prerequisites in the Grading System section for a list of the prerequisite courses all students must complete prior to beginning upper-level nursing coursework. Students are encouraged to meet with faculty advisors each semester before registering for nursing courses. Students are expected to complete approximately 64 credits toward the degree prior to beginning the nursing major.

In addition to the courses listed under General Requirements, the following courses are required for the upper-division major in nursing for PRE-licensure students:

- NURS 320. Socialization I: Introduction to Professional Nursing
- NURS 321. Nursing Assessment of Clients
- NURS 322. The Client System of Nursing
- NURS 351. Pathophysiology I
- NURS 352. Practice of Nursing I
- NURS 353. Practice of Nursing II
- NURS 360. Socialization II: Nursing Research
NURS 361. Pathophysiology II
NURS 362. Practice of Nursing III
NURS 363. Practice of Nursing IV
NURS 365. Pharmacology in Nursing
NURS 470. Socialization III: Professional Issues
NURS 471. Practice of Nursing V
Nursing elective or independent study

In addition to the courses listed under General Requirements, the following courses are required for the upper-division major in nursing for RN students. RNs may also earn credit by examination for NURS 351, 360, 361 and 365. See the Decker School of Nursing Undergraduate Programs Student Handbook for full testing policy details.

- NURS 351. Pathophysiology I
- NURS 360. Socialization II: Nursing Research
- NURS 361. Pathophysiology II
- NURS 365. Pharmacology in Nursing
- NURS 380. Professional Role Development: Transitions
- NURS 382. Population-Focused Health Promotion
- NURS 384. Population-Focused Disease Management
- NURS 386. Health Assessment
- NURS 388. Health Care Policy and Health Disparities
- NURS 484. Socialization into the Leadership Role
- Nursing elective or independent study

Sample Curriculum for the Traditional Track Program

<table>
<thead>
<tr>
<th>First Year/Fall</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition course</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 101 Intro Chem I (inorganic)</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 111 General Psychology</td>
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</tr>
<tr>
<td>General Education/Elective</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
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<table>
<thead>
<tr>
<th>First Year/Spring</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 118 Intro Biology (lecture)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 102 Intro Chem II (organic/biochem)</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 220 Dev Psychology</td>
<td>4</td>
</tr>
<tr>
<td>Second Composition Course</td>
<td>4</td>
</tr>
<tr>
<td>Subject</td>
<td>Credits</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Physical Activity/Wellness</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Second Year/Fall</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 251 Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 147/MATH 148/PSYC 243 Statistics (or humanities)</td>
<td>4</td>
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<tr>
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<td>General Education/Elective</td>
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<tr>
<td>Physical Activity/Wellness</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Second Year/Spring</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 347 Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 224 Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective</td>
<td>4</td>
</tr>
<tr>
<td>General Education/Elective</td>
<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Third Year/Fall</strong></td>
<td></td>
</tr>
<tr>
<td>NURS 320. Socialization I: Introduction to Professional Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NURS 321. Nursing Assessment of Clients</td>
<td>4</td>
</tr>
<tr>
<td>NURS 322. The Client System of Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NURS 351. Pathophysiology I</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>2/4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16-18</strong></td>
</tr>
<tr>
<td><strong>Third Year/Spring</strong></td>
<td></td>
</tr>
<tr>
<td>NURS 352. Practice of Nursing I</td>
<td>4</td>
</tr>
<tr>
<td>NURS 353. Practice of Nursing II</td>
<td>4</td>
</tr>
<tr>
<td>NURS 361. Pathophysiology II</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
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</tbody>
</table>
### Fourth Year/Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>NURS 360. Socialization II: Nursing Research</td>
<td>2</td>
</tr>
<tr>
<td>NURS 362. Practice of Nursing III</td>
<td>4</td>
</tr>
<tr>
<td>NURS 363. Practice of Nursing IV</td>
<td>4</td>
</tr>
<tr>
<td>NURS 365. Pharmacology in Nursing</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>2/4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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### Fourth Year/Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>NURS 470. Socialization III: Professional Issues</td>
<td>4</td>
</tr>
<tr>
<td>NURS 471. Practice of Nursing V</td>
<td>8</td>
</tr>
<tr>
<td>Nursing Elective</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>2/4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16-18</strong></td>
</tr>
</tbody>
</table>

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**Baccalaureate Accelerated Track (BAT) Nursing Program for Candidates with Degrees in Other Fields**

The accelerated baccalaureate in nursing program is a 12-month, four-semester program leading to a Bachelor of Science degree with a major in nursing. Applicants to the program are expected to have earned a baccalaureate or higher degree in another field and to have a desire to make a career change to professional nursing. They must have earned a minimum GPA of 3.0 in the prior degree and in prerequisite courses to be considered for the program.

Students selecting this option complete all required courses in the nursing major in a sequence that provides accelerated progression to achieve the undergraduate program objectives. This selective program option is designed for the mature, highly motivated student.

**BAT Curriculum Plan (One Calendar Year)**

#### Summer Session Term I (May - June)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurs 320. Socialization I: Introduction to Professional Nursing</td>
<td>4</td>
</tr>
<tr>
<td>Nurs 321. Nursing Assessment of Clients (May-August)</td>
<td>4</td>
</tr>
<tr>
<td>Nurs 351. Pathophysiology I</td>
<td>2</td>
</tr>
<tr>
<td>Nursing elective (one required — may be taken summer or spring)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Per Summer Session I</strong></td>
<td><strong>10-12</strong></td>
</tr>
</tbody>
</table>

#### Summer Session Term II (July - August)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurs 321. Nursing Assessment of Clients ((continued) July - August)</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Registered Nurse Program

Registered nurses who wish to earn the Bachelor of Science degree with a major in nursing have the opportunity to do so at Binghamton University. Decker School of Nursing offers several options for registered nurses who have earned an associate degree in nursing from a community college or have graduated from a hospital diploma program. Degree requirements for the nursing major are 126 credits, 52 of which must be nursing. RNs transfer 20 credits from associate degree nursing programs to fulfill nursing course requirements. See more information on transfer credits in this publication. Required nursing courses (32 credits) for all registered nurse students include NURS 351, 360, 361, 365, 380, 382, 384, 386, 388, 484, and a nursing elective. Full- and part-time study options are available. Each RN student meets with an RN advisor to develop an individual program plan.

The following is a sample curriculum plan for registered nurse students who have completed all prerequisite courses to the nursing major and the majority of the General Education requirements. For more information on General Education requirements, consult with a Nursing School academic advisor or go online to the Binghamton University General Education website.

Sample Curriculum Two-Year Program Plan for RN Students

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurs 360. Socialization II: Nursing Research</td>
<td>2</td>
</tr>
<tr>
<td>Nurs 361. Pathophysiology II</td>
<td>4</td>
</tr>
<tr>
<td>Nursing elective (one required — may be taken summer or spring)</td>
<td>2</td>
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<tr>
<td><strong>Total Per Summer Session II</strong></td>
<td><strong>6-8</strong></td>
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<table>
<thead>
<tr>
<th>Fall Semester</th>
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<tbody>
<tr>
<td>NURS 322. The Client System of Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NURS 352. Practice of Nursing I (1/2 semester course)</td>
<td>4</td>
</tr>
<tr>
<td>NURS 353. Practice of Nursing II (1/2 semester course)</td>
<td>4</td>
</tr>
<tr>
<td>NURS 362. Practice of Nursing III (1/2 semester course)</td>
<td>4</td>
</tr>
<tr>
<td>NURS 365. Pharmacology in Nursing</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
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<table>
<thead>
<tr>
<th>Winter Session</th>
<th>credits</th>
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</thead>
<tbody>
<tr>
<td>NURS 363. Practice of Nursing IV (1/2 semester course)</td>
<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 470. Socialization III: Professional Issues</td>
<td>4</td>
</tr>
<tr>
<td>NURS 471. Practice of Nursing V</td>
<td>8</td>
</tr>
<tr>
<td>Nursing Elective (one required — may be taken summer or spring)</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12-14</strong></td>
</tr>
<tr>
<td>Semester I - Fall</td>
<td>credits</td>
</tr>
<tr>
<td>------------------</td>
<td>---------</td>
</tr>
<tr>
<td>NURS 351. Pathophysiology I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 380. Professional Role Development: Transitions</td>
<td>2</td>
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<tr>
<td>NURS 382. Population-Focused Health Promotion</td>
<td>3</td>
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<td>NURS 386. Health Assessment</td>
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<tr>
<td>General Education or Elective</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<table>
<thead>
<tr>
<th>Semester II - Spring</th>
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</thead>
<tbody>
<tr>
<td>NURS 361. Pathophysiology II</td>
<td>4</td>
</tr>
<tr>
<td>NURS 388. Health Care Policy and Health Disparities</td>
<td>2</td>
</tr>
<tr>
<td>Nursing Elective</td>
<td>2</td>
</tr>
<tr>
<td>General Education or Elective</td>
<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<table>
<thead>
<tr>
<th>Semester III - Fall</th>
<th>credits</th>
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</thead>
<tbody>
<tr>
<td>NURS 360. Socialization II: Nursing Research</td>
<td>2</td>
</tr>
<tr>
<td>NURS 365. Pharmacology in Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS 384. Population-Focused Disease Management</td>
<td>3</td>
</tr>
<tr>
<td>General Education or Elective</td>
<td>4</td>
</tr>
<tr>
<td>General Education or Elective (if needed)</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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<table>
<thead>
<tr>
<th>Semester IV - Spring</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 484. Socialization into the Leadership Role</td>
<td>8</td>
</tr>
<tr>
<td>Nursing Elective (if needed)</td>
<td>2</td>
</tr>
<tr>
<td>General Education or Elective</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8-14</strong></td>
</tr>
</tbody>
</table>

**Accelerated Program for Registered Nurse Students**

RNs can select from a two-semester or three-semester accelerated program option if they are a licensed RN and have transferred 76 credits of course work to the School of Nursing including all prerequisite courses and General Education.
Education requirements with a 3.0 GPA or higher prior to starting their program of study. Candidates’ potential for success in the accelerated program track is evaluated based on references, the ability to study full-time for two or three semesters, and previous education and clinical experience. One year of work experience as an RN is required prior to starting an accelerated program.

**Two-Semester Accelerated RN Curriculum Plan:**

<table>
<thead>
<tr>
<th>Fall</th>
<th>credits</th>
<th>Spring</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 351. Pathophysiology I</td>
<td>2</td>
<td>NURS 361. Pathophysiology II</td>
<td>4</td>
</tr>
<tr>
<td>NURS 360. Socialization II: Nursing Research</td>
<td>2</td>
<td>NURS 388. Health Care Policy and Health Disparities</td>
<td>2</td>
</tr>
<tr>
<td>NURS 365. Pharmacology in Nursing</td>
<td>2</td>
<td>NURS 484. Socialization into the Leadership Role</td>
<td>8</td>
</tr>
<tr>
<td>NURS 380. Professional Role Development: Transitions</td>
<td>2</td>
<td>Nursing Elective</td>
<td>2</td>
</tr>
<tr>
<td>NURS 382. Population-Focused Health Promotion</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURS 384. Population-Focused Disease Management</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURS 386. Health Assessment</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>TOTAL</td>
<td>16</td>
<td>TOTAL</td>
<td>16</td>
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</table>

**Three-Semester Accelerated RN Curriculum Plan:**

<table>
<thead>
<tr>
<th>Summer</th>
<th>credits</th>
<th>Fall</th>
<th>credits</th>
<th>Spring</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 351. Pathophysiology I</td>
<td>2</td>
<td>NURS 365. Pharmacology in Nursing</td>
<td>2</td>
<td>NURS 388. Health Care Policy and Health Disparities</td>
<td>2</td>
</tr>
<tr>
<td>NURS 360. Socialization II: Nursing Research</td>
<td>2</td>
<td>NURS 380. Professional Role Development: Transitions</td>
<td>2</td>
<td>NURS 484. Socialization into the Leadership Role</td>
<td>8</td>
</tr>
<tr>
<td>NURS 361. Pathophysiology II</td>
<td>4</td>
<td>NURS 382. Population-Focused Health Promotion</td>
<td>3</td>
<td>Nursing Elective</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NURS 384. Population-Focused Disease Management</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NURS 386. Health Assessment</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>8</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Community Agencies for Clinical Practice**
The nursing curriculum places its focus on knowledge and theory drawn from health science and the related disciplines. Students apply this knowledge and theory in a number of clinical settings, giving them an opportunity to develop skill in clinical practice, critical thinking, problem solving and leadership. The Decker School of Nursing places students in agencies locally and throughout New York state and Pennsylvania. Included among nearly 400 clinical affiliations are the following.

**Listing of Hospital and Clinical Affiliations**

- Arnot Ogden Medical Center, Elmira, N.Y.
- Bassett Healthcare, Cooperstown, N.Y.
- Binghamton City Schools, Binghamton, N.Y.
- Binghamton General Hospital, Binghamton, N.Y.
- Broome County Health Department, Binghamton, N.Y.
- Cayuga Medical Center, Ithaca, N.Y.
- Community General Hospital, Syracuse, N.Y.
- Crouse Hospital, Syracuse, N.Y.
- Delaware County Public Nursing Service, Delhi, N.Y.
- Elizabeth Church Manor, Binghamton, N.Y.
- Good Shepherd Fairview Home, Binghamton, N.Y.
- Greater Binghamton Health Center, Binghamton, N.Y.
- Guthrie Healthcare, Sayre, P.A.
- Ideal Senior Living Center, Endicott, N.Y.
- Lourdes Hospital, Binghamton, N.Y.
- Lourdes At Home, Binghamton, N.Y.
- St. Joseph's Hospital, Elmira, N.Y.
- St. Joseph's Hospital, Syracuse, N.Y.
- Susquehanna Nursing Center, Binghamton, N.Y.
- Tioga County Health Department, Owego, N.Y.
- Twin Tier Home Health, Vestal, N.Y.
- United Health Services, Wilson Memorial Regional Medical Center, Johnson City, N.Y.
- United Medical Associates, Johnson City, N.Y.
- University Hospital, SUNY Upstate Medical University, Syracuse, N.Y.
- Vestal Nursing Center, Vestal, N.Y.
- Willow Point Nursing Home, Vestal, N.Y.

**Forensic Health Minor**

The Forensic Health Minor enhances the knowledge of students who are planning for careers in which they may have victims and/or perpetrators of violence and crime in their client population. The minor consists of seven core courses (16 credits), and two adjunct courses (8 credits). The total number of credits required for the minor is twenty-four (24).
Requirements:

A minimum GPA of 3.0

Students must complete at least 60 college credits before declaring the minor.

Successful completion of all the following Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 335. Forensic Health Essentials</td>
<td>2</td>
</tr>
<tr>
<td>NURS 335B. Forensic Health of Victims</td>
<td>2</td>
</tr>
<tr>
<td>NURS 335C. Forensic Health of Offenders</td>
<td>2</td>
</tr>
<tr>
<td>NURS 335D. Forensic Pediatrics*</td>
<td>2</td>
</tr>
<tr>
<td>NURS 335F. Medicolegal Death Investigation*</td>
<td>2</td>
</tr>
<tr>
<td>NURS 370. Disaster Preparedness*</td>
<td>3</td>
</tr>
<tr>
<td>NURS 455. Correctional Health*</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

*Nursing Honors Program may be substituted as an alternative for NURS 335D, N335F, N370, or N455, if focused on a topic integral to forensic health and with approval of forensic health coordinator.

Successful completion of two of the following adjunct courses for total of 8 credits (no more than two may count toward minor):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 111. Introduction to Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 220. Developmental Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 330. Drugs &amp; Behavior</td>
<td>4</td>
</tr>
<tr>
<td>HDEV 200. Introduction to Human Development</td>
<td>4</td>
</tr>
<tr>
<td>HDEV 400. Social Justice</td>
<td>4</td>
</tr>
<tr>
<td>HWS 340. Substance Abuse in Contemporary Society</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>
Graduate Programs

The Decker School of Nursing offers graduate-level advanced practice nursing programs of study culminating in the professional degrees of Master of Science (MS) and Doctorate of Nursing Practice (DNP) with majors in family, community health, family psychiatric mental health or adult-gerontological nursing. The Decker School also offers the terminal research degree Doctor of Philosophy (PhD) in Nursing with emphases in rural health and vulnerable populations.

In the Master of Science degree programs, students select one of four functional roles to pursue that include the nurse practitioner, clinical nurse specialist, nurse educator or nurse administrator role. Dual roles are also available for additional credit with the exception of Nurse Educator, which is reserved for post graduate certificate enrollment only.

Students holding a BS in nursing and meeting admission criteria may enroll in the BS-to-PhD program. Program plans for BS-to-PhD students may be individualized based on an applicant's clinical experience and educational goals. Admission to the BS-to-DNP program is temporarily suspended until further notice. However, the post-MS DNP program is available for enrollment to those who hold a master's degree in nursing.

For those students already holding a master's degree in nursing, the Decker School offers programs leading to advanced certificates as a family nurse practitioner, adult-gerontological nurse practitioner, family psychiatric mental health nurse practitioner or a community health primary care nurse practitioner. Also offered are an advanced certificate in nursing education, a certificate in forensic health or a certificate in disaster management. Students with a baccalaureate degree in nursing and certification as a nurse midwife may complete requirements for a master's degree in family nursing.

Master of Science Degree Programs

The Master of Science programs in nursing require successful completion of 46-48 credits for award of degree. Full- and part-time program options of study are available. The curriculum has five components: core, clinical specialization, role development, supporting courses and electives. Core courses taken by all students in the program address nursing theory, advanced physical health assessment, advanced pathophysiology across the lifespan, advanced pharmacology for clinical practice, nursing research, professional issues and the health care delivery system. The clinical courses prepare nurses for family nursing, community health nursing, family psychiatric mental health nurse practitioner or a community health primary care nurse practitioner. The role courses address socialization and implementation of the role of nurse practitioner, clinical nurse specialist, nurse educator or nurse administrator. Supporting courses are tailored to degree requirements per MS specialization of study (e.g., psycho-pharmacology is required only for those students enrolled in the family psychiatric mental health specialization). The courses in the first semester of study for all MS curricula provide the foundation for courses in subsequent semesters.

Elective course(s) may be taken either in nursing or related areas of study. Courses may be taken in other units of the University, i.e., the departments of Harpur College of Arts and Sciences, such as Psychology, Anthropology, Political Science and Sociology; College of Community and Public Affairs; and School of Management. Students are encouraged to select electives that will enhance their special interests and career goals. Independent study is an option.

Admission

All students entering the master of science programs in nursing must satisfy the general conditions and procedures for admission to the Graduate School as stated in the Admission section of this publication.

Although each applicant is considered on an individual basis, the general admissions requirements are:
A baccalaureate degree in nursing from an ACEN- or CCNE-accredited school of nursing

A descriptive statistics course w/a grade of C or better

An undergraduate GPA of 3.0 or better

A current, unencumbered license to practice as a registered professional nurse in the United States is required of all applicants

- All applicants are required to have taken and passed the NCLEX-RN examination prior to the start of clinical courses and/or by a specified date as stipulated by the Director of Graduate Nursing Programs.
- International students are additionally required to provide proof of a current, unencumbered license to practice as a registered professional nurse in their home country.
- Prior to beginning clinical experiences in a New York clinical facility, students are required to provide a copy of their current, unencumbered license to practice as a Registered Nurse in New York. This is a requirement of the New York State Department of Education Office of the Professions.

- Two satisfactory academic or professional references
- Personal statement
- Resume or curriculum vitae
- Satisfactory scores on the Graduate Record Examination (GRE) are required; the Director of Graduate Nursing can at his/her discretion request a waiver of the GRE requirement on behalf of an applicant
- For international students: Proof of English proficiency (such as official TOEFL, IELTS or PTE academic scores); International Student Financial Statement Form; and supporting financial documentation (such as official bank statements or official scholarship or sponsorship letters) are required.

Notes regarding admissions criteria above follow:

- Students may consider applying for non-degree or non-matriculated status in lieu of matriculation in order to complete up to a maximum of 12 graduate nursing credits as a non-degree student, and after which time they may apply to be considered for regular matriculated admission. The Director of Graduate Nursing Programs will provide advisement regarding appropriate courses for enrollment by non-degree students attempting to prove their ability to be successful at the graduate nursing level, and in anticipation of student applying for future matriculated status.
- Interview with Program Director or Member of the Graduate Admissions and Academic Standards Committee may be required.
- Letters of recommendation from professional referents as required may not be personal friends and/or family members of the applicant. It is expected that a professional referent would be a current or former supervisor to the applicant.
- Any domestic student applicant may be admitted with Regular Admit - Additional Advising status (formerly known as "conditional admission") by the department. By definition, this category of admission means that the applicant lacks required admission criteria.
  - Domestic students who do not advance from Regular Admit - Additional Advising status to Regular Admission status in a timely manner (i.e., failure to meet the department's conditional admission requirements) will find their registration blocked and/or possibly risk program dismissal.
- International student applicants cannot be admitted "conditionally" based on changes to federal regulations implemented in 2016 by the United States Immigration and Customs Enforcement (ICE) Student and
International student applicants who have not met minimum TOEFL, IELTS or PTE Academic score requirements may be recommended for an offer of admission from the Decker School of Nursing, but will be granted only provisional admission by the Graduate School.

A provisional admission status related to these test scores requires that the applicant provide sufficient proof of English proficiency.

Once sufficient proof has been provided by the applicant, the Graduate School will default the admissions decision back to that assigned by the department, and the student will receive a regular letter of admission and an I-20.

In such an admissions case, the student may be required to take an English as a Second Language (ESL) assessment exam. Exam results assist the department in determining which ESL courses will be completed by the student preliminary to or concurrently with core graduate nursing course requirements in the first and/or subsequent semesters, and at the discretion of the Graduate Nursing Program Director.

Domestic students enrolling immediately after graduation from a BS program in nursing must pass the national licensing examination (NCLEX-RN) before beginning any clinical course work. As related, those students who are granted full-time admission in a fall semester are scheduled to take N.502 Advanced Physical Health Assessment, in the first-semester of study. N.502 has a clinical component requiring those students to pass the NCLEX-RN examination and provide proof of passing the exam by August 15 of the first fall semester of admission.

Students who have already completed a master’s degree in nursing from an accredited program, but wish to pursue a different clinical specialty and/or advanced practice role may be admitted to the post-master's program. (GREs are not required for the post-master's program.)

Graduates of nursing schools outside the United States must hold a baccalaureate degree in nursing or its equivalent. World Education Services (WES) transcripts must be submitted as proof of a baccalaureate degree. Licensure (or eligibility) to practice in the United States is required.

One year of full-time employment as a professional Registered Nurse is strongly recommended prior to application for admission to a graduate nursing program of study, but it is not required. At the discretion of the Director of the Graduate Nursing Programs, students may be admitted to begin the master's degree program on a part-time basis to allow time for the student to gain confidence in their nursing skills while working in a hospital setting as an RN.

It is expected that students admitted to a graduate nursing program will be computer literate before beginning their studies, including the ability to use various software applications to include word processing ability, use of email, web searching capabilities, downloading and uploading files and instant messaging and/or chatting.

Transfer Credit

For students in the MS program, a maximum of 12 graduate credits, completed with a B grade or better within the previous five years, may be transferred from an accredited college or university. Courses are approved for transfer on an individual basis. This does not apply to courses used to satisfy requirements for another degree. Students requesting transfer credits must provide course syllabi for each course they wish to transfer and an official transcript showing successful completion of coursework (minimum Grade of B). For more information, consult an advisor or the Graduate School Manual located on the Web. All decisions regarding transfer credits are at the discretion of the Director of Graduate Nursing Programs.

Part-Time Study
Part-time study options are available. Students seeking part-time study are encouraged to contact the Director of Graduate Programs for assistance in developing specific plans of study. Per Graduate School policy, a master's degree curriculum must be completed within five years from date of matriculation to remain eligible for award of degree.

Clinical Practice Requirements

At least three semesters include clinical experiences, which range from a minimum of 12 hours per week to a maximum of 16 hours per week. Some elective courses also have clinical practice requirements that may increase the clinical practice time. All clinical practice assignments must be coordinated through the DSON office of the Clinical Site Coordinator.

Additional Requirements

Graduate students in the Decker School of Nursing must adhere to the following policies related to professional practice. Some policies will require students to pay additional fees and as such are detailed in the following:

Nursing Simulation Lab Fee: A Simulation Fee of $300 will be incurred by students enrolled in graduate nursing courses that regularly require clinical simulation activities be completed in the Innovative Simulation & Practice Center (ISPC) to meet course objectives. The simulation fee is assessed once per semester regardless of the number of courses in which a student is enrolled which carry the simulation fee. Only courses that actually use simulation have the associated fee. Currently the courses carrying the simulation fee are listed below, but as new simulation activities are developed additional courses may be added to the list:

- N.502. Concepts in Health Assessment for Nurses in Advanced Clinical Practice
- N.511. Adult-Gerontological Nursing I
- N.512. Adult-Gerontological Nursing II
- N.513. Adult-Gerontological Nursing III
- N.514. Adult-Gerontological Nurse Practitioner Role I
- N.515. Functional Role I: Community Health Primary Care Nurse Practitioner
- N.516. Functional Role II: Community Health Primary Care Nurse Practitioner
- N.517. Functional Role III: Community Health Primary Care Nurse Practitioner
- N.521. Nursing in Family Practice I
- N.522. Nursing in Family Practice II
- N.596. Nursing in Family Practice III
- N.553. Family Nurse Practitioner Role I
- N.554. Family/Adult-Gerontological Nurse Practitioner Role II
- N.555. Family/Adult-Gerontological Nurse Practitioner Role III

Typhon: A one-time system access fee of $80 is charged to enroll in Typhon, a clinical experience management system; this is required for all graduate nursing students enrolled in clinical courses. This fee may be subject to change.

Malpractice and Liability Insurance: All students in clinical courses are billed for malpractice and liability insurance each semester. The cost of this insurance is currently $35 per semester, but is subject to change each semester. Students who may have their own malpractice and liability insurance policy are required to purchase malpractice and liability insurance through the University, as it provides coverage for their practice as a student in clinical-nursing
courses. Individual policies purchased by the student do not satisfy this requirement.

**Health Insurance:** All students enrolled in clinical nursing courses are required to submit proof of personal health insurance. This documentation must be submitted prior to beginning any clinical experience. Failure to demonstrate evidence of health insurance will prevent the student from beginning clinical experiences in any semester. Health insurance is available for purchase through the University for those students who do not have coverage.

**Cardiopulmonary Resuscitation:** Prior to beginning clinical-nursing courses, all students are required to submit evidence of cardiopulmonary resuscitation (CPR) certification (including AED training) at the professional rescuer level. DSON does not accept online CPR certification. CPR certification must be completed every other year.

**Health Evaluations:** The school has formal affiliations with healthcare agencies for student clinical-laboratory experiences. Healthcare agencies must comply with the New York State (NYS) Department of Health Code 405.3, which includes health requirements necessary for all persons engaged in patient contact. Agencies may have additional health requirements over and above those mandated by NYS (i.e., substance abuse screening, removal of artificial/acrylic nails). The school must comply with NYS and agency requirements prior to student placement in the clinical agency.

All DSON Graduate students health requirements must be uploaded and approved by the DSON Office of Clinical Placements no later than October 15 in the semester preceding clinical courses requiring student placement in a clinical site. Failure to meet the deadline for health requirement submission will result in denial of clinical placement.

Prior to enrollment in clinical nursing courses, all students are required to submit an annual health evaluation to Castle Branch on behalf of the Decker School of Nursing. The annual health evaluation must include:

- a physical examination documented on the Decker School of Nursing Student Annual Health Evaluation form;
- a two-step Mantoux Tuberculin Test prior to enrollment in clinical nursing courses and one annually thereafter; students with a positive reaction are required to have a chest x-ray and provide evidence of follow-up health care. Some agencies require a Mantoux Test or chest x-ray (if indicated) within six months of a student’s clinical placement and students would be expected to comply with this requirement;
- documented evidence of current immunization to tetanus-diphtheria;
- documented evidence of immunization or serologic evidence of immunity to MMR (measles, mumps and rubella);
- proof of varicella (chicken pox) immunity as documented by varicella immunizations, diagnosis of history of varicella diseases, or a varicella titer report, prepared by a healthcare provider;
- documented evidence of immunization to Hepatitis B, prepared by a healthcare provider. Those electing not to receive the Hepatitis B series must sign a Statement of Declination;
- documentation of the seasonal flu vaccine in the current semester in which clinical is taking place. Those students that choose not to receive the seasonal flu vaccine must wear a mask in all patient areas.

Agencies have the right to request this information from the DSON and students are required to sign a waiver authorizing the release of this information by the DSON. Failure to sign a release may lead to a delay/denial of clinical placement.

**Professional Licensure:** Evidence of an unencumbered active license to practice professional nursing in the United States must be kept on file on Castle Branch. Agencies have the right to request this information and students are asked to release this information as requested. International students are additionally required to present proof of a current, unencumbered license to practice as a registered professional nurse in their home country. Prior to beginning clinical experiences in a New York clinical facility, students are required to provide a copy of their current, unencumbered license to practice as a Registered Nurse in New York. This is a requirement of the New York State
Training in Infection Control and Bloodborne Pathogens; HIPAA: Clinical agencies require that students have annual training in infection control and bloodborne pathogens and HIPAA. Graduate students who are employed in healthcare agencies, who have received the above training through their places of employment and can provide documentation of such, may satisfy this requirement. Some agencies have very specific training that they require the student to participate in prior to the beginning of a clinical experience and students are expected to comply with such requests. Students who are not currently employed may receive this training through the DSON. The Decker School of Nursing’s HIPAA policy may be reviewed online.

Professional Ethics and Academic Honesty: Students are expected to comply with the University’s Rules for Student Conduct and the policies related to professional ethics, professional practice and academic honesty as stated in the Decker School of Nursing Graduate Programs Student Handbook.

Release of Personal Information: Some agencies, in order to protect clients, require information related to students past employment and documentation as to whether or not they have ever been convicted of a criminal offense, including misdemeanors and felonies. Students may be asked to respond to such questions.

Criminal Background Checks: Clinical agencies are beginning to require criminal background checks for everyone working in the facility, including students. All DSON students participating in a clinical experience are required by clinical agencies used by the DSON to undergo a criminal background screening and/or drug screening. In addition, some agencies may require more stringent screening than indicated below, including fingerprinting. The student will be required to submit a criminal background screening to Castle Branch. This documentation will be due prior to the start of the semester in accordance with the due dates for all other clinical requirements (health forms, proof of CPR, etc.). The student is responsible for all costs associated with these requirements. The Criminal Background Screening will be required annually while attending DSON. For more information about this process and its costs, please see Castle Branch.

Results will be disclosed to the agency/clinical site to determine if the student is eligible to attend clinical within the facility. Any student that delays, fails or refuses to provide a Criminal Background Screening to Castle Branch by its due date will be unable to attend clinical, which may result in a failure for the clinical course. Positive Criminal Background Screening results may hinder a student's opportunity for state licensure. DSON recommends a student contact his/her state board of licensure to clarify any concerns regarding licensure. Should a student be convicted of a criminal offense between the first and second background screening, he/she must immediately disclose this to the DSON for review with the clinical site. The clinical site will determine whether the student will be permitted to continue to participate in clinical. Any such incident may jeopardize the student’s enrollment at the University and licensure.

Reports from the Criminal Background Screening are stored online at a password-protected site sponsored by Castle Branch. After the student signs a release each year, the DSON will assume responsibility for releasing written verification of a clear criminal background check to the clinical agency. Again, failure, delay or refusal to sign the release, allowing the DSON to provide the results to the agencies, will prevent the student from attending clinical, which may result in a failure for the clinical course.

Disclaimer: The Criminal Background Screening procedure does not ensure the security of students, patients, faculty or staff.

Medical Document Manager: All DSON health requirements are housed on Castle Branch. Instructions for this process can be found online.

The DSON will not provide opportunities for clinical experiences for students who fail to meet the requirements/responsibilities as outlined above.
Programs of Study

Family Nursing

The program in family nursing prepares nurses for advanced practice with families by addressing individual and family health problems, family functioning and complex families. Students may select functional role preparation as a family nurse practitioner, nurse educator or nurse administrator. Clinical Nurse Specialist (CNS) is not an available functional role in the Family Nursing MS program. Nurses who have an MS degree in nursing may enroll in the post-master's family nurse practitioner certificate program. Certified nurse midwives with a baccalaureate degree in nursing may enroll in the master's completion program.

MS in Family Nursing

Semester I (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NURS 502. Concepts in Health Assessment for Nurses in Advanced Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NURS 532. Nursing and Community Health Care Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>NURS 600. Advanced Research Methods and Quantitative Analyses</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
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Semester II (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NURS 503. Scientific Inquiry: Theoretical Foundations for Advanced Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS 519. Advanced Pharmacology for Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 521. Nursing in Family Practice I</td>
<td>3</td>
</tr>
<tr>
<td>Functional Role I* (ADM, EDUC or NP)</td>
<td>4</td>
</tr>
<tr>
<td>(*Course numbers differ depending on role selected)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
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</tbody>
</table>

Semester III (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 522. Nursing in Family Practice II</td>
<td>3</td>
</tr>
<tr>
<td>Functional Role II* (ADM, EDUC or NP)</td>
<td>4</td>
</tr>
<tr>
<td>(*Course numbers differ depending on role selected)</td>
<td></td>
</tr>
<tr>
<td>NURS 535. Scientific Inquiry: Application of Research Methods</td>
<td>2</td>
</tr>
</tbody>
</table>
### Community Health Nursing

Graduates of the program in community health nursing are committed to aiding community members to achieve optimal health as a means of improving life. Graduates are able to assess and diagnose actual and potential health problems of the community and work with individuals, families, groups and communities to improve and maintain health. Students may select functional role preparation as a primary care nurse practitioner, nurse educator, or nurse administrator. Clinical Nurse Specialist (CNS) is not an available functional role in the Community Health Nursing MS program. Nurses who have an MS degree in nursing may enroll in the post-graduate community health primary care nurse practitioner certificate program.

### MS in Community Health Nursing

#### Semester I (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 502. Concepts in Health Assessment for Nurses in Advanced Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NURS 540. Elements of Biostatistics and Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>NURS 600. Advanced Research Methods and Quantitative Analyses</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
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</tbody>
</table>

#### Semester II (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 596. Nursing in Family Practice III</td>
<td>3</td>
</tr>
<tr>
<td>Functional Role III* (ADM, EDUC or NP)</td>
<td>4</td>
</tr>
<tr>
<td>(*Course numbers differ depending on role selected)</td>
<td></td>
</tr>
<tr>
<td>NURS 570. Proseminar</td>
<td>2</td>
</tr>
<tr>
<td>Elective or thesis</td>
<td>3</td>
</tr>
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<td>TOTAL</td>
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</table>

**TOTAL CREDITS** 48

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<table>
<thead>
<tr>
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<tbody>
<tr>
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**Semester IV (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 502. Concepts in Health Assessment for Nurses in Advanced Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NURS 540. Elements of Biostatistics and Epidemiology</td>
<td>3</td>
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<tr>
<td>NURS 600. Advanced Research Methods and Quantitative Analyses</td>
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<td>TOTAL</td>
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<tr>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>NURS 503. Scientific Inquiry: Theoretical Foundations for Advanced Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS 519. Advanced Pharmacology for Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 541. Community Health Nursing Practice I</td>
<td>3</td>
</tr>
<tr>
<td>Functional Role I* (ADM, EDUC or PCNP)</td>
<td>4</td>
</tr>
<tr>
<td>(*Course numbers differ depending on role selected)</td>
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<td>TOTAL</td>
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**Semester III (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NURS 542. Community Health Nursing Practice II</td>
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<tr>
<td>Functional Role II* (ADM, EDUC or PCNP)</td>
<td>4</td>
</tr>
<tr>
<td>(*Course numbers differ depending on role selected)</td>
<td></td>
</tr>
<tr>
<td>NURS 532. Nursing and Community Health Care Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>NURS 535. Scientific Inquiry: Application of Research Methods</td>
<td>2</td>
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<td>TOTAL</td>
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**Semester IV (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 543. Community Health Nursing Practice III</td>
<td>3</td>
</tr>
<tr>
<td>Functional Role III* (ADM, EDUC or PCNP)</td>
<td>4</td>
</tr>
<tr>
<td>(*Course numbers differ depending on role selected)</td>
<td></td>
</tr>
<tr>
<td>NURS 570. Proseminar</td>
<td>2</td>
</tr>
<tr>
<td>Elective or thesis</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
</tr>
</tbody>
</table>

**Total Credits**

| Total Credits                                                        | 48      |

**Adult-Gerontological Nursing**

Adult-Gerontological nursing provides students with an in-depth understanding of health and illness in the adult and older-adult populations. Students are prepared to provide advanced nursing care to well adults/elders, acutely and chronically ill adults/elders and frail older persons in community or institutional settings. Students choose functional preparation as a Nurse Practitioner, Clinical Nurse Specialist, Nurse Educator or Nurse Administrator. Nurses who have an MS degree in nursing may enroll in the post-graduate adult-gerontological nurse practitioner certification program.
## MS in Adult-Gerontological Nursing

### Semester I (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 502. Concepts in Health Assessment for Nurses in Advanced Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NURS 532. Nursing and Community Health Care Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>NURS 600. Advanced Research Methods and Quantitative Analyses</td>
<td>3</td>
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<tr>
<td><strong>TOTAL</strong></td>
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</tbody>
</table>

### Semester II (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 503. Scientific Inquiry: Theoretical Foundations for Advanced Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS 511. Adult-Gerontological Nursing I</td>
<td>3</td>
</tr>
<tr>
<td>Functional Role I* (ADM, CNS, EDUC or NP) (*Course numbers differ depending on role selected)</td>
<td>4</td>
</tr>
<tr>
<td>NURS 519. Advanced Pharmacology for Clinical Practice</td>
<td>3</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12</strong></td>
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</tbody>
</table>

### Semester III (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 512. Adult-Gerontological Nursing II</td>
<td>3</td>
</tr>
<tr>
<td>Functional Role II* (ADM, CNS, EDUC or NP) (*Course numbers differ depending on role selected)</td>
<td>4</td>
</tr>
<tr>
<td>NURS 535. Scientific Inquiry: Application of Research Methods</td>
<td>2</td>
</tr>
<tr>
<td>Elective or thesis</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12</strong></td>
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</table>

### Semester IV (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 513. Adult-Gerontological Nursing III</td>
<td>3</td>
</tr>
<tr>
<td>Functional Role III* (ADM, CNS, EDUC or NP) (*Course numbers differ depending on role selected)</td>
<td>4</td>
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</tbody>
</table>
Family Psychiatric Mental Health Nursing

Graduates of the program in family psychiatric mental health nursing are prepared to provide comprehensive, client-centered mental health care to individuals, families and groups across the lifespan. Students acquire in-depth knowledge in the assessment, diagnosis, treatment and prevention of mental illness, as well as the promotion of mental health. Students may select a functional role preparation as a family psychiatric mental health nurse practitioner, nurse educator, or nurse administrator. Clinical Nurse Specialist (CNS) is not an available functional role in the Family Psychiatric Mental Health Nursing MS program. Nurses who have an MS degree in nursing may enroll in the post-master's family psychiatric mental health nurse practitioner certificate program.

MS in Family Psychiatric Mental Health Nursing

Semester I (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 502. Concepts on Health Assessment for Nurses in Advanced Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NURS 532. Nursing and Community Health Care Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>NURS 600. Advanced Research Methods and Quantitative Analyses</td>
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<td>TOTAL</td>
<td>12</td>
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</table>

Semester II (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 503. Scientific Inquiry: Theoretical Foundations for Advanced Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS 519. Advanced Pharmacology for Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>Elective (NURS XXX or other discipline)</td>
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</tr>
<tr>
<td>Functional Role I* (ADM, EDUC or NP) (*Course numbers differ depending on role selected)</td>
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Semester III (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 570. Proseminar</td>
<td>2</td>
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<td>Elective or thesis</td>
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<tr>
<td>TOTAL</td>
<td>12</td>
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</tbody>
</table>

TOTAL CREDITS 48
NURS 535. Scientific Inquiry: Application of Research Methods 2
NURS 562. Psychopharmacology 2
NURS 563. Family Psychiatric Mental Health Specialization I: Acute Illnesses 4
Functional Role II* (ADM, EDUC or NP) (*Course numbers differ depending on role selected) 4
TOTAL 12

Semester IV (Spring)

NURS 564. Family Psychiatric Mental Health Specialization II: Chronic Illnesses 4
Functional Role III* (ADM, EDUC or NP) (*Course numbers differ depending on role selected) 4
NURS 570. Proseminar 2
OPTIONAL - Second Elective 3
TOTAL 10-13

TOTAL CREDITS 46-49

Certificates

Students currently enrolled in family health, community health, family psychiatric mental health or adult-gerontological health nursing graduate degree programs may choose to complete an additional certificate. Students choosing this option will be required to complete additional credits. Students interested in these options should see the Director of Graduate Programs or a faculty academic advisor prior to beginning coursework so that the plan of study may be developed. Students must complete an add-on certificate application form through the Graduate School to add the certificate code to the academic record, and students must submit the certificate processing fees form and pay a certificate processing fee in the semester in which they plan to graduate.

Students who are not currently enrolled in a graduate degree program must complete a stand-alone certificate program application through the Graduate School and pay an application fee.

Admissions Requirements for Nurse Practitioner Post-Graduate Stand-Alone Certificates

Although each applicant is considered on an individual basis, the general admissions requirements are:

- A master's degree in nursing from an ACEN- or CCNE-accredited school of nursing program
- A bachelor's degree in nursing from an ACEN- or CCNE-accredited school of nursing program
- A current, unencumbered license to practice as a registered professional nurse in the United States
Prior to beginning clinical experiences in a New York clinical facility, students are required to provide a copy of their current, unencumbered license to practice as a Registered Nurse in New York. This is a requirement of the New York State Department of Education Office of the Professions.

Two satisfactory academic or professional references are required; letters of recommendation from professional referents may not be personal friends and/or family members of the applicant. It is expected that a professional referent would be a current or former supervisor to the applicant.

Personal statement
Resume or curriculum vitae
Copies of course syllabi and official academic transcript(s) reflective of successful course completion with a grade of B or better are required of any applicant who seeks a waiver of previously completed non-clinical graduate nursing coursework such as the "3 Ps" (i.e., Concepts in Health Assessment for Nurses in Advanced Clinical Practice; Advanced Pathophysiology Across the Lifespan; Advanced Pharmacology for Clinical Practice).

Post-Graduate Family Nurse Practitioner Certificate Program

Students who already hold an MS degree in nursing may enroll in the post-graduate family nurse practitioner certificate program. Depending on prior educational preparation, select non-clinical course requirements may be eligible for waiver by the Graduate Nursing Program Director with the submission of official transcripts reflecting successful completion of previous coursework (grade of B or better) and related supporting course syllabi. Graduate Record Examination scores are not required for admission to this program.

Semester I (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 502. Concepts in Health Assessment for Nurses in Advanced Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>6</strong></td>
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</table>

Semester II (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 519. Advanced Pharmacology for Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 521. Nursing in Family Practice I</td>
<td>3</td>
</tr>
<tr>
<td>NURS 553. Family Nurse Practitioner Role I</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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</table>

Semester III (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 522. Nursing in Family Practice II</td>
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</tr>
<tr>
<td>NURS 554. Family/Adult-Gerontological Nurse Practitioner Role II</td>
<td>4</td>
</tr>
<tr>
<td>Semester IV (Spring)</td>
<td>credits</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------</td>
</tr>
<tr>
<td>NURS 596. Nursing in Family Practice III</td>
<td>3</td>
</tr>
<tr>
<td>NURS 555. Family/Adult-Gerontological Nurse Practitioner Role III</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7</td>
</tr>
</tbody>
</table>

| TOTAL CREDITS | 30 |

**Post-Graduate Community Health Primary Care Nurse Practitioner Certificate Program**

Students holding an MS degree in nursing may enroll in the post-graduate community health primary care nurse practitioner program. Depending on prior educational preparation, several course requirements may be eligible for waiver by the Graduate Nursing Program Director with the submission of official transcripts reflecting successful completion of previous coursework (grade of B or better) and related supporting course syllabi. Graduate Record Examination scores are not required for admission to this program.

**Semester I (Fall)**

<table>
<thead>
<tr>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 502. Concepts in Health Assessment for Nurses in Advanced Clinical Practice</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
</tr>
<tr>
<td>NURS 540. Elements of Biostatistics and Epidemiology</td>
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<tr>
<td>TOTAL</td>
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**Semester II (Spring)**

<table>
<thead>
<tr>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 519. Advanced Pharmacology for Clinical Practice</td>
</tr>
<tr>
<td>NURS 541. Community Health Nursing Practice I</td>
</tr>
<tr>
<td>NURS 515. Functional Role I: Community Health Primary Care Nurse Practitioner</td>
</tr>
<tr>
<td>TOTAL</td>
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</tbody>
</table>

**Semester III (Fall)**

<table>
<thead>
<tr>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 542. Community Health Nursing Practice II</td>
</tr>
</tbody>
</table>
NURS 516. Functional Role II: Community Health Primary Care Nurse Practitioner 4

TOTAL 7

Semester IV (Spring)

NURS 543. Community Health Nursing Practice III 3
NURS 517. Functional Role III: Community Health Primary Care Nurse Practitioner 4

TOTAL 7

TOTAL CREDITS 33

Post-Graduate Adult-Gerontological Nurse Practitioner Certificate Program

Students holding an MS degree in nursing may enroll in the post-graduate adult-gerontological nurse practitioner program. Depending on prior educational preparation, several course requirements may be eligible for waiver by the Graduate Nursing Program Director with the submission of official transcripts reflecting successful completion of previous coursework (grade of B or better) and related supporting course syllabi. Graduate Record Examination scores are not required for admission to this program.

Semester I (Fall)

NURS 502. Concepts in Health Assessment for Nurses in Advanced Clinical Practice 3
NURS 518. Advanced Pathophysiology Across the Lifespan 3

TOTAL 6

Semester II (Spring)

NURS 519. Advanced Pharmacology for Clinical Practice 3
NURS 511. Adult-Gerontological Nursing I 3
NURS 514. Adult-Gerontological Nurse Practitioner Role I 4

TOTAL 10

Semester III (Fall)

NURS 512. Adult-Gerontological Nursing Practice II 3
NURS 554. Family/Adult-Gerontological Nurse Practitioner Role II 4

TOTAL 7

**Semester IV (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 513. Adult-Gerontological Nursing III</td>
<td>3</td>
</tr>
<tr>
<td>NURS 555. Family/Adult-Gerontological Nurse Practitioner Role III</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS** 30

**Post-Graduate Family Psychiatric Mental Health Nurse Practitioner Certificate Program**

Students holding an MS degree in nursing may enroll in the post-graduate psychiatric mental health nurse practitioner program. Depending on prior educational preparation, several course requirements may be eligible for waiver by the Graduate Nursing Program Director with the submission of official transcripts reflecting successful completion of previous coursework (grade of B or better) and related supporting course syllabi. Graduate Record Examination scores are not required for admission to this program.

**Semester I (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 502. Concepts on Health Assessment for Nurses in Advanced Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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</tbody>
</table>

**Semester II (Spring)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 519. Advanced Pharmacology for Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 565. Family Psychiatric Mental Health NP Role I: Assessment &amp; Diagnosis</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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</table>

**Semester III (Fall)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 562. Psychopharmacology</td>
<td>2</td>
</tr>
<tr>
<td>NURS 563. Family Psychiatric Mental Health Specialization I: Acute Illnesses</td>
<td>4</td>
</tr>
</tbody>
</table>
Advanced Certificate in Nursing Education

The Advanced Certificate in Nursing Education encompasses current technological trends while preparing students for the role of nurse educator to teach at both the undergraduate and graduate nursing degree levels. Nurse Educator role courses must be taken in sequence with the exception of N.558. Currently enrolled master’s in nursing students completing the nurse educator functional role may choose to complete the Advanced Certificate in Nursing Education by completing one additional four-credit course (N.558) in addition to the three required role courses (N.556, N.557 and N.590). Otherwise, applications may be submitted for enrollment only if applying as a post-master’s student. The following four courses are required to earn the certificate:

<table>
<thead>
<tr>
<th>Courses Required for Certificate Award</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 556. Functional Role I: Nurse Educator, Educational Philosophy and Curriculum Development</td>
<td>4</td>
</tr>
<tr>
<td>NURS 557. Functional Role II: Nurse Educator, Teaching Methods and Strategies</td>
<td>4</td>
</tr>
<tr>
<td>NURS 590. Functional Role III: Nurse Educator, Educational Issues and Roles</td>
<td>4</td>
</tr>
<tr>
<td>NURS 558. Information and Educational Technology in Nursing Education</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Students who are currently enrolled must complete an add-on certificate application form through the Graduate School to add the certificate code to the academic record, and students must submit the certificate processing fees form and pay a certificate processing fee in the semester in which they plan to graduate.

Students who are not currently enrolled in a degree program must complete a stand-alone certificate program application through the Graduate School and pay an application fee.

Advanced Certificate in Disaster Management

Graduates of the Disaster Management Certificate program are prepared to develop and implement educational programs for first responders, community-based organizations, voluntary organizations and academic institutions. This program is open to both matriculated graduate and post-master’s graduate students in the Decker School of
Nursing who are interested in Disaster Management. Because public health agencies are often located in rural areas, and many of the employees of these agencies are unable to attend a three-hour on-campus class on a weekly basis, the Disaster Management certificate is offered in an online hybrid format. Each course meets several times per semester on campus. This allows students and faculty to meet in person; provides time for instruction on use of "myCourses" (formerly Blackboard); allows for hazmat demonstrations, drills and tabletops; and allows students to present their projects. The certificate in Disaster Management requires the successful completion of four graduate courses for a total of 12 credits.

Students who are currently enrolled must complete an add-on certificate application form through the Graduate School to add the certificate code to the academic record, and students must submit the certificate processing fees form and pay a certificate processing fee in the semester in which they plan to graduate.

Students who are not currently enrolled in a degree program must complete a stand-alone certificate program application through the Graduate School and pay an application fee.

<table>
<thead>
<tr>
<th>Courses Required for Certificate Award</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 540. Elements of Epidemiology and Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>NURS 546. Community Response to Emerging Health Threats</td>
<td>3</td>
</tr>
<tr>
<td>NURS 547. Community Response to Disaster Preparedness</td>
<td>3</td>
</tr>
<tr>
<td>NURS 549. Community Response to Chemical and Radiological Incidents</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Advanced Certificate in Forensic Health**

The Forensic Health Certificate program is open to all students who have a baccalaureate degree and who are interested in forensics. Interested students need not be nursing majors but are required to apply to matriculate into the forensics certificate program. The graduate certificate in forensic health requires the successful completion of three graduate forensics courses for a total of nine credits; each course is three credits. There are five forensic health courses available for enrollment at the graduate level. Students are required to complete N.581G, Forensic Health of Victims, as one of the three courses completed to be eligible for award of certificate. Course titles previously completed at the undergraduate level may not be repeated at the graduate level. Note that not all courses are offered in every semester.

Students who are currently enrolled must complete an add-on certificate application form through the Graduate School to add the certificate code to the academic record, and students must submit the certificate processing fees form and pay a certificate processing fee in the semester in which they plan to graduate.

Students who are not currently enrolled in a degree program must complete a stand-alone certificate program application through the Graduate School and pay an application fee.

<table>
<thead>
<tr>
<th>Courses Available for Certificate Award**</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 581B. Forensic Health Essentials</td>
<td>3</td>
</tr>
<tr>
<td>NURS 581E. Medicolegal Death Investigation</td>
<td>3</td>
</tr>
<tr>
<td>NURS 581F. Forensic Health of Offenders</td>
<td>3</td>
</tr>
</tbody>
</table>
Elections

In addition to electives in other disciplines, students may choose electives in nursing to meet degree requirements, in accordance with professional goals and academic needs. A variety of elective courses are offered each semester. Students should consult with their assigned faculty adviser to ensure that elective course choices support academic goals.

Grading and Requirements for Graduation

Grading Policies of the Graduate School of Binghamton University. The following requirements must be met by students enrolled in the master of science programs of the Decker School:

- The Decker School will require a grade of B (= numerical grade of 83) or better in all courses required for the MS in Nursing program.
- In every course that has a clinical component, students must pass both didactic and clinical components of the course, effective fall 2013.

MS Synthesis Experience (Paper or Project or Thesis)

All master's degree students complete a paper or a project as a final synthesizing experience and as part of course requirements. Students are encouraged to examine and make decisions regarding these options early in their programs.

Students may alternatively elect to complete a MS thesis to fulfill the MS Synthesis Experience requirement. Students register for an Independent Study course through the Graduate Program Office when electing to complete a thesis. Credits earned by completing a thesis may be used to satisfy elective credit requirements. Students planning to pursue a PhD in nursing are encouraged to consider the MS thesis option. Thesis guidelines are found online in the Graduate School Manual. Students selecting the thesis option must seek advisement from their faculty advisor one year prior to graduation.

Doctoral-Level Programs

Doctoral students in Decker School of Nursing adhere to all policies of the School pertinent to professional practice, grading policies, professional ethics and academic honesty. Doctoral students are also required to adhere to all policies and procedures found online in the Graduate School Manual.

PhD Admission Requirements

For students who intend to pursue the Doctor of Philosophy (PhD) program, the following are required and will be evaluated for admission:
1. A baccalaureate degree in nursing from an ACEN- or CCNE-accredited program
2. GPA of 3.0 or higher
3. Two papers that demonstrate student's ability to analyze and/or synthesize nursing phenomena
4. Three recommendations for doctoral study
5. A statement of research interests and professional goals including possible current Decker School of Nursing PhD faculty member(s) whose current research you feel your background and interest might coincide
6. A current, unencumbered license to practice as a registered professional nurse in the United States is required of all applicants
   - All applicants are required to have taken and passed the NCLEX-RN examination prior to the start of clinical courses and/or by a specified date as stipulated by the Director of Graduate Nursing Programs.
   - International students are additionally required to provide proof of a current, unencumbered license to practice as a registered professional nurse in their home country.
   - Prior to beginning clinical experiences in a New York clinical facility, students are required to provide a copy of their current, unencumbered license to practice as a Registered Nurse in New York. This is a requirement of the New York State Department of Education Office of the Professions.
7. Completion of a statistics course (within five years)
8. Curriculum vita including employment and education history
9. A personal interview
10. A progressive record of continued development in nursing practice and scholarship
11. For international students: Proof of English proficiency (such as official TOEFL, IELTS or PTE academic scores); International Student Financial Statement Form; and supporting financial documentation (such as official bank statements or official scholarship or sponsorship letters) are required

**DNP Program Admission Requirements**

For students who intend to pursue the Doctorate in Nursing Practice (DNP) program, the following are required and will be evaluated for admission. International students are ineligible to enroll in a DNP program due to U.S. Department of Homeland Security regulations.

**Post BS-to-DNP Degree Admission Requirements**: 

1. A baccalaureate degree in nursing from an ACEN- or CCNE-accredited program
2. GPA of 3.0 or higher
3. Graduate Record Examination (GRE) scores or Miller Analogy Test (MAT) scores
4. A current, unencumbered license to practice as a registered professional nurse in the United States is required of all applicants
   - All applicants are required to have taken and passed the NCLEX-RN examination prior to the start of clinical courses and/or by a specified date as stipulated by the Director of Graduate Nursing Programs.
   - Prior to beginning clinical experiences in a New York clinical facility, students are required to provide a copy of their current, unencumbered license to practice as a Registered Nurse in New York. This is a requirement of the New York State Department of Education Office of the Professions.
5. Three (3) letters of recommendation
6. Successful completion of a descriptive statistics course

7. Submission of a 500-1000 word essay on how the DNP will enhance your career

8. One year of full-time employment as a professional Registered Nurse is strongly recommended prior to application for admission to a graduate nursing program of study, but it is not required. At the discretion of the Director of the Graduate Nursing Programs, students may be admitted to begin the master's degree program on a part-time basis to allow time for the student to gain confidence in their nursing skills while working in a hospital setting as an RN.

9. Résumé or curriculum vitae

10. Evidence of professional productivity, scholarship, involvement in research, etc.

11. Interview with Program Director or Member of the DNP Admissions Committee

*Admission to/enrollment in the post BS-to-DNP program has temporarily been suspended.

Post Graduate DNP Degree Admission Requirements:

1. Master's degree in nursing from an ACEN- or CCNE-accredited program

2. Bachelor's degree in nursing from an ACEN- or CCNE-accredited program

3. Graduate GPA of 3.0 or higher

4. Graduate Record Examination (GRE) scores or Miller Analogy Test (MAT) scores

5. A current, unencumbered license to practice as a registered professional nurse in the United States

6. Prior to beginning clinical experiences in a New York clinical facility, students are required to provide a copy of their current, unencumbered license to practice as a Registered Nurse in New York. This is a requirement of the New York State Department of Education Office of the Professions.

7. Three (3) letters of recommendation

8. Proof of current national certification as a nurse practitioner or clinical nurse specialist

9. Graduate level statistics course within past five years

10. Submission of a 500-1000 word essay on how the DNP will enhance your career

11. Résumé or curriculum vitae

Doctorate in Nursing Practice (DNP)

The doctorate in nursing practice (DNP) program is designed to prepare nurse practitioners and clinical nurse specialists to respond more efficiently to changes in healthcare delivery and emerging health care needs for the future. The DNP program incorporates and builds on the advanced practice content and competencies currently taught in the master’s program. The DNP focuses on providing graduates with knowledge and competence in health systems leadership, policy development and interdisciplinary collaboration to improve health care outcomes and increase health care access for all populations. Transforming healthcare delivery recognizes the critical need for clinicians to design, evaluate and continuously improve the context within which care is delivered.

Advanced practice nurses prepared at the doctoral level with a blend of clinical, organizational, economic and leadership skills will make a significant impact on health care outcomes. The DNP focuses on providing leadership for innovative and evidence-based nursing practice. This requires competence in translating research into practice, evaluating evidence, applying research in decision-making and implementing viable clinical innovations to change practice.
Students holding a master’s degree in nursing who wish to earn the DNP degree may apply provided they hold national certification as a Nurse Practitioner or Clinical Nurse Specialist in an area of clinical practice offered by the Decker School to include Family, Community Health, Adult-Gerontological or Family Psychiatric Mental Health nursing. Students may currently choose to be admitted to a master’s degree in nursing program as a post-baccalaureate in nursing graduate so that they may complete nurse practitioner or clinical nurse specialist certification requirements and subsequently apply for admission to the post-master's DNP program. One thousand (1,000) post-baccalaureate clinical practicum hours are required to complete the DNP curriculum and meet DNP degree requirements.

DNP Program Offerings

Nurse Practitioner or Clinical Nurse Specialist*

- Family Nursing
- Community Health Nursing
- Adult-Gerontological Nursing
- Family Psychiatric Mental Health Nursing

*NOTE: The Clinical Nurse Specialist (CNS) functional role is only available in the Adult-Gerontological DNP program.

Post-Graduate Full-Time DNP Program Plan

Semester I (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 601. Theoretical and Conceptual Foundations of Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 610. Evidence-Based Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 540. Elements of Epidemiology and Biostatistics OR NURS XXX</td>
<td>1 or 4</td>
</tr>
<tr>
<td>Graduate-level elective required for students who completed a master's-level Epidemiology and Biostatistics course prior to admission</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7 - 10</td>
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</tbody>
</table>

Semester II (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 579. Advanced Diagnostics and Clinical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>NURS 634. Health Policy Formulation</td>
<td>3</td>
</tr>
<tr>
<td>NURS 651. DNP Scholarly Project I (120*)</td>
<td>3</td>
</tr>
</tbody>
</table>
### Semester III (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 548. DNP Organizational Behavior</td>
<td>4</td>
</tr>
<tr>
<td>NURS 652. DNP Scholarly Project II (120 *)</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### Semester IV (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 655. DNP Practicum Experience II (180 *)</td>
<td>3</td>
</tr>
<tr>
<td>NURS 615. Information Systems and Technology in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>NURS 653. DNP Scholarly Project III (120 *)</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

**TOTAL PROGRAM CREDITS**  
35 - 38

*Clinical hours required for DNP practicum courses*

**Post-Baccalaureate DNP Entry Program Plan***

*Admission to the post BS-to-DNP program is temporarily suspended until further notice.*

### Semester I (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 502. Concepts on Health Assessment for Nurses in Advanced Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 518. Advanced Pathophysiology Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NURS 600. Advanced Research Methods and Quantitative Analyses</td>
<td>3</td>
</tr>
<tr>
<td>NURS 610. Evidence Based Practice</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12</strong></td>
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</tbody>
</table>

### Semester II (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>NURS 519. Advanced Pharmacology for Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 532. Nursing and Community Health Care Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>Specialization I*</td>
<td>3</td>
</tr>
<tr>
<td>*Course numbers vary depending on clinical specialization</td>
<td></td>
</tr>
<tr>
<td>Role I* (CNS or NP)</td>
<td>4</td>
</tr>
<tr>
<td>*Course numbers vary depending on role</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

**Semester III (Fall)**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 601. Theoretical and Conceptual Foundations of Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 540. Elements of Epidemiology and Biostatistics</td>
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</tr>
<tr>
<td>Specialization II*</td>
<td>3</td>
</tr>
<tr>
<td>*Course numbers vary depending on clinical specialization</td>
<td></td>
</tr>
<tr>
<td>Role II* (CNS or NP)</td>
<td>4</td>
</tr>
<tr>
<td>*Course numbers vary depending on role</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14</strong></td>
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</tbody>
</table>

**Semester IV (Spring)**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 579. Advanced Diagnostics and Clinical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>NURS 651. DNP Scholarly Project I (120*)</td>
<td>3</td>
</tr>
<tr>
<td>Specialization III*</td>
<td>3</td>
</tr>
<tr>
<td>*Course numbers vary depending on clinical specialization</td>
<td></td>
</tr>
<tr>
<td>Role III* (CNS or NP)</td>
<td>4</td>
</tr>
<tr>
<td>*Course numbers vary depending on role</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

**Semester VI (Fall)**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 548. DNP Organizational Behavior</td>
<td>4</td>
</tr>
<tr>
<td>NURS 650. DNP Practicum Experience I (180*)</td>
<td>3</td>
</tr>
<tr>
<td>NURS 652. DNP Scholarly Project II (120*)</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
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</tbody>
</table>
Semester VII (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 655. DNP Practicum Experience II (180*)</td>
<td>3</td>
</tr>
<tr>
<td>NURS 615. Information Systems and Technology in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>NURS 634. Health Policy Formulation</td>
<td>3</td>
</tr>
<tr>
<td>NURS 653. DNP Scholarly Project III (120 *)</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
</tr>
</tbody>
</table>

TOTAL PROGRAM CREDITS 77

*Clinical hours required for DNP practicum courses

Grading and Graduation Requirements for DNP Students

In addition to the grading policies of the Graduate School at Binghamton University, the following requirements must be met by students in DNP programs of the Decker School:

- The Decker School will require a grade of B (= numerical grade of 83) or better in all courses required for the DNP program.
- In every course that has a clinical component, students must pass both didactic and clinical components of the course, effective fall 2013.
- DNP Scholarly Project requirements are made available in-depth via an on-campus orientation to the DNP Scholarly Project course series and are outlined in the DSON DNP Student Handbook. Students may access the DSON DNP Handbook online.

Doctor of Philosophy in Nursing

The PhD program in nursing is designed to prepare graduates for research and active scholarship in nursing that will extend the knowledge base of nursing and improve the delivery of health care for rural and other vulnerable populations. Graduates will be prepared to conduct research and develop theory related to these populations. Graduates of the program will also be able to design future practice models, direct the development of policy initiatives and effect meaningful change within healthcare delivery systems. The program includes:

- **Research and Conceptualization:**
  - Study in advanced research methods, theory development and analysis, advanced statistics for health research, conceptual analysis, instrumentation and measurement, and involvement in active research programs

- **Nursing and Health Policy:**
  - Study in the healthcare needs of rural or vulnerable populations, and the issues, strategies and policy development interventions for healthcare delivery for these populations

- **Cognate Courses:**
- Selected courses advancing student's knowledge in their specific area of interest

- **Dissertation:**
  - An independent original research project

Students are admitted to candidacy upon satisfactory completion of the following:

- required coursework;
- University Graduate School residency requirement;
- a comprehensive examination;
- successful defense of the dissertation proposal; a teaching requirement.

### Financial Assistance

Prospective students are encouraged to visit the Decker School of Nursing website to review Financial Aid and Scholarship information. Links to apply for consideration by application for funding and/or scholarships are available via the website.

### PhD Post Graduate Program Plan:

<table>
<thead>
<tr>
<th>Year 01</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>N.600 Advanced Research Methods and Quantitative Analyses</td>
<td>3</td>
</tr>
<tr>
<td>N.601 Theoretical and Conceptual Foundations in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>N.640 Rural People and Communities in a Metropolitan Society</td>
<td>4</td>
</tr>
<tr>
<td>N.690 Research Seminar I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Semester Total</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>N.602 Conceptual Analysis for the Investigation of Nursing Phenomena</td>
<td>3</td>
</tr>
<tr>
<td>N.691 Research Seminar II</td>
<td>3</td>
</tr>
<tr>
<td>N.603 Advanced Statistics: Multivariate</td>
<td>3</td>
</tr>
<tr>
<td>N.621 The Rural Imperative: Theoretical Frameworks for Rural Nursing</td>
<td>3</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>N.621 The Rural Imperative: Theoretical Frameworks for Rural Nursing</td>
<td>3</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>N.622 Vulnerable Populations: Theoretical Framework</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Semester Total</strong></td>
</tr>
</tbody>
</table>
### Year 02

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.604</td>
<td>Qualitative Methods in Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>N.623</td>
<td>Theoretical Frameworks: Health Promotion</td>
<td>3</td>
</tr>
<tr>
<td>OR N.624</td>
<td>Theoretical Frameworks: Chronic Illness</td>
<td>3</td>
</tr>
<tr>
<td>N.633</td>
<td>Advanced Health Systems and Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>N.692</td>
<td>Research Seminar III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Semester Total</strong></td>
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</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.607</td>
<td>PhD Dissertation Seminar</td>
<td>3</td>
</tr>
<tr>
<td>N.693</td>
<td>Research Seminar IV</td>
<td>3</td>
</tr>
<tr>
<td>N.634</td>
<td>Health Policy Formulation</td>
<td>3</td>
</tr>
<tr>
<td>N.660</td>
<td>Leadership in Nursing Education</td>
<td>3</td>
</tr>
<tr>
<td>N.661</td>
<td>Teaching Practicum (required if student has no teaching experience)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Semester Total</strong></td>
<td><strong>12-14</strong></td>
</tr>
</tbody>
</table>

#### Cognate

- Cognate course may be taken in any of the above semesters or while writing the dissertation | 3

#### Total Course Credits

- **52-54**

### Remaining semesters . . . .

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam</td>
<td>Comprehensive/Qualifying Examination</td>
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</tr>
<tr>
<td>N.699</td>
<td>Dissertation</td>
<td>1</td>
</tr>
</tbody>
</table>

**Students will register for 1 credit per semester until Dissertation is completed and defended.**

### Health and Wellness Studies

#### Mission and Vision

The Division of Health and Wellness Studies empowers Binghamton University students to make informed decisions
and inspires them to pursue life-long wellness. Through the study of health and wellness science, students will acquire the knowledge and develop the motivation necessary to achieve constructive health behaviors and enhanced functional capacities. Our mission is to integrate the foundations of wellness, including but not limited to: proper nutrition, stress management, emotional and physical health. Students will develop critical thinking skills to evaluate the maze of conflicting health information. The overall goal is to promote academic and personal success and to maximize positive health outcomes.

Some of our goals are to:

- stay sensitive to the diversity of culture, knowledge base and physical ability in our student population,
- cultivate a comfortable yet challenging learning environment in each class,
- offer sound guidance through the maze of conflicting contemporary fitness and health information,
- model positive attitudes, and help students to overcome fears and misconceptions,
- inspire students to discover and continue to practice enjoyable and effective activities,
- stimulate students to become proactive regarding their health and wellness.

We offer a variety of credit courses that satisfy the undergraduate General Education requirements of Activity (Y), Wellness (S) and/or Both (B). These requirements enable us to introduce fundamentals and new experiences to those students who otherwise might not seek them out and to encourage higher-level skill development and depth of knowledge for more experienced students.

Students may satisfy this two-credit Physical Activity/Wellness requirement in any of the following ways:

- 2 credit B course
- 1 Y + 1 S
- 1 B + 1 Y
- 1 B + 1 S
- 1 B + 1 B

With the intent of making it easier to fulfill the graduation requirement, most of these credits are offered through the Division of Health and Wellness Studies in the form of a 2 credit “B” course. These course offerings can be found under the Health and Wellness Studies (HWS) rubric when searching for courses.

There are differences in the application of elective credits that may be applied toward the degree among the five schools. Please contact your school academic advising office for more information.

Graduate students may audit HWS courses on a “space available” basis and are not allowed to advance register.

Transfer credits may be accepted from other academic institutions if the course is equivalent in contact hours and content to that which is offered at Binghamton University. Credits may not be transferred from non-academic agencies such as health spas, fitness clubs, karate schools, dance schools, etc. Students intending to take a health and/or physical education course at another institution during the summer should receive prior approval from both their academic advisor as well as the Division of Health and Wellness Studies. A course description, contact hours and credit value for the course are needed to determine if the course credit is transferable.

Teaching assistantships, internships and independent study opportunities (for variable credit) are available through the Health and Wellness Studies Department faculty.

Students with temporary or permanent physical disabilities, after being examined by the University physician, may be assigned to the ACR (adaptive, corrective, rehabilitative) program or request to have the requirement waived.
Waiving the credit does not grant credit for courses not taken, nor does it reduce the credit hours required for graduation.

Students are encouraged to begin fulfilling the requirement early in their academic career. Postponing may cause scheduling difficulties in the senior year, and the requirement will not be waived because of schedule conflicts when previous opportunities to fulfill the requirement were not used. The requirement may not be fulfilled by taking the same course more than once.

Physical activity courses are at the beginner skill level unless otherwise specified. Intermediate and advanced courses that do not have specific prerequisites do require some mastery of knowledge and skills. Students should realistically assess their skill level before registering for a course beyond the beginner level. Instructors should be consulted if students are unsure of their qualifications. Students can be dropped from a course by the instructor if their skill level is not appropriate to the class.

Some courses may meet for half the semester only. It is the student’s responsibility to know the start and end dates as listed on the BU Brain. If a course is restricted on BU Brain, students may attend for the first several class meetings, and instructors will add students through the petition process as vacancies occur through drops or “no-shows.”

Most courses are held in the West Gym while some are held in other buildings on campus. Students should note the location of the class when they register. All students registered for a "Y" or "B" HWS class as of the first day of classes are liable for a fee that is non-refundable once classes begin. In other words, students who advance register for a course must drop it before classes begin if they do not intend to take the class. Students are entitled to a locker and towel service in the West Gym; however, failure to obtain a locker does not relieve the student of financial responsibility for the fee. Some courses, such as scuba, have additional fees that are specific to the course. Please refer to the University policy on tuition and fee refunds at the following website for additional refund information: http://www.binghamton.edu/student-accounts/ tuitionadjustments.html.

All Health and Wellness Studies courses have attendance requirements. It is the policy of the Health and Wellness Studies Department that any registered student who does not show up for the first two class meetings can be officially dropped from the course by the department at the discretion of the instructor.

Instruction is offered in the following areas:

**ACR:** adaptive, corrective and rehabilitative exercise and recreational activities within the individual’s limitations, as determined in consultation with the University physician.

**Aquatics:** beginning and intermediate swimming, scuba, swimming for fitness, aquatic fitness, and Red Cross certification courses in lifeguard training and water safety instructor training.

**Health and Wellness Cognitive Based Courses:** contemporary health issues, human sexuality, nutrition, health, human behavior and society, stress management, men’s wellness, women’s wellness, women’s body image (Love Thyself), pathophysiology of nutrition-related diseases, care and prevention of athletic injuries, sport and society, psychology of sport and exercise, and substance abuse in contemporary society.

**Health and Wellness Activity Based Courses:** aerobic exercise, running, karate, physical fitness and wellness, psychophysiological awareness, classical pilates, rape aggression defense for women (RAD), self-defense for women, taekwondo, tai chi, triathlon training, marathon training, weight training, cycling, yoga, healthy weight/healthy you, science and application of exercise.

The Division of Health and Wellness Studies offers students from all schools on campus the opportunity to declare a minor in Health and Wellness Studies. Decker nursing students also have the option of completing a concentration in Health and Wellness Studies. Please see the requirements below and check with your school’s advising office as to
how the credits apply toward your graduation requirements.

**Health and Wellness Studies Minor**

The Health and Wellness Studies minor is designed to complement and enrich interdisciplinary learning at Binghamton University. Students will critically evaluate scientific literature and research related to health, wellness, and disease prevention. This knowledge will be applied to effectively assess, plan, motivate and implement health-promoting behaviors, and cultivate lifelong wellness for diverse populations. These educational experiences provide students with the understanding to integrate core concepts and to pursue careers in health and wellness. Our mission is to provide a broad foundation in the concepts of health promotion and wellness education to encourage healthy living both personally and professionally.

**Minor Requirements:**

Core Courses (14 cr. total)

- HWS 233/NURS 220: Stress Management (2 cr.)
- HWS 331/NURS 311: Contemporary Health Issues (4 cr.)
- HWS 332/NURS 312: Nutrition (4 cr.)
- HWS 336/NURS 313: Science and Application of Exercise (4 cr.)

*NOTE: Nursing students have the option of fulfilling the core requirements with either Science and Application of Exercise (HWS 336/NURS 313) or Human Sexuality (HWS 330/NURS 310).*

10 credits of elective HWS courses

- No more than 2 courses can be designated as a “B” Gen Ed

*NOTE: Nursing students may fulfill electives with any of the following courses:*

- NURS 332: Holistic Health Practice
- NURS 335: Forensic Health Essentials
- NURS 342: Global Healthcare Strategies in Nursing
- NURS 345: Care of Children in Community
- NURS 356: Spirituality and Healing
- NURS 370: Disaster Preparedness
- NURS 392: Palliative Care

**Total credits required = 24 credit hours**

For more information or to apply for the minor, please visit [http://www2.binghamton.edu/dson/health-wellness-studies/](http://www2.binghamton.edu/dson/health-wellness-studies/).
Harpur College strives to provide its students with a sound liberal education as well as specialization in some area of the humanities, social sciences, arts or sciences.

Prospective applicants should see the general section on Admission in this publication.

**The Liberal Arts Program Basis**

The program fosters development of knowledge, skills and interpretive abilities and offers other opportunities for growth outside the classroom.

- **Substantive Knowledge.** The quantity of substantive knowledge that a student can assimilate in four years is limited. Harpur deems no single body of knowledge indispensable. Each student, however, is encouraged and given the opportunity to acquire understanding of the physical and biological world in which we live; of humankind as individuals, creators and philosophers; and of human relations and arrangements in past and contemporary societies.

- **Skills.** Students of the liberal arts are expected to master a number of academic skills necessary for rational discourse. The most essential of these are logical argument and clear expression. Such skills are normally supplemented by particular kinds of competence — mathematic, linguistic and the like — as required by individual fields of study.

- **Interpretive Ability.** In the application of learned skills to subject matter, it is assumed that students acquire theoretical understanding and the power of interpretation. The premise here is that theory provides a means of comprehending and extending fundamental knowledge and perspective.

- **Supplementary Opportunities.** Since students do not exclusively inhabit classrooms, libraries or laboratories, Harpur encourages and provides for a wide range of extracurricular and credit-bearing activities to aid in the continued growth of individual talents, social competency and participatory government among its students.

**Academic Organization**

Most departments of Harpur College are contained administratively within three principal divisions: humanities (including fine arts), science and mathematics, and social sciences. For most matters, the principal academic and administrative unit is the department. Several interdisciplinary major programs are not attached to any division. Students ordinarily pursue academic major programs supervised by departments, although several interdepartmental majors are available.

**Planning a Program of Study**

The General Education Program provides exposure to broad areas of learning. The program provides a general introduction to the Harpur College curriculum, and provides a basis for choosing a major program.

Harpur College students may seek academic advice on planning a program of study from several sources: Harpur Academic Advising, relevant academic departments and/or individual faculty members. These academic advisors help guide students toward a planned and organized program, rather than a random selection of courses.

Typically, students declare a major program before their fifth semester of residence. Students who receive financial aid are encouraged to read in the Financial Information section of this publication regarding the academic progress required to maintain state or federal aid. Timely declaration of the major is an important consideration for such students. When this is done, students are assigned to a departmental advisor, generally a faculty academic advisor within the major program for information about and guidance in the major. Harpur Academic Advising remains available to all students throughout their education for information about the General Education requirements, the All-College Writing requirement, degree planning and other aspects of the undergraduate academic experience.
Academic Requirements

BA, BMus, BFA and BS Degrees

In addition to the bachelor of arts (BA) degree, Harpur College offers a bachelor of music (BMus), bachelor of fine arts (BFA) and bachelor of science (BS) degree in some fields. The general requirements and the Harpur College requirements for these degrees are the same, but the college specifies more major requirements for a BS degree than for a BA degree. The college encourages students to meet with a departmental advisor to discuss which degree is most appropriate for them given their academic and career plans. Whereas no more than 15 courses may be required for a major program leading to the BA, a minimum of 16 courses are required for a major program leading to the BS. Except for interdisciplinary programs, such as biochemistry and integrative neuroscience, every department that offers the BS also offers the BA. More courses are also required for a BMus and a BFA degree. Students may not earn two Harpur BA or BS degrees simultaneously nor may students earn a BA and BS degree in combination. Note that although students may receive only one degree from Harpur College, they may have two majors or more.

Requirements for Graduation

To qualify for a bachelor of arts, bachelor of music or bachelor of science degree from Harpur College, students must meet the following conditions:

- They must complete the General Education requirements. These are described in the Academic Policies and Procedures section of this publication under the heading Undergraduate General Education Program. Courses used to satisfy General Education requirements may be used to satisfy major requirements.
- They must have credit for a minimum of 31½ academic courses (126 credits). (Note: In Harpur College a course is defined as four credits. Students may apply a maximum of 32 external examination credits toward the Harpur College degree. See Advanced Placement and Credit by Examination in this publication.)
- They must complete a minimum of 90 credits in liberal arts and sciences.
- They must complete a minimum of 44 upper-level credits, that is, credits in courses numbered 300 or above.
- They must complete the requirements of their major field.
- They must complete the All-College Writing requirement described later in this section.
- They must complete at least 44 Harpur credits in residence.
- They must be in residence at Harpur College during the last seven and one-half courses (30 credits) immediately preceding graduation, unless specifically exempted from this requirement by the Harpur College Academic Standards Committee.
- They must be in good academic standing, i.e., must present a minimum cumulative grade-point average of 2.0.
- They must pay or satisfactorily adjust all fees and bills.
- They must not be under any disciplinary action.
- They must be duly recommended by the faculty.
- Finally, the State University Trustees by formal action must admit a student to the degree.

Harpur College reserves the right to make changes in the requirements for graduation, except that no increase in total courses required for graduation shall retroactively affect any student already matriculated when the change is made.
There is an overall limit of 20-credits combined of Independent Study, Internship, HWS, OUT and Teaching Practica. Credits taken beyond this limit will not count toward the Harpur graduation requirement of 126 credits. The following limits apply and are included in the 20 credit limit: 10 combined credits (limit of two OUT credits) of HWS, OUT courses, 16 credits of Independent Study (typically course numbers ending in -97, -98 or -99), 8 credits of Internship (typically -95), and 8 credits of Teaching Practica (typically -91).

All-College Writing Requirement

To ensure that all students obtain considerable experience and receive significant guidance or instruction in writing during their baccalaureate studies, Harpur College establishes the following requirements relating to enrollment in composition (C)* and writing (W) courses:

All candidates for a baccalaureate degree from Harpur College must present one of the following combinations of C and W courses for completion of the writing requirement:

- two C and three W; or
- three C and one W; or
- four C.

*Courses tagged with the General Education designator of J also count as C courses.

Transfer credit in English expository writing (composition, rhetoric or literature) may be applied to this requirement up to a maximum of three courses, of which only one may count as a C course.

Harpur College believes that writing is central to a liberal arts education. The labels C (composition) and W (writing) guide students in the selection of courses designed to help them develop their writing skills. Students are strongly urged to take at least one four-credit C course within their first two semesters (32 credits) at Harpur College.

Composition (C) courses emphasize writing as a process of revision and require a minimum of 20 pages of expository prose. At least 50 percent of the course grade is based on student writing. Writing (W) courses provide considerable experience in and feedback on writing as a tool of college-level teaching and learning. Written assignments in W courses constitute 30 to 100 percent of the basis for the grade in the course and typically consist of a minimum of 10 pages of writing.

Major Requirements

All students must pursue an approved academic major. Because it is often difficult to complete all requirements for an academic major by the end of the senior year unless a concrete plan is developed early in the academic career, students normally declare a major program before their fifth semester of residence. The declaration of major is processed in individual departments or programs.

The following major programs are available.

Within the Division of Humanities:

BA degree in:

- Africana Studies
- Arabic
- Art
- Art History
Asian and Asian American Studies
Chinese Studies
Cinema
Classical Civilization
Classics, Greek and Latin
Comparative Literature
English, General Literature and Rhetoric
French
German
Hebrew
Italian
Japanese Studies
Judaic Studies
Korean Studies
Latin
Music, BA, BMUS
Spanish
Philosophy
Theatre

Within the Division of Science and Mathematics:
Biochemistry, BS
Biological Sciences, BA, BS
Chemistry, BA, BS
Geological Sciences, BA, BS
Mathematical Sciences, BA, BS
Physics, BA, BS
Integrative Neuroscience, BS
Psychology, BA

Within the Division of Social Sciences:
Anthropology, BA, BS
Economics, BA, BS
Geography, BA
History, BA
Political Science, BA
Sociology, BA

In Interdisciplinary Major Departments and Programs:
BA degree in:
Environmental Studies, BA, BS
Latin American and Caribbean Area Studies
Individualized Major Program
Linguistics
Medieval Studies
Philosophy, Politics and Law

Note: Due to overlapping requirements in majors, students may not double-major in certain disciplines. Students majoring in biochemistry may not double-major in biology or chemistry. Students majoring in integrative neuroscience may not double-major in either psychology or biology.

Grading System

Students taking Harpur College courses are graded in one of two ways:

- Standard letter grades of A, A-, B+, B, B-, C+, C, C-, D, F; or
- Pass/Fail option using grades of P for Pass and F for Fail. In the Pass/Fail option, P is defined as the equivalent of D or better.

Grading Option Policy

For each course in which they enroll, students choose, with some limited exceptions, one of two grading options at registration. The decision may be changed (either from standard letter grade to Pass/Fail or vice versa) at any time up to the end of the course-withdrawal period, more than halfway through the semester. Please see the University Calendar for published dates. The Registrar informs the course instructor of the students grading choices, and the instructor submits grades accordingly.

Students not on probation may elect to use the Pass/Fail option in a maximum of 24 credits of coursework. Mandatory Pass/Fail courses are not included in this 24-credit limit.

The instructor of any course may choose to limit the grading option of any course exclusively to the Pass/Fail system. Such a limitation must have approval of the appropriate department and of the Harpur College Curriculum Committee and must be noted in the online pre-registration schedule available to students. An indication that Pass/Fail is the only available grade in the course is noted on the student's transcript.

All transcripts are complete semester-by-semester records of courses carried beyond the drop deadline. The explanatory notes that accompany transcripts contain a clear description of the system used in recording grades.

Incompletes

The instructor may report a notation of Incomplete, rather than a grade, when a student has not been able to complete a course for what, in the instructors judgment, is a compelling reason. The student is responsible for requesting an incomplete in a timely fashion so that the instructor may evaluate the circumstance before grades are due to the registrar. The submission of an incomplete means that a student has made a substantial commitment to the course—that is, has completed more than half of the work required—but less than half of the work must still be accomplished before an evaluation may be made.

Students may not re-register for a course in order to complete an Incomplete. See the Repeating Courses section of the Harpur College portion of the University Bulletin.

Students must determine with the instructor, consistent with the provisions of the policy stated above, what work is necessary for completion of the course and when the work must be submitted.

Ordinarily all Incomplete notations must be replaced with grades by the end of the next major semester (fall, spring), whether or not the student is enrolled. Incomplete notations change to an F grade at the end of the next semester.
unless the student files an official extension with the Financial Aid and Student Records Office. The student is responsible for initiating a request for an extension, having reached agreement with the instructor for an alternate completion date. The student is responsible for obtaining appropriate signatures on a Request for Extension of Incomplete form which is available in the Financial Aid and Student Records Office. An Incomplete may be extended for only a limited time. The instructor must submit the grade for the Incomplete course within 18 months of the last class day of the semester in which he or she offered the original class. Students must clear all Incompletes within 30 days of their intended graduation semester.

Change of Grade

Instructors may not change a grade, unless one of the following situations occurs:

- cheating is discovered;
- the instructor testifies that a mechanical error occurred; or
- the instructor receives satisfactory evidence that events beyond the student’s control prevented the submission of the student’s required work, and so changes the grade to Incomplete.

The last day an instructor may change one letter grade to another is 18 months from the last class day of the semester in which he or she offered the original class. However, faculty are required to keep graded work not returned to students for only one semester following the end of the course.

Harpur College students taking courses offered by other schools at the University are graded according to the grading system of the school offering the course.

Academic Progress

Academic progress is determined by grade-point average (GPA) calculation, in which:

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<tr>
<th>Grade</th>
<th>GPA</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
<td>A–</td>
<td>3.7</td>
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<tr>
<td>B+</td>
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<td>B</td>
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<td>C–</td>
<td>1.7</td>
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<td>D</td>
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<td>F</td>
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</tbody>
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GPA is based on all Binghamton University courses taken for credit, except for courses with the grade of P or notations of W, I, MG and AU.

Academic Standing

Satisfactory progress towards a degree is determined by achieving a cumulative GPA of 2.00 or better, which is required to graduate. At the end of each spring and fall semester, Harpur College assesses academic standing, the process used to determine satisfactory progress towards a degree for all enrolled students. Failure to achieve a 2.00 cumulative GPA by the end of a spring or fall semester at Binghamton will result in a “probation” notation being placed on the student's internal transcript.

Students on probation may not elect to use the Pass/Fail grading option. Academic probation does not imply dismissal and does not preclude students from registering or from receiving financial aid. For further information...
about financial eligibility, see the Financial Information section of this publication.

Students who do not earn a 2.00 cumulative GPA in a subsequent semester at Binghamton may be subject to suspension from the university; upon return from suspension, failure to achieve a 2.00 cumulative GPA in future semesters may lead to dismissal from the University. However, a student will not be suspended or dismissed if the student’s semester GPA is greater than a 2.00.

Probation, suspension and dismissal notations are placed on a student’s internal transcript. Letter grades converted to incomplete grades once grades are submitted will not be applied to a semester GPA recalculation for purposes of academic standing.

Readmission after Academic Suspension

Students are not eligible to return from suspension until at least two major semesters have passed since their notification of suspension. Students ready to return from suspension should contact the Harpur Academic Advising Office. If allowed to return, students continue on probation until their overall GPA is a 2.0 or better.

Students who have been away from the university for three or more major academic semesters must apply for readmission in writing through the Admissions Office.

Repeating Courses

Courses for which students previously received credit at Binghamton University or through AP, CLEP, Higher Level International Baccalaureate courses, or through transfer credit at another institution are not counted as credit towards the degree nor is the second grade calculated into the GPA.

Students may retake courses in which they have received a passing grade. This is to allow a student to demonstrate mastery of a given subject matter upon which successful performance in later courses may depend. The repeated course does not count toward hours attempted, hours completed or the GPA.

When a student repeats a course previously passed, both grades appear on the transcript, but only the first grade is counted in the GPA calculations. The transcript will bear a footnote reading credit not applied toward degree for the repeated course. If the student repeats the course to meet a major or minor grade requirement, he/she must, upon completion of the course, submit a degree audit inquiry to the Harpur College degree audit coordinator through the Harpur Academic Advising website requesting that the degree audit coordinator update the student's audit.

Students may retake courses in which they have received a failing grade; they are not required to do so by Harpur College, although major requirements may dictate otherwise. When a student repeats a course previously failed, both grades appear on the transcript, and both are counted in the GPA. As they make their decision about repeating any failed course, students are encouraged to speak with Harpur Academic Advising.

Dropping a Course and Withdrawing from the University

Course Drop/Delete

Students may formally drop a course from their schedules by the announced drop/delete deadline. No notation of any kind appears on the student's transcript if the course is dropped by the drop/delete deadline.

Course Withdraw

Students may withdraw from all but one course between the drop/delete deadline and the course-withdraw deadline.
Courses dropped during this period receive a notation of W.

Students may be permitted to withdraw from courses after the course withdraw deadline only if they cite extraordinary extenuating circumstances and successfully petition through the Harpur College Deans Office. Courses dropped late by petition result in a W notation on the student’s transcript. Consult the Academic Policies and Procedures section for more information on late withdrawing from a course.

University Withdraw

Students who decide to withdraw from all courses for which they are registered at any time between the published first day of classes and the last day of classes must complete the Withdrawal Form. If the student submits the Withdrawal Form before the drop deadline, registered courses are deleted. If the student submits the Withdrawal Form after the drop deadline, a W grade is assigned to each course. In either case, withdrawal results in a notation on the transcript, withdrew from the University.

Course Information

Prerequisites and Course Numbering

Specific course prerequisites are listed clearly in the course descriptions of this publication. Harpur College expects students to know the prerequisites for the courses in which they enroll. Instructors may waive prerequisites in particular cases if the student presents appropriate qualifying evidence.

Harpur College courses with numbers 100 through 199 are introductory courses that normally have no prerequisites and are open to all students.

Courses with numbers 200 through 299 are intermediate-level courses that may or may not have prerequisites.

Courses with numbers 300 through 399 are intermediate courses, normally with prerequisites.

Courses with numbers 400 through 499 are advanced-level courses with specific course prerequisites.

Certain numbers indicate special learning situations. Courses noted -80 are intended for special topics, -91 for teaching practica, -95 for internships, -97 for independent study, and -98 or -99 for honors thesis.

Independent Study

Independent study accommodates advanced students who wish to pursue individual research under the direct supervision of a faculty member and is normally reserved for students who cannot pursue their intellectual interests through normal course offerings. Independent study registrations must be signed by the sponsoring faculty member, the student and the appropriate department representative. Refer to the section titled Requirements for Graduation for specific information regarding the number of independent study credits that can count towards the degree.

First-semester freshmen may not register for independent study courses.

Attendance

In addition to the University-wide attendance policy explained in this publication, note that individual instructors are free to set more stringent attendance requirements in accordance with the academic needs of their classes.

After the first five full class days of the semester, an instructor can drop students who have not attended and who
have not notified the instructor of their intention to remain in the class. To exercise this option, the instructor must make every effort to alert the student to their removal from the course.

Program Load

Fall and Spring Semesters

Binghamton University considers 12 credits a full-time course load. However, Harpur College students typically enroll in 16-18 credits per semester. Students may register for up to 18 academic credits without review.

On the fifth day of the first week of the semester, students with a Binghamton cumulative GPA of 3.3 or higher may register for up to 22 academic credits. In addition, any student may register for two additional credits of OUT, MUSP or THEP. Students who are declared majors in Harpur College and another college or school (Watson School of Engineering, School of Management, Decker School of Nursing, College of Community and Public Affairs) must submit an overload form. Forms are available on the Harpur Advising website.

Courses in the Graduate School

Arts and sciences courses numbered 500 and above are graduate courses, ordinarily open only to graduate students. Harpur College students, however, are permitted to count any course they are qualified to take in the Graduate School toward the 31-1/2 courses (126 credits) required for the baccalaureate degree.

Undergraduate students at Harpur College who have completed all but two courses required for graduation may register for up to two courses of graduate credit to be recorded on a graduate transcript. Interested students should consult the Harpur Academic Advising Office for details.

Courses in Other Schools at Binghamton University

Harpur College students may count up to a total of 36 credit hours of non-liberal arts courses toward the 126 credit hours required for the baccalaureate degree. Within the 36-credit limit are included non-liberal arts courses taken at other institutions, courses in College of Community and Public Affairs, Decker School of Nursing, School of Management, Thomas J. Watson School of Engineering and Applied Science, the Graduate School of Education and OUT courses. Students should refer to the Requirements for Graduation section above for specific limits on internships, independent studies, teaching practica, HWS and OUT courses.

The School of Management offers two programs of particular interest to Harpur College students: an adjunct option in management science, as a supplement to appropriate major programs in Harpur; and a master of business administration program, with special provisions for Harpur undergraduates. See the School of Management section of this publication for details about these programs.

Harpur students interested in a minor in computer science should consult the Watson School section of this publication.

Harpur students interested in a minor in immigration studies should consult the College of Community and Public Affairs section of this publication.

Academic Honors

Departmental Honors

All of the departments and major programs of Harpur College offer qualified students the opportunity to pursue
special studies that, if successfully completed, lead to a degree with honors in that field, e.g., Honors in English or Distinguished Independent Work in Chemistry. Students interested in such special programs should check appropriate sections of this publication and then consult their major advisors. Normally, consultation with the advisor takes place no later than during the students fourth semester of residence.

Deans List

To qualify for the Harpur Deans List at the end of each regular semester, students must have a 3.5 or better semester grade-point average, at least 12 graded credits and no missing grades or Incompletes. Recognition is given for each semester in which students meet these criteria. The award is noted on the transcript.

College-Wide Honors

Students with outstanding academic records receive college-wide honors upon graduation. To qualify students must meet the cumulative grade-point averages specified below, have at least 48 graded Binghamton University credits and have no missing grades or Incompletes. Honors are awarded as follows:

- 3.50-3.69 GPA: cum laude
- 3.70-3.84 GPA: magna cum laude
- 3.85-4.00 GPA: summa cum laude

The appropriate graduation honors are indicated on the diploma and on the final transcript.

Optional Minors

An academic minor is an approved course sequence within an area of study, providing a degree of specialization in that area, a specialty within a discipline or a specialty integrating more than one discipline. The area in which a student takes a minor is recorded on the student's transcript at graduation as certified by the minor department or program. Students in Harpur College are not required to take an academic minor. Departments are not required to offer a minor.

Juniors and seniors who have already declared a major and earned a minimum of 60 credits may declare a minor(s). Minor requirements are described in detail in this publication under each department’s listing. The completed minor(s) appear on the transcript when the degree is certified. Students may not complete minors after graduation.

General Requirements

- The student must earn a minimum of 24 credits (in Harpur College, a course is defined as four credits). Each department or program establishes requirements for its minor. A minor program must include not more than two introductory-level courses and at least two upper-level courses (numbered 300-499).
- At least four of the courses in the students minor program must be in addition to those counted toward fulfillment of the requirements for the students major(s) and or minor(s).
- If a student declares two minors, at least two divisions must be represented in the three fields of study (major and two minors).
- If a student wishes to minor in a separate specialization or track within the department or program of the major, the proposal must be consistent with stated policies of that department or program.
Individualized Major Program

The Individualized Major Program (IMP) provides Harpur College students an opportunity to design a program of study not presently available within the established University structure. These innovative majors must be academically sound, must show breadth and depth, and must provide a theoretical and conceptual framework for a particular course of study. Acceptable majors are interdisciplinary and combine courses from three or more liberal arts disciplines. Students are advised to apply for an IMP major no later than the second semester of their sophomore year. Applications after this period may mean that additional semesters may be required. Students interested in IMP should consult the program’s advisor in the Harpur College Academic Advising Office early in their planning.

Professional Career Preparation

American professional training in engineering, law, teaching, medicine, dentistry and the sciences is ordinarily built on a foundation of undergraduate education, usually including a program of four years leading to the bachelor’s degree. Students contemplating graduate training for a profession should begin early to consult the bulletins of the graduate and professional schools. Students interested in preparing for a career in teaching and education at the primary and secondary levels should contact the Graduate School of Education for information about graduate curricular options. Students eligible for the Collegiate Science and Technology Entry Program (CSTEP) should contact the pre-health or pre-law advisors for academic and career information. Additional assistance is available through the CSTEP Office (607-777-2678).

Health Professions

Pre-health-professions advising is a key resource for students who wish to study for the health professions. Students may consult with a full-time advisor who is a specialist in the health professions. There are also advisors for Freshman/Sophomore Pre-Health Students and the health sciences fields as well as a cohort of peer advisors available to advise students. Pre-health students may join discussions on PREHLTH-L, the Binghamton University pre-health listserv. The listserv provides a forum in which ideas and information may be exchanged with the pre-health professions advisor and among students themselves. In addition, a great deal of information is now housed on the pre-health webpage, accessible at: http://www2.binghamton.edu/pre-health/.

For more information about pre-medical education, see Medical School Admission Requirements, published annually by the Association of American Medical Colleges (online at http://aamc.org). This information covers all aspects of preparation for and admission to medical school, including specific requirements of the individual schools. Although there is some variation, most medical schools (allopathic and osteopathic) require the following college-level courses: one year each of English, biology, inorganic chemistry, organic chemistry and general physics. One semester of biochemistry and statistics is also required. Some medical schools also require a semester to one year of mathematics (calculus). Basic science courses must include laboratory experience. As there are well over twice as many applicants as there are positions available in medical schools, it is unlikely that the above minimal requirements will be sufficient.

Dental school requirements are similar to medical school requirements. Students interested in dentistry are referred to Admission Requirements of U.S. and Canadian Dental Schools, published annually by the American Dental Education Association (online at http://www.adea.org). This information presents pertinent information about preparation for dental education, as well as information about individual dental schools.

Requirements for optometry and veterinary medicine are considerably more varied.

For additional information, please consult the Pre-Health Freshman-Sophomore Handbook which is available on the pre-health website (http://www2.binghamton.edu/pre-health/).
Articulation Agreements

Binghamton University has entered into agreements with three health professional schools that make it easier for students to make a transition between the University and professional school. Students interested in these programs should review information available on the pre-health webpage (http://binghamton.edu/pre-health/) and then consult the pre-health professions advisor.

Medicine: Binghamton University has established an agreement with the College of Medicine at SUNY Upstate Medical University in Syracuse that allows Binghamton students to participate in an early assurance program. Second-semester sophomores accepted into an early assurance program are guaranteed admission into medical school upon satisfactory completion of their remaining two years at Binghamton (i.e., receiving their bachelor’s degree). Interested students should contact the pre-health professions advisor at the beginning of their sophomore year.

Dentistry: Binghamton University and the School of Dental Medicine at the State University of New York at Buffalo have established an early assurance program. Second-semester sophomores accepted into an early assurance program are guaranteed admission into dental school upon satisfactory completion of their remaining two years at Binghamton (i.e., receiving their bachelor’s degree). Interested students should contact the pre-health professions advisor at the beginning of their sophomore year.

Optometry: Binghamton University and SUNY College of Optometry have a joint degree program leading to a BA in biology from Binghamton and a Doctor of Optometry from the College of Optometry. This program takes seven years instead of the usual eight necessary to obtain both the liberal arts degree and the professional school degree. After three years at Binghamton, participants attend the optometry college, with the first year of professional school counting also as the fourth year at Binghamton. The BA is awarded at the end of the participant’s first year of professional school. Spaces are reserved for prospective or current freshmen only, and there are a number of steps to the admissions process after acceptance into Binghamton. Interested students are encouraged to consult the Pre-Health website at http://binghamton.edu/pre-health/ or to contact the pre-health professions advisor or the Admissions Office or SUNY Optometry (http://www.sunyopt.edu; 212-938-5500).

Legal Careers

The pre-law advisor in the Harpur College Academic Advising Office serves students and graduates from all Binghamton University schools who are interested in attending law school. Current students may subscribe to the pre-law electronic listserv PRELAW-B, attend pre-law meetings, workshops and other law-related events held throughout the year, and meet law school representatives at Binghamton University's annual Law Day. The Harpur College Academic Advising Office also provides a pre-law resource library, law-school admission data, LSAT test preparation materials, law-school bulletins and application materials, and information about internships and legal careers. The pre-law advisor meets with students and graduates during scheduled appointments and walk-in times.

Unlike other graduate and professional schools, law schools do not require specific courses or curriculum prior to admission. Students interested in law school may pursue a variety of majors. A well-rounded liberal arts curriculum that develops disciplined habits of study, analytical thought, and writing and oral expression skills is excellent preparation for law school.

For careers in patent law that involve practice before the U.S. Patent and Trademark Office (USPTO), students must either obtain a bachelor’s degree in certain science or engineering fields or complete a requisite number of credit hours in specific disciplines. Students interested in patent law should consult with the pre-law advisor early in their college careers.

The pre-law advisor encourages students interested in a legal career to pursue internships, summer employment
and other opportunities to explore the legal profession before applying to law school.

Additional information on law school and legal careers is available in the ABA-LSAC Official Guide to ABA-Approved Law Schools, produced by the Law School Admission Council and the American Bar Association (Law School Admission Council, 662 Penn St. Newtown, PA 18940, online at http://www.lsac.org and the American Bar Association, Section of Legal Education and Admissions to the Bar, 321 North Clark Street, Chicago, IL 60654, online at http://www.abanet.org/legaled).

Africana Studies

Program Components

Mission Statement

Africana Studies is the study of Africans and African descended peoples. It offers a multidisciplinary, integrative hermeneutics to investigate, educate, promote, and value the contributions and experiences of Africans and African descended peoples worldwide.

Vision Statement

The department’s vision is to impart innovative, creative, solidly-grounded knowledge and understandings of Africans and the African Diasporas.

Goals

1. Students will have knowledge of the national, global roles and cultural contributions and experiences of Africans and people of African descent.
2. Students will have knowledge of oral traditions, literature, art and aesthetics, expressions and conceptualizations of spiritualism within the African purview.
3. Students will have knowledge of social, political and economic history of Blacks and the evolution of black nationalism.

The department attracts students of all ethnic backgrounds. Both minority and non-minority students benefit from exposure to academic materials and perspectives not otherwise available to them.

All the department’s courses satisfy Harpur College writing requirements. A single, double or cross-disciplinary major (BA program) and minor in Africana Studies are available.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA
Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the *Bulletin*.

**Requirements for Africana Studies Major**

For the major, seven of the eleven required courses must be taken in the department from department faculty only. These courses should be in the 100-400 levels reflecting academic growth, progressive competence and a course distribution that reflects the African and African Diaspora focus of the department. Of these, students should take:

**A. Two generalist introductory courses:**
- AFST 101. Introduction to Africana Studies, or
- AFST 171. Introduction to African Religion, or
- AFST 175. Introduction to African Art

**(ii) One disciplinary introductory permanent course:**
- AFST 212. African Intellectual Traditions, or
- AFST 229. Introduction to African Literature

**(ii) One special topics introductory course:**
- AFST 203. Afro-Brazilian & Caribbean Religions, or
- AFST 205. African & Western Religions, or
- AFST 251. Islamic Cultures in Africa

**C. (i) AFRICA: Select two topic courses. Prerequisite: Students must have taken relevant 100- or 200-level Africana Studies courses.**
- AFST 317. African Women & Feminism
- AFST 329. Advanced African Dance
- AFST 345. Race, Philosophy & the Law
- AFST 362. Literature of North Africa and the Middle East
- AFST 367. African Kingship
- AFST 373. The African Novel
- AFST 376. African Cultural Traditions
- AFST 378. African Metaphysics

**(ii) AFRICA DIASPORA: Select two topics courses. Prerequisite: Students must have taken relevant 100- or 200-level Africana Studies courses.**
- AFST 360. Refugee and Immigrant Health
- AFST 370. Convivencia in Islamic Spain
- AFST 372. Arabic Civilization & Culture
- AFST 379. Contemporary Art-African Diaspora
- AFST 450. Global Health
- AFST 477. Mediumistic Traditions
D. AFST 490 Senior Seminar, and any two advanced 400-level courses.

E. At least seven of the eleven Africana courses should be in the 300-400 levels and these should follow the Distribution Requirement.

**General Requirement:**

Students must earn a grade of C or above in courses fulfilling the major requirement. No courses fulfilling the major requirement may be taken Pass/Fail. Only one independent study course may be counted in fulfillment of the requirements for the major and this must be by an Africana Studies faculty. Students must take seven of the eleven courses at Binghamton University for the major. Students may take cross-listed courses of non-Africana Studies faculty but only as electives. When appropriate, students can petition to have a different course count as fulfilling requirements for courses in Group A or B.

**Departmental Honors Program**

Exceptional students majoring in Africana Studies are considered for admission to the honors program upon the successful completion of six semesters or 96 credit hours (including at least 32 in Africana Studies).

The honors program consists of two courses taken in the senior year: AFST 497, Advanced Independent Study/Honors Research and AFST 499, Honors Thesis. Honors in Africana Studies are awarded to students who receive at least a B+ grade in Advanced Independent Study/Honors Research and at least an A– in Honors Thesis.

Students who wish to enroll in the honors program must have a cumulative and major/program 3.5 grade-point average, must be recommended to the program by a faculty who will take responsibility for directing that student’s Honors Thesis and must be granted permission to participate in the program by the department chairperson. Interested students should apply in the spring semester of the junior year to the undergraduate studies director who solicits a sample of the student’s written work in Africana Studies courses and two letters of recommendation from appropriate faculty. Upon acceptance, a Change of Major, Degree or Specialization form is submitted to the Office of the Registrar.

**Requirements for Africana Studies Minor**

The minor in Africana Studies is designed to give students with majors in other fields a chance to have a supplementary discipline and focus that may combine their academic interests as well as future professional concerns. Students develop their programs with the advice of departmental faculty. Students may, for example, take a history, PPL, sociology, literature, music, women studies or religion concentration with the supervision of the Africana Studies faculty.

A minimum of six courses (24 credits) is required, including:

- any one Africana Studies course at the 100-level
- any two courses at the 200-level
- any two courses at the 300 upper-level
- any one course at the 400 upper-level

Students must earn a grade of C or above in courses fulfilling the minor requirement. No courses fulfilling the minors requirement may be taken Pass/Fail. Students must take 3 of 6 courses at Binghamton University by Africana faculty members for the minor.

**Anthropology**
Undergraduate Programs

Anthropology studies human populations and cultures in comparative, historical and evolutionary frameworks. The curriculum promotes understanding the variety of past and present human groups, the cultures and societies people create, the processes that animate cultural production and social life, and the processes that underlie human biological development and change. Students learn and apply the research methods and theoretical constructs used by anthropologists to investigate peoples and their social worlds. Excavating and analyzing the remains of past cultures, observing primate behavior, and examining global social and cultural changes are but a few of the approaches anthropologists use to investigate the human way of life.

The department offers the BA and BS degrees in anthropology. Students majoring in the BA select one of two tracks: general anthropology or anthropological perspectives. These tracks are tailored to the different interests and career goals of majors, and provide excellent training for those interested in undertaking graduate studies in anthropology or related fields. The BS degree combines anthropology with natural science approaches associated with biology, chemistry, geology and related fields, and is directed toward students who require formal scientific training within the major to prepare them for careers or advanced studies with a scientific focus in anthropology or other disciplines.

Sequences of courses enable the student to move from a broad understanding of anthropology to more focused topics of study. Only courses passed with a grade of C- or better are counted toward fulfilling the requirements of a major in anthropology; transfer courses also must be C- or better to count toward the major. No more than one course taken under the Pass/Fail option is accepted in fulfillment of the requirements for an anthropology major. The Anthropology Department’s “Residency Requirement” stipulates that a minimum of seven courses (28 credits) in the major must be taken in residence at Binghamton University.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

BA Degree Program

Track 1: General Anthropology

The General Anthropology track offers the student a sound understanding of the concerns and methods within each of the four subfields of anthropology — archaeology, linguistic anthropology, biological anthropology, and sociocultural anthropology — and also provides foundational coursework for students intending to pursue graduate studies in anthropology. This is accomplished through a carefully defined and sequenced program of courses in six
categories:

- ANTH 114 (or 118), 166, 167 (or 169), and 168;
- ANTH 300;
- A course in quantitative or qualitative methods chosen from among ANTH 200; ECON 366; HDEV 300; MATH 130, 147, 148, 221, 222; PSYC 243; OR SOC 305;
- One course from each of the following four groups, at least three courses of which must be taken at the 300 or 400 level:
  - Sociocultural: ANTH 220-229, 270-279, 349-369, 450-465, 477, or 280/380/480 (with a sociocultural focus);
  - Archaeology: ANTH 230-239, 260-265, 340-348, 370-379, 470-475, or 280/380/480 (with an archaeology focus);
  - Biological: ANTH 240-249, 330-339, 420-429, or 280/380/480 (with a biological focus);
  - Linguistic Anthropology: ANTH 210-219, 310-329, 440-449, 466-469, 280/380/480 (with a linguistic focus);
- Two courses with a focus on the peoples and cultures of a specific world region or area, chosen from among ANTH 250-269, 273, 367, 370, 374-379;
- Eight credits of electives at the 300-400 level in anthropology or related social sciences, to be chosen with the advice and consent of the director of undergraduate studies.

**Track 2: Anthropological Perspectives Program**

The Anthropological Perspectives track allows greater flexibility in the sequencing and selection of courses toward the major. It also provides the opportunity for students who wish to concentrate in one of the subfields (archaeology, biological anthropology, linguistic anthropology, sociocultural anthropology) to pursue a more focused major. Selection of courses must be done in consultation with the director of undergraduate studies:

- 24 credits in anthropology at the 100-200 level,
- four credits of an "area course" focusing on the peoples and cultures of a specific world region or area (e.g., ANTH 251-273, 340-344, 367-370, 374-379).

Students should take three of the four foundations courses listed below, including the foundations course for the subfield in which they are concentrating (please note that these foundation courses are with in the six 100-200 level courses required for the major):

- for archaeology: ANTH 167 or 169;
- for biological anthropology: ANTH 168;
- for linguistic anthropology: ANTH 114, 118 or 170;
- for sociocultural anthropology: ANTH 166;
- 28 credits at the 300-400 level, of which 20 credits must be taken in anthropology and eight credits may be taken in the related social sciences. For students concentrating in one of the subfields, a minimum of three courses in the chosen subfield should be included.

*Note: No more than six courses from a single subfield may be applied toward fulfilling the major requirements (excluding electives) in either the General Anthropology or Anthropological Perspectives program. A maximum of four credits of ANTH 495, 497 or 499 may be used toward fulfilling upper-level major requirements, with the consent of 325/669*
the director of undergraduate studies.

BS Degree Program

This program allows majors to integrate anthropology with scientific training relevant to their career or post-graduate goals. It provides background in each of the four subfields of anthropology, yet requires more training in quantitative methods and laboratory settings. This major is designed to allow students to focus their training in either biological anthropology or archaeology. Anthropology courses that apply toward this track also emphasize natural science methodologies and theories:

- the foundations course in each of the four subfields (12 credits): ANTH 114 (or 118 or 170), 166, 167 (or 169) and 168;
- two field/laboratory courses (8 credits): one field/laboratory course must be from (for biological anthropology) ANTH 332, 335, 336, 426, or 428; (for archaeology) 345, 372, 373, 472, 473 or 475, and one may be a science cognate (science cognates include BIOL 117, 118; PHYS 121, 122; CHEM 101, 102, 107, 108; GEOL 111, 113);
- two quantitative methods courses (8 credits), at least one of which must be a statistics course: ANTH 200; ECON 366; HDEV 300; MATH 130, 147, 148, 221 or 222; PSYC 243; or SOC 305;
- two lower-level courses in anthropology, chosen from among the following: ANTH 241-249 for biological anthropology; and, for archaeology, ANTH 230-239, 255-256, 260-269;
- five upper-level courses in anthropology (20 credits). Choose from among ANTH 300 and for biological anthropology, ANTH 330-339, 380, 420-429, 480; for archaeology, ANTH 340-348, 370-380, 470-475, 480. Once the field/laboratory course requirement has been met, additional anthropology laboratory or fieldwork courses may be applied to this requirement. A maximum of four credits of ANTH 497 or 499 may be used toward fulfilling the upper-level course requirements, with the consent of the director of undergraduate studies;
- two electives from anthropology and the science cognates (8 credits), one of which must be a science cognate. Upper- or lower-division anthropology courses may be used with the exception of ANTH 491, 495. Science cognates include BIOL 117, 118; PHYS 121, 122; CHEM 101, 102, 107, 108; GEOL 111, 113.

The total number of courses and credits required for each program of study toward the major is fixed, and no single course may be counted twice. Only courses passed with a grade of C– or better may be counted toward fulfilling the requirements of the major in anthropology. One course taken under the Pass/Fail option may be used to fulfill anthropology major requirements. The Anthropology Department's "Residency Requirement" stipulates that a minimum of seven courses (28 credits) in the major must be taken in residence at Binghamton University.

Any changes in either of these two programs may be made only with the approval of the director of undergraduate studies or the department chair.

Honors Program

Graduation with honors in anthropology is awarded for superior independent work, and is strongly encouraged for students who intend to pursue graduate careers. To qualify for admission to the honors program, a student must have demonstrated academic accomplishment of high quality. Applications to the program must be approved by the departmental undergraduate committee no later than the end of the sixth semester of a student’s eight semesters of baccalaureate studies. A senior honors thesis, supervised by two members of the faculty, is required for honors. Normally, honors students should enroll in ANTH 497 in their next-to-last semester to do research toward an honors thesis, and in ANTH 499 in their last semester, during which they complete the thesis.

5-year Combined Degree Programs
Bachelor of Arts and Master of Arts Combined Degree (BA/MA)
Bachelor of Arts and Master of Arts in Public Archaeology (BA/MAPA)
Bachelor of Arts and Master of Science Combined Degree (BA/MS)
Bachelor of Science and Master of Arts Combined Degree (BS/MA)
Bachelor of Science and Master of Arts in Public Archaeology (BS/MAPA)
Bachelor of Science and Master of Science Combined Degree (BS/MS)

The 5-year combined-degree program is designed for outstanding Binghamton University anthropology students who wish to combine either a bachelor of arts or a bachelor of science degree in anthropology with a master’s degree (either a master of arts in anthropology or a master of science degree in biomedical anthropology). The combined-degree program enables students to graduate with both degrees in five years in part by having students take a limited number of graduate courses while still undergraduate students. The combined-degree program also allows a limited number of graduate courses (usually 12 credits of 500-level courses) to count towards both graduate-level degree requirements and undergraduate-level degree requirements. These and other program designs reduce the normal amount of time required to complete both the BA/BS and MA/MS, from six years to five years.

Each year, the Anthropology Department will offer a limited number of exceptional anthropology students the opportunity to enroll in the combined-degree program in anthropology. Students who have achieved a cumulative GPA of 3.5 or better and who have outstanding academic records may apply to the combined-degree program as early as their fourth semester of undergraduate study, and no later than their sixth semester of study (second semester of the junior year). (See below for other application requirements and deadlines.) Students who are interested in the program and not yet in their fourth semester of study are strongly encouraged to download and follow the recommended “Course Timetable” for the specific combined-degree program in which they are interested (available at the department’s website), as well as to indicate their interest in the program as early as possible in their undergraduate studies (before they are eligible to apply) by meeting with the director of undergraduate studies in anthropology.

Application and Admissions Process

Application and admissions processes for the combined-degree program in anthropology are, first, through the anthropology undergraduate program and the anthropology graduate program and, subsequently, through the Graduate School. Students may apply to the combined-degree program no earlier than their fourth semester of undergraduate study, and no later than the sixth semester of undergraduate study (second semester of the junior year). There are two target deadlines each year for submitting applications: November 1st and March 15th.

Eligibility: Students applying for admission to the combined-degree program must have exceptional academic records, including a cumulative GPA of 3.5 or better, and faculty recommendations attesting to the student’s potential in a graduate program.

Admissions Application: A complete application for admission to the combined-degree program should include all of the following:

- the “Application for Admission to Combined Degree Program” (available online);
- a writing sample (for applicants to MA combined programs);
- Two letters of recommendation in support of the student's application from Binghamton University faculty, at least one of which must be from a member of the anthropology department; and
- the applicant’s official BU transcript as well as transcripts from any other colleges or universities the applicant has attended.
Applicants will also be required to interview with the combined-degree program Admissions Committee, consisting of the Department of Anthropology’s undergraduate director, graduate director, and the chair of the department. Each applicant will be contacted by e-mail shortly after the application submission deadline to schedule the interview.

Admissions applications are competitively evaluated on the basis of the undergraduate transcript, the references, and the interview. Applicants are advised that acceptance into the combined-degree program is highly competitive, with a limited number of applicants accepted into the program each year. Applicants will be notified of the Admissions Committee’s decision approximately four to six weeks after the application deadline.

**Continuing Eligibility**

Upon admission to the combined-degree program, successful completion of benchmark degree requirements is necessary for continued standing in the program. Students may be dismissed from the program at any time for failure to successfully complete benchmark requirements. While some requirements vary according to the specific combined-degree program into which the student has been accepted (BA/MA, BA/MAPA, BA/MS, BS/MA, BS/MAPA or BS/MS), benchmark requirements applicable to all students admitted include all of the following:

- successful completion of the undergraduate degree (the BA or BS in anthropology) in the fourth year of study, including all General Education and Harpur College requirements for graduation;
- maintenance of a cumulative GPA of 3.5 or better;
- receipt of grades of "B" or better and a cumulative GPA of at least 3.0 in undergraduate courses taken for the major and in all graduate coursework, including the core graduate required courses;
- successful application to and acceptance by the Graduate School (by the fifth year); and
- timely completion of all required undergraduate and graduate coursework (including core graduate course requirements) for the specific combined-degree program, as laid out on the “Course Timetable” specific to the student’s combined-degree program.

In addition:

- **For students pursuing the BA/MA or BS/MA combined degree:** Formation of a faculty committee willing to supervise the student’s MA thesis, as required for the MA degree, which committee must be in place by the beginning of the fifth year; successful completion of the foreign language requirement for all MA students at the Graduate School; and successful completion of either an MA thesis or 2-paper thesis option.

- **For students pursuing the BS/MAPA or BA/MAPA combined degree:** Completion of the required internship during the summer of the fourth year (between years four and five). Formation of a faculty committee willing to supervise the student's MA thesis, as required for the MA degree, which committee must be in place by the beginning of the fifth year, and successful completion of an MA thesis.

Students who complete the BA or BS degree requirements during the first four years are assured of receiving the appropriate bachelor’s degree if, due to dismissal from the program or other reasons, they do not complete the fifth year of study in the combined-degree program.

**Tuition and Financial Aid**

Students admitted to the combined-degree program are formally considered undergraduates and pay undergraduate tuition rates. Applicants accepted into the combined-degree program are considered undergraduates and are therefore entitled to undergraduate tuition and financial aid. Applicants accepted into the combined-degree program are considered undergraduates and are therefore entitled to undergraduate tuition and financial aid.
tuition rates for the first four years of the program until they graduate with the BA/BS degree. During the fifth year in
the combined-degree program, students are formally considered graduate students and pay graduate student tuition
rates.

**Minors in Anthropology**

Five possible minors in anthropology are offered: general anthropology, sociocultural anthropology, archaeology,
biological anthropology and linguistic anthropology. Each is satisfied by the completion of the coursework described
below. Exceptions to these requirements may be made only with the approval of the director of undergraduate
studies.

Only courses passed with a grade of C– or better may be counted toward fulfilling the requirements of a minor in
anthropology. No courses taken under the Pass/Fail option may be used to fulfill anthropology minor requirements.
The Anthropology Department’s “Residency Requirement” stipulates that a minimum of three courses (12 credits) in
the minor must be taken in residence at Binghamton University.

**Requirements for General Anthropology Minor**

The minor in general anthropology gives the student a broad background in the field of anthropology and
encourages selection of courses from all of the subfields of anthropology, without specialization in any single one:

- three courses (12 credits) in anthropology at the 100-200 level, at least one of which must be at the 200 level;
- three courses (12 credits) in anthropology at the 300-400 level.

No more than two courses (8 credits) of the total six courses required for this minor may be from any single subfield
(linguistic anthropology, archaeology, biological anthropology, sociocultural anthropology). At least one course (4
credits) should be an "area course" that focuses on the peoples and cultures of a specific world area or region. One
of the 300-400 level courses (4 credits) may be in any cognate social science, chosen in consultation with the
director of undergraduate studies.

**Requirements for Sociocultural Anthropology Minor**

The sociocultural anthropology minor introduces students to a range of theories, problematics and questions in the
study of social and cultural differences around the world. Such training is relevant to students in a wide variety of
fields, including area studies (Asian and Asian American Studies, Africana Studies, Latin American and Caribbean
Studies), economics, geography, history, art history, political science, psychology, sociology, and women's studies.
This minor is useful to students engaged with questions of cultural diversity and social behavior, and to those
wanting to gain a global perspective on social problems and comparative cultural phenomena:

- the foundations course in sociocultural anthropology (4 credits), ANTH 166;
- one sociocultural area course (4 credits) that focuses on the peoples and cultures of a specific world area or
  region, preferably chosen from among ANTH 253-254, 256-258, 367-370;
- three upper-level courses (12 credits) in sociocultural anthropology, chosen from among ANTH 300, 349-359,
  360-369, 450-465, 477, and 380/480 (with a sociocultural focus);
- one elective course (4 credits), which may be taken in any area of anthropology or in a cognate social
  science, to be chosen in consultation with the director of undergraduate studies.

Of the courses taken for the minor, no more than two may be at the 100 level.
Requirements for Biological Anthropology Minor

The biological anthropology minor provides students with a basic understanding of the fundamental concepts of human biology, evolution, and the relationships between humans as biological and cultural animals. The program is relevant to students with interests in biology, geology, environmental studies, psychology, nursing, dentistry, medicine and general bio-behavioral science:

- the foundations course in biological anthropology, ANTH 168 (4 credits);
- three upper-level courses (12 credits) in biological anthropology, chosen from among ANTH 330-339, 420-429, and 380/480 (with a biological focus);
- one lower-level course (4 credits) in biological anthropology, chosen from among ANTH 241-280 (with a biological focus);
- one elective course (4 credits) in any area of anthropology or in a cognate field, chosen in consultation with the director of undergraduate studies.

Requirements for Archaeology Minor

The archaeology minor provides students with a basic understanding of how archaeologists study and reconstruct the past. Such training is relevant to students in a wide variety of fields, including history, art history, classical studies, medieval studies, Judaic studies, African American studies, and Middle Eastern and North African studies:

- one foundations course in archaeology (4 credits): ANTH 167 or 169;
- two archaeological area courses (8 credits), chosen from among ANTH 260-269, 340-344, 370, and 374-379;
- two upper-level courses in archaeological methods (8 credits), chosen from among ANTH 940-348, 372-379, 470-475;
- one elective course (4 credits) in anthropology or in a cognate field, chosen in consultation with the director of undergraduate studies; any of the courses listed above that are not used for the first three requirements may be used to fulfill this requirement.

Requirements for Linguistic Anthropology Minor

The Linguistic Anthropology minor introduces students to a broad range of theories and questions in the study of language and culture and how they influence each other. Such training is relevant to students in a variety of fields including area studies (Asian and Asian-American studies, Africana studies, Latin American and Caribbean Area studies, Judaic studies), linguistics, economics, geography, history, art history, political science, psychology, sociology, women’s studies, and romance languages:

- two foundations courses in linguistic anthropology (8 credits): ANTH 118 and ANTH 114 or ANTH 170;
- one 200 level course in Linguistic Anthropology (4 credits) to chosen from among: ANTH 210-219 or 280 topics courses (with a linguistic anthropology focus).
- two 300/400 level courses in Linguistic Anthropology (8 credits), chosen from among: ANTH 310-329, 410, 440-449, or 380/480 topics courses (with a linguistic anthropology focus).
- one elective course (4 credits) taken at any level and in any subfield of Anthropology or the other social sciences, to be chosen in consultation with the director of undergraduate studies.

Art History - Undergraduate
The curriculum in Art History acquaints students with the visual culture of humankind through the ages: with works of art as individual organizations of shape, space and color and as cultural artifacts with a history and function within their societies linked to other forms of cultural production. The curriculum shares the studio program’s concern with understanding the making of art, and the concern of other humanities departments with the variety of ways in which art has become a focus for discourse in the past and in the present. Students may enroll in one or more of the introductions to art history and architecture or to the broader field of visual culture. They may also take more specialized historical courses in the art and architecture of a particular era, or of a particular geographical area, or topical courses on particular problems in the field.

The curriculum places the study of art within the broadest possible context, and in order to be well prepared, students are encouraged to take courses linked to their work and majors in other disciplines. The department encourages and advises students toward interdisciplinary studies and sponsors conferences and symposia to strengthen such links to other fields.

Binghamton’s programs in the history of art and architecture prepare students not only for advanced graduate work in art and architectural history, but also for a broad range of professions and vocations in a variety of related fields. In the past, students completing degrees in the program have enrolled in history of art and architecture graduate programs in most major universities across the country (including, of course, Binghamton’s own very distinctive graduate program). But many others have chosen to enter fields closely related to art history, such as curatorial practice, museum administration, museum education, art conservation or visual resources management, or to work in commercial galleries, auction houses, archives and historic preservation.

The department offers a major and a minor in Art History.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Art History Major**

The undergraduate major in the Art History Department offers three specializations: Track A, Art History; Track B, Architecture and Urban History; and Track C, Pre-Architecture.

The Art History track prepares undergraduate majors for scholarly and professional work and study in the art world, including advanced graduate study, professional museum and gallery work, and careers in arts administration.

The concentration in Architecture and Urban History prepares departmental majors for advanced study in the field, for careers in teaching, for professional work in such areas as historic preservation, and for civic administrative work.
in related areas.

The pre-architecture concentration prepares students for entry into professional graduate schools in architecture, design and urban planning.

Departmental Honors are offered for all three tracks. Departmental Honors offers students an opportunity to pursue advanced independent work in a carefully designed project supervised by a member of the Art History faculty. Honors candidates must have a GPA of 3.5 in the major and must obtain the agreement of a member of the faculty to serve as advisor.

Fifty percent (50%) of the required coursework for the major must be advanced (300-level and above). Not more than four credit hours, equivalent to one of the required advanced-level courses, may be an independent study (ARTH 397).

Majors in Art History may elect the Pass/Fail grade option in only two ARTH courses (or a total of eight credits). These courses may not include ARTH 496, Theory and Methods, or ARTH 498-499, Honors Thesis. Courses passed with a grade of D do not fulfill requirements for the major.

Transfer credits toward the Art History major must be reviewed by the department. A maximum of 16 credits at the 100- or 200-levels may be accepted. All 300- and 400-level courses must be completed in residence.

All art history majors are advised to take at least two courses in other departments that relate specifically to their art historical work. Such courses might include the history, politics and/or literature of a temporal period or geographical region, or courses in philosophy, sociology or anthropology. In addition, the department strongly advises majors to acquire a reading knowledge of French, German, or another research language appropriate to their field of interest. Courses should be selected with the advice of the student's departmental advisor. The department also encourages the pursuit of study abroad opportunities related to research interests, when feasible.

**Art History Track**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower (100-level) Any two from ARTH 102, 103, 110 or 111</td>
<td>8</td>
</tr>
<tr>
<td>Intermediate (200-level) and advanced (300-level): No more than eight credits at the 200 level; At least eight credits must be in each of the following two distribution designations: - &quot;Pre-1800&quot; - &quot;Post-1800&quot;</td>
<td>20</td>
</tr>
<tr>
<td>Elective in Fine Arts: Any course in ARTS, CINE, MUS, or THEA</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 496: Theories and Methods</td>
<td>4</td>
</tr>
<tr>
<td>Additional 400-level seminar</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

*Please Note: 2-credit courses may count toward total required credits.

**Architecture and Urban History Track**
### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower (100-level)</strong>&lt;br&gt;Any two from ARTH 102, 103, 110 or 111</td>
<td>8</td>
</tr>
<tr>
<td><strong>Intermediate (200-level) and advanced (300-level):</strong>&lt;br&gt;No more than 8 credits at 200 level;&lt;br&gt;At least 12 credits must be in &quot;History of Architecture&quot;&lt;br&gt;Of the credits in &quot;History of Architecture&quot; at least 4 credits must be in each of the following two distribution designations:&lt;br&gt;- &quot;Pre-1800&quot;&lt;br&gt;- &quot;Post-1800&quot;</td>
<td>20</td>
</tr>
<tr>
<td>Seminar in Theory and Methods (ARTH 496)</td>
<td>4</td>
</tr>
<tr>
<td>Elective in Fine Arts:&lt;br&gt;Any course in ARTS, CINE, MUS, or THEA</td>
<td>4</td>
</tr>
<tr>
<td>Additional 400 level seminar</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

*Please Note: 2-credit courses may count toward total required credits.*

### Pre-Architecture Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower (100-level):</strong> Any two from ARTH 102, 103, 110, or 111</td>
<td>8</td>
</tr>
<tr>
<td><strong>Intermediate (200-level) and advanced (300-level):</strong>&lt;br&gt;No more than 8 credits at 200 level;&lt;br&gt;At least 12 credits must be in &quot;History of Architecture.&quot;&lt;br&gt;Of the credits in &quot;History of Architecture,&quot; at least 4 credits must be in each of the following two distribution designations:&lt;br&gt;- &quot;Pre-1800&quot;&lt;br&gt;- &quot;Post-1800&quot;</td>
<td>20</td>
</tr>
<tr>
<td>Seminar in Theory and Methods (ARTH 496)</td>
<td>4</td>
</tr>
<tr>
<td>Art studio courses:&lt;br&gt;intermediate-level drawing</td>
<td>4</td>
</tr>
<tr>
<td>elective</td>
<td>4</td>
</tr>
<tr>
<td>Additional 400-level seminar</td>
<td>4</td>
</tr>
<tr>
<td>Required courses outside the department:&lt;br&gt;MATH 224/225</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>52</strong></td>
</tr>
</tbody>
</table>

*Please Note: 2-credit courses may count toward total required credits.*
(Pre-architecture concentration) The following courses are required courses for the pre-architecture concentration: MATH 224, PHYS 121 AND ARTS 371. If students do not place into MATH 224/225, then MATH 223 and, if needed, MATH 108 are also required for completion of the major. If students do not place into PHYS 121, then MATH 108 is also required for completion of the major. ARTS 171 is required for placement into ARTS 371.

**Departmental Honors**

The honors program in art history is an opportunity for qualified undergraduate students to pursue advanced work with an individual faculty member for two semesters during the senior year. Based upon the successful completion of the senior honors thesis and a demonstration of overall excellence in art history courses, the department will award the BA degree with honors in art history. Requirements for admission to the honors program are a 3.5 GPA in art history through the sixth semester and the approval of a faculty advisor, who will also supervise the two-semester project.

Students entering the honors program should contact a potential advisor in their area of interest several months before the start of the senior-year fall semester to ensure the feasibility of the project and availability of the individual advisor. In the first semester, a topic is chosen and a formal proposal written under the supervision of the advisor, in accordance with departmental standards. This proposal is then approved and formally recorded in the minutes of the department faculty meetings. A copy of the proposal is normally sent to the chosen second reader of the thesis. In place of a 400-level seminar in ARTH, Departmental Honors in Art History requires a two-semester sequence (ARTH 498-499). The first semester is dedicated to research and analysis, while the second is dedicated to the writing of the thesis.

Finished theses are bound and must meet the formatting requirements laid down by the department. At least two copies of the thesis must be provided, one for the library and one for the department. Students who wish to obtain a personal bound copy may do so for a fee. Physical copies of all honors theses are held by the library and the departmental office.

**Minor in Art History**

The minor in art history consists of 24 credit hours, distributed as follows:

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower level: any two from ARTH 102, 103, 110 or 111</td>
<td>8</td>
</tr>
<tr>
<td>Intermediate (200-level) and advanced (300-level); no more than 4 credits at 200-level; no more than 4 credits of Independent Study (ARTH 397)</td>
<td>12</td>
</tr>
<tr>
<td>Any 400-level seminar in ARTH</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

*Please Note: 2-credit courses may count toward total required credits.*

Two advanced (300-level) ARTH courses along with the 400-level seminar in ARTH must be taken in residence. A Pass/Fail grade option may be elected for only one Art History course (or 4 credits), but not the 400-level seminar. Courses passed with a grade of D do not fulfill requirements for the minor.

**BA and MA Five-Year Combined-Degree-Art History Track**

**Admission**
The BA and MA combined-degree program admits qualified applicants who are enrolled as art history majors at Binghamton University and wish to complete a BA and an MA in Art History in five years. The program is open to art history majors in Track A: Art History concentration, or in Track B: Architectural and Urban History concentration, but not Track C: pre-architecture; with an MA in art history, in five years. The program restricts admission to students with exceptional academic records and demonstrated potential for advanced graduate work.

Prospective students should begin the application process early in the junior year by applying to the combined-degree program at the level of the Art History Department. Applicants will fill out an internal form generated by the Art History Department and submit an official transcript, the names of two professors who have agreed to serve as references, and a writing sample. Qualified students will be conditionally admitted into the combined-degree program and then they will be allowed to enroll in 500-level courses that may be double-counted to fulfill requirements for both the BA and the MA. During the first semester of the senior year, combined-degree students must apply for formal admission to the Graduate School. The combined-degree student is granted MA student status only after all requirements for the BA degree are completed satisfactorily, with a cumulative GPA of 3.0 for graduate coursework. Combined-degree students are not eligible for the Departmental Honors program.

Course Requirements

Combined-degree students must fulfill all of the course requirements for both the Art History BA and the MA. However, all combined degree students must take ARTH 500 in the spring semester of their senior year (and not ARTH 496), which will fulfill both the BA requirement for ARTH 496 and the MA requirement for ARTH 500. Graduate-level courses (32 credits) must be taken for regular letter grades and a B average or better must be maintained.

BA and MA Five-Year Combined-Degree

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower (100-level): any two from ARTH 102, 103, 110 or 111</td>
<td>8</td>
</tr>
<tr>
<td>*Intermediate (200-level) and advanced (300-level); no more than 8 credits at the 200-level; at least 8 credits must be in each of the following two distribution designations: *&quot;Pre-1800&quot; and *&quot;Post-1800&quot;</td>
<td>20</td>
</tr>
<tr>
<td>Elective in Fine Arts: any course in ARTS, CINE, MUS, or THEA</td>
<td>4</td>
</tr>
<tr>
<td>Any 400-level seminar in ARTH (other than ARTH 496)</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 500: Theory and Methods (required in the fourth year; also fulfills ARTH 496 requirement for the major)</td>
<td>4</td>
</tr>
<tr>
<td>Seven additional 500-level courses (including at least six art history seminars, taken with at least four different faculty members in art history, at least 4 credits taken while still at the BA stage)</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>68</td>
</tr>
</tbody>
</table>

(with at least 8 credits of 500-level coursework used to fulfill requirements for the BA major)

*Please Note: 2-credit courses may count toward total required credits.

BA and MA Five-Year Combined-Degree-Architecture and Urban Studies Track

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>335/669</td>
<td></td>
</tr>
</tbody>
</table>
### Lower (100-level):
ARTH 103 and any one from ARTH 102, 110, or 111 8

### Intermediate (200-level) and advanced (300-level):
- No more than 8 credits at 200 level; at least 12 credits must be in "Architecture and Urban Studies"; of the credits in "Architecture and Urban Studies" at least 4 credits must be in each of the following two distribution designations: "Pre-1800" and "Post-1800" 4-16
- PHYS 121: General Physics I 4
- MATH 224: Differential Calculus and MATH 225: Integral Calculus 4
- ARTS 371: Drawing II 4
- Additional 400-level seminar in ARTH, designated "Architecture and Urban Studies" 4
- ARTH 500. Theory and Methods (required in the fourth year, also fulfills ARTH 496 requirement for the major) 4
- Seven additional 500-level courses (including at least six art history seminars, taken with at least four different faculty members in art history, at least 4 credits taken while still at the BA stage) 28

### Total (with at least 8 credits of 500-level coursework used to fulfill requirements for the BA major) 68

*Two-credit courses may be counted towards the required credit hours.*

### Foreign Language
Students must pass an examination demonstrating an ability to read research literature in their areas of interest in an appropriate language of scholarship in addition to English. The examination must be taken no later than one semester after formal admission to the MA program. Work in certain fields may require additional language skills.

### Master's Examination
The masters comprehensive examination has been incorporated into the mandatory seminar in theory and methods. All students are required to pass ARTH 500, Theory and Methods, with a grade of B or better. For combined-degree students, ARTH 500 also fulfills the BA major requirement of ARTH 496. At the discretion of the art history graduate committee, students failing to achieve the required grade may be asked either to repeat the course or, in exceptional cases, to redo the examination assignment.

### Master's Thesis
Students are required to produce a masters thesis, finished to a professional standard and approximately 30 pages in length. The paper will be supervised by a selected art history faculty member and refereed by a second reader, assigned by the departmental graduate committee. The final thesis must be approved by both readers and submitted in accordance with Graduate School regulations. Students must be registered for at least one credit of Thesis (ARTH 599) during the semester in which the degree is completed.

Students planning to apply for funding and entry into the doctoral program should submit a first draft of their masters thesis to their supervisor by the beginning of the spring semester.

### Art and Design
Art Program

The Department of Art and Design provides a creative environment for academic excellence in the areas of Drawing, Painting, Sculpture, Printmaking, Graphic Design and Photography. The curriculum offers a strong foundation in the creation, history and theory of the visual arts and design, preparing students for professional careers and graduate studies. Majors and minors receive rigorous training and individualized attention by faculty who are committed to teaching excellence in traditional practices, expanded media and trans-disciplinary approaches to art, through contemporary curriculum that emphasizes experimentation, problem solving and collaboration. The Department of Art and Design also provides creative learning experiences for liberal arts students who wish to explore studio practices through elective courses. Students can choose to major or minor in Drawing, Painting, Sculpture, Printmaking and Graphic Design. Please note that photography classes are currently available as electives only.

The department requires a grade of C or better in art courses counted toward the major and minor. No courses for the major and minor may be taken Pass/Fail. Advanced courses may be repeated for further development, with the approval of the chair. Certain courses can be repeated for credit and may count towards the major.

The Bachelor of Fine Arts (BFA) is a pre-professional degree with intense focus on studio arts for students who wish to pursue art as their career. Students graduate with an exhibition and professional portfolio and are prepared for careers in creative industries, fine arts or the pursuit of a graduate degree. The degree requires 74 credits, in the area of concentration within the art major.

Bachelor of Art (BA) is a 40-credit degree in fine arts within the liberal arts context. The BA is suited to students who wish to double major or broaden their educational experience with particular skills in studio arts.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Requirements for Art Major — BFA Degree

There are five tracks for the BFA: Drawing, Painting, Sculpture, Printmaking and Graphic Design. Please consult with the department for appropriate courses for each track.

- Four introductory courses, by advisement.
- Five elective courses from the intermediate level (300-level or higher), by advisement.
- Five studio courses in one specialization track, by advisement (no more than three transfer courses allowed).
- Three art history courses, by advisement.
Seminar in Studio Art (ARTS 496).
Senior Exhibition Seminar (ARTS 499) critique and exhibition.

TOTAL = 74 credits

Please note that a maximum of six transferred courses may count towards the BFA.

Requirements for Art Major — BA Degree

- Four introductory courses: ARTS 171, 210, 230, 240 or 254/255.
- One intermediate, one advanced and one special studio project in one specialization track (no more than two transfer courses allowed).
- One Art History course (for Graphic Design track, ARTS 215 is the alternative).
- Two studio art electives, decided in consultation with the director of undergraduate studies.

TOTAL = 40 credits

A minimum of five courses must be at the 300 or 400 level.

Please note that a maximum of four transferred courses may count towards the major.

Honors Program

Departmental honors in art are awarded to those majors who have completed a substantive body of significant work in one or more tracks. Nominations for honors are submitted by individual faculty members, and the final decision rests with the entire studio faculty. Senior standing is required.

Minor in Art

A minor in art consists of a minimum of six courses distributed as follows:

- Beginning, intermediate and advanced level courses in one of these tracks: Drawing, Painting, Sculpture, Printmaking or Graphic Design.
- An additional introductory-level course in an area other than the chosen track.
- Two courses chosen in consultation with a faculty advisor. One of these courses must be at the advanced 300-400 level, and may or may not be in the area of specialization.

TOTAL = 24 credits

Please note that a maximum of two transferred courses may count towards the minor in art.

Asian and Asian American Studies

Asian and Asian American Studies

The department encourages work that is interdisciplinary, comparative or global in methodology and theory, as well as work that is specialized locally or regionally. It also supports work that examines the study of Asia and Asian diasporas as complex nexuses of sociological, geographical and political regions, as well as economies, histories and ideas across national and oceanic boundaries. Students benefit from the cross-national work and research agendas of both Asianists and Asian Americanists in productive dialogue.

Asian American and Diaspora Studies

The Asian American and Diaspora Studies program offers students an interdisciplinary approach to the study of Asian diasporic communities. The program's intellectual purview includes the study of Asian communities situated outside Asia, as well as communities that reside as minorities within the continent, with special interest in studies of majority-minority relations. Particular focus is paid to Asians in the Americas, which includes those in the U.S., Canada, Latin America, and the Caribbean. The course offerings are wide-ranging and rigorous, consisting of lower- and upper-division undergraduate courses and advanced-level graduate courses. Through its diverse curriculum and sponsorship of Asian American- and Asian diaspora-related events, the program provides students with an invaluable education into the historical, cultural, and political dimensions of diasporic and minority experiences. The program endeavors to not only build bridges between but amalgamate distinct but related scholarly arenas, including ethnic studies with area studies; Asian American Studies with African American, Latino, Caribbean, and Native American Studies; and Asian and Asian American scholarship with global, transnational, and diasporic approaches. The program is also committed to the important task of narrowing the traditional gaps that have hindered beneficial relationships between academy and community, faculty and students, and knowledge and experience. DAAAS offers a master of arts and a major track in Asian American and Diaspora Studies.

Chinese Studies

The Chinese Studies program offers students a diverse curriculum centered on Chinese language, culture, and society. Its rigorous language curriculum stresses verbal and textual mastery, cultural competency, and includes courses in Chinese linguistics and language pedagogy. Content courses explore both ancient and modern Chinese literature, visual arts, society, history, philosophy, and economics. The Chinese Studies faculty stress both global/transnational perspectives and area/regional knowledge and linguistic skills, in order to best prepare students for a broad spectrum of future educational and career goals and opportunities. DAAAS offers a master of arts, major and minor in Chinese Studies.

Japanese Studies

The Japanese Studies program fosters detailed, nuanced knowledge and understanding of various aspects of pre-modern, modern and contemporary Japanese culture and society, including history, language, literature, visual culture, war, politics and economics. It provides a solid foundation of Japanese language skills, including reading, writing, speaking and listening comprehension. The courses offered are ideal for students wishing to gain practical communicative skills, those planning to further specialize in Japanese Studies and those pursuing careers in areas such as education, business, government and NGOs. DAAAS offers a master of arts, major and minor in Japanese Studies.

Korean Studies

The Korean Studies program provides students with a solid foundation in Korean language skills and knowledge of Korea’s history, literature, religions, politics and economics. The program is based on the premise that both contemporary and historic understanding of Korea, its interrelations with larger East Asia and its global importance today cannot be fully grasped without a deep understanding of its language, history, social systems and culture. Hence, the program aims to provide students with not only language training, but also a solid understanding of how Korean societies and people actually functioned and interacted with other cultures in both the pre-modern and contemporary periods. The wide range of courses is designed to introduce various aspects of Korean Studies and provide students with the knowledge necessary for business, professional or academic endeavors. DAAAS offers a master of arts, major and minor in Korean Studies.
South Asian Studies

DAAAS also offers students the opportunity to study the social, cultural and intellectual history of the nations of South Asia, a region often defined to include India, Pakistan, Bangladesh, Nepal and Sri Lanka. Students can learn about the teachings and historical development of South Asian religions such as Hinduism and Buddhism. They can also develop a greater understanding of the lived experience of South Asian peoples through pre-modern and modern times, including the experience of women and of socially marginalized groups. DAAAS offers a master of arts and major track in South Asian Studies.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Major Requirements

All majors (Asian and Asian American Studies, Chinese Studies, Japanese Studies and Korean Studies) consist of 11 courses and mandate the following:

- Two 400 level courses, at least one of which must be in the major/major track. These must: 1) be taught by DAAAS faculty members; 2) be non-language courses; and 3) be chosen in consultation with the major advisor.
- At least four additional courses must be at the 300 or 400 level.
- At least six courses must be taken at Binghamton University.
- No more than one course may be an independent study.
- No more than one non-language course may be taken Pass/Fail.
- Majors may not pass/fail a language course. In addition, a grade of C or better is necessary to advance to the next course in a language sequence.
- A grade of C or better is necessary for a course to count toward the major.

Asian and Asian American Studies Major

DAAAS offers a major in Asian and Asian American Studies organized along three different tracks. Students wishing to major in Asian and Asian American Studies choose from one of the following:

1. **Asian American and Diaspora Studies**, with particular focus on the social, cultural, and historical aspects of
Asians in the U.S. and, more broadly, Asians in the Americas.

2. **Asian Comparative**, with particular focus on comparative Asian studies that encompass two or more Asian countries.

3. **South Asia**, with particular focus on the study of the diverse cultures, peoples and regions of South Asia.

All track majors must successfully complete 11 courses, consisting of two common core courses and 9 track courses.

1. One of the following core Asian American and Diaspora Studies courses (or other appropriate courses as they become available):
   - AAAS 220. Asian American Cultural Representations
   - AAAS 371. Asian Americas

2. One of the following core Asian Studies courses (or other appropriate courses as they become available):
   - AAAS 104. Introduction to Asian Art and Architecture
   - AAAS 105. Introduction to Asian Philosophy
   - AAAS 106. Introduction to Asian Civilizations
   - AAAS 135. Introduction to the Cultures of China, Japan, and Korea

**Asian American and Diaspora Studies Track**

In addition to the two common core courses, students must complete five courses designated as Asian American and Diaspora Studies, meaning courses on the Asian diaspora, including Asians in the United States and the Americas. The list of these courses changes by semester and may include the following examples:

- AAAS 220. Asian American Cultural Representations
- AAAS 221. Korea Beyond the Peninsula
- AAAS 320. Eating Asian American Food, Culture, Politics
- AAAS 371. Asian Americas

Students must also complete four elective courses. These courses may be from either Asian Studies or Asian American and Diaspora Studies, and may include Asian language courses.

**Asian Comparative Track**

In addition to the two common core courses, students must complete five courses designated as Asian Comparative, meaning courses that examine more than one Asian country. The list of these courses changes by semester and may include the following examples:

- AAAS 238. Science and Technology in the Modern World
- AAAS 259. Eastern Asia: Land and People
- AAAS 341. China and the West
- AAAS 375. Negotiating Contemporary Asia
- AAAS 414. Economic Development: East Asia
Students must also complete four elective courses. These courses may be from either Asian Studies or Asian American and Diaspora Studies, and may include Asian language courses.

**South Asia Track**

In addition to the two common core courses, students must complete five courses designated as South Asian Studies, meaning courses on (but not limited to) Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka and Tibet. The list of these courses changes semester to semester and may include the following examples:

- AAAS 111. Music Cultures of Asia
- AAAS 284C. Global India
- AAAS 284D. Gender and Sexuality in South Asia
- AAAS 344. Buddhist Ethics
- AAAS 445. Buddhist Metaphysics

Students must also complete four elective courses. These courses may be from either Asian Studies or Asian American and Diaspora Studies, and may include Asian language courses.

**Chinese Studies Major**

**Language Requirements**

Students are required to successfully complete the following four language courses: CHIN 203 Intermediate Chinese I; CHIN 204 Intermediate Chinese II; CHIN 305 Advanced Chinese I; CHIN 306 Advanced Chinese II (Note: CHIN 101 Elementary Chinese I, CHIN 102 Elementary Chinese II, CHIN 103 Elementary Chinese I Heritage and CHIN 104 Elementary Chinese II Heritage provide the basic linguistic knowledge and skills required to begin the major but do not count towards the major). After consultation and proficiency test assessment administered by Chinese Program faculty, students who already demonstrate competence in Mandarin at any of the required levels may waive part or all of the language requirements. Waived Chinese language courses will not count toward the major and must be replaced with other Chinese Studies courses to bring the total number of courses up to eleven.

**Elective Courses**

Students choose six of the courses listed below (or other approved Chinese Studies courses as they become available). Students are also required to successfully complete one course designated as Asian American and Diaspora Studies.

Note: Depending on prior exposure to the language, CHIN 101 and 102 may be required prerequisites for the major.

See Major Requirements above for additional information.

- CHIN 202. Singing Chinese
- CHIN 331. Readings in Chinese Culture
- CHIN 350. Business Chinese
- CHIN 351. Chinese Business Culture
- CHIN 395. Internship
Japanese Studies Major

Language Requirements

Students are required to successfully complete the following four language courses: JPN 203 Intermediate Japanese I; JPN 204 Intermediate Japanese II; JPN 305 Advanced Reading and Comprehension I; JPN 306 Advanced Reading and Comprehension II (Note: JPN 101 Elementary Japanese I and JPN 102 Elementary Japanese II provide the basic linguistic knowledge and skills required to begin the major, but do not count towards the major). After consultation and proficiency test assessment administered by Japanese Program faculty, students who already demonstrate competence at any of the required levels of the Japanese language may waive part or all of the language requirements. Waived Japanese language courses will not count toward the major and must be replaced with other Japanese studies courses to bring the total number of courses up to eleven.

Elective Courses

Students choose six of the courses listed below (or other approved Japanese studies courses as they become available). Students are also required to successfully complete one course designated as Asian American and Diaspora Studies.

Note: Depending on prior exposure to the language, JPN 101 and 102 may be required prerequisites for the major.

See Major Requirements above for additional information.

- JPN 407. Fourth Year Japanese I
- JPN 408. Fourth Year Japanese II
- AAAS 210. Introduction to Japanese Culture
Korean Studies Major

Language Requirements

Students are required to successfully complete the following four language courses: KOR 203 Intermediate Korean I; KOR 204 Intermediate Korean II; KOR 305 Advanced Reading and Comprehension I; KOR 306 Advanced Reading and Comprehension II (Note: KOR 101 Elementary Korean I and KOR 102 Elementary Korean II provide the basic linguistic knowledge and skills required to begin the major, but do not count towards the major). After consultation and proficiency test assessment administered by Korean Program faculty, students who already demonstrate competence at any of the required levels of the Korean language may waive part or all of the language requirements. Waived Korean language courses will not count toward the major and must be replaced with other Korean Studies courses to bring the total number of courses up to eleven.

Elective Courses

Students choose six of the courses listed below (or other approved courses as they become available). Students are also required to successfully complete one course designated as Asian American and Diaspora Studies.

Note: Depending on prior exposure to the language, KOR 101 and 102 may be required prerequisites for the major.

See Major Requirements above for further information.
Minor Requirements

All minors (Asian and Asian American Studies, Chinese Studies, Japanese Studies and Korean Studies) consist of 6 courses and mandate the following:

- Only one course may be taken as an independent study.
- Only one non-language course may be taken Pass/Fail.
- At least four courses must be taken at Binghamton University.
- Minors may not pass/fail a language course. In addition, a grade of C or better is necessary to advance to the next course in a language sequence.
- A grade of C or better is necessary for a course to count toward the minor.

Asian and Asian American Studies Minor

The minor in Asian and Asian American Studies allows students to supplement their major through participation in a cross-disciplinary program. The requirements include a total of six courses in Asian and Asian American Studies, from which:

- At least two courses must at the 100 or 200 level.
At least two courses must be at the 300 or 400 level.
At least one course must be at the 400 level.
At least one course must be considered Asian Studies.
At least one course must be considered Asian American and Diaspora Studies.
Up to two Asian language courses may be applied toward the minor.

Chinese Studies Minor

The minor in Chinese Studies consists of three required language courses and three Chinese Studies elective courses. At least three of these six courses must be at the 300 or 400 level.

Language Requirements: CHIN 203 Intermediate Chinese I, CHIN 204 Intermediate Chinese II, and CHIN 305 Advanced Chinese I. (Note: CHIN 101 Elementary Chinese I, CHIN 102 Elementary Chinese II, CHIN 103 Elementary Chinese I Heritage and CHIN 104 Elementary Chinese II Heritage provide the basic linguistic knowledge and skills required to begin the minor but do not count towards the minor). After consultation and proficiency test assessment administered by Chinese Program faculty, students who demonstrate competence in Mandarin at any of the required levels may waive part or all of the language requirements. Waived Chinese language courses will not count toward the minor and must be replaced with other Chinese Studies courses to bring the total number of courses up to six.

See Minor Requirements above for more information.

Three Chinese Studies Elective Courses from the following list (or other Chinese Studies courses as they become available):

- CHIN 202. Singing Chinese
- CHIN 306. Advanced Chinese II
- CHIN 331. Readings in Chinese Culture
- CHIN 350. Business Chinese
- CHIN 351. Chinese Business Culture
- CHIN 395. Internship
- CHIN 471. Classical Chinese
- AAAS 230. Contemporary Chinese Cinemas
- AAAS 241. Classical Chinese Literature in Translation
- AAAS 272. Island Culture: Taiwan Film and Fiction
- AAAS 273. Chinese Civilization
- AAAS 274. Modern China
- AAAS 317. The Economy of China
- AAAS 341. China and the West
- AAAS 352. 20th-Century Chinese Literature in Translation
- AAAS 353. Prosody in Chinese Poetry
- AAAS 374. Modern China
- AAAS 461. Li Bai and Du Fu
Japanese Studies Minor

The Japanese minor consists of three required language courses and three Japanese Studies elective courses. At least three of these six courses must be at the 300 or 400 level.

Language Requirements: JPN 203 Intermediate Japanese I, 204 Intermediate Japanese II, and 305 Advanced Reading and Composition I. (Note: JPN 101 Elementary Japanese I and JPN 102 Elementary Japanese II provide the basic linguistic knowledge and skills required to begin the minor but do not count towards the minor). After consultation and proficiency test assessment administered by Japanese Program faculty, students who demonstrate competence at any of the required levels of the Japanese language may waive part or all of the language requirements. Waived Japanese language courses will not count toward the minor and must be replaced with other Japanese Studies courses to bring the total number of courses up to six.

See Minor Requirements above for additional information.

Three Japanese Studies Elective Courses from the following list (or other Japanese Studies courses as they become available):

- JPN 306. Advanced Reading and Composition II
- JPN 407. Fourth Year Japanese I
- JPN 408. Fourth Year Japanese II
- AAAS 210. Introduction to Japanese Culture
- AAAS 219. Structure of Japanese
- AAAS 250. Japanese Cinema
- AAAS 251. Classical Japanese Literature and Culture
- AAAS 252. Medieval/Early Modern Japanese Literature and Culture
- AAAS 253. Cultures of Premodern Japan
- AAAS 254. Pop Culture of Contemporary Japan
- AAAS 350. Modern Japanese Literature in Translation
- AAAS 351. Pacific War Experience in Japanese Literature and Film
- AAAS 354. The Tale of Genji and its World
- AAAS 414. Economic Development in East Asia
- AAAS 450. Women in Premodern Japanese Literature and Culture
- AAAS 451. Fictions of the Samurai
- AAAS 452. Natsume Sōseki and the Modernization of Japan
- AAAS 453. Trauma in/and Japanese Literature and Film
- AAAS 454. Unresolved Issues from Modern Wars in Asia
Korean Studies Minor

Language Requirements: KOR 203 Intermediate Korean I, KOR 204 Intermediate Korean II, and KOR 305 Advanced Reading and Composition I. (Note: KOR 101 Elementary Korean I and KOR 102 Elementary Korean II provide the basic linguistic knowledge and skills required to begin the minor but do not count towards the minor). After consultation and proficiency test assessment administered by Korean Program faculty, students who demonstrate competence at any of the required levels of the Korean language may waive part or all of the language requirements. Waived Korean language courses will not count toward the minor and must be replaced with other Korean Studies courses to bring the total number of courses up to six.

See Minor Requirements above for additional information.

Three Korean Studies Elective Courses from the following list (or other Korean Studies courses as they become available):

- KOR 411. Professional Korean I
- KOR 412. Professional Korean II
- KOR 415. Korean Translation Literary
- KOR 416. Korean Translation Non-Literary
- KOR 306. Advanced Korean II
- AAAS 211. Korean Civilization
- AAAS 218. Structure of Korean
- AAAS 221. Korea Beyond the Peninsula
- AAAS 240. Korean Literature and Culture (Pre-20th Century)
- AAAS 242. 20th-Century Korean Literature in Translation
- AAAS 311. Language, Culture and Society in Korea
- AAAS 313. Religions and Culture of Korea
- AAAS 340. Readings in Korean Literature
- AAAS 345. North Korean Culture
- AAAS 346. Intro to Korean Cinema
- AAAS 360. Korean History (Ancient-19th Century)
- AAAS 361. Korea-Age of Empire, 1876-1945
- AAAS 362. Divided Korea
- AAAS 363. Gender, Culture and Korean Society
- AAAS 414. Economic Development in East Asia
- AAAS 431. Confucianism and Korea
- AAAS 432. Women in Korean History
- AAAS 434. History of Women in East Asia
- AAAS 439. East Asian Linguistics
- AAAS 449. Pedagogy for East Asian Languages—Korean
- AAAS 463. Medicine and Body in East Asia
Honors

Majors in the Department of Asian and Asian American Studies qualify for honors by fulfilling the following requirements:

- Having at least a 3.5 GPA for DAAAS courses taken through the seventh (7th) semester (excluding any course taken Pass/Fail);
- Submission to the department of a 10,000-15,000 word (including notes) honors thesis. The thesis topic must be pre-approved by a DAAAS or DAAAS-affiliated faculty advisor. Positive evaluation of the thesis by the advisor and an appropriate reader results in honors. Students may register for DAAAS 498/499, but these courses do not count toward the major.

Biochemistry

BS Degree Program

The biochemistry program is the result of a joint effort of the departments of Biological Sciences and Chemistry to provide students interested in this area with a curriculum in the interdisciplinary science of biochemistry. The program, strengthened by mathematics and physics, attempts to unite those aspects of biology and chemistry relevant to the sub-cellular study of the life process. Administration of the program is by the biochemistry committee, composed of members of the departments of Biological Sciences and Chemistry. Flexibility in course requirements allows students to shape individual curricula within the framework of the overall program. Toward this goal, each student receives individual guidance by members of the committee.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Requirements for Biochemistry Major

- BCHM (or BIOL) 401, 403, 425, 426, BCHM 480
- BIOL 117, 118
- CHEM 107 and 108 (or 111), 231, 332, 335, 361
- PHYS 131, 132 (or 121, 122)
- MATH 224/225 and MATH 222 or 226/227
Plus 16 additional credits: four in biology, eight in chemistry and four in any department of the Division of Science and Mathematics. The four credits in biology must be at the 300-400 level. The eight credits in chemistry must be selected from the following courses: CHEM 221, 341, 421, 432, 434, 462, 482, 483, 485 and 486. Four credits of BCHM 497 may be used as science and mathematics divisional credits. BIOL 490, 491, 494, 495, 496, 497 and 498, BCHM 491 and CHEM 391, 397, 497 and 498 may not be used to fulfill the electives. Eight of these credits must be upper-level.

Electives should be approved by the advisor. Biochemistry majors may not take BCHM 401, 403, 425, 426 and 480 (or BIOL 401, 403, 425, 426) or CHEM 361 on a Pass/Fail basis. They may, however, elect to take a total of not more than eight credits of their other courses and electives required for the major with the Pass/Fail grading options.

Residency requirement: The following courses must be taken at Binghamton University: BCHM 401, 403, 425, 426, 480, CHEM 361, four credits in BIOL courses numbered 300 level and above, eight credits in CHEM courses selected from the list of approved courses.

It is important to declare a major in biochemistry as soon as possible and to plan carefully the sequence in which the courses should be taken. A suggested sequence is available on the biochemistry program website: http://www.binghamton.edu/biochem/. Consent of the biochemistry program director is required for any substitutions or waivers of the requirements.

The following courses are required courses for the Biochemistry major: MATH 224 and PHYS 121. If students do not place into MATH 224, then MATH 223 and, if needed, MATH 108 are also required for completion of the major. If students do not place into PHYS 121, then MATH 108 is also required for completion of the major.

**Honors Program in Biochemistry**

An honors program in biochemistry is available to declared biochemistry majors who have demonstrated excellence in laboratory research. To qualify for honors, students must:

- have a successful ongoing research project, and
- with approval of their advisor, apply to the Biochemistry Committee to be admitted into the Honors Research in Biochemistry Program.

Before graduation, the student must complete a thesis, the form of which is decided by the advisor with approval of the biochemistry committee. This thesis must be defended before a thesis committee composed of the student's advisor, a faculty member selected by the student and his or her advisor and a faculty member selected by the biochemistry committee. At graduation, recipients of honors receive recognition of their accomplishments for Distinguished Independent Research in Biochemistry. Each year, one or two outstanding senior biochemistry majors are honored as recipients of the Award for Excellence in Biochemistry. They are selected on the basis of their academic excellence and research capabilities.

**Biological Sciences**

**Undergraduate Programs**

The Department of Biological Sciences offers BA and BS degrees in biological sciences. The curriculum is designed for students to meet the following learning outcomes: ability to critically evaluate the methodology and to carry out a scientific investigation in biology; understanding and critical evaluation of biological information; ability to discuss and communicate biological concepts accurately, effectively and concisely; and the ability to apply biological training to careers. The BA is recommended for the student who wishes to use a general education with a major in biology as a foundation for the MD, careers in the allied medical professions, environmentally related professions, law, business
and finance, education, information technologies and the like. Students have great flexibility in their course choices. Selection of courses based on career goals is highly advised. The BS is recommended for students who plan laboratory or field-based scientific careers in biology and related fields either immediately after the baccalaureate or after post-graduate study. BS students select one of two concentrations: cell and molecular biology (CMB) or ecology, evolution and animal behavior (EEB).

Students should declare the major after having completed 12 credits while attending college, with eight of these credits being in BIOL 117, BIOL 118, CHEM 107, CHEM 108, MATH 147/148.

Students may not double major or minor in Integrative Neuroscience or Biochemistry.

AP Statistics is not accepted for fulfilling the statistics requirement.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Requirements for the BA Degree**

A total of 62 credits, distributed as follows:

- BIOL 117 and BIOL 118;
- CHEM 107 and CHEM 108 (or CHEM 111; the total is reduced to 58 credits if CHEM 111 is selected);
- CHEM 231, 332, 335;
- MATH 147/148 or BIOL 437 or BIOL 447;
- For breadth beyond biology or biologically related sciences, eight credits in additional mathematics, physical science, and computer science courses selected from the following list: BME 340, CHEM 221, CHEM 341, CHEM 351, CS 110, CS 140, ENVI 201, ENVI 382M, MATH 224, MATH 225, MATH 226, MATH 227, MATH 304, MATH 314, PHYS 121, PHYS 122 (or PHYS 131, PHYS 132), any 100-level GEOL course (only one permitted); other courses in mathematics, the physical sciences and computer science only by approval of faculty advisor;
- One upper-level core course in cell and molecular biology: BIOL 401 or BIOL 311;
- One upper-level core course in ecology, evolution, behavior: BIOL 351 or BIOL 355/BIOL 373;
- 16 additional credits in BIOL courses numbered 300 and above, where two courses must have a laboratory component, with the following additional stipulations:
No more than four credits may come from the following list: BIOL 494, 495, 496, 497 and 498.

Will not be satisfied by BIOL 491.

BIOL courses that fulfill a laboratory requirement are distinguished by specific numbers. These are BIOL 320-329, BIOL 340-349, BIOL 370-379, BIOL 420-429, BIOL 440-449, BIOL 470-479, BIOL 495, BIOL 497, BIOL 498, BIOL 480-489 with letters E to H, M to P and U to X.

A course counting toward the laboratory requirement must be at least two credits.

Only one laboratory course requirement may be satisfied by BIOL 495 or 497 or 498.

Except for BIOL 494-498, no BIOL course taken on the Pass/Fail grading option will fulfill the requirements for the biology major.

Residency requirement: A minimum of 24 credits in BIOL courses numbered 300-level and above, including the two upper-level core courses, must be taken in Harpur College in order to qualify for the BA degree.

Note: The following courses are required courses for the Biological Sciences major: MATH 147/148. If students do not place into MATH 147/148, then MATH 107 is also required for completion of the major.

Requirements for the BS Degree Program

A total of 78 credits, distributed as follows:

- BIOL 117 and BIOL 118;
- CHEM 107 and CHEM 108 (or CHEM 111; the total is reduced to 74 credits if CHEM 111 is selected);
- CHEM 231, 332, 335;
- MATH 147/148 or BIOL 437 or BIOL 447;
- For breadth beyond biology or biologically related sciences, 12 additional credits in mathematics, physical science, and computer science courses selected from the following list: BME 340, CHEM 221, CHEM 341, CHEM 351, CS 110, CS 140, ENVI 201, ENVI 382M, MATH 224, MATH 225, MATH 226, MATH 227, MATH 304, MATH 314, PHYS 121, PHYS 122 (or PHYS 131, PHYS 132), any 100-level GEOL course (only one permitted); other courses in mathematics, the physical sciences and computer science only by approval of faculty advisor;
- Four credits that may be additional mathematics, physical science and computer science courses as listed above, or upper-level BIOL courses numbered 300-489;
- 32 credits in upper-level BIOL courses distributed according to the student’s concentration; three of these courses must have a laboratory component; at least two of the three courses with laboratory component must be in the chosen concentration.

Distribution of the 32 credits in upper-level BIOL courses for the concentration in cell and molecular biology (CMB)

- Two core courses in cell and molecular biology
  - BIOL 301 or BIOL 401;
  - BIOL 311;
- One core course in ecology, evolution, behavior;
  - BIOL 351 or BIOL 355/BIOL 373;
- 16 credits in BIOL courses numbered 300-349, 400-449 or 480-489 A to P;
Four credits in BIOL courses numbered 330-379, 430-479 or 480-489 I to X.

Distribution of the 32 credits in upper-level BIOL courses for the concentration in ecology, evolution, behavior

- Two core courses in ecology, evolution, behavior
  - One in evolution: BIOL 351;
  - One in ecology: BIOL 355/BIOL 373;
- One core course in cell and molecular biology
  - BIOL 301 or BIOL 401 or BIOL 311;
- 16 credits in BIOL courses numbered 330-379, 430-479, or BIOL 480-489 I to X;
- Four credits in BIOL courses numbered 300-349, 400-449 or BIOL 480-489 A to P.

The following additional stipulations hold for the upper-level BIOL courses required for the BS degree:

- No more than eight credits may come from the following list: BIOL 494, 495, 496, 497 or 498. It is expected that most students will be selecting internships and research projects that are within their area of concentration. If not, the exception must be brought to the attention of an advisor.
- May not be satisfied by BIOL 491.
- BIOL courses that fulfill a laboratory requirement are distinguished by specific numbers. These are BIOL 320-329, BIOL 340-349, BIOL 370-379, BIOL 420-429, BIOL 440-449, BIOL 470-479, BIOL 495, BIOL 497, BIOL 498, BIOL 480-489 with letters E to H, M to P and U to X.
- A course counting toward the laboratory requirement must be at least two credits.
- Only two laboratory course requirements may be satisfied by BIOL 495, 497 or 498.

Except for BIOL 494-498, no BIOL course taken on the Pass/Fail grading option will fulfill the requirements for the biology major.

**Residency requirement:** A minimum of 32 credits in BIOL courses numbered 300-level and above, including the three core courses, must be taken in Harpur College in order to qualify for the BS degree.

**Distinguished Independent Work in Biology**

The award of Distinguished Independent Work in Biology is granted to biology majors who distinguish themselves in biological research. Students in this program are required to do a year-long research project under the guidance of a departmental faculty member. To be accepted into the program, a student must have junior standing, at least a 3.0 GPA overall and 3.3 GPA in biology courses, the consent of a faculty supervisor and the approval of the undergraduate committee. Students doing the research register for BIOL 497, followed by at least one subsequent registration in BIOL 498, and should maintain their GPAs. The student’s thesis must be submitted for approval to a thesis committee consisting of the supervising professor and two other members, usually faculty. The satisfactory completion of the project and thesis earns the recognition at graduation of distinguished independent work in biology. Formal application for this program, including the composition of the thesis committee, must be completed by the registration period of the semester when the student plans to graduate.

**Five-Year Combined-Degree Programs**

Students may apply for a five-year combined-degree program leading to the BA in biology together with a specific
graduate degree, as described below. The requirements for the BA portion of these combined five-year programs are the same as the BA requirements listed above. In these programs, 12 graduate credits are also counted toward the undergraduate degree. The nature of those 12 credits depends on the particular program.

Combined BA and MA Biology or BA and MS Biology: 12 graduate credits in biology taken for either the MA or MS in biology are also counted toward the BA in biology. Details are presented in the section on graduate programs in biology.

Combined BA and MAT (Master of Arts in Teaching) in Biology: This is specifically for students preparing for a career in secondary education in the area of biology. The shorter time to degree is made possible by counting 12 graduate credits in education courses toward the 126 credits required for fulfillment of the baccalaureate in Harpur College. Details are presented in the section on graduate programs in the School of Education.

Students with either the BA or the BS in biology may also apply for the Harpur College of Arts and Sciences/School of Management Fast-Track MBA (Master of Business Administration) program. Details are presented in the section on graduate programs in the School of Management.

**Biological Sciences Minor**

Requirements for the minor are:

- BIOL 117 and 118;
- One core course in cell and molecular biology, BIOL 301 or 401 or 311;
- One core course in ecology, evolution, behavior, BIOL 351 or 355/373;
- Eight additional credits in BIOL at the 300-400 level, but not BIOL 491.

Only four credits may be in BIOL 494, 495, 496 and 497.

All courses taken to satisfy the minor must be taken for a letter grade unless mandated Pass/Fail by the instructor.

*Residency requirement:* A minimum of 12 credits of BIOL courses numbered 300-level and above, including the two core courses, must be taken in Harpur College in order to qualify for the biology minor.

At least four of the courses in the student’s minor program must be in addition to those counted toward fulfillment of the requirements for the student’s major (and for the other minor, if the student pursues two).

**Chemistry**

**Undergraduate Programs**

The Department of Chemistry offers BA and BS degrees in chemistry, both of which are liberal arts degrees. The BS degree is generally recognized as preparation for a career in chemistry at the bachelor’s level and hence offers a greater concentration in the field, whereas the BA program provides a greater flexibility in designing a plan of study. Both degrees provide a background in chemistry for graduate and professional study. The department also offers degrees with emphases in materials chemistry and in biological chemistry, an ACS certified BS degree, and a chemistry minor.

A GPA of 2.0 or better is the necessary average of all courses used to satisfy the requirements of a chemistry major.

A grade of C- or better is necessary for a chemistry course to satisfy the requirements of a chemistry major.

Among courses used for the chemistry degree, no more than two with a grade of P may be included. However, CHEM 221, 231, 341, 351/361 are foundation courses that cannot be taken as pass/fail.
No more than 12 credits of CHEM 397 and 497/498 may be used to satisfy the major, and no more than four credits of CHEM 397 may be used to satisfy the major.

AP and IB Credit: Binghamton University recognizes good performance on the Advanced Placement (AP) or International Baccalaureate (IB) exam in chemistry. For a score of 5 on the AP exam, or a score of 6 or 7 on the IB exam, the university awards 8 credits of CHEM 107 and 108. For a score of 4 on AP, or 5 on IB, the university awards 4 credits of CHEM 107 or 111, and for a score of 3 on AP, or 4 on IB, the university awards 4 credits of CHEM 101, which can be counted towards the number of credits for graduation, but does not fulfill major requirements.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Note: The following course is required for the Chemistry major: MATH 224. If students do not place into MATH 224, then MATH 223 and, if needed, MATH 108 are also required for completion of the major.

BA Degree Program

The major in chemistry leading to the BA degree requires the following courses: CHEM 111,* 221, 231, 332, 341, 351 or 361, 496; MATH 224/225 and 222 or 226/227; PHYS 131 (or 121) and 132 (or 122); one and one-half additional courses** from among CHEM 335, 422, 445, 455 and 497/498; two additional courses in chemistry; one additional course* within the Division of Science and Mathematics.

BA students must take CHEM 496 and at least six other chemistry courses in the major, including at least four upper-level chemistry courses, while in residence at Binghamton University.

* CHEM 107-108 may be substituted for CHEM 111. If this substitution is made, the additional course in the Division of Science and Mathematics is not required.

** Subject to approval of the department, laboratory courses from other departments may be substituted.

The following sample sequences are offered as a general guide.

These requirements afford students considerable flexibility in designing courses of study suited to their particular needs and interests. To take full advantage of that flexibility, it is important to carefully plan the sequence of courses in the first two years of study. The student is required to seek early advice from a faculty member when declaring a chemistry major.
Sequence with CHEM 111

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Sequence with CHEM 107-108

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<td></td>
<td>CHEM 351 or 361</td>
<td>CHEM elective</td>
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<td>Senior</td>
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<td></td>
<td>CHEM 496</td>
<td>CHEM elective</td>
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<td>CHEM elective</td>
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</tbody>
</table>
Physics with calculus (PHYS 131 and 132) is strongly recommended but not required. As an alternative, students may take non-calculus-based physics (PHYS 121 and 122).

** Pre-health students may prefer to defer CHEM 221 to the junior year.

These sequences allow the student to explore the various upper-division chemistry course offerings in the junior and senior years.

It is possible to begin specialization within the major early, by choosing a group of electives concentrated on one particular area of chemistry, such as organic, analytical, inorganic or physical chemistry. Students may also design a program interdisciplinary in nature, by choosing complementary electives in other disciplines such as biology, geology or physics. Especially in the case of tailored programs, students should obtain advice from Chemistry Department faculty as early as possible in their careers.

For those students desiring a broad background in chemistry, the following general track of chemistry electives is suggested:

- CHEM 335
- CHEM 422
- CHEM 442, 443, 444, 445 or 484
- CHEM 451 or 455

**BS Degree Program**

The major in chemistry leading to the BS degree requires the following courses: CHEM 111,* 221, 231, 332, 335, 341, 351, 422, 451; MATH 224/225, 222 or 226/227, PHYS 131 (or 121) and 132 (or 122); one course from among CHEM 442, 443, 444, 445, 484; CHEM 455, and CHEM 496; and four courses in the Division of Science and Mathematics, or professionally related courses. Students should petition the Chemistry Department's Undergraduate Program Committee for professionally related courses not in the Division of Science and Mathematics to count toward the chemistry BS major.

BS students must take CHEM 496 and at least seven other chemistry courses in the major, including at least five upper-level chemistry courses, while in residence at Binghamton University.

*CHEM 107-108 may be substituted for CHEM 111 in any program.*

The following sample sequences are offered as a general guide.

These courses provide the student with a broader and more intense course of study than that obtained with the BA degree.

**Sequence with CHEM 111**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td><strong>Freshman</strong></td>
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<tr>
<td>CHEM 111</td>
<td>CHEM 231</td>
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<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
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<tr>
<td><strong>Sophomore</strong></td>
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<tr>
<td>Freshman</td>
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<td>CHEM 107</td>
<td>CHEM 108</td>
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<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
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<td>Sophomore</td>
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</tr>
<tr>
<td>CHEM 231</td>
<td>CHEM 221</td>
</tr>
<tr>
<td>PHYS 131*</td>
<td>CHEM 332</td>
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<td></td>
<td>CHEM 335</td>
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<tr>
<td></td>
<td>PHYS 132*</td>
</tr>
<tr>
<td>Junior</td>
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</tr>
<tr>
<td>CHEM 341</td>
<td>CHEM 451</td>
</tr>
<tr>
<td>CHEM 351</td>
<td>Inorganic II**</td>
</tr>
<tr>
<td>CHEM 422</td>
<td>CHEM 455</td>
</tr>
<tr>
<td>Senior</td>
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</tr>
<tr>
<td>CHEM 496</td>
<td>Science elective</td>
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<tr>
<td>Science elective</td>
<td>Science elective</td>
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</tbody>
</table>

**Sequence with CHEM 107-108**

<table>
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<tr>
<th>Fall</th>
<th>Spring</th>
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<td></td>
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</tbody>
</table>

*Physics with calculus (PHYS 131 and 132) is strongly recommended but not required. As an alternative, students may take non-calculus-based physics (PHYS 121 and 122).*
** Inorganic II may be CHEM 442, 443, 444, 445 or 484.

## Chemistry BS ACS Certified

The major in chemistry leading to the ACS certified BS degree requires the following courses: CHEM 111,* 221, 231, 332, 335, 341, 351, 422; MATH 224/225, 222 or 226/227, PHYS 131 (or 121) and 132 (or 122); BIOL 118; BCHM 403; one course from among CHEM 442, 443, 444, 484; CHEM 455 and CHEM 496; and two credits from courses in the Division of Science and Mathematics, or professionally related courses; CHEM 445, or two credits of Advanced Independent Study (CHEM 497 or 498) involving laboratory work in inorganic chemistry and at least two additional credits of independent study (CHEM 397, 497 or 498) involving laboratory work. If CHEM 107-108 rather than CHEM 111 is taken, the two additional credits of laboratory work are not required, and four additional credits in the Division of Science and Mathematics, rather than two, are required. Students should petition the Chemistry Department’s Undergraduate Program Committee for professionally related courses not in the Division of Science and Mathematics to count toward the chemistry BS major.

BS students must take CHEM 496 and at least seven other chemistry courses in the major, including at least five upper-level chemistry courses, while in residence at Binghamton University.

* CHEM 107-108 may be substituted for CHEM 111 in any program.

The following sample sequences are offered as a general guide.

These courses provide the student with a broader and more intense course of study than that obtained with the BA degree.

### Sequence with CHEM 111

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td><strong>Freshman</strong></td>
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<td>CHEM 111</td>
<td>CHEM 231</td>
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<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
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<tr>
<td><strong>Sophomore</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM 332</td>
<td>CHEM 221</td>
</tr>
<tr>
<td>PHYS 131*</td>
<td>CHEM 335</td>
</tr>
<tr>
<td>BIOL 118</td>
<td>PHYS 132*</td>
</tr>
<tr>
<td><strong>Junior</strong></td>
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</tr>
<tr>
<td>CHEM 341</td>
<td>CHEM 451</td>
</tr>
<tr>
<td>CHEM 351</td>
<td>CHEM 455</td>
</tr>
<tr>
<td>CHEM 422</td>
<td>BCHM 403</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM 496</td>
<td>Lab elective II</td>
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</tbody>
</table>
### Lab elective I  Science elective

### Inorganic II**

**Sequence with CHEM 107-108**

<table>
<thead>
<tr>
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<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td><strong>Freshman</strong></td>
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</tr>
<tr>
<td>CHEM 107</td>
<td>CHEM 108</td>
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</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
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<tr>
<td><strong>Sophomore</strong></td>
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</tr>
<tr>
<td>CHEM 231</td>
<td>CHEM 221</td>
<td></td>
</tr>
<tr>
<td>PHYS 131*</td>
<td>CHEM 332</td>
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</tr>
<tr>
<td>BIOL 118</td>
<td>CHEM 335</td>
<td>PHYS 132*</td>
</tr>
<tr>
<td><strong>Junior</strong></td>
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<td></td>
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<tr>
<td>CHEM 341</td>
<td>CHEM 451</td>
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<td>CHEM 351</td>
<td>CHEM 455</td>
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<tr>
<td>CHEM 422</td>
<td>BCHM 403</td>
<td></td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 496</td>
<td>Science elective</td>
<td></td>
</tr>
<tr>
<td>Inorganic II**</td>
<td></td>
<td>Lab elective II</td>
</tr>
</tbody>
</table>

* Physics with calculus (Phys 131 and 132) is strongly recommended but not required. As an alternative, students may take non-calculus-based physics (PHYS 121 and 122).

** Inorganic II may be CHEM 442, 443, 444 or 484.

The Science Elective can be any course of at least two credits within the Division of Science and Mathematics (e.g., BIO 113, PSYC 11, MATH 323, or chemistry elective).

Lab Elective I is two credits of laboratory work.

Lab Elective II can be either CHEM 445, or two credits of CHEM 497 or 498 involving inorganic chemistry and two credits of CHEM 397, 497, or 498.

**BS Program with Emphasis in Biological Chemistry**

The major in chemistry leading to the BS degree with emphasis in biological chemistry requires the following courses: CHEM 111,* 221, 231, 332, 335, 341, 361, 422, 451; MATH 224/225, 222 or 226/227, PHYS 131 (or 121) and 132 (or 122); BIOL 118, BCHM 403; one course from among CHEM 442, 443, 444, 445, 484; one chemistry
course from among CHEM 434, 485K, or other biologically related chemistry courses; CHEM 455 and CHEM 496; and one course in the Division of Science and Mathematics, or professionally related courses. Students should petition the Chemistry Department’s Undergraduate Program Committee for professionally related courses not in the Division of Science and Mathematics to count toward the chemistry BS major.

BS students must take CHEM 496 and at least seven other chemistry courses in the major, including at least five upper-level chemistry courses, while in residence at Binghamton University.

*CHEM 107-108 may be substituted for CHEM 111 in any program.*

The following sample sequences are offered as a general guide.

**Sequence with CHEM 111**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td><strong>Freshman</strong></td>
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</tr>
<tr>
<td>CHEM 111</td>
<td>CHEM 231</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
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<tr>
<td><strong>Sophomore</strong></td>
<td></td>
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<tr>
<td>CHEM 332</td>
<td>CHEM 221</td>
</tr>
<tr>
<td>PHYS 131*</td>
<td>CHEM 335</td>
</tr>
<tr>
<td>BIOL 118</td>
<td>PHYS 132*</td>
</tr>
<tr>
<td><strong>Junior</strong></td>
<td></td>
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<tr>
<td>CHEM 341</td>
<td>CHEM 451</td>
</tr>
<tr>
<td>CHEM 361</td>
<td>CHEM 455</td>
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<tr>
<td>CHEM 422</td>
<td>BCHM 403</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM 496</td>
<td>CHEM <em>elective</em></td>
</tr>
<tr>
<td>Inorganic II**</td>
<td>Science <em>elective</em></td>
</tr>
</tbody>
</table>

**Sequence with CHEM 107-108**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM 107</td>
<td>CHEM 108</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
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<tr>
<td><strong>Sophomore</strong></td>
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<td>Course</td>
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<td>CHEM 231</td>
<td>CHEM 221</td>
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<td>PHYS 131*</td>
<td>CHEM 332</td>
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<tr>
<td>BIOL 118</td>
<td>CHEM 335</td>
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<td>PHYS 132*</td>
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**Junior**

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
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<tbody>
<tr>
<td>CHEM 341</td>
<td>CHEM 451</td>
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<tr>
<td>CHEM 361</td>
<td>CHEM 455</td>
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<tr>
<td>CHEM 422</td>
<td>BCHM 403</td>
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</table>

**Senior**

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<th>Course</th>
<th>Course</th>
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<tbody>
<tr>
<td>CHEM 496</td>
<td>CHEM <em>elective</em></td>
</tr>
<tr>
<td>Inorganic II**</td>
<td>Science <em>elective</em></td>
</tr>
</tbody>
</table>

* Physics with calculus (PHYS 131 and 132) is strongly recommended but not required. As an alternative, students may take non-calculus-based physics (PHYS 121 and 122).

** Inorganic II may be CHEM 442, 443, 444, 445 or 484.

The Science Elective can be any course within the Division of Science and Mathematics (e.g., BIO 113, PSYC 111, MATH 323, or chemistry elective).

CHEM elective to be selected from a list of biologically related chemistry including CHEM 434, and CHEM 485K.

**BS Program with Emphasis in Materials**

The major in chemistry with emphasis in materials leading to the BS degree requires the following courses: CHEM 111 (or 107/108), 221, 231, 332, 335, 341, 351, 422, 444, 455, 496; MATH 224/225, 222 or 226/227; PHYS 131 (or 121) and 132 (or 122); one course in the Division of Science and Mathematics; either CHEM 451 or 452; one course from CHEM 445, 497/498 or other materials laboratory course; and two materials course electives at any level.

BS students must take CHEM 496 and at least seven other chemistry courses in the major, including at least five upper-level chemistry courses, while in residence at Binghamton University.

**Sample Course Sequence for BS Degree with Emphasis in Materials Chemistry**

<table>
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<tr>
<th>Fall</th>
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<tbody>
<tr>
<td>Freshman</td>
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<tr>
<td>CHEM 111</td>
<td>CHEM 231</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
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<th>Sophomore</th>
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<tbody>
<tr>
<td>Junior</td>
<td>Senior</td>
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<tr>
<td>CHEM 332</td>
<td>CHEM 351</td>
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<td>CHEM 335</td>
<td>CHEM 451</td>
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<tr>
<td>PHYS 131*</td>
<td>CHEM 451</td>
</tr>
<tr>
<td>Science elective</td>
<td>CHEM 444</td>
</tr>
<tr>
<td>PHYS 132*</td>
<td>CHEM 444</td>
</tr>
<tr>
<td>CHEM 422</td>
<td>Materials lab**</td>
</tr>
<tr>
<td>Materials elective</td>
<td>Materials elective</td>
</tr>
</tbody>
</table>

*Physics with calculus (PHYS 131 and 132) is strongly recommended but not required. As an alternative, students may take non-calculus-based physics (PHYS 121 and 122).

**Materials laboratory can be CHEM 455 or CHEM 497/498.

**Chemistry Minor**

Requirements for the minor are:

- CHEM 107 and 108;
- Four CHEM courses numbered 200 or above. At least two of these courses must be numbered 300 or above.

No more than two credits of CHEM 397, 497 or 498 may be used to satisfy the minor. Chemistry minor students must take four chemistry courses (16 credits) in the minor with at least two upper-level chemistry courses, while in residence at Binghamton University.

CHEM 111 may be substituted for CHEM 107-108. If this substitution is made, an additional chemistry course numbered 200 or above is required. Only courses that fulfill the chemistry major requirements may be used to fulfill the chemistry minor requirements. Keep in mind that the four chemistry courses numbered 200 or above must be different from the chemistry courses used to fulfill a student’s major requirement. Among the courses for the chemistry minor, no more than one with a grade of Pass may be included.

**Honors Program**

Graduation with honors in chemistry is granted for superior independent work. To qualify for admission to the honors program, a student must have demonstrated academic accomplishment of high quality and must have had prior enrollment in CHEM 497, Advanced Independent Study, and current enrollment in CHEM 498, Advanced Independent Research—Honors. The results of the honors project, presented in a thesis, are defended before an examining committee. Successful completion of the program earns the recognition of distinguished independent work in chemistry. Detailed guidelines for the program are available from the department office, and should be consulted by majors in their junior year.

**Five-Year Program in Chemistry and Materials Science and Engineering**
The five-year program leading to a BS in chemistry and an MS in materials science and engineering in five years gives all students a strong research background combined with a strong foundation in chemistry and materials science. It requires completion of all components of the BS in chemistry with emphasis in materials. Participation in three semesters of laboratory/research work from 397, 445, 497 or 598 must be included within the existing BS requirements. In order to complete the five-year option, students are also required to complete all requirements of the MS degree in materials science and engineering, including a thesis. Twelve credits taken in the fourth year at the graduate level may be applied to both degree programs. Students in the combined program receive the BS degree after completing their undergraduate requirements.

Students are admitted to the combined program at any time up to the beginning of their senior year. Admission to the combined program is limited to students who have a cumulative GPA of at least 3.0 in both the major and overall. Students will need to maintain this GPA to stay in the program. In order for students to complete this program within five years, three of the courses required for the BS in chemistry (with materials emphasis) are replaced by the more rigorous graduate course equivalents—e.g., CHEM 411, 444 and 498 by 511, 544 and 598—and count toward both degree requirements.

**Sample Course Sequence for BS Degree with Emphasis in Materials Chemistry in 5 year BS/MS Program**

<table>
<thead>
<tr>
<th>Freshman</th>
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<tbody>
<tr>
<td>Fall</td>
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<tr>
<td>CHEM 111</td>
<td>CHEM 231</td>
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<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
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<table>
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<tr>
<th>Sophomore</th>
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<tbody>
<tr>
<td>Freshman</td>
<td></td>
</tr>
<tr>
<td>CHEM 332</td>
<td>CHEM 221</td>
</tr>
<tr>
<td>CHEM 335</td>
<td>Materials elective</td>
</tr>
<tr>
<td>PHYS 131*</td>
<td>PHYS 132*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior</th>
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<tbody>
<tr>
<td>CHEM 351</td>
<td>CHEM 451</td>
</tr>
<tr>
<td>CHEM 341</td>
<td>CHEM 444</td>
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<tr>
<td>CHEM 422</td>
<td>CHEM 455</td>
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<table>
<thead>
<tr>
<th>Senior</th>
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<tbody>
<tr>
<td>CHEM 496</td>
<td>Materials elective</td>
</tr>
<tr>
<td>Materials elective</td>
<td>CHEM 397/497 Materials Research**</td>
</tr>
<tr>
<td>CHEM 397/497 Materials Research**</td>
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</tbody>
</table>

*Physics with calculus (PHYS 131 and 132) is strongly recommended but not required (PHYS 121 and 122 can be taken instead).

**Required for 5-year BS Chemistry/MS Materials Science & Engineering Program.
CHEM 107 and 108 may be substituted for CHEM 111.

The Materials Electives can be any materials-related course within the Division of Science and Mathematics or the Watson School of Engineering.

Additional all-college elective courses would be taken to complete a full course load.

Five-Year Program in Chemistry and Teaching

The five-year program leading to a BA in chemistry and an MAT in Chemistry Adolescence Education efficiently combines an undergraduate degree in chemistry with a graduate-level teaching certification program. Students should declare their interest in this option as soon as possible to ensure proper undergraduate course selection. Students should apply for the combined program no later than the beginning of their junior year. Admission decisions for the combined program will be made no later than spring of the student's junior year. Application and admissions processes are through the MAT program and the Graduate School. Admissions decisions for the combined program will be based on course grades (cumulative grade point average of 3.4 or better in chemistry and overall), chemistry faculty recommendations, an interview by the MAT science education program faculty, GRE scores, and a personal narrative essay of approximately 1,000 words. For more information about the five-year combined BA/MAT program, please see the chemistry department undergraduate program director and the Graduate School of Education website: http://www2.binghamton.edu/gse/teacher-education/pre-service/combined-ba-mat-chem.html. Note: Transfer students are not eligible for the five-year combined degree program, but are encouraged to apply to the standard, post-BA/BS, three-semester MAT-Chemistry program (contact the Graduate School of Education).

Cinema

Cinema Major

The Department of Cinema develops both artists and creative thinkers in cinema. It fosters critical appreciation of both innovative and traditional cinematic expression. Students learn how to view works of cinema in their social, economic and historical contexts, as well as in general historical and aesthetic terms. The production program in film and electronic media is not oriented toward developing mere technical proficiency, but toward encouraging artistic discovery and expression. Both production and studies courses are valuable to a wide range of students, not only because cinema is a major art and entertainment medium of our time, but also because, increasingly, our experience and exploration of all areas of knowledge is transmitted through the moving image.

Qualified students are encouraged to conclude their work in the department by choosing the senior thesis option. The department encourages studies in the theories and techniques of other artistic disciplines, such as music, theater, painting and literature.

Honors Program

Departmental honors are awarded to students whose senior theses are judged by the faculty to be of superior quality. In addition, honors are awarded to those majors who have completed a substantive body of significant work in the department. Nominations for honors are submitted by individual faculty members, and the final decision rests with the entire Cinema Department faculty. Senior standing is required.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Cinema Requirements**

The cinema major consists of six core courses and five electives. The core courses give students experience in the analysis of film and video and the creation of personal works in both media. A set of elective courses is chosen to reflect the student’s dominant interests. Those who wish to stress filmmaking or videomaking should begin the major early enough in their academic careers to allow for the completion of the sequence of courses in those areas.

- CINE 121. Experience, History and Analysis of Cinema
- CINE 122. Expression and Innovation in Film and Video
- CINE 252. Video and Filmmaking I
- One of the following mid-level production courses:
  - CINE 353. Digital Videomaking II
  - CINE 321. Film Theory
- Five additional cinema courses, at least three of which must be upper-division courses (courses numbered between 300 and 499).
- CINE 491 does not satisfy major or all college requirements.

**Residency requirement:** A minimum of 6 courses in Cinema must be taken in Harpur College in order to qualify for the BA degree.

The department requires a grade of C or better in cinema courses counted toward the major and minor. No courses for the major may be taken Pass/Fail.

**Cinema Minor**

The cinema minor consists of three core courses and three electives, for a total of 24 credit hours. Students should be advised that CINE 122 is a prerequisite to all studio courses and may be taken concurrently with CINE 252.

- CINE 121. Experience, History and Analysis of Cinema
- CINE 122. Expression and Innovation in Film and Video
- CINE 252. Video and Filmmaking I
- Cinema elective (200 level or higher)
- Cinema elective (300-400 level)
Cinema elective (300-400 level)
- CINE 491 does not satisfy major or all college requirements.

**Classical and Near Eastern Studies**

**Programs**

With its focus on the languages, literatures, and cultures of the ancient Mediterranean (Greek and Roman) and modern Arabic-speaking worlds, this department provides instruction that is crucial to understanding where we are today and how we got here. Courses range from basic instruction in language (Arabic, Greek, Latin) and culture for all students in all programs, to advanced work preparatory to rewarding careers in government, law, academia, and other areas. Note that instruction in the spoken and written languages of the Near East has obvious and immediate application.

**Course Credit**

Courses taken on campus for two credits cannot count as more than half courses if approved for any major in Classical and Near Eastern Studies.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the *Bulletin*. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the *Bulletin*.

**Major Programs in Classical Studies**

Three specializations are offered within the Classical Studies program:

- Classical Civilization
- Classics, Greek and Latin
- Latin

Any course in which a student receives the grade of P or D shall not count for the major. A student may not major in more than one of these three tracks in Classical Studies (i.e., may not double- or triple-major in Classical Studies).

**Classical Civilization**
This specialization offers a grounding in the cultures of the ancient Mediterranean world, Greece and Rome especially, but does not require reading knowledge of the original languages.

<table>
<thead>
<tr>
<th>number of courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any courses listed under Classics, Greek or Latin</td>
<td>6 or 7</td>
</tr>
<tr>
<td>Courses in ancient history, ancient philosophy, ancient art or other courses in classical civilization approved by the classics undergraduate advisor</td>
<td>4 or 3</td>
</tr>
</tbody>
</table>

Not more than two introductory-level (100-level) courses may be counted toward the major.

**TOTAL** 10

**Classics, Greek and Latin**

This rich and demanding major program prepares students for serious scholarly work in Latin and ancient Greek. With departmental approval, a special program may be devised that emphasizes both languages equally, or in which one language predominates. For example:

<table>
<thead>
<tr>
<th>number of courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses beyond 102 in either ancient Greek or Latin</td>
<td>4</td>
</tr>
<tr>
<td>Courses in the other language (ancient Greek or Latin)</td>
<td>2</td>
</tr>
<tr>
<td>Courses chosen with departmental approval from other departmental offerings, or from ancient history, ancient philosophy, ancient art or medieval studies</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL** 10

Note: Depending on prior exposure to the language, LAT 101, 102 and GRK 101 and 102 may be required prerequisites for the major.

**Latin**

This major builds on a foundation of classical Latin for concentration in ancient or medieval Latin literature and culture.

<table>
<thead>
<tr>
<th>number of courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>At least five Latin courses beyond 102</td>
<td>5</td>
</tr>
<tr>
<td>Roman history</td>
<td>1</td>
</tr>
<tr>
<td>Courses approved by the department from department offerings, or ancient or medieval history, philosophy, art or religion</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL** 10

Note: (Latin Major) Depending on prior exposure to the language, LAT 101 and 102 may be required prerequisites for the major.
Major Program in Arabic Studies

The Arabic major requires 10 courses in total.

<table>
<thead>
<tr>
<th>number</th>
<th>of courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six of these must be in Modern Standard Arabic, including 101–102, 203–204, and 305–306</td>
<td>6</td>
</tr>
<tr>
<td>Two of these must be Arabic 115–116 (Spoken Arabic of Egypt).</td>
<td>2</td>
</tr>
<tr>
<td>Two must be from topics courses. The specific topics for these courses are announced on a semester-by-semester basis. Examples of the options include, but are not limited to, Arabic Literature, Arabic Literature in Translation, Advanced Standard Arabic III and IV, Arabic Grammar Review, Introduction to Islamic Thought, Introduction to Qur’an and Hadith, and Koranic Arabic.</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
</tr>
</tbody>
</table>

Note to Arabic Studies majors: Students with high school or other preparation in Arabic are placed at the appropriate level on the basis of individual consultation with faculty members or, in some cases, by placement tests.

Requirements for Minors

Minor in Classical Civilization: Six courses (24 credits), of which at least three must be listed under Classics, Greek or Latin, with the remainder to be chosen from ancient history, ancient art or other courses in classical civilization approved by the classics undergraduate advisor. No more than two introductory-level (100-level) courses may be counted toward the minor.

Minor in Ancient Greek: Any six courses (24 credits) in ancient Greek.

Minor in Latin: Any six courses (24 credits) in Latin.

Minor in Arabic: The Arabic minor requires Arabic 101, 102, 203, 204, one 300 level Modern Standard Arabic course and one related course either offered or approved by the department. The related course may be any course from the Egyptian Spoken Arabic track, e.g., Arabic 110, 111, etc.

Study Abroad in Arabic

There are many study abroad opportunities for Arabic Studies students; for example, in Egypt (particularly the American University in Cairo and the University of Alexandria), Jordan, Lebanon, Morocco (e.g., AUI where there is a formal link with BU), and the United Arab Emirates. Students interested in study abroad need to consult with the Arabic Studies program director and advisor, especially for pre-approval of credit recognition and credit transfer.

Comparative Literature

Undergraduate Programs

The Department of Comparative Literature offers a five-track curriculum:

- general humanities courses that will be of interest to all students;
- literature in translation courses for students who want advanced study of literature as well as other arts and
disciplines;
• translator training for students who want to add translation to their marketable skills;
• an individualized major program;
• a minor program.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

• 126 credits
• 90 liberal arts and sciences credits
• Minimum of 44 upper-level credits
• Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
• Minimum of 44 credits in residence in Harpur College
• 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

The Comparative Literature Major

The comparative literature major is designed to allow students significant freedom in designing a major with a literary emphasis. It stresses foreign language skills and encourages students to approach literature from an interdisciplinary perspective. The department's commitment to a vital engagement with literature and the arts, its encouragement of cross-disciplinary work and its strengths in the areas of literature, modern theory and philosophy, cultural studies, and translation studies create a distinctive context for an innovative humanities major.

Requirements

• COLI 110, 111. World Literature I and II (or appropriate equivalents);
• one comparative literature course at the 200 level or higher;
• one course in a foreign language beyond the 203 level;
• three courses in advanced literature, art or related disciplines at the 300 or 400 level. These should be chosen on an individualized basis through consultation with the departmental undergraduate advisor;
• COLI 371. World, Text, and Critic;
• COLI 372. Works that Call Forth Thinking;
• COLI 481. Methodologies and Masterpieces Tutorial.

Note: Depending on prior exposure to the language, Introductory/elementary language courses (typically language courses numbered 101 and 102 or 111 and 115) and intermediate I level language courses (typically language courses numbered 203 or 211) are required prerequisites for completion of the major.

Honors
Candidates for honors in the comparative literature major must write an honors thesis with a director chosen from among the comparative literature faculty. To be eligible, students must have a grade-point average of at least 3.5 for courses within the major. They may write their thesis in a single semester by enrolling in COLI 499, Honors Thesis, or may choose to devote a full year to the project by enrolling initially in COLI 498, Honors Seminar, and then, in the second semester, in COLI 499. COLI 498 is not a prerequisite for COLI 499; it simply offers students the opportunity to undertake larger projects. Students should consult with the undergraduate director to determine which option will best serve their needs and interests. The designation of honors in comparative literature is awarded to students who receive a grade of at least A– for their honors theses.

Requirements for Comparative Literature Minor

Required for an undergraduate minor in comparative literature:

- one 100-level course in comparative literature (enrollment preference is given to minors in 100-level courses);
- one course in any foreign language, 203 level or above;
- COLI 481;
- three other 300- or 400-level courses in comparative literature;
- a minimum of 12 credits in residence at Binghamton University.

Translator Training

The certificate program in translator training is administered by the translation research and instruction program. For a detailed description, see that section.

The comparative literature degree programs in translator training, administered by the department, are described in that same section.

Economics

Undergraduate Programs

The economics curriculum provides an understanding of the origins, characteristics and functions of our economic organization, and develops the ability to appraise the functioning of the economy and proposals for the economy’s improvement. The curriculum emphasizes the development of tools of economic analysis and the study of current institutional arrangements and their consequences. Attention is focused on the effects of individual and collective actions on the economic process.

The department offers the BA and BS degrees in economics, as well as a minor. The BA degree offers an excellent background for students planning to enter careers or professional schools in business, law or public policy. The BS offers three specializations. The BS specialization in economic analysis is the most quantitative specialization. It is offered for students planning careers requiring the more technical tools of economic theory and econometrics. It is a basic preparation for graduate training in economics, although additional coursework in advanced mathematics and statistics is suggested for those planning to pursue a PhD. The BS specialization in financial economics is offered for students planning employment or graduate study in financial analysis. The BS specialization in economic policy analysis combines empirical statistical tools with additional exposure to courses outside economics related to policy analysis. It is offered for students interested in public policy and planning employment or graduate study in government, health care and other non-profit organizations.

The Economics Department views the grade of C– as passing but unsatisfactory. Therefore, a course in which a student earns a grade of C– or less is not acceptable as a prerequisite and may not be used to fulfill the
requirements for a major/minor in economics. A course taken under the Pass/Fail option may not be used to fulfill the requirements for a major/minor or prerequisite in economics.

There are no requirements to declare a BA as major; however, no course for the major may be taken more than twice. This includes any combination of statistics and/or calculus courses. Students who fail to receive a grade of C or better in two attempts at core courses will be dropped from the major. Students who achieve grades of B– or better in both ECON 366 (or its approved equivalent), and MATH 224 and 225 may change their major to any of the BS degrees. A grade of B- or better in MATH 220 is acceptable in lieu of MATH 224/225 for the BS Financial Economic degree and the BS in Economic Policy Analysis degree.

Courses numbered in the 300s and above are upper-level courses open to students with the proper prerequisites.

Note: The following courses are required courses for a major in Economics: MATH 224 and MATH 147. If students do not place into MATH 224, then MATH 223 and, if needed, MATH 108 are also required for completion of the major. If students do not place into MATH 147, then MATH 107 is also required for completion of the major.

For additional information about the economics major, please see the Economics Department website at: http://www.binghamton.edu/economics/index.html.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Economics Major — BA Degree

Departmental requirements for a BA degree in economics are 11 full courses in economics, or their equivalent, and one course in mathematics, distributed as listed below. Students should consult the department for details on qualifying grades in AP and transfer courses. At least seven of the 11 total courses, including two numbered 400-489, must be taken at Binghamton:

- ECON 160 and 162;
- MATH 220 or both MATH 224 and 225;
- ECON 360 and 362;
- ECON 366 (or MATH 147, MATH 448, CQS 112);
- Five other full courses in economics numbered above 110, or their equivalent, of which at least three must be chosen from courses numbered 400-489 (hence, practica, independent studies, internships and honors courses do not count for this requirement); no more than one may be chosen from courses numbered in the
Economics Major — BS Specialization in Economic Analysis

Departmental requirements for the BS specialization in economic analysis are 16 full courses from economics and mathematics distributed as listed below. Students should consult the department for details on qualifying grades in AP and transfer courses. No course may be counted toward more than one requirement. At least nine of the 16 required courses and six courses in economics, including four numbered 400-489, must be taken at Binghamton:

- ECON 160 and 162;
- ECON 360 and 362;
- ECON 366 (or MATH 147, MATH 448, CQS 112);
- ECON 466;
- ECON 461, 462, 464 or 467; ECON 611 may be substituted with approval of the Economics Department;
- MATH 224/225, MATH 222 or MATH 226/227, MATH 304 AND 323;
- Three additional full courses (or equivalent) chosen from economics courses numbered 400-489 (hence practica, independent studies, internships and honors courses do not count for this requirement);
- Two full courses (or equivalent) chosen from courses in economics numbered above 110, no more than one of which may be numbered in the 100s, or from the following courses in mathematics or computer science: MATH 314, 357, 371, 447, 448, 461, 471, 478, CS 140. Other mathematics courses numbered 300 and above may be substituted after approval by the economics undergraduate director.

Economics Major — BS Specialization in Financial Economics

Departmental requirements for the BS specialization in financial economics are 16 full courses distributed as listed below. Students should consult the department for details on qualifying grades in AP and transfer courses. No course may be counted toward more than one requirement. At least nine of the 16 required courses and six courses in economics, including four numbered 400-489, must be taken at Binghamton:

- ECON 160 and 162;
- ECON 360 and 362;
- ECON 366 (or MATH 147, MATH 448, CQS 112);
- ECON 466 and 467;
- MATH 220 or both MATH 224 and 227, MATH 304 AND 323;
- ACCT 211 and FIN 311;
- Five other full courses in economics numbered above 110, or their equivalent, of which:
  - no more than one may be chosen from courses numbered in the 100s;
  - at least three must be chosen from courses numbered 400-489; and
  - at least three must be chosen from the following list of courses:

ECON 350, 414, 436, 437, 439, 440, 442, 450, 458, 461, 462. The department may also designate special topics courses as suitable to satisfy this requirement. Such courses will be identified prior to the start of the semester.
Economics Major — BS Specialization in Economic Policy Analysis

Departmental requirements for the BS specialization in economic policy analysis are 16 full courses, distributed as listed below. Students should consult the department for details on qualifying grades in AP and transfer courses. No course may be counted toward more than one requirement. At least nine of the 16 total courses and six courses in economics, including two numbered 400-489, must be taken at Binghamton:

- ECON 160 and 162;
- ECON 360 and 362;
- ECON 366 (or MATH 147, MATH 448, CQS 112);
- ECON 445;
- ECON 466;
- MATH 220 or both MATH 224 and 225;
- CS 105 (CS 110 also accepted);
- Two courses chosen from either PLSC or ENVI or another course approved by the director of undergraduate studies. PLSC courses used to satisfy this requirement must be numbered above 300;
- Five other full courses in economics numbered above 110, or their equivalent, of which:
  - at least three are numbered 400-489; and
  - at least three must be chosen from the following list of courses:

ECON 314, 317, 331, 345, 414, 430, 431, 433, 436, 437, 440, 443, 444, 450, 461, 462. The department may also designate special topics courses as suitable to satisfy this requirement. Such courses will be identified prior to the start of the semester.

Honors Programs

Students in either BA or BS degree programs may earn honors in economics through the J.C. Liu Honors Thesis Program. This is a three-semester program that includes ECON 490, Intermediate Research Seminar (four credits); ECON 498, Honors Research Design (four credits); ECON 499, Honors Thesis (four credits); and submission of a thesis judged worthy of honors in conjunction with ECON 499. Two among the courses ECON 490, 498 or 499 may be counted as lower-level electives towards the economics major, but will not count toward the requirement of courses numbered 400-489.

Admission to the honors thesis program and to ECON 498-499 is limited to majors with a 3.3 GPA in economics and a 3.0 GPA overall who have completed ECON 490. Requests for admission to the program should be directed to the instructor of ECON 498 in the second semester of the junior year. Students planning to graduate in December of their fourth year should be aware that they must begin the program with ECON 490 in the spring of their second year, and complete ECON 499 in the spring of their third year.

Economics Minor

To declare a minor in economics, students must have completed 60 credits and have an overall GPA of 3.0.

Departmental requirements for a minor in economics are seven full courses distributed as listed below. At least four of the courses must be taken at Binghamton:

- ECON 160 and 162;
- MATH 220 or both MATH 224 and 225;
- ECON 360;
- ECON 366 (or MATH 147, MATH 148, MATH 327, MATH 448, CQS 112);

Any two full courses in economics in addition to the above five, at least one of which must be chosen from courses numbered 400-489.

At least four of the courses in the student's minor program must be in addition to those counted toward fulfillment of the requirements for the student's major(s) and/or other minor(s). Therefore, students whose major requirements in other fields include more than three of the courses listed above will need to substitute additional economics elective courses to meet the requirements for the economics minor.

**Combined Five-Year Program in Economics and Finance**

The five-year program in economics and finance offers majors the opportunity to enhance their training with master's-level courses in economics and in finance, completing both the BS in economics with a specialization in financial economics and the MA in financial economic analysis in five years. To allow completion of both degrees in five years, ECON 502 and ECON 504, taken in the senior year, will substitute for ECON 466 and ECON 467. Credit for these courses will be applied to both programs.

Students may apply to the department for admission to the five-year program in the second semester of their third year. Admission to the fifth year is by application to the Graduate School and is conditional on earning an average GPA of 3.0 in the two graduate courses taken in the fourth year.

**English, General Literature and Rhetoric**

**Undergraduate Programs**

The Department of English, General Literature and Rhetoric offers students the opportunity to study literature and language in their many manifestations. Literature courses deal broadly with genres and themes from the past and present, and teach students how to read and analyze texts; creative writing courses foster, in qualified students, the development of serious creativity; courses in globalization and culture explore cultural and literary responses to the emergence of global culture and the questions raised by this process; rhetoric courses deal with both the theory and practice of communication, as well as the history of oral and written argument.

Majors in English choose one of the concentrations listed below, which require either five core courses in literary history and theory or six core courses in theories and practices of global literary and cultural production. All versions of the major require 10 courses total. The basic major in English, with its five electives, allows students to design their majors around their own interests (literature of past or present, language, folklore, American culture or cultural studies, or writing). The major in English with a concentration in global culture includes four electives, as well as courses that explore the Anglo-American imperial tradition and the cultural productions of marginalized peoples. The major in English with a concentration in rhetoric provides a structured set of courses related to rhetorical theory and practice; students may combine this concentration with the global culture core or the traditional literary history core. The major in English with a concentration in creative writing provides a sequence of courses in the arts of poetry and fiction; students may combine this concentration with the global culture core or the traditional literary history core.

No more than five courses may be transferred for credit toward the major from programs at other colleges or universities. Students will receive credit toward the major for courses offered by our department and for courses we cross-list (offered by other departments). Students will also receive credit toward the major for courses offered through our London Program.
Courses taken under the Pass/Fail grading option do not count toward the major, except those for which Pass/Fail is the only grading option. Students must receive a grade of C– or better on courses to fulfill requirements for the major.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Major in English

Students take five core courses and five electives in literature, rhetoric, folklore and/or creative writing, focusing their curricula in ways they choose. Students should consult their advisors for help in planning their course selections.

<table>
<thead>
<tr>
<th>Required courses</th>
<th>number of courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course in British literature to 1660 (ENG 227, 230, 240, 330-339, or 340-349)</td>
<td>1</td>
</tr>
<tr>
<td>One course in British literature 1660-1900 (ENG 228, 250, 260, 350-359, or 360-369)</td>
<td>1</td>
</tr>
<tr>
<td>One course on Shakespeare (ENG 245)</td>
<td>1</td>
</tr>
<tr>
<td>One course in American literature to 1920 (ENG 270, 272, 370-379)</td>
<td>1</td>
</tr>
<tr>
<td>One course in literary theory (ENG 310 or ENG 320)</td>
<td>1</td>
</tr>
<tr>
<td>One course in literature, rhetoric or creative writing at the 200 level or above (ENG/RHET/CW 200-299, 300-399,400-490, 495, 498-499), plus four additional courses in literature, rhetoric or creative writing at the 300-level or above (ENG/RHET/CW 300-399, 400-490, 495, 498-499.) Independent Study (497) students who wish to count an independent study towards the major must have approval from the department before enrolling in ENG 497. Application forms for independent study credit are available in the department office.</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
</tr>
</tbody>
</table>

Concentration in Global Culture
### Required courses

<table>
<thead>
<tr>
<th>Required courses</th>
<th>number of courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two of the following three:</td>
<td></td>
</tr>
<tr>
<td>One course in British literature to 1660 (ENG 227, 230, 240, 330-339 or 340-349)</td>
<td></td>
</tr>
<tr>
<td>One course in British literature 1660-1900 (ENG 228, 250, 260, 350-359 or 360-369)</td>
<td></td>
</tr>
<tr>
<td>One course in American literature to 1920 (ENG 270, 272, 370-379)</td>
<td>2</td>
</tr>
<tr>
<td>One course in literary theory (ENG 310)</td>
<td>1</td>
</tr>
<tr>
<td>One course in globalization and culture (ENG 320)</td>
<td>1</td>
</tr>
<tr>
<td>One course in contestations of nation in literature and culture (consult the department for a list)</td>
<td>1</td>
</tr>
<tr>
<td>One course in global cultural productions (consult the department for a list)</td>
<td>1</td>
</tr>
<tr>
<td>One course in literature, rhetoric or creative writing at the 200 level or above (ENG/RHET/CW 200-299, 300-399, 400-490, 495, 498-499), plus three additional courses at the 300-level or above (ENG/RHET/CW 200-299, 300-399, 400-490, 495, 498-499). Independent Study (497) students who wish to count an independent study towards the major must have approval from the department before enrolling in ENG 497. Application forms for independent study credit are available in the department office.</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### Concentration in Creative Writing

This option is designed for writers of poetry and prose fiction. Through workshops, studies for writers, conferences and readings, students discover the spirit and craft of their art.

CW 250 is open to any student with an interest in creative writing. The intermediate and advanced workshops (CW 350 and 450) are open only to students who submit acceptable portfolios for admission.

Workshops vary in focus each semester and may be repeated, but students may take no more than one workshop per semester.

<table>
<thead>
<tr>
<th>Required courses</th>
<th>number of courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course in British literature to 1660 (ENG 227, 230, 240, 330-339, or 340-349)</td>
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<td>1</td>
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<td>1</td>
</tr>
<tr>
<td>One course in American literature to 1920 (ENG 270, 272, 370-379)</td>
<td>1</td>
</tr>
<tr>
<td>One course in literary theory (ENG 310 or ENG 320)</td>
<td>1</td>
</tr>
<tr>
<td>One introductory creative writing workshop (CW 250)</td>
<td>1</td>
</tr>
</tbody>
</table>
One intermediate creative writing workshop (CW 350) & 1 
One advanced creative writing workshop (CW 450) & 1 
Two additional advanced creative writing or English courses (CW 380, CW 450, or ENG 300-399, 400-490, 495, 498-499). Independent Study (497) students who wish to count an independent study towards the major must have approval from the department before enrolling in CW/ENG 497. Application forms for independent study credit are available in the department office. & 2 

**TOTAL** & 10 

**Concentration in Creative Writing and Global Culture**

<table>
<thead>
<tr>
<th>Required courses</th>
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</tr>
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<tr>
<td>Two of the following three:</td>
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<td>One course in contestations of nation in literature and culture (consult the department for a list)</td>
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<td>One introductory creative writing workshop (CW 250)</td>
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<td>1</td>
</tr>
</tbody>
</table>

**TOTAL** & 10 

**Concentration in Rhetoric**

This option allows students to pursue interests in journalism and other forms of non-fiction writing, rhetorical and communication theory, rhetorical criticism and communication arts.

RHET 240, Introduction to Journalism, is open to all English majors with an interest in journalism. RHET 440s, advanced courses in journalism, are especially recommended for students who wish to acquire expertise in this field.
### Required courses

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Number of Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course in British literature to 1660 (ENG 227, 230, 240, 330-339, or 340-349)</td>
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</tr>
<tr>
<td>One course in British literature 1660-1900 (ENG 228, 250, 260, 350-359, or 360-369)</td>
<td>1</td>
</tr>
<tr>
<td>One course on Shakespeare (ENG 245)</td>
<td>1</td>
</tr>
<tr>
<td>One course in American literature to 1920 (ENG 270, 272, 370-379)</td>
<td>1</td>
</tr>
<tr>
<td>One course in literary theory (ENG 310 or ENG 320)</td>
<td>1</td>
</tr>
<tr>
<td>One rhetorical foundations course (RHET 350)</td>
<td>1</td>
</tr>
<tr>
<td>One rhetorical skills course (RHET 240, 380, CW 350)</td>
<td>1</td>
</tr>
<tr>
<td>One advanced rhetorical theory course (RHET 450-459)</td>
<td>1</td>
</tr>
<tr>
<td>Two additional advanced courses in rhetoric or English (RHET/ENG 300-399, 400-490, 495, 498-499). Independent Study(497) students who wish to count an independent study towards the major must have approval from the department before enrolling in ENG/RHET 497. Application forms for independent study credit are available in the department office.</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### Concentration in Rhetoric and Global Culture

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Number of Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two of the following three:</td>
<td>2</td>
</tr>
<tr>
<td>One course in British literature to 1660 (ENG 227, 230, 240, 330-339, or 340-349)</td>
<td>1</td>
</tr>
<tr>
<td>One course in British literature 1660-1900 (ENG 228, 250, 260, 350-359, or 360-369)</td>
<td>1</td>
</tr>
<tr>
<td>One course in American literature to 1920 (ENG 270, 272, 370-379)</td>
<td>1</td>
</tr>
<tr>
<td>One course in literary theory (ENG 310)</td>
<td>1</td>
</tr>
<tr>
<td>One course in globalization and culture (ENG 320)</td>
<td>1</td>
</tr>
<tr>
<td>One course in contestations of nation in literature and culture (consult the department for a list)</td>
<td>1</td>
</tr>
<tr>
<td>One course in global cultural productions (consult the department for a list)</td>
<td>1</td>
</tr>
<tr>
<td>One rhetorical foundations course (RHET 350)</td>
<td>1</td>
</tr>
<tr>
<td>One rhetorical skills course (RHET 240, 380, CW 350)</td>
<td>1</td>
</tr>
<tr>
<td>One advanced rhetorical theory course (RHET 450-459)</td>
<td>1</td>
</tr>
</tbody>
</table>
One additional advanced course in rhetoric or English (RHET/ENG 300-399, 400-490, 495, 498-499). 1
Independent Study (497). Students who wish to count an independent study towards the major must have approval from the department before enrolling in ENG/RHET 497. Application forms for independent study credit are available in the department office.

| TOTAL | 10 |

Semester-in-London Program

In the spring semester the department offers an academic program in London integrating courses in literature, theater, history and art with tours, trips and theater attendance. Courses fulfill requirements for the English major, though program participation is not limited to English majors. Internships in which students gain career experience working in a British enterprise are also available. Detailed information for the London program may be obtained in the department office.

Honors Program

The honors program in English consists of two courses taken in the student’s senior year: ENG 498, Honors Seminar; and ENG (RHET) 499, Honors Thesis (CW 499, Honors Portfolio). The designation of honors in English is awarded to students who receive at least a B+ grade in the Honors Seminar and at least an A– in the Honors Thesis or Portfolio.

In the major in English, the two honors courses take the place of two advanced electives. Majors concentrating in rhetoric or creative writing should consult the undergraduate director about the ways in which the honors courses may substitute in their curricula.

Admission to the honors program is by invitation, limited to about 20 students per year, with preference given to students who have completed substantial coursework at Binghamton with the highest grade-point average. The program director may solicit a sample of the student’s written work in an English course and other information.

Environmental Studies

Our society faces numerous environmental challenges—from global warming to species extinction, water contamination to soil erosion. Confronting these challenges to building sustainable communities requires attending to the interconnected nature of complex systems and that bridge traditional academic fields such as geology, geography, anthropology, public administration, political science, economics, philosophy, and ecology. The Environmental Studies Program at Binghamton University fosters transdisciplinary perspectives on interactions between human and natural systems with a view to sustaining communities so that they meet the needs of the present without sacrificing the needs of the future.

Our approach to environmental studies embraces the idea that effective environmental policy is based on a solid understanding of science and that scientists working on environmental problems must understand the policy, planning and economic framework in which their science will be applied. The major in environmental studies provides undergraduates with an interdisciplinary program in which to study these interrelationships of humans with their environment and the practical problems resulting from these relationships. In addition to taking the core courses required of all Environmental Studies majors, a student majoring in Environmental Studies completes a specialization which develops a cross-disciplinary perspective, with a problem-oriented focus. Within the framework of the Environmental Studies major, a student may obtain the interdisciplinary background prerequisite for such professional fields as planning, policy analysis, environmental law, ecosystem management, environmental education and environmental analysis, or graduate programs in these fields, as well as in environmental geology and environmental chemistry.
Because of the diverse background required of students majoring in Environmental Studies, prospective majors must plan their academic program carefully. The Environmental Studies faculty who oversee the program, recommend that majors complete the core requirements (see below) for the Environmental Studies major as early as possible. At the time students declare their intention to major in Environmental Studies they choose a specialization and should, in consultation with their program advisor, decide on the courses making up their specialization and plan their academic program.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Environmental Studies Major**

The major in environmental studies leads to either a BA or BS degree. There are three parts to each degree program: 1) a set of five core courses; 2) two problem-oriented courses; and 3) a specialization.

**BA Degree Program**

Courses required for the BA degree include:

- Five core courses:
  - ENVI 101 and 201
  - CHEM 101, 107 or 111 (with 107 or 111 required for specializations in ecosystems, environmental chemistry, or Earth sciences/natural resources)
  - ECON 160
  - One of ENVI/PHIL 149 or ENVI/GEOG 239 or ENVI 230
- Two problem-oriented courses, usually taken in the senior year, selected from ENVI 397, 413, 415, 495 (or 491), 498, and 499;
- a specialization made up of eight courses. Approved specializations include:
  - ecosystems
  - environmental chemistry
  - Earth sciences and natural resources
  - public policy, administration and law
Students may also design their own specialization through consultation with their advisor.

BS Degree Program

Students choosing one of the science specializations in the ES major also have the choice of completing a BA or a BS degree. Courses required for the BS degree include:

- Five core courses:
  - ENVI 101 and 201
  - CHEM 107 or 111
  - ECON 160
  - Either ENVI/PHIL 149 or ENVI/GEOG 239 or ENVI 230
- Two problem-oriented courses, usually taken in the senior year, selected from ENVI 397, 413, 415, 495 (or 491), 498, and 499;
- A specialization made up of 11 courses. Approved specializations include:
  - ecosystems
  - Earth science and natural resources
  - environmental chemistry

A list of the specific course requirements for each specialization is available in the Geological Sciences and Environmental Studies Department office and on the Environmental Studies website. Courses approved for environmental studies specializations are drawn from the offerings of anthropology, biological sciences, chemistry, economics, geography, geological sciences, political science and others.

Except for internships and teaching practica, courses taken Pass/Fail may not be counted toward the major. A grade of D is not considered satisfactory for courses applied to the major and thus will not count.

Minor in Environmental Studies

The six-course minor in environmental studies allows a student to explore the interdisciplinary structure of the environmental studies curriculum without completing the full major. Requirements are:

- ENVI 101 and ENVI 201
- One of ENVI/PHIL 149 or ENVI/GEOG 239 or ENVI 230
- Two upper-division ENVI courses
- Either ENVI 413 or ENVI 415

Honors Program in Environmental Studies

Graduation with honors in environmental studies is granted for superior independent work, usually in the form of an honors thesis. To qualify, students must have demonstrated excellence in coursework and must receive the approval of a faculty member to register for ENVI 498 and ENVI 499. Normally, honors students enroll in ENVI 498 in their next-to-last semester and in ENVI 499 in their last semester, during which they complete the thesis. The student’s
work must be submitted to a thesis committee consisting of the supervising professor and at least one other faculty member associated with the environmental studies program.

**Evolutionary Studies Program (EVOS)**

**Undergraduate Program Requirements**

The general requirements of the undergraduate EvoS program are:

- 20 credits of eligible courses (no more than 8 credits at the 100 level and no less than 8 credits at or above the 300 level). Evolution for Everyone (BIOL 105) is recommended as an introduction.

- Breadth: at least one eligible course above the 100 level must be in a subject area that is different from your other coursework that is 200 level and above. Current Topics in EvoS (BIOL 451) does not count towards this requirement.

- Depth: at least 8 credits at 300 level or above. Current Topics in EvoS (BIOL 451) does not count towards this requirement.

- At least two semesters of the 2-credit seminar course (BIOL 451), which counts towards the 20-credit total. Anyone may attend the EvoS seminars, but enrollment for credit is limited to students with junior standing and above.

To learn more about the program visit the [Evolutionary Studies website](#).

**Geography**

**Undergraduate Programs**

Geography stresses the importance of understanding “where things are located” and the processes that create and change the distribution of access to physical and human resources, such as clean water and healthcare. Students learn to better understand how natural and human environments become organized geographically by institutional decisions and the consequences of human actions. Geography students study a number of contemporary problems, among them physical resource development, racial/ethnic patterns, urban decay, business geography and pollution. Geography stresses strategies for solving locational and environmental problems. Mapping, Global Positioning Systems and Geographic Information Systems are important tools that geographers learn to apply and solve problems.

The department offers a number of curricular options that permit a general education or the choice of a more specialized focus, such as environmental or urban planning analysis, the use of maps and geographical information systems, or environmental and natural resource management. All options provide preparation for graduate work and for careers in public and private agencies. The courses emphasize the problem solving approach, both theoretical and applied. Double majors are encouraged, and special programs may be designed on request.

Geography courses suitable for freshmen include all 100-level courses, plus GEOG 211, 212, 221, 232, 234 and 259. Recommended for students with a general interest in geography and specific issues of global importance, including development, demographic change, urbanization and migration, and international conflict is GEOG 151; for those interested in physical processes, GEOG 121 and in racial/ethnic geography, GEOG 103.

The Geography Department requires that students take four courses *in the major* in residence at Binghamton University effective with the 2010-11 academic year.
The Geography Department views the grade of D as passing but unsatisfactory. Courses passed with a grade of D, or P, do not fulfill requirements for the major.

**Grievance Procedure:** Resolution of student-faculty grievances should be worked out in accordance with the departmental grievance procedure, available from the department office.

Independent study courses (GEOG 497) count toward the major tracks only with the approval of the director of undergraduate studies. Each track requires a minimum of five upper-division (300 or 400 level) geography courses.

Note: The following course is required for the Geography major: MATH 147. If students do not place into MATH 147, then MATH 107 is also required for completion of the major.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the *Bulletin*. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the *Bulletin*.

**BA, Track 1: General Geography**

- GEOG 121. Physical Geography
- GEOG 151. World Regional Geography
- GEOG 360. Introduction to GIS and Cartography
- MATH 147. Statistics
- two cultural/regional courses
- four upper-division geography courses

**TOTAL:** 10 courses (40 hours). Credit is granted for equivalent courses.

**BA, Track 2: Computer Applications in Human-Environmental Analysis**

- GEOG 360. Introduction to GIS and Cartography
- GEOG 361. Introduction to Raster GIS and GPS
- GEOG 463. GIS and Spatial Analysis
- GEOG 465. Remote Sensing and GIS
- MATH 147. Statistics
- CS 100, 110 or 140. Introduction to Computer Programming
Four courses to be selected from the following (at least two must be upper division):

- GEOG 103. Multicultural Geographies
- GEOG 221. Physical Geography of Global Change
- GEOG 234. Urban Geography: Global Linkages
- GEOG 336. Environmental Health: Race and Place
- GEOG 481. Special Topics (techniques-oriented)
- GEOG 482. Applied Urban Research
- GEOG 495. Internship
- GEOG 499. Honors Thesis

TOTAL: 10 courses (40 hours). Credit is granted for equivalent courses.

**BA, Track 3: Environmental and Resource Management**

- GEOG 121. Physical Geography
- GEOG 221. Physical Geography of Global Change
- MATH 147. Statistics
- one regional/cultural course
- four physical/environmental courses selected from the following:
  
  - GEOG 222. Earth Surface Processes
  - GEOG 239. (ENVI 239) Environmental Planning and Policy
  - GEOG 323. (ENVI 323) Soils: Properties, Processes and Distribution
  - GEOG 330. (ENVI 330) Natural Hazards
  - GEOG 336. Environmental Health: Race and Class Disparities
  - GEOG 341. Water Resource Planning and Management
  - GEOG 421. Advanced Physical Geography Seminar
  - GEOG 422. (BIOL 459) Biogeography
  - GEOG 497. Independent Study

- two mapping and applications courses selected from the following:
  
  - GEOG 360. Introduction to GIS and Cartography
  - GEOG 361. Introduction to Raster GIS and GPS
  - GEOG 463. GIS and Spatial Analysis
  - GEOG 495. Internship in Planning (var. cr.)
  - GEOG 499. Honors Thesis

TOTAL: 10 courses (40 hours). Credit is granted for equivalent courses.

**BA, Track 4: Urban and Regional Planning**
• GEOG 121. Physical Geography
• GEOG 234. Urban Geography: Global Linkages or GEOG 235: Introduction to Urban Planning
• GEOG 360. Introduction to GIS and Cartography
• MATH 147. Statistics
• one cultural/regional course
• two upper level urban/economic courses selected from the following:
  • GEOG 333. Retail Geography
  • GEOG 335. Legal and Administrative Aspects of Planning
  • GEOG 345. Urban Planning Analysis I
  • GEOG 445. Urban Planning Analysis II
  • GEOG 481. Special Topics Geography
  • GEOG 497. Independent Study
• one physical/environmental course selected from the following:
  • GEOG 239. (ENVI 239) Environmental Planning and Policy
  • GEOG 323. (ENVI 323) Soils: Properties, Processes and Distribution
  • GEOG 330. (ENVI 330) Natural Hazards
  • GEOG 336. Environmental Health: Race and Class Disparities
  • GEOG 337. Natural Resource Conservation: Theory, Policies and Practices
  • GEOG 341. Water Resource Planning and Management
  • GEOG 421. Advanced Physical Geography
  • GEOG 422. (BIOL 459) Biogeography
• two mapping and applications courses selected from the following:
  • GEOG 361. Introduction to Raster GIS and GPS
  • GEOG 463. GIS and Spatial Analysis
  • GEOG 495. Internship in Planning (var. cr.)
  • GEOG 499. Honors Thesis

TOTAL: 10 courses (40 hours). Credit is granted for equivalent courses.

BA, Track 5: Urban: Economic/Retailing Emphasis
• GEOG 101, 103 or 151.
• One cultural or regional course
• Select two of the following:
  • GEOG 232. Economic Geography
  • GEOG 233. Urban Geography: Race and Place
  • GEOG 234. Urban Geography and Global Linkages
- GEOG 235. Introduction to Urban and Regional Planning
- MATH 147. Statistics
- GEOG 360. Introduction to GIS and Cartography
- Select two of the following upper level urban/economic courses:
  - GEOG 333. Retail Geography
  - GEOG 345. Urban Planning I
  - GEOG 445. Urban Planning II: Economic Development
  - GEOG 482A. Applied Urban Research
  - GEOG 497. Independent Study
- Select two of the following upper level mapping/applications courses:
  - GEOG 361. Introduction to Raster GIS and GPS
  - GEOG 463. GIS and Spatial Analysis
  - GEOG 495. Internship in Planning (var. cr.)
  - GEOG 499. Honors Thesis

TOTAL: 10 courses (40 hours). Credit is granted for equivalent courses.

**BA, Track 6: Race-Ethnicity and Place: American Urban Perspectives**

- Core courses:
  - GEOG 103. Multicultural Geographies
  - GEOG 234. Urban Geography: Global Linkages
  - GEOG 336. Environmental Health: Race and Class Disparities
  - GEOG 360. Introduction to GIS
- Select two of the following:
  - GEOG 101. Introduction to Geography
  - GEOG 151. World Geography
  - GEOG 212. Historical Geography of U.S.
  - GEOG 232. Economic Geography
  - GEOG 259. East Asia
  - GEOG 357. Geography of the Middle East
- Choose one of the following:
  - GEOG 463. GIS and Spatial Analysis
  - MATH 147. Elementary Statistics
- Choose three of the following: (one prerequisite)
  - GEOG 345. Urban Planning Analysis I
- GEOG 352. Population Geography
- GEOG 457. U.S. Latino Geographies
- GEOG 458. The African Diaspora in the U.S. and Canada
- GEOG 459. Asian Settlements in the U.S.
- GEOG 495. Internship

- Others by permission

TOTAL: 10 courses (40 hours). Credit is granted for equivalent courses.

**Honors in Geography**

1. The student must be an undergraduate geography major with a minimum 3.0 overall GPA and 3.3 GPA in geography.
2. The student must submit a report based on a project that is completed during his or her last year.
3. This project may be based on any one of the following:
   - an original research topic;
   - an extension of an internship; or
   - an extension of a previous class project.
4. The project must be completed under the direction of a faculty advisor and must be approved by at least two other faculty members in the Geography Department.
5. Designation of honors will depend on creativity, analytical rigor and the overall quality of the final product.

**High Honors in Geography**

1. The student must be an undergraduate geography major with a minimum 3.0 overall GPA and 3.5 GPA in geography.
2. The student must write an Honors Thesis to be completed in the last semester of his or her undergraduate studies.
3. The student must register for GEOG 499.
4. The thesis must be completed under the direction of a faculty advisor and must be approved by at least two other faculty members in the Geography Department.
5. The thesis must represent original research on a geographic theme and/or technique.
6. The thesis must be approved by the faculty advisor and an honors thesis committee of two faculty members.
7. The thesis must be completed two weeks prior to the end of the semester in which the student plans to graduate.
8. Inability to complete work will result in a grade for GEOG 499 but no honors recognition.
9. Designation of honors will depend on creativity, analytical rigor and the overall quality of the final product.
10. The student will formally present the thesis to the committee.
11. The thesis must be bound for department library.

**Highest Honors in Geography**
1. The student must be an undergraduate geography major with a minimum of 3.0 overall GPA and 3.8 GPA in geography.

2. The student must write an Honors Thesis to be completed in the last semester of his/her undergraduate studies.

3. The student must register for GEOG 499.

4. The thesis must be completed under the direction of a faculty advisor and must be approved by at least two other faculty members in the Geography Department.

5. The thesis must represent original research on a geographic theme and/or technique.

6. The thesis must be approved by the faculty advisor and an honors thesis committee of two faculty members.

7. The thesis must be completed two weeks prior to the end of the semester in which student plans to graduate.

8. Inability to complete the work will result in a grade for GEOG 499 but no honors recognition.

9. Designation of honors will depend on creativity, analytical rigor and the overall quality of the final product.

10. The student will formally present the thesis to the committee.

11. The thesis must be bound for department library.

**Five-Year BA/MA Program**

Students may earn the BA in Geography with the MA in just five years. The requirements for the BA portion of these combined five-year programs are the same as the BA requirements listed above. Further details are presented in the section on graduate programs.

**Requirements for Geography Minors**

**General Geography**

The six courses required for this minor are:

- Any 100 level geography course
- GEOG 360. Introduction to GIS and Cartography
- Two of the following:
  - GEOG 211. Cultural Geography
  - GEOG 212. Historical Geography of the U.S.
  - GEOG 232. Economic Geography
  - GEOG 233. Urban Geography: Race and Place
  - GEOG 234. Urban Geography: Global Linkages
  - GEOG 259. Eastern Asia: Land and People
- Any two upper level (300 or above) courses

**Geographical Information Systems**

The six courses required for this minor are:
• Any two 100- or 200-level geography courses
• GEOG 360. Introduction to GIS and Cartography
• GEOG 361. Introduction to Raster GIS and GPS
• One of the following:
  • GEOG 463. GIS and Spatial Analysis
  • GEOG 465. Remote Sensing
• Select one upper-level mapping/application course:
  • GEOG 336. Environmental Health: Race and Class Disparities
  • GEOG 481. Special Topics (techniques-oriented)
  • GEOG 482A. Applied Urban Research
  • GEOG 495. Internship

Environmental Resource Management

The six courses required for this minor are:

• GEOG 121. Physical Geography
• GEOG 151. World Geography
• GEOG 232. Economic Geography
• Any three courses from:
  • GEOG 239. Environmental Planning and Policy
  • GEOG 323. Soils: Properties, Processes and Distribution
  • GEOG 330. Natural Hazards
  • GEOG 337. Natural Resource Conservation: Theory, Policies and Practices
  • GEOG 341. Water Resource Planning and Management
  • GEOG 361. Introduction to Raster GIS and GPS
  • GEOG 421. Advanced Physical Geography Seminar
  • GEOG 422. (BIOL 459) Biogeography

Physical Geography

The six courses required for the minor are:

• GEOG 121. Physical Geography
• GEOG 151. World Geography
• and either
  • GEOG 221. Physical Geography of Global Change or
  • GEOG 222. (GEOL 211) Earth Surface Processes
- any three courses from
  - GEOG 323. Soils: Properties, Processes and Distribution
  - GEOG 341. Water Resource Planning and Management
  - GEOG 360. Introduction to GIS and Cartography
  - GEOG 361. Introduction to Raster GIS and GPS
  - GEOG 421. Advanced Physical Geography Seminar
  - GEOG 422. (BIOL 459) Biogeography

**Urban Planning**

The six courses required for the minor are:

- Any 100-level geography course.
- Two of the following:
  - GEOG 233. Urban Geography: Race and Place
  - GEOG 234. Urban Geography: Global Linkages
  - GEOG 235. Introduction to Urban and Regional Planning
- Two of the following:
  - GEOG 333. Retail Geography
  - GEOG 335. Legal and Administrative Aspects of Planning
  - GEOG 361. Introduction to Raster GIS and GPS
- One of the following:
  - GEOG 345. Urban Planning Analysis I
  - GEOG 445. Urban Planning Analysis II

**Immigration/Migration Geography**

The six required courses for the minor are:

- GEOG 103. Multicultural Geographies of the United States
- GEOG 151. World Geography
- GEOG 352. Population Geography
- GEOG 360. Introduction to Cartography and GIS
- GEOG 482. Applied Urban Research: Gateway Cities

Choose One:

- GEOG 457. Latino Geographies of the United States
- GEOG 458. The African Diaspora in the United States and Canada
Geological Sciences and Environmental Studies

Undergraduate Programs

Earth sciences embody a wide range of approaches to studying the world around and below us. Sub-disciplines represented in the Department of Geological Sciences and Environmental Studies include various branches of geology, geochemistry, geophysics and environmental studies. Majors in the department begin with one of several introductory courses, followed by a set of four departmental core courses. Cognate requirements and the remaining departmental course requirements depend on whether a BA or BS degree is the goal, and on the track selected for the BS degree. The department requires a grade of C– or better in geology courses counted toward the major. No courses for the major may be taken Pass/Fail.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

BA Degree in Geological Sciences

The BA degree in geological sciences serves as a liberal arts degree with emphasis on the natural sciences and, with appropriate planning, as a preparatory degree for graduate study and professional employment. The BA degree requires 15 courses, of which at least eight must be in geology; at least three courses must be from the cognate sciences of biology, chemistry, physics and mathematics, and four courses must be used to fulfill an area of specialization. An important aspect of the program is the flexibility of the four-course specialization, which should be carefully planned with the assistance of a faculty advisor. Final approval of the courses selected for the four-course specialization should be secured from the undergraduate committee no later than the student’s sixth semester. These four courses must establish a program with a sound rationale, either in the geological sciences or in related fields.

The BA degree requires 15 courses that include the following:

- one four-credit 100-level geology course;
- GEOL 211;
- GEOL 212;
- GEOL 213;
- GEOL 214;
- three geology courses at the 300 level or higher;
- CHEM 107 or 111;
- two courses from BIOL 117, 118, 370, 371 and 373; CHEM 108, 221, 231, 332, 341 and 351; MATH 147, MATH 224 and 225, MATH 222 (or MATH 226 and 227), MATH 304, and MATH 323; and PHYS 121, 122, 131, 132 and 227;
- four courses in an area of specialization, which must be approved by the department advisor no later than the student’s sixth semester.

Note: The cognate science courses and four-course specialization must include at least three upper-level (300 or higher) courses.

**BS Degree in Geological Sciences**

The BS degree is intended as training for graduate school and professional employment, with research, teaching and industry careers as the ultimate goals. The BS degree requires 17 courses in the geology and environmental geology tracks and 18 courses in the geophysics track, including a common sequence of 12 courses.

The following courses are required courses for the BS Degree in Geological Sciences: MATH 224 and PHYS 121. If students do not place into MATH 224, then MATH 223 and, if needed, MATH 108 are also required for completion of the major. If students do not place into PHYS 121, then MATH 108 is also required for completion of the major. In addition, the Geophysics track requires PHYS 341. MATH 304 and 330 are required prerequisites to PHYS 341.

The BS degree requirements include the following:

**Cognate Requirements**

- MATH 224 and 225 and MATH 222 (or MATH 226 and 227);
- PHYS 131 and 132 (PHYS 121/122 may be substituted for 131/132);
- CHEM 107 and 108 or CHEM 111.

**Departmental Requirements**

- one four-credit 100-level geology course;
- GEOL 211;
- GEOL 212;
- GEOL 213;
- GEOL 214;
- GEOL 401 or equivalent (summer Field Experience);
- additional courses, selected from one of the following tracks:

**Geology Track**

GEOL 423; GEOL 436 or 366; GEOL 344; and two GEOL electives above 300 level.

**Environmental Geology Track**
GEOL 342 or 370; GEOL 416; GEOL 470; and two GEOL electives above 300 level chosen from the following list of courses; GEOL 342 or 370 (if not already taken), GEOL 465, or GEOL 436.

Geophysics Track

MATH 323; PHYS 331, 332 and 341; GEOL 451; and one course selected from GEOL 344 or 416.

BS students should take a Field Experience course (GEOL 401 or equivalent) for 4-6 credits in the summer following their junior year. They are encouraged to choose a course in the branch of the Earth sciences that most directly relates to their major track or career interest. The course must cover basic field techniques and skills, followed by field experience with traditional geological, hydrogeological, geophysical or other approved applications.

In addition, geology majors are encouraged to gain experience with statistics, computer languages or programming, and Geographic Information Systems (GIS).

Distinguished Independent Work in the Geological Sciences

The award of distinguished independent work in the geological sciences is granted by the department to those majors who have distinguished themselves in academic endeavor beyond the normal requirements for the bachelor’s degree. The requirements for this award include above-average performance in coursework as well as successful completion of an independent research paper under the supervision of a faculty member. Majors are invited to consult with their department advisors about this award before the beginning of their senior year.

Combined BA or BS and Earth Science MAT Degrees

The combined BA/MAT and BS/MAT programs accommodate the needs of a select group of Harpur College students who wish to efficiently combine an undergraduate geology degree with a graduate-level teacher certification program. This combined program includes the entire current geology BA or BS program and the current NYSED-registered earth science MAT program. The combination results from the inclusion of 16 credits of graduate education coursework as “double-counted” credits during the students’ fourth year of study. The combined program saves the student one semester of time relative to the separate, sequentially taken BA/BS and MAT degrees. Students should declare their interest in this option as soon as possible to ensure proper undergraduate course selection. A limited number of students are selected into this program at the end of the junior year.

Geology Minor

The minor in geology is for students who have a general interest in the Earth sciences. Twenty-four credits are required, from courses offered by the department. No more than eight credits may be 100-level courses. The department recommends that at least eight credits be selected from the geology “core courses”: GEOL 211, 212, 213 and 214.

Geophysics Minor

This program is primarily for students with some technical background who wish to gain a fundamental understanding of “pure” geophysics. The 24 credits required include one four-credit 100-level geology course; PHYS 331, 341; GEOL 449, 451; and either GEOL 344 or 416.

Geochemistry Minor

The minor in geochemistry is for students with a strong interest in chemistry and Earth science. Emphasis is on the application of chemical principles to geologic processes.
The 24 required credits are:

- any four-credit 100-level GEOL course and GEOL 470;
- eight credits from among the following CHEM courses: 221, 351 (one of 221 or 351 is strongly recommended), 231, 332, 341, 422, 452, 482 or 484;
- eight credits from among the following GEOL courses: 212, 370, 416, 423, or 465.

**German and Russian Studies**

**German Studies Program**

The program emphasizes language fluency and cultural competency at all levels of study. A flexible curriculum and individualized advising allow majors and minors to develop a program of study and to explore interests in the humanities and social sciences or in engineering, computer science, management or the natural sciences. The program focuses on culture in the broadest sense and approaches literature, language, visual arts, history and philosophy in an interdisciplinary manner through the lens of German Studies. Students in German Studies develop an awareness of the cultural context of the German language in its various forms as well as an understanding of the German contribution to culture, the history of ideas and the development of academic and professional disciplines.

Students who declare a major or minor must consult a faculty advisor to develop an individualized course program in German Studies. The department also encourages interdisciplinary work through the double major or a dual-degree program with engineering/computer science or management that usually includes an internship abroad and study at a university of technology in Germany or Austria. A minor in German allows students to acquire language proficiency and to explore aspects of German culture in international contexts.

The department directs two highly regarded study-abroad programs, one at the University of Graz, Austria and another at the University of Leipzig, Germany. Both are open to students in all disciplines. Students normally participate in the Graz exchange in the junior or sophomore year. Prerequisites include a 3.0 GPA and two years of training in German language for the traditional junior year semester-abroad program, or one year for the language, culture and general education program at the sophomore level. Students who wish to participate in the Leipzig exchange program require more advanced language proficiency. This program may be of special interest to students in the social sciences, business and management. Through generous endowments the program offers financial support for study abroad to majors and minors. Additional funds provided by program alumni recognize outstanding work in German Studies at the intermediate and advanced levels and support departmental activities such as lectures by leading scholars in German Studies and events like the annual Binghamton University German Studies Colloquium (BUGSC).

A minimum grade of "C" is required for any course to be counted toward the major or minor and defines "satisfactory performance" in a course. Only one course opted as pass/fail can be counted toward the major, double major or minor.

For GERM 491 (Practicum in Teaching German) permission of the undergraduate studies director is mandatory. This course is intended for students who are well advanced in the study of German.

The program strongly recommends that German Studies majors and minors study abroad in a German-speaking country.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:
- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Requirements for German Studies Major

The requirements for the major are 40 credits in German Studies courses above GERM 102, beyond the first-year level. Of these, at least 20 credits must be taken at the 300 or 400 level. Students are required to demonstrate language proficiency in German by successfully completing GERM 306 or a separate exam administered by the department at the beginning of the semester and during early registration period. (German Major) Students will be placed into the language course sequence at the appropriate level, therefore GERM 101/102, GERM 203/204 and GERM 305/306 may all be required in order to achieve the required proficiency level. GERM 221, GERM 222, and the teaching practicum (GERM 491) may be counted only once toward the major. Twelve credits of coursework must be taken in courses that focus on the study of German literature and culture outside the language course sequence (GERM 101/102; GERM 203/204 and GERM 305/306 constitute the language course sequence). At least four credits must be taken in courses conducted in German (GERM 381) beyond the language course sequence (GERM 101/102, GERM 203/204 and GERM 305/306 constitute the language course sequence). Up to 12 credits of coursework in German Studies courses taught in English (e.g., GERM 241) may be counted toward the major. Credits for courses taken abroad may be counted toward the major with the permission of the departmental advisor. Upon return from study abroad, majors are expected to take at least one additional advanced German Studies course in residence.

The requirements for a double major in German Studies and in another discipline are 36 credits in German Studies courses, of which at least 15 credits must be earned at the 300 or 400 level. Students are required to demonstrate language proficiency in German by successfully completing GERM 306 or a separate exam administered by the department at the beginning of the semester and during early registration period. German Conversation (GERM 221 or GERM 222) and the teaching practicum (GERM 491) may be counted once toward the major. Twelve credits must be taken in courses that focus on the study of German literature and culture outside the language course sequence (GERM 101/102, GERM 203/204 and GERM 305/306 constitute the language course sequence). At least four credits must be taken in courses conducted in German beyond the language course sequence. Students who have studied abroad are expected to complete the major by taking at least one additional advanced German Studies course in residence.

Completion of the German Studies major and the German Studies double major requires that students take at least 20 credits of coursework while in residence in Binghamton or as part of study abroad with the German Studies program's partner universities in Graz, Austria or Leipzig, Germany.

Requirements for German Studies Minor

The requirements for the minor are 24 credits in courses above GERM 102. Students must demonstrate language proficiency in German by successfully completing GERM 306 or a separate exam administered by the department at the beginning of the semester and during early registration period. German Conversation (GERM 221 or GERM
GERM 241, and the teaching practicum (GERM 491) may be counted only once toward the minor. Transfer credit is counted toward the 24-credit requirement for the minor, but students must still complete at least two upper-level German Studies courses (eight credits) in residence.

Honors Program

German Studies majors who intend to graduate with honors should contact the department chair at the beginning of their senior year:

Honors are usually awarded on the basis of demonstrated proficiency in German, a project that demonstrates an understanding of the development of German culture and literature, and an “A–” average in all courses in German, with no more than one course below an "A–".

High Honors: Requirements for Honors, plus a grade of "A" on a substantive research paper written in the Senior Seminar course.

Russian Studies Program

The Russian Studies program offers a broad range of instruction that combines language training with courses (taught in English) that provide exposure to Russian literature and culture. Language instruction extends from the beginning through the advanced level. Instruction stresses the basic skills – comprehension, speaking, reading and writing – and aims primarily to develop practical competency in two semesters. For heritage speakers of Russian, the course sequence Russian for Russians makes it possible to gain basic reading and writing competency. Russia’s literature and culture are introduced in a permanent sequence of lower- and upper-level courses.

Interested students can pursue a major or a minor in Russian Studies.

Requirements for the Russian Studies Major

Requirements

- 40 credits
- Minimum of 20 upper-division credits
- Minimum of 24 credits at Binghamton University
- Minimum grade of C for a course to count towards the major
- Maximum of 4 credits of independent study or RUSS 491/492 will count towards major requirements
- Maximum of 16 language study credits for non-heritage speakers;
- credit towards the major is given for language courses above the 100-level
- Maximum of 8 language study credits for heritage speakers
- Language Placement: All students entering the program with advanced language proficiency will take a placement exam.

Curriculum

The B.A. in Russian Studies is available in two tracks: Track 1: Literary and Cultural Studies; Track 2: Area Studies

Track 1: Literary and Cultural Studies

- Linguistic proficiency to the level of RUSS 306, or the equivalent, for non-heritage learners; or to the level of
RUSS 312, or the equivalent, for heritage learners

- RUSS 110. Russian Culture and Civilization
- RUSS 210. Introduction to Russian Literature
- Additional courses selected from current course offerings in Russian Cultural Studies. Courses recently offered at Binghamton include:

RUSS 215. Slavic Folklore
RUSS 261. Russian Popular Culture
RUSS 321. 19th Century Russian Literature
RUSS 325. Demons, Fools, and Madmen
RUSS 331. Moscow and St. Petersburg
RUSS 339. Seagull's Flight: Russian Drama
RUSS 341. 20th Century Russian Literature
RUSS 351. Women in Russian Literature
RUSS 371. Russia and the World
RUSS 380. Literature and Revolution
RUSS 380. Germans and Russians in New York
RUSS 380. Russian Cinema
RUSS 380. Stalingrad
RUSS 380. Theater as Language
RUSS 471. Activism in Russia
RUSS 472. Great Russian Novels

- RUSS 498. Capstone Course

**Track 2: Area Studies**

- Linguistic proficiency to the level of RUSS 306, or the equivalent, for non-heritage learners; or to the level of RUSS 312, or the equivalent, for heritage learners
- RUSS 110. Russian Culture and Civilization
- RUSS 210. Introduction to Russian Literature and/or HIST 225 Imperial Russia
- Minimum of at least one course in each of the following three areas:
  - Russian Literary and Cultural Studies
  - Russian, Eurasian and East European History
  - Russian, Eurasian and East European Political Science
- RUSS 498. Capstone Course

Recent courses in Russian Cultural Studies are listed above.

Recent courses in Russian, Eurasian and East European History have included:

HIST 325. Red Phoenix: Revolution and USSR
HIST 426. Soviet Russia

Recent courses in Russian, Eurasian and East European Political Science have included:

PLSC 358. Russian and Post-Soviet Politics
Honors Program

The Director of Undergraduate Studies administers the Russian honors program. Students interested in honors must consult with the director to determine eligibility, and eligible students must submit a proposal no later than September of the senior year. To be eligible to earn honors, a Russian major must have a GPA of 3.60 in Russian studies courses, not counting courses taken Pass/Fail. The student must write an honors thesis and the thesis must be judged worthy (of honors, high honors, or highest honors) by the faculty supervisor and one other member of the department (or a faculty member outside the department approved by the undergraduate director). In case of disagreement between the two readers, a third is designated by the undergraduate director. This work may be completed during the student’s last semester. Students writing an honors thesis will register for RUSS 499 Honors Thesis. However, this course may not be used to satisfy the major requirement. For more information, the student should refer to the “Rules Governing the Preparation of Undergraduate Honors Theses,” available from the undergraduate director.

Requirements for the Russian Studies Minor

A minimum of six courses is required for the minor in Russian studies with a language and literature concentration. All students are required to gain language proficiency to the level of RUSS 204 or equivalent; in addition, all students must take RUSS 321 or 341, RUSS 110 or 374, and one course at the 300 or 400 level. A Russian Studies minor with an Area Studies concentration is also available. For details, see the Russian and East European Program description or check with the REEP director, Prof. Nancy Tittler.

Study Abroad

Students with some proficiency in Russian are encouraged to attend a study-abroad program in Russia for a summer, semester or academic year. In most cases these programs will help students make progress towards the minor or the major.

The Global Studies Minor (GSM)

The Global Studies Minor (GSM) is an innovative, multi-disciplinary program in which students investigate the ways scholarship and experiential learning can be used to achieve understanding of international, regional and global issues. The GSM is open to all undergraduate students who wish to increase their knowledge and competencies by adding a formally recognized global dimension to their program of study. Study abroad, language study and use, and Binghamton University’s internationalized curriculum provide the tools to build knowledge and skills. Students may use the GSM to help steer their choice of electives; to provide a global studies foundation within their major; or to expand their future options on the basis of acquired international knowledge, intercultural proficiency, and global awareness. Specifically, GSM courses foster a self-critical perspective on the study abroad/intercultural experience; promote students’ reflective-analysis so they may better understand their own cultural values and behaviors, and the various ways these may be interpreted by members of other cultures; prompt students to connect their study abroad experience to their academic area of expertise; and encourage investigation into the ways scholarship has been used to achieve understandings of international, regional and global issues.

Because it builds upon the University’s existing requirements in language and in "Global Vision," the GSM requires only 24 credits beyond the credits required to meet General Education Global Interdependencies and foreign language requirements. Test credit (AP, IB, CLEP, etc.) may not be used to meet the minor's requirements.

Requirement A: Language Study and Use. Three (3) credits of a foreign language beyond the General Education requirement required by the student's school, or academic work that requires significant use of a foreign language at or beyond the third-semester level of college proficiency (for example, taking a course in which a language other than English is the language of instruction).
Requirement B: Knowledge of Global and International Content. Eight (8) credits in courses with substantial international content. Courses which meet this requirement must be beyond the courses taken to meet the 8-credit General Education Creating a Global Vision requirement. No more than one of these courses can be at the 100 level. "Substantial international content" means that a course focuses on a specific society, nation-state or region other than the United States; or compares societies, nation-states or regions; or provides global perspectives on one or more issues or topics. Courses that count in this category are identified by the GSM program and may include courses in a wide variety of disciplines, including but not limited to the area studies programs, anthropology, film studies, sociology, geography, comparative literature, political science, theater and most of the professional schools.

Requirement C: Additional Credits. Any combination of A or B Requirements (6-8 credits). These credits must be at the 200 level or above.

Requirement D1: GLST 390/392: Introduction to Cross-Cultural Experiences and Cross-Cultural Immersion — two one-credit online courses that begin pre-departure and extend through the student's stay abroad.

Requirement D2: Study Abroad/International Internship/Research Abroad Experience. Students must enroll in a program abroad with a minimum duration of four weeks, and while abroad students must complete at least one 3- or 4-credit course. Students may use other courses taken abroad to fulfill a portion of requirements A, B, or C above. No more than nine credits taken abroad may be credited toward the minimum of 24 credits required for the Global Studies Minor.

Requirement D3: GLST 490A or 490B: Global Studies Capstone Seminar. This classroom course must be taken in the semester after the student's stay abroad. 490A is worth two credits, one credit of which is for an individualized capstone project. 490B is worth four credits, three credits of which are for the individualized capstone project.

The total number of credits for requirements A-D must equal a minimum of 25.

Students who wish to pursue a minor in Global Studies may obtain information from the coordinator of the Global Studies Minor, in Nelson A. Rockefeller Center room 212, and may get more information at http://www.binghamton.edu/oip/global-studies-minor.html or via e-mail at globalstudies@binghamton.edu.

History

Undergraduate Programs

The History Department curriculum explores human societies over time and across the globe. History courses provide training in the methods of historical research and allow students to hone skills in thinking critically, interpreting evidence, conducting independent research and writing effectively. The program offers a balance between humanistic approaches to the study of the human experience and approaches based on the methods of the social and behavioral sciences.

History Department courses are offered at four levels.

- **Introductory Courses**: Courses on the 100-level; introductory overviews of the Middle East, history of a particular area or region (e.g., Europe, United States, Asia, South Asia, Africa and Latin America). Open to all students; history majors and minors taking 100-level courses do so before their junior year. May be taken in any sequence.

- **Intermediate Courses**: Courses on the 200-level; more specialized analyses of eras and themes, suitable for students at all levels.

- **Advanced Courses**: Courses on the 300-level; more advanced and specialized, with more difficult reading assignments. Freshmen may not register for these courses.
Research Seminars: Courses on the 400-level (with the exception of HIST 498 and 499) are small intensive seminars in which a research paper is required. The normal prerequisite is junior standing.

Students planning to major or minor in history should consult, as early as possible, with the departmental director of undergraduate studies or the departmental undergraduate advisor. History majors and minors should visit the director’s office whenever they need advice on their programs. The History Department does not require that majors or minors specialize or concentrate in any area, period or type of history. Some students, however, may wish to create an ad hoc concentration by taking several courses in one field, such as the United States, Europe, the Third World, ancient history, modern history or social and economic history. Those who do should seek advice from the director of undergraduate studies. The department accepts up to two history courses taken at other colleges in fulfillment of the requirements for the minor and up to four history courses taken at another college in fulfillment of the requirements for the major. The department does not accept advanced placement credit, CLEP credit or course credit by examination in fulfillment of the requirements for the major or the minor.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

History Major

The Department of History requires for the major a minimum of 40 credits distributed as follows:

- Four courses, one from each of the following areas:
  - United States
  - Europe
  - a third world area (e.g., Middle East, Asia, Africa, Latin America)
  - world history or inter-regionally comparative history.
- At least five 300- or 400-level courses, one of which must be a research seminar (HIST 400 through 487A-Z). The research seminar may not be taken under the Pass/Fail option and must be taken in residence.
- At least one other history course. 100-level history courses do not count toward the major when taken by students in their junior and senior years. Furthermore, no more than four 100-level courses (including no more than two numbered 101, 102, 103 or 104) may be counted toward the major.

No more than four credit hours of HIST 397 (Independent Study) may be used to satisfy the total requirements for the major. Only one course taken under the Pass/Fail option is credited to the major. HIST 395 does not count toward 401/669.
The History Department views the grade of D as passing but unsatisfactory. Courses passed with a grade of D do not fulfill requirements for the major.

**Honors Program**

The director of undergraduate studies administers the honors program offered by the Department of History. Candidates for honors must consult with the director of undergraduate studies or the departmental undergraduate adviser.

To be eligible to earn honors, a history major must:

- Have a GPA of 3.60 in history, not counting courses taken Pass/Fail;
- Have taken at least one 400-level seminar in which the student earned a grade of A or A–.

Both of these conditions must be satisfied by the end of the student's penultimate semester.

All students must now write an honors thesis.

The student must arrange with a faculty member in the History Department to supervise the research and writing of a thesis, and with a second member of the department to read the thesis. Students writing an honors thesis may (but are not required to) register for HIST 498 and 499. These courses may not be used to satisfy the history major requirement. For more information, the student should refer to the "Rules Governing the Preparation of Undergraduate Honors Theses," available from the undergraduate director.

As an assessment, the thesis will be judged worthy (of honors, high honors or highest honors) by the faculty supervisor and one other member of the department (or a faculty member outside the department approved by the undergraduate director). In case of disagreement between the two readers, a third is designated by the undergraduate director. This work may be completed during the student's last semester.

**History Minor Programs**

The Department of History offers two minors: one traditional history minor, which offers general training in history, and a minor in the history of science, technology and medicine.

**Traditional History Minor**

The purpose of the history minor is to encourage students to supplement their major in another discipline with a coherent program in history. Each student develops a program to satisfy the minor requirements in consultation with the department's advisors. The general requirements are:

- A minimum of six history courses (24 credit hours). No more than two courses numbered HIST 101, 102, 103 or 104, and no more than one four-hour course of HIST 397 (Independent Study), may be counted. 100-level courses taken during the junior or senior year do not count toward the minor. Only one course taken under the Pass/Fail option is credited toward the minor;
- At least two 300- or 400-level courses, one of which must be a seminar (HIST 400 through HIST 487 A-Z). The seminar may not be taken under the Pass/Fail option. HIST 395 does not count toward the minor.

At least four of the courses in the history minor program must be in addition to history courses counted toward fulfillment of the student's major. At least four of the six courses counting toward the minor must be taken at Binghamton University.
The History Department views the grade of D as passing but unsatisfactory. Courses passed with a grade of D do not fulfill requirements for the minor.

**Minor in the History of Science, Technology, and Medicine**

The minor in the history of science, technology, and medicine introduces students to the history of science, technology, and medicine in a variety of time periods, geographic regions, and religious and cultural systems. It grounds developments within science, technology and medicine in a specific historic context, and it encourages students to consider these developments in relation to broader political, social, cultural and intellectual trends.

In order to complete the minor (24 credits), students must take a **minimum of four courses** exploring the theory and method of the history of science, technology, and medicine. Students may also include **up to two courses** that examine specialized contexts and applications—that is, courses exploring topics such as race or sexuality, which are of profound relevance for the history of science, technology and medicine. Students will find a list of these courses on the departmental website and are encouraged to consult with the Director of Undergraduate Studies as they develop their program of study.

**Requirements**

- A minimum of 24 credits of history of science, technology, and medicine coursework
- A minimum of four courses grappling with the theory and method of the historical study of science, technology, and medicine.
- At least two courses must be taken at the 300 or 400 level. Of these two, at least one must be a 400-level course, which may not be taken under the pass/fail option and must be taken in residence.
- At least four courses for the minor must be taken in residence at Binghamton.
- No more than one independent study (HIST 397) can be counted toward the minor.
- The history internships (HIST 395) cannot be counted toward the minor.
- Only one course taken under the pass/fail option will receive credit toward the minor.
- Only two courses may be counted toward both the minor and a student’s major.
- Students must receive a grade of C– or better in order for a course to count toward the minor.

**Integrative Neuroscience**

**Program Components**

The BS major in Integrative Neuroscience offers the student a firm basis in biology, psychology and chemistry, along with courses in a variety of other disciplines. The program provides the breadth and depth necessary for the interdisciplinary study of the biological bases of behavior. See our website for more information about the major requirements, research, honors and careers: [http://www.binghamton.edu/integrative-neuroscience/](http://www.binghamton.edu/integrative-neuroscience/).

In order to declare their major students must have completed both PSYC 111 and 243 with a grade of C or better. Students should go to the Integrative Neuroscience Academic Advising office (Science IV, 230-B) to meet with an academic advisor, review degree requirements and declare the major.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Integrative Neuroscience Requirements**

- **CORE COURSES:** The following 12 core courses (48 credit hours) are required (if CHEM 111 is taken, the total is 11 courses for 44 credit hours): PSYC 111, PSYC 243, PSYC 344, PSYC 362, BIOL 117 and 118, BIOL 375 or PSYC 327, CHEM 111 or CHEM 107 and 108, CHEM 231 and 332, and an approved Integrative Neuroscience Seminar (PSYC 473 or BIOL 480/483 — see "Integrative Neuroscience Seminar Requirement" below);
- **MATH/CHEM/PHYS ELECTIVES:** Minimum 6 credit hours of electives in chemistry, math and physics selected from CHEM 221, 335, 434, MATH 224 and 225, MATH 226 and 227 (or MATH 222), 323, CS 140, 240, PHYS 121 OR 131, PHYS 122 or 132;
- **RELATED SUBJECTS ELECTIVES:** Minimum 4 credit hours of electives in related subjects selected from ANTH 111, 117, 168, 243, 244, 247, 248, 333, 334, 335, 336, 337, 338, 366, 428, BIOL 105, CLAS 121, CS 100, 105, 110, GEOG 422, HIST 230, 238, PHIL 121, 122, 148, 423, and SOC 251;
- **TYPE A BIOLOGY ELECTIVES:** Minimum 4 credit hours or electives selected from BCHM 401, 403, 425, 426, BIOL 224, 311, 313, 314, 318, 326, 401, 402, 403, 405, 425, 426, 427, 428. Independent study (BIOL 297/495/496/497/498) with biology faculty in the area of Biochemical, Cell, and Molecular Biology (BCMB) can count toward biology Type A with advisor's approval. An additional approved 2 credit BIOL 480 or 4 credit BIOL 483 seminar with biology faculty in the area of Biochemical, Cell, and Molecular Biology (BCMB) can also count toward biology Type A with advisor's approval;
- **TYPE B BIOLOGY ELECTIVES:** Minimum 4 credit hours or electives selected from BIOL 351, 352, 355, 366, 371, 373, 378, 379, 437, 483N, 450, 451, 452, 454, 456, 471, 472, 475, 476. (Only two credits of BIOL 452 can count towards the major.) Independent study (BIOL 297/495/496/497/498) with biology faculty in the area of Ecology, Evolution and Behavior (EEB) can count toward biology Type B with advisor's approval. An additional approved 2 credit BIOL 480 or 4 credit BIOL 483 seminar with biology faculty in the area of Ecology, Evolution and Behavior (EEB) can also count toward biology Type B with advisor's approval;
- The following courses could count as Biology Type A or B: BIOL 251, 252, 324, 330, 340, 347, 435, 441, 483i, BE 340;
- **PSYCHOLOGY ELECTIVES:** Minimum 6 credit hours or electives selected from PSYC 220, 223, 330, 350, 351, 352, 355, 356, 357, 358, 359, 360, 363, 385, 406, or an additional approved 4 credit 473 seminar with advisor’s approval. Independent study (PSYC 397/493/494/499) with psychology faculty can count toward psychology electives with advisor's approval.

**Additional Requirements and Important Notes**

- **Laboratory Requirement:** Among the electives, three courses (2 to 4 credit hours each) at the 200 level or above must be taken that are either laboratory courses or courses that contain a weekly laboratory or field
experience. Organic Chemistry Laboratory (CHEM 335), as well as laboratory courses in the biology and psychology electives, meets this requirement. See academic advisor for a list of approved lab courses.

- **Upper-Level Requirement:** At least 16 credit hours of the elective courses for the major must be taken at the 300 level or above.

- **Integrative Neuroscience Seminar Requirement:** The Integrative Neuroscience Seminar may be fulfilled by taking an approved four-credit Psychology or Biology seminar or 2 two-credit Biology seminars that cover a Neuroscience-related area. These are offered each semester in both biology and psychology. A list of approved seminars is made available prior to advanced registration each semester: [http://www.binghamton.edu/integrative-neuroscience/course-offerings.html](http://www.binghamton.edu/integrative-neuroscience/course-offerings.html). With the advanced consent of the Integrative Neuroscience program's academic advisor, an additional approved Integrative Neuroscience Seminar (approved PSYC 473 or approved BIOL 480/483) can count toward the elective requirements, either the biology Type A, biology Type B or psychology elective category, as determined by the advisor.

- **Pass/Fail:** No courses for the major may be taken Pass/Fail, other than independent research.

- **Minimum Grade:** Students must earn a C or higher in PSYC 111 and PSYC 243 in order to declare the major and a C- or higher in all other core courses. A passing grade (D or better) is required for all other courses in the major with the exception of independent study which is taken pass/fail.

- **A Single Course May Fulfill Multiple Requirements:** Some courses may fulfill multiple elective requirements. For example, PSYC 363 satisfies one course for the laboratory requirement, two credits for the upper-level requirement and two credits for the psychology electives category. However, no courses can count toward both the core and the elective requirements.

- **Students must take at least eight courses in the major, including five upper-level courses, in residence at Binghamton University:** These include the following courses: PSYC 344 Research Methods, PSYC 362 Behavioral Neuroscience, the required upper-level Integrative Neuroscience seminar (from among the list of approved seminars, updated every semester), one laboratory course and either PSYC 327 Evolution and Behavior or BIOL 375 Animal Behavior. Three additional courses of the student’s choosing are also required to be taken at Binghamton University.

- You cannot receive credit for both BIOL 375 and PSYC 327.

- Due to significant overlap in course requirements, it is not possible to double-major in Integrative Neuroscience and Psychology, nor is it possible to double-major in Integrative Neuroscience and Biology.

### Independent Study Courses (credit varies; requires advisor’s approval)

- PSYC 397. Independent Study
- PSYC 493. Assessment, Intervention and Evaluation II
- PSYC 494. Assessment, Intervention and Evaluation III
- PSYC 499. Advanced Independent Study (Honors)
- BIOL 297. Research Experience in Biology
- BIOL 495. Laboratory or Field Internship
- BIOL 496. Independent Study
- BIOL 497. Independent Field or Laboratory Research
- BIOL 498. Continuing Independent Field or Laboratory Research

With the advanced consent of the Integrative Neuroscience program’s academic advisor, up to eight credits of independent research may substitute for eight hours of upper-level elective credit under either the biology Type A,
biology Type B or psychology elective category as determined by the advisor. Only independent study with an Integrative Neuroscience faculty member can count as a lab elective, and it can only count as one of the three lab electives required by the major. Independent research experience is recommended for students planning post-graduate studies.

**Honors Program in Integrative Neuroscience**

Outstanding students in Integrative Neuroscience are encouraged to participate in the honors program. Participation requires the preparation of an honors thesis that consists of a proposal, data collection, written analysis and an oral defense of the final thesis. Successful completion of the honors program results in graduation with distinguished independent work in Integrative Neuroscience.

**Prerequisites and Requirements**

To gain acceptance to the honors program in Integrative Neuroscience, a student must:

- Have declared Integrative Neuroscience as a major;
- Have achieved at least junior standing;
- Have a minimum overall GPA of 3.0 and a minimum GPA of 3.3 in those courses taken toward the major; and
- Be accepted by a supervising faculty member whose research is in the field of Integrative Neuroscience.

**Appeals**

Any student who fails to meet one or more of the requirements listed above may petition the director of the Integrative Neuroscience program for a waiver of a particular requirement. No waiver will be granted without the written support of the supervising faculty member. Such appeals must be requested before the thesis project is begun.

**Formation of Honors Committee**

Prior to the end of the seventh semester, a student must form an honors committee, consisting of three faculty members: the student’s supervising faculty member (who acts as chair) and two other faculty members, at least one of whom must be from a department other than that of the supervising faculty member. These additional faculty members should be chosen in consultation with the supervising faculty member. When appropriate, post-doctoral staff or faculty members from other universities may be appointed.

**Written Research Proposal**

During the semester prior to the semester in which the honors project is to be completed, the student must submit a written research proposal to the members of the honors committee at least two weeks before a scheduled meeting. At this meeting, the honors committee must assess the practicality of the proposal and the candidate’s ability to do the work. Approval of the proposal by the honors committee is required before acceptance into the honors program and before initiation of the honors research (preliminary work only may be completed prior to the submission of the proposal). A copy of the approved proposal signed by all members of the committee, an unofficial transcript or copy of the DARS, and a completed Honors Program Application Form, available from the advising office (S4-230B), must be filed with the advising office no later than the end of the semester prior to receiving honors.

**Academic Credit for Honors Work**
Honors work per se carries no academic credit. Ordinarily, the candidate signs up for four credit hours of independent research in the department in which the student’s supervising faculty member resides. A student who drops out of the honors program, or who fails to meet the thesis deadlines, still receives a grade for his or her research activities.

**Honors Thesis**

A well-edited draft of the honors thesis must be given to the members of the honors committee at least two weeks before the defense, which must take place before the examination period of the semester in which the student wishes to receive honors. An honors thesis should follow the format of a scientific paper. The thesis should include background information and the rationale for the proposed work, a detailed description of the methods and results, and a discussion of the results in the context of the relevant scientific literature.

**Defense of the Thesis**

A defense of the honors thesis is conducted in the presence of the committee and any other interested parties. The student is responsible for notifying the director of the time and place of the defense. The defense consists of a brief (15 to 20 minute) presentation of the research, followed by questions from the committee.

**Procedures for Final Certification**

Determination of the student’s receipt of the distinguished independent work in Integrative Neuroscience designation resides solely with the student’s honors committee, assuming the student has met all the requirements described above. Such certification must be conveyed to the advising office (S4-230B) by the supervising faculty member so that timely notification of the designation may be transmitted to the Dean’s Office and the Registrar’s Office. A copy of the final honors thesis, signed by all members of the honors committee, must be filed with the advising office to certify completion of the honors program.

**Judaic Studies**

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Judaic Studies Major**
There are two tracks in the Judaic Studies major: Judaic Studies and Hebrew.

**Track 1: Judaic Studies**

The Judaic Studies track requires students to take at least ten courses, of which at least five are taken at the 300-400 level and at least five have to be taken at Binghamton University. The distribution of the required courses is as follows:

**One Introductory Course**

JUST 101 Introduction to Judaic Studies

*JUST 111 Introduction to Philosophy of Religion and RELG 101 World Religions may be substituted for JUST 101.

**Two Core Survey Courses**

JUST 201 History to 1500

JUST 202 History 1500 to Modernity

*Relevant upper level courses may be substituted for Survey Courses.

**Four Area Courses**

Students focus their coursework in an Area of their choosing, in consultation with faculty.

Possible Areas of Study include Jewish History, philosophy, Jewish social justice, communal service, Sephardi studies, Holocaust studies, Yiddish language and culture. Jewish literature and culture, Hebrew, Israel studies. American Judaism, and others. Students may consult with faculty to create their own Area of Study.

**Three Elective Courses**

Any 3 courses, including language courses.

**Language Proficiency**

Students must complete coursework in Hebrew or Yiddish through the 203 level.

Students who have not met their General Education foreign language requirement are advised to take Hebrew or Yiddish.

*Courses in these languages above the 203 level may be counted toward the Major.

Note: Depending on prior exposure to the language, HEBR 101 and 102 may be required prerequisites for the major.

**Track 2: Hebrew**

Students pursuing the Judaic Studies: Hebrew track must take the following distribution of courses:

Three of the courses listed below:
JUST 241 Biblical History: Hebrew Origins to the Exile
JUST 242 Jewish History: Second Temple Period
JUST 243 Medieval Jewish History
JUST 244 Modern Jewish History
A topics course, Jews in the Age of the Renaissance, may satisfy one of the core course requirements.

In addition, students must take:

- HEBR 204 Readings in Hebrew
- HEBR 261 Israeli Poetry and Prose (HEBR 221 Hebrew Conversation and Composition may be substituted with consent of the department)
- HEBR 331 or another course in rabbinic or medieval literature;
- HEBR 351 or another course in modern Hebrew literature;
- one course in biblical literature;
- another upper-level Hebrew course, or
  - a fourth core course, or
  - a course in Yiddish, or
  - ARAB 102 Elementary Arabic II

Students who place out of HEBR 204 or 261 must substitute an equivalent number of upper-level Hebrew courses. In addition, substitutions for HEBR 204 and 261 may include:

- a fourth core course
- courses in Yiddish
- ARAB 102 Elementary Arabic II

Students concentrating in Hebrew are encouraged to speak with the director of the Hebrew program, the director of undergraduate studies, or the chair of the department to adjust their curriculum as needed.

**Honors**

Judaic Studies majors can pursue honors in Judaic Studies. Honors work is pursued during the first semester of one’s senior year. It consists of the pursuit of an independent research and writing program in consultation with a faculty member and requires the writing of a substantial paper. To be eligible for honors work, students should have an overall GPA of 3.5 and complete six of the required Judaic Studies courses with an average GPA of at least 3.6. Of the completed courses, at least two should be Area courses.

**Notes:**

1. At least five courses must be at the 300-400 level.

2. No course with a grade lower than C and no P/F courses can be counted toward the Judaic Studies minor.

**Minors**

**Judaic Studies Minor**
The Judaic Studies minor requires that a student take at least six courses. Students minoring in Judaic Studies must take Introduction to Judaic Studies and two Survey courses, or Three Survey courses.

and

Three Area Courses

Notes:

1. Relevant upper level courses may be substituted for Survey Courses.

2. Half of the courses for the minor must be at the 300 or 400 level.

3. At least 3 courses used for the minor must be taken at Binghamton University.

Hebrew Minor

The Hebrew minor requires that a student take at least six courses. Only courses above HEBR 102 count toward the minor. At least two of the courses have to be in the 300-400 level. At least two of the courses have to be taken at Binghamton University.

(Students interested in a Hebrew major should discuss the minor requirements with the Hebrew Language coordinator, the Judaic Studies Director of Undergraduate Studies, or the Chair.)

Notes:

1. Courses in Yiddish language and literature may be counted toward the Hebrew minor.

2. No course with a grade lower than C and no P/F courses can be counted toward the Hebrew minor.

Israel Studies

Minor

The minor complements majors in Anthropology, Arabic, Art History, Comparative Literature, Geography, History, Judaic Studies, Political Science, and Sociology. Students who are pre-law or pre-health, but interested in modern Israeli history, politics, and culture, will find a home in Israel Studies.

Israel provides a case study in the sociology of multi-ethnic and multi-religious relations, as well as international and multilateral conflict and conflict resolution. For this reason the Israel Studies minor serves students with a wide range of interests and backgrounds.

The Program of Study for the Minor in Israel Studies consists of:

- Two courses above the 102 level in either Hebrew or Arabic language or literature
- A course on the History of Modern Israel
- A course on Cultures and Societies of Modern Israel

Students may focus their work in Israel Studies in history, politics, literature, or another Area in consultation with faculty.

Notes:

1. Half of the courses for the minor must be at the 300 or 400 level.
2. At least 3 courses used for the minor must be taken at Binghamton University.

3. Students who pass the test of language proficiency in either Hebrew or Arabic will be required to substitute 2 courses for the language requirement.

4. No course with a grade lower than C and no P/F courses can be counted toward the Israel Studies minor.

Languages Across the Curriculum Program

Binghamton University's Languages Across the Curriculum (LxC) Program provides unique opportunities for students to apply and enhance existing language skills in courses outside of the language departments. The primary premise of the LxC program is that foreign languages should be actively used throughout the University. Their use should be linked to students' disciplinary and professional interests to enhance academic performance, to promote critical thinking and to broaden perspectives on course content.

Since 1991, LxC has supported courses in all three divisions of Binghamton University's Harpur College of Arts and Sciences — Humanities, Science and Mathematics, and Social Sciences; graduate and undergraduate courses in the international business and accounting programs of the School of Management; and undergraduate courses in the Thomas J. Watson School of Engineering and Applied Science. Supported languages in one or more of these courses have included Cantonese, French, Gaelic, German, Greek, Hebrew, Hindi, Italian, Japanese, Korean, Mandarin, Portuguese, Russian, Spanish and Turkish. Students may contact the Languages Across the Curriculum office to request a list of courses offering an LxC option. The list of LxC-supported courses is also posted on the program's website at http://www.binghamton.edu/oip/lxc/.

Faculty who choose to offer LxC options to their students design their courses so that LxC assignments may replace a certain percentage of regular coursework or serve as the basis of a group presentation or paper. Language resource specialists (LRSs), who are selected for their linguistic background, cross-cultural perspectives, and disciplinary expertise, prepare LxC assignments utilizing authentic resource materials. The LRSs lead study groups in which they help participating students understand the target language materials and relate them to the course content. The extent to which the designated language is spoken in these “traditional” Languages Across the Curriculum study groups is based entirely on the proficiency levels of the participating students.

LxC also supports global English groups in which students, using their varied target languages alongside non-U.S. English sources, share texts rooted in a common theme from multiple linguistic and cultural perspectives. These groups are conducted entirely in English due to the diverse language groups represented. See the LxC website for more information.

LxC study groups meet one hour per week for ten weeks, outside of regular class or discussion section meetings. In addition to the weekly study group meetings, enrolled students dedicate approximately 45 minutes to one hour of time preparing LxC assignments. Students who choose to enroll in an LxC study group receive a zero-credit transcript notation indicating the language and course of their completed study-group participation. LxC study-group participation may count toward the foreign-language requirement for the Global Studies Minor.

Latin American and Caribbean Area Studies (LACAS)

Undergraduate Program

The Latin American and Caribbean Studies major offers an interdisciplinary and transnational approach to the study of Latin America, the Caribbean and peoples of Latin American and Caribbean descent. LACAS majors and minors learn methodologies and theoretical perspectives for studying historical processes, cultural dynamics, and social and economic problems across the Americas. LACAS majors and minors build skills in research, critical thinking, and effective communication.
Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

LACAS Major

The undergraduate major in Latin American and Caribbean Area Studies is a well-established program that began in 1973. The Latin American and Caribbean Studies major offers an interdisciplinary and transnational approach to the study of Latin America, the Caribbean, and peoples of Latin American and Caribbean descent. LACAS majors learn methodologies and theoretical perspectives for studying historical processes, cultural dynamics, and social and economic problems across the Americas. LACAS majors build skills in research, critical thinking, and effective communication.

1. Complete a minimum of 10 courses selected from among those parented by or cross-listed with LACAS; courses with content on U.S. Latin@s, the Caribbean and/or Latin America; or any other course approved by the LACAS Committee. The following requirements apply:

- At least one course in each of the three separate departments;
- Two of the following three courses: LACS 200 (formerly LACS 105), LACS 210 (formerly LACS 106), LACS 202 (formerly LACS 107). None of these can be taken Pass/Fail;
- One course in library research (e.g., LACS 271) or research methodology, in which the major project focuses on Latin America and/or the Caribbean. The course cannot be taken Pass/Fail;
- One literature course related to Latin America and/or the Caribbean;
- Five advanced courses (300 level or above), of which one must be 400 level;
- No more than half of the courses may be taken outside Binghamton University;
- No more than one of the non-required courses can be taken Pass/Fail.

2. Show a proficiency in a language relevant to the area of specialization (e.g., Spanish, French, English, Portuguese, Creole, Dutch). The LACAS language requirement can be met through one or more of the following means:

- By taking an intermediate level course in a language relevant to the LACAS major (e.g., SPAN 211, SPAN 212, SPAN 215, SPAN 244, FREN 211, FREN 215).
- If a student has taken the Advanced Placement Test in High School in a language relevant to the LACAS
major (e.g., Spanish, French, English, Portuguese, Creole, Dutch).

- By taking the CLEP, or College Level Examination Program in a language relevant to the LACAS major (e.g., Spanish, French, English, Portuguese, Creole, Dutch). (http://clep.collegeboard.org/)
- Students who are native or heritage speakers in a language relevant to the LACAS major may request a waiver of the requirement from the program.

Students whose language of preference is not offered by the university or tested by the Advanced Placement Test in High School or CLEP will be formally evaluated by a professor appointed by the LACAS Director for that purpose.

**LACAS Senior Thesis and Honors Program**

To be eligible to earn honors in the Latin American and Caribbean Area Studies Program, a student majoring in LACAS must have:

- A grade-point average of 3.5 or above in LACAS courses by the beginning of the first semester of their fourth year;
- A 3.0 or above overall GPA by the beginning of the first semester of their fourth year; and
- Completed an independent study course (LACS 497) that results in a research paper that is judged to be of honors quality (grade of A), or earn honors in the Senior Thesis course (LACS 498). The work is evaluated by a committee designated by the LACAS Director.

Anyone interested in pursuing LACAS Honors should declare it by the end of the second semester of their junior year in order to allow for adequate planning of the independent research project.

**Fieldwork and LACAS Senior Thesis and Honors Program**

Students may pursue fieldwork research as part of their fulfillment towards the requirements for a LACAS Senior Thesis and Honors Program. The fieldwork can be carried out in one of the following: (a) Latin America; (b) the Caribbean; or (c) in Latin@/Chican@/Caribbean communities in Binghamton or other parts the United States. For students interested in study abroad, LACAS recognizes SUNY study-abroad programs in Latin America and the Caribbean.

The fieldwork site would be chosen in consultation with the LACAS Director or Associate Director, and according to a research proposal developed by the student during the semester prior to their fieldwork but no later than the end of the second semester of their junior year. All students pursuing fieldwork must take LACS 271 or another approved research methodology course prior to beginning their study. In addition, they must meet the following course requirements depending on their chosen research site:

- Students who undertake fieldwork locally must register for a minimum of eight (up to 12) independent study/field research credits with LACAS during the semester of research (LACS 496 and LACS 497).
- Students conducting fieldwork elsewhere in the U.S. sign up for LACS 496 and LACS 497 and must be supervised by a LACAS affiliated faculty coordinator on site.
- Students conducting fieldwork abroad register through the Office of International Programs (for LACS 496 and LACS 497).

At the completion of their fieldwork, students register for LACS 498 (LACAS Senior Thesis). At that time, students write up the results of their fieldwork in a senior thesis. An A grade in the Senior Thesis would result in the student being granted Honors.

For more information contact the LACAS Director or Associate Director.
LACAS Minor

The LACAS minor offers an interdisciplinary and transnational approach to the study of Latin America, the Caribbean and peoples of Latin American and Caribbean descent. The minor is designed for undergraduates who wish to graduate with formal recognition for coursework in the field without undertaking all the requirements of a major. To qualify for the LACAS minor, a student must complete a minimum of six courses selected from among courses parented by/or crosslisted with LACAS; courses with content on U.S. Latin@s, the Caribbean and/or Latin America; or any other course approved by the LACAS Committee. The following stipulations apply:

- At least two courses must be upper-level courses (300 or above) (excluding LACS 395, LACS 397);
- LACS 200 (formerly LACS 105);
- At least one of the following two courses: LACS 202 (formerly LACS 107), LACS 210 (formerly LACS 106);
- Only one of the six courses can be LACS 395 or LACS 397;
- All courses for the minor must be passed with a minimum of C-;
- No more than half the courses may be taken outside Binghamton;
- A course taken under the Pass/Fail grading option may not be used to fulfill requirements for the minor.

Any student interested in pursuing a LACAS minor should meet with the LACAS Director or Associate Director to discuss the requirements and their plan of study.

LACAS Undergraduate Majors and Minors: Clarifications and Recommendations

Students interested in the major or minor should keep the following in mind:

- The main difference between the major and the minor is that the major requires a minimum of 10 courses and the minor requires a minimum of six courses;
- The Honors Program includes the design and execution of a research project that can include fieldwork abroad;
- Depending on the nature of the courses, some courses taken in Latin American and/or Caribbean universities may be used to fulfill part of the requirements for the major and/or the minor;
- It is strongly recommended (but not required) that students interested in the LACAS major combine that major with a major or minor in another department or program. This ensures further background in a related field.

In accordance with normal Harpur College policy, students may use the same course(s) to fulfill part of the course requirements for both their LACAS major and a second major. At least four of the courses for student’s LACAS minor must be in addition to those counted towards the student’s major.

Linguistics

Program Components

Linguistics — the scientific study of language — is inherently interdisciplinary. With respect to the administrative and curricular divisions of Harpur College at Binghamton University, the field of linguistics is in fact fully interdivisional. The subject matter of linguistics includes topics from all three divisions: Humanities, Social Sciences and Science and Mathematics.

The major and minor programs in linguistics provide a foundation in the principles of linguistic theory and method, as well as a wide variety of cross-disciplinary and sub-disciplinary offerings.
Linguistics as Preparation for Graduate and Professional Studies

Undergraduate study in linguistics serves as an excellent preparation for graduate and professional study in many fields, including law, anthropology, education and counseling, and language pathology, as well as linguistics itself. Students planning to pursue graduate or professional study in any of these areas are strongly advised to keep these plans in mind as they select courses. Students with an interest in graduate work in linguistics, for example, are well advised to study at least two languages other than English, one, a language of scholarship and the other, a non-Western language. Students considering professional training in applied and clinical areas such as language teaching, speech/language pathology and audiology, deaf education or counseling are urged to consult appropriate pre-professional information sources early in their undergraduate career, preferably not later than the beginning of the sophomore year.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Linguistics Major

The major in linguistics combines the study of linguistic theory and methods with the comparative study of specific languages. Reflecting this perspective, the linguistics major counts as a major within the Humanities Division. The minimum course requirements for the major are:

- LING 114 or LING 170 (equivalents are ANTH 114 and ANTH 170);
- LING 118 (equivalent is LING 118);
- 24 additional credits in linguistics, at least 12 of which must be at the upper-division level (LING 300 or above);
- Language courses:
  - One advanced foreign language course, in composition or phonetics or advanced grammatical analysis, presupposing intermediate fluency (the fluency normally attained after four or more semesters of college-level language instruction);
  - Four semesters of college-level instruction (or the equivalent, including courses taken at the secondary school level, equating one year of instruction to one semester of college-level instruction) in a language or languages other than the language above. Students may fulfill this requirement with up to four semesters (or equivalent) in a single additional language or one semester each of four different languages, or any combination adding up to the equivalent of four semesters of college-level language
Note: Depending on prior exposure to the language, Introductory/elementary language courses (typically language courses numbered 101 and 102 or 111 and 115) and intermediate level I and II language courses (typically language courses numbered 203 and 204 or 211 and 215) are required prerequisites for completion of the major.

**Honors in Linguistics**

The award of honors in linguistics is based upon completion of an acceptable honors thesis. To be considered for honors, a student must have at least a B+ average in linguistics courses, must secure the approval of a faculty member who agrees to serve as the honors thesis supervisor and a second faculty member who will serve as a reader, and must submit a written request to the program director for approval no later than the end of the semester preceding the student’s final semester. Up to four credits may be obtained for the thesis by registering for LING 498. LING 498 may not be used, however, toward fulfillment of the minimum course requirements for the major. By the last day of classes in the student’s final semester, each honors thesis supervisor must submit written confirmation that an acceptable thesis has been completed or is certain to be completed by the end of the semester.

**Linguistics Minor**

The linguistics minor is also interdivisional. Six courses, distributed as follows, are required for the linguistics minor:

- LING 114 or LING 170 and 118 (equivalents are ANTH 114, 118, 170);
- Four other courses in linguistics, at least two of which must be at or above the 300 level.

**Counting of Courses toward Major and Minor Requirements**

All courses presented in fulfillment of the minimum requirements for the linguistics major or minor must be taken for a letter grade (no Pass/Fail), and the grade received must be a C– or better in order to count toward these requirements. The overall average in courses presented in fulfillment of minimum requirements must be a C or better. Exceptions to any of the above requirements must be requested in writing from the program director, who may grant such requests in extraordinary circumstances.

**Mathematical Sciences**

**Undergraduate Programs**

Mathematics belongs both to liberal arts and to sciences. Not only is it the language of science (including social science), but it is also studied for its own beauty. It is therefore one of the most vital and lively subjects in the university curriculum. In the technology-oriented climate of today, the department's graduates have excellent employment opportunities.

Mathematicians and statisticians are in demand, not only in mathematics teaching and research, and in the traditional fields of physics, chemistry, computer science and engineering, but also, and increasingly, in business, economics, environmental sciences, geology, biology, and the health sciences, among others. Students interested in the applications of mathematics should consider a minor in another discipline or even a double major, and consult the faculty in the relevant departments. Knowledge of computer science is useful for many applications of mathematics.

The Department of Mathematical Sciences (the Department) has programs leading to BA, BS, MA and PhD degrees (MAT and MSEd degrees are offered through the Department of Education). The Department offers a BA program in Mathematical Sciences with two tracks: one in Mathematics and one in Actuarial Science; the challenging BS degree
program provides excellent preparation for graduate work at any university. Students considering a BS degree should seek advice as early as possible and plan their schedules carefully to meet the demanding requirements.

The Department collaborates with the Department of Education in offering the five-year 3/2 (combined) program leading to a BA in Mathematics and an MAT degree in Mathematics Adolescence Education.

The Department serves other disciplines by providing instruction in various mathematical skills. Traditional mathematical preparation for the hard sciences (biology, chemistry, economics, physics and engineering) is provided by MATH 223, 224, 225, 226, 227, 230, 304, 323, 324, 327, 371, 375, 471, 478, 479 and other courses. Statistical preparation is provided by MATH 147, 148, 327, 447, 448, 455, 457 and 458 among others.

Note: Math 224 is required for all Mathematical Sciences majors. If a student does not place into MATH 224, then MATH 223 and, if needed, MATH 108 are also required for the completion of the major.

Grade Requirements and Prerequisites

- Any math course in which a student earns a grade of C- or less is not acceptable as a prerequisite for any other course offered by the Department of Mathematical Sciences, unless stated otherwise in the course description.
- Any math course in which a student earns a grade of C- or less cannot be used to fulfill the requirements of the major or minor.
- A pass grade (P) does not count toward the major or minor unless the only grade available is Pass/Fail; in this case, consent of the Department is required.
- A student who has received credit for a course may not take one of its prerequisites for credit at a later time.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

BA Degree Program in Mathematical Sciences

The BA program in Mathematical Sciences is highly flexible and allows each student to fashion a course of study to meet his or her individual needs and interests. While there is one major in Mathematical Sciences, there are two tracks: one in Mathematics and one in Actuarial Science.

Mathematics Track
The BA track in Mathematics emphasizes the breadth. The student is encouraged to experience different areas in mathematical sciences. High-level courses offered in different areas of mathematical sciences are:

**Core Areas:**
- Analysis: 371, 372, 375, 471, 472, 478, 479 and various topics courses
- Algebra: 401, 402, 404, 407 and various topics courses
- Geometry/Topology: 461, 463, 465 and various topics courses

**Non-Core Areas:**
- Actuarial Science and Statistics: 346, 447, 448, 450, 452, 454, 455, 457, 458 and various topics courses
- Combinatorics: 381, 386 and various topics courses
- Computer Science: CS 373, CS 375, CS 432, CS 433, CS 435, CS 436, CS 458, CS 460, CS 471, CS 472 and various topics courses
- Others: 356, 489 and various topics courses

To obtain a BA degree in Mathematical Sciences with a Mathematics track, a student must complete a minimum of 40 credits of coursework as follows:

- Calculus and Linear Algebra: MATH 224 and 225, MATH 226 and 227, MATH 323 and 304 (MATH 230, Honors Calculus, can be taken in place of the regular Calculus II sequence, MATH 226 and 227);
- Number Systems: MATH 330 (it is strongly advised that this course is taken as soon as MATH 227 or MATH 230 is completed);
- Breadth Requirement (all courses must be numbered above MATH 330):
  - One course in Analysis
  - One course in Algebra
  - One course in Geometry/Topology
  - Two additional courses. These two courses may not be from the same core area.


Courses not listed above may be counted towards the major. The Director of Undergraduate Studies determines whether they can be counted and which areas they should be categorized to. MATH 449 does not count towards the major. At most one of MATH 471 and 472 can be counted towards the major.

At least three of the required mathematics courses listed above, and numbered above MATH 330, must be regular courses (not independent study) taken from the Department of Mathematical Sciences.

The 40 credits requirement should be considered a strict minimum. Students are encouraged to take some additional mathematics courses numbered above MATH 330.
The flexibility of the mathematics track of the BA program makes it especially important for the student to get early and regular advice from a faculty advisor. See further comments under the headings “Departmental Advising” and “Mathematics and Computer Science.”

**Actuarial Science Track**

The BA track in Actuarial Science is designed to prepare students for an actuarial career. Actuaries analyze and solve complex business and social problems related to insurance and pension plans. Professional advancement results from passing a series of examinations administered by the actuarial societies and by completion of specific courses approved by the actuarial societies. To obtain a BA degree in Mathematical Sciences with an Actuarial Science track, a student must complete 42 credits of coursework in the field of Mathematical Sciences and two courses in Economics as follows:

- **Calculus and Linear Algebra:** MATH 224 and 225, MATH 226 and 227, MATH 323 and 304 (MATH 230, Honors Calculus, can be taken in place of the regular Calculus II sequence, MATH 226 and 227);
- **Number Systems:** MATH 330 (it is strongly advised that this course is taken as soon as MATH 227 or MATH 230 is completed);
- **Computing:** MATH 329;
- **Actuarial foundation courses:** MATH 346, 447 and 448;
- **Actuarial elective courses:** two courses from 450, 452, 454, 455, 457, and either 458 or ECON 467;
- **Economics:** ECON 160, 162.

At least three of the required courses listed above, and numbered above MATH 330, must be regular courses (not independent study) taken from the Department of Mathematical Sciences.

MATH 449 is a preparation for the actuarial examination on Probability and hence students are encouraged to take it. MATH 346 is a preparation for the actuarial examination on Financial Mathematics. MATH 450 and 452 cover topics in the actuarial examination on Long-term Actuarial Mathematics (previously the MLC exam). MATH 454 covers the deeper mathematical foundation for the actuarial examination on Investment and Financial Markets. MATH 455 and 458 cover topics in the actuarial examination on Statistics for Risk Modeling. MATH 457 covers topics in the actuarial learning module and assessment on Predictive Analytics. ECON 160 and 162 fulfill the VEE requirement on Economics. MATH 448 fulfills the VEE requirement on Mathematical Statistics. Students interested in an actuarial career should have knowledge of computer programming equivalent to CS 100 as a minimum, and also take courses in Economics and Finance.

Note: MATH 449 does not count towards the major. At most one of MATH 458 and ECON 467 can be counted towards the major. At most one of MATH 471 and 472 can be counted towards the major.

**BS Degree Program in Mathematical Sciences**

There are also two tracks to the BS degree: one in Mathematics and one in Actuarial Science.

**Mathematics Track**

This degree affords excellent preparation for graduate study in Mathematics. A student must complete the following 64 credits of coursework:

- **Calculus and Linear Algebra:** MATH 224 and 225, MATH 226 and 227, MATH 323 and 304 (MATH 230, Honors Calculus, can be taken in place of the regular Calculus II sequence, MATH 226 and 227);
- Number Systems: MATH 330 (it is strongly advised that this course is taken as soon as MATH 227 or MATH 230 is completed);
- Algebra, Topology and Analysis: MATH 375, 401, either 402 or 404, 461, 478, and 479.
- Five additional courses, chosen from the following: any MATH course numbered above 330, other than 449, including graduate courses; CS 373, 375, 432, 433, 435, 436, 458, 460, 471, 472; courses from other departments with prior approval by the Director of Undergraduate Studies. At most three of these five courses may be taken outside the Department of Mathematical Sciences.

Transfer, computer science, and independent study credits may not be used for more than five courses numbered above MATH 330.

Exceptions to the requirements for the BS degree may, in rare cases, be allowed. They must be approved by the Department.

Note: MATH 449 does not count towards the major. At most one of MATH 471 and 472 can be counted towards the major.

**Actuarial Science Track**

The BS track in Actuarial Science is designed to prepare students for an actuarial career. It is a mathematically stronger program than the BA track in Actuarial Science. It is designed for students who may wish to pursue a graduate degree in Actuarial Science or related fields. Actuaries analyze and solve complex business and social problems related to insurance and pension plans. Professional advancement in the actuarial field results from passing a series of examinations administered by the actuarial societies and by completion of specific courses approved by the actuarial societies. Students who successfully complete our program should be well prepared to pass some of these exams. To obtain a BS degree in Mathematical Sciences with an Actuarial Science track, a student must complete 58 credits of coursework in the field of Mathematical Sciences and 4 courses in Economics as follows:

- Calculus and Linear Algebra: MATH 224 and 225, MATH 226 and 227, MATH 323 and 304 (MATH 230, Honors Calculus, can be taken in place of the regular Calculus II sequence, MATH 226 and 227);
- Number Systems: MATH 330 (it is strongly advised that this course is taken as soon as MATH 227 or MATH 230 is completed);
- Computing: MATH 329;
- Actuarial foundation courses: MATH 346, 447, 448;
- Actuarial elective courses: four courses from 450, 452, 454, 455, 457, and either 458 or ECON 467;
- Advanced Mathematics courses: two courses from 404, 472, 478 and 479;
- Economics: ECON 160, 162, 360 and 362.

Transfer, computer science, and independent study credits may not be used for more than five courses numbered above MATH 330.

MATH 449 is a preparation for the actuarial examination on Probability and hence students are encouraged to take it. MATH 346 is a preparation for the actuarial examination on Financial Mathematics. MATH 450 and 452 cover topics in the actuarial examination on Long-term Actuarial Mathematics (previously the MLC exam). MATH 454 covers the deeper mathematical foundation for the actuarial examination on Investment and Financial Markets. MATH 455 and 458 cover topics in the actuarial examination on Statistics for Risk Modeling. MATH 457 covers topics in the actuarial learning module and assessment on Predictive Analytics. ECON 160 and 162 fulfill the VEE.
requirement on Economics. MATH 448 fulfills the VEE requirement on Mathematical Statistics. Students interested in an actuarial career should have knowledge of computer programming equivalent to CS 100 as a minimum, and also take courses in Economics and Finance.

Note: MATH 449 does not count towards the major. At most one of MATH 458 and ECON 467 can be counted towards the major. At most one of MATH 471 and 472 can be counted towards the major.

**Combined Program in Mathematics (BA) and Master of Arts in Teaching (MAT) in Mathematics Adolescence Education**

This program combines the Bachelor of Arts (BA) in Mathematics program and the Master of Arts in Teaching (MAT) program. The combined program provides an opportunity for a limited number of outstanding liberal arts students to graduate in five years with a BA in mathematics and an MAT degree. The number of required mathematics courses in this program is the same as for the BA and MAT degrees completed separately. In the fourth year, a student takes 20 credits of courses in education, which double-count for BA electives. Students who are interested in this program should meet with the MAT mathematics coordinator in the Department of Education and the MAT advisor in the Department of Mathematical Sciences early in the sophomore year to ensure that all requirements are being met in a timely manner and to learn about applying for the MAT component of the program.

**Honors in Mathematics**

The Undergraduate Committee determines the recipients of departmental honors. Usually these will be students who are in the BS program and/or have a strong record of success in mathematics or actuarial science. Final awarding of honors requires satisfactory completion of the student's final semester courses as determined by the Undergraduate Committee.

**Departmental Advising**

Students considering a major in Mathematical Sciences should seek advice from the faculty as early as possible. Every student declaring a Mathematical Sciences major is assigned a faculty advisor, and should meet regularly with the advisor to discuss course selection and career goals. Students are free to choose another advisor from among the faculty once they get to know the faculty better. In addition, any issue related to the major/minor can be discussed with the Director of Undergraduate Studies.

**Mathematics and Computer Science**

The Department of Computer Science in the Watson School offers a minor program that may be combined with a BA in Mathematics to provide a strong background leading to careers in Computer Science. The BA in Mathematics is designed to facilitate this combination by allowing up to two Computer Science courses to be included in the degree program. Students interested in Mathematics and Computer Science should also consult with the Department of Computer Science.

**Mathematics Minor**

A minor in Mathematical Sciences requires the student to complete, with a grade at least C, at least 24 credits from courses numbered above MATH 300, of which at least 12 credits are from courses numbered MATH 330 or above. Transfer and independent study credit may not be used for more than 4 credits of the latter 12 credits. Harpur College mandates that at least 16 credits for the minor must be in addition to those counted towards fulfillment of the student's major. At most two CS courses chosen from CS 373, 375, 432, 433, 435, 436, 458, 460, 471 or 472 may be counted toward the mathematics minor. At most one of these courses can be counted as a course numbered above MATH 330. The use of CS courses is subject to the transfer and independent study restriction. At most one of MATH
447 and 449 may be counted towards the mathematics minor; at most one of MATH 471 and 472 may be counted towards the minor; at most one of MATH 324 and 371 may be counted towards the minor. At least 8 credits from courses numbered above MATH 330 must be taken from the Department of Mathematical Sciences. Students interested in pursuing a Mathematics minor should consult with the Director of Undergraduate Studies.

Medieval and Early Modern Studies

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Requirements for the Medieval and Early Modern Major

The major in Medieval and Early Modern Studies (MDVL) enables students to build an interdisciplinary program in the history of political, religious, and social institutions and in cultural production—from science and technology to theatre, literature, music and art. Majors select courses under the supervision of the undergraduate director, who assists in tailoring the curriculum to the students’ individual interests. Majors may concentrate on one geographic region or on the increasing development of global interdependencies while focusing on a particular period or on movement through time. Temporal coverage ranges from c.600-1650. Within that range, majors choose either the medieval track (late 4th through 14th centuries) OR the early modern track (15th through 16th centuries).

Eleven 4-credit courses are required for the major (letter grades only; minimum of “C–” to count towards the requirements):

MDVL 101. Introduction to Medieval and Early Modern Studies

(Required for Medieval and Early Modern Studies majors and minors)

MDVL 101 offers a survey of political, religious and social institutions, science, technology and cultural production from the late 4th through 16th centuries, with a focus on increasing contact, exchange and global interdependencies across the medieval and early modern worlds. Non-majors are also welcome. In exceptional cases and at the determination of the undergraduate director, students may substitute a survey course of similar chronological, geographical, and disciplinary breadth for MDVL 101 in satisfying the major requirement.

Language Requirements

Two 4-credit courses above the 100 level in Latin, Greek, Hebrew, Arabic or another research language pertinent to the student’s course of study. Both courses must be in the same language, to ensure reading competency.
Note: Depending on prior exposure to the language, Introductory/elementary language courses (LAT 101 and 102, GRK 101 and 102, HEBR 101 and 102, ARAB 101 and 102 or a modern research language) are required prerequisites for completion of the major.

**Additional Courses**

- Five courses in the student's chosen track (medieval or early modern). In cases where ambiguities arise (e.g., when course coverage straddles both periods), the undergraduate director will consult with faculty to determine the track-status of a given course.

- Three courses in the track not chosen (medieval or early modern) and/or in classical studies. (Courses not designated by the CLAS, LAT or GRK rubric, but still within the disciplinary boundaries of classical studies, e.g., courses in ancient history, philosophy, art history, or archaeology, can, with the approval of the undergraduate director, be counted as courses in classical studies.)

- The eight courses indicated above must originate from at least three different departments. Courses not designated by the MDVL rubric, but still within the temporal boundaries of the program—e.g., carrying a history, anthropology, or Romance languages rubric—can, with the approval of the undergraduate director, be counted among these eight required courses for the major.

- Five of the eight courses indicated above must be 300 level or higher, with at least one of these being a 400-level seminar.

The major in Medieval and Early Modern Studies is administered by Binghamton University’s Center for Medieval and Renaissance Studies (CEMERS).

The major is recommended for students planning to pursue graduate studies in pre-modern fields in the humanities and social sciences or as preparation for law school. It has also proven to offer excellent preparation for careers in the public humanities and in public history. It may be taken concurrently with a major or minor in a department or another program. There is no limit to the number of courses that can count toward more than one major, but a maximum of two courses that count toward another minor can also count toward a MDVL major.

For additional details on the major, please contact the CEMERS office (607-777-2730 or cemers@binghamton.edu), visit our website (http://www.binghamton.edu/cemers/), or consult with Harpur Advising.

**Honors in Medieval and Early Modern Studies**

The undergraduate director administers the honors program offered in Medieval and Early Modern Studies. MDVL majors may become candidates for honors once they have completed 87 credits and, thus, achieved “senior” standing. Before becoming candidates for honors, majors must consult with the undergraduate director and complete the appropriate form to qualify.

To be eligible to earn honors, a MDVL major must:

- Have a GPA of 3.50 in courses counting towards the major at the time of candidacy for honors;

- Write an honors thesis, which the student must arrange to research and write under the supervision of a faculty member affiliated with CEMERS.

Majors writing honors theses may (but are not required to) register for MDVL 498 and MDVL 499. These courses may not be used to satisfy course requirements for the MDVL major.

Ideally, the thesis supervisor should be a faculty member with whom the honors candidate has taken upper-level courses that have been counted towards the MDVL major. The supervisor will be selected by the student. Once the faculty member agrees to supervise the project, s/he will be appointed by the undergraduate director.
It is also advisable for the honors candidate to define a topic for the thesis based on advanced work already completed at the 400 level by the time of candidacy.

When the thesis is complete, a second member of the CEMERS faculty will be appointed to serve as the reader of the thesis. Selected by the student, the reader must be approved by the thesis supervisor and appointed by the program director.

The completed thesis will be evaluated by the faculty supervisor and reader, who will judge whether the work is worthy of honors, high honors or highest honors. In case of disagreement between the two readers, a third will be designated by the program director. This process must be complete before the last week of the student's last semester.

Upon successful completion of the project, the student will present a bound copy of the thesis to the MDVL program for its archive.

Requirements for the Minor in Medieval/Early Modern Studies

Minors select courses under the supervision of the undergraduate director, who assists in tailoring the curriculum to the students’ individual interests.

Six 4-credit courses are required for the minor (letter-grades only; minimum of “C–” to count towards the requirements):

- MDVL 101. Introduction to Medieval and Early Modern Studies (or, in exceptional cases, an equivalent course)
- Five courses in the student's chosen track (medieval or early modern). In cases in which ambiguities arise (e.g., when course coverage straddles both periods), the undergraduate director will consult with faculty to determine the track-status of a given course.

With the approval of the undergraduate director, these five courses may include one course in the track not chosen (medieval or early modern) or in classical studies. (Courses not designated by the CLAS, LAT or GRK rubric, but still within the disciplinary boundaries of classical studies, for instance, courses in ancient history, philosophy, art history or archaeology, can, with the approval of the program director, be counted as courses in classical studies.)

- The five courses indicated above must originate in at least two different departments. Courses not designated by the MDVL rubric, but still within the temporal boundaries of the program—e.g., carrying a history, anthropology, or Romance languages rubric—can, with the approval of the undergraduate director, be counted among these five required courses for the minor.
- Three of the five courses indicated above must be 300 level or higher, with at least one of these being a 400-level seminar.

The minor in Medieval and Early Modern Studies is administered by Binghamton University’s Center for Medieval and Renaissance Studies (CEMERS).

The minor is recommended for students planning to pursue graduate studies in pre-modern fields in the humanities or social sciences or as preparation for law school. It may be taken concurrently with a major or minor in a department or another program. A maximum of two courses that count toward a MDVL minor can also count toward another major. For additional details on the minor, please contact the CEMERS office (607-777-2730 or cemers@binghamton.edu), visit our website (http://www.binghamton.edu/cemers/), or consult with Harpur Advising.

Middle East and North Africa Studies Program (MENA)
Undergraduate Programs

The Middle East and North Africa Studies Program (MENA) at Binghamton University coordinates study of the Middle East, North and Sudanic Africa, and European countries that have extensive Islamic contact. The program develops and integrates research and graduate and undergraduate instruction about the MENA area. Courses related to this area are offered in history, geography, political science, anthropology, sociology, art history, comparative literature, Africana Studies, Judaic Studies, Arabic, Ottoman, modern Turkish, Hebrew and other fields.

MENA Minor

This interdisciplinary program combines language study with the range of topical courses that treat the Middle East region from historical and contemporary perspectives. Current faculty members offer courses in Arabic literature, Turkish popular culture, Islamic art and architecture, Middle Eastern history (ancient and modern), religious cultures of the Middle East and North Africa, and the politics of the wider MENA region, in addition to many other subjects. This minor is geared toward students who are interested in further graduate study on the Middle East, perhaps under the rubric of a specific discipline, such as history or political science, while also providing a strong background to students that are interested in relevant careers, such as journalism, foreign policy and international law.

The program of study for the minor includes the following required courses:

- Language requirement: 2 semesters (8 credits) of Arabic, Hebrew, or Turkish (modern or Ottoman), studied at any level. This should be 2 semesters of the same language. A semester of Ottoman may be combined with a semester of any level of modern Turkish.
- Middle East and North Africa, pre-1800 (4 credits)
- Middle East and North Africa, since 1800 (4 credits)
- Electives: 2 courses in chosen areas of interest (8 credits)

Please note: Minimum grade required for courses to be counted for the minor: C. No courses for the minor may be taken P/F. At least 4 courses (16 credits) must be taken at Binghamton University. At least 2 courses (8 credits) must be at the 300- or 400-level.

Music

Mission Statement

The mission of the Binghamton University Music Department is:

- To train professionally-oriented students for careers in music: in performance, composition, music history, and music theory. We aim to accomplish this objective through our bachelor’s degrees and our graduate programs. Our professional music degrees are supported by a broad foundation in the liberal arts, a historical strength of Harpur College.
- To enrich the musical life of all students on campus through specially designed courses, various ensemble participation, and studio instruction in most instruments and voice; these are open and available to all matriculated students. Indeed, the Department has always prided itself on the rich "hands-on" choices for music study it provides to the general liberal arts student. In addition, there are numerous concerts of all kinds that enrich the musical life of the university community.
- To serve as an important arts resource for the civic community and region through the active presentation of faculty, guest, and student concerts (over 100 per year), special courses, lectures, workshops, master classes, community outreach programs, and cooperative projects with other musical institutions in the area.
We view this as central to our mission as a public institution in a relatively small metropolitan area.

- To expand the Department of Music’s reputation through the active concert touring of its artist faculty and through the publications of its scholars so that the department’s influence is felt not only regionally, but nationally and internationally as well.

**Course Designations**

Course offerings in the Music Department are lettered and numbered to reflect the content and sequence of courses.

MUS: History and literature, theory, orchestration, conducting, and performance (not by audition).

MUSP: Performance courses requiring an audition, including ensembles, studio instruction, chamber music, and other courses. Auditions are held the first week of classes each semester. If accepted, the student adds the course at a special registration held in the Music Department during the second week of classes.

The department views the grade of D as passing but unsatisfactory. Therefore, a course in which a grade of D was received may not be used to fulfill the requirements for the major or minor in music. No course taken Pass/Fail counts toward the minimum requirements for the major or minor, with the exception of ensembles.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the *Bulletin*. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the *Bulletin*.

**Music Major — BA Degree**

Students who wish to become music majors in the BA program should make an appointment with the undergraduate director for advising and formal declaration after completing MUS 215 and 216. The department urges all prospective BA majors to begin the major core as early as possible during their college residence to permit sufficient time for the sequence of courses.

The BA degree in music requires the following courses as the basis for a liberal arts program in music:

*Theory and Musicianship (to be taken in sequence)*

1. MUS 215. Theory I, and MUS 216. Musicianship I
2. MUS 217. Theory II, and MUS 218. Musicianship II
3. MUS 315. Theory III, and MUS 316. Musicianship III
4. MUS 317. Theory IV, and MUS 318. Musicianship IV

**History and Literature (to be taken in sequence)**

1. MUS 301. History of Western Music I (prerequisite: MUS 215)
2. MUS 302. History of Western Music II (prerequisite: MUS 217)
3. MUS 303. History of Western Music III

**Ethnomusicology**

MUS 304. Introduction to Ethnomusicology (prerequisite: MUS 217)

**Music Electives**

A total of eight credits from upper-level electives, denoted by 300 and 400 numbered courses and other courses approved by the undergraduate director. Composition may be used only once to satisfy one music elective. A total of four credits of music electives are required for double majors.

**Performance**

Music majors in the BA program are required to participate for at least four semesters in a major vocal or instrumental ensemble, or accompanying. Students are placed by the director(s) of the appropriate ensemble program(s). These may be taken for zero credit if a student’s credit load requires it.

Music majors are also required to complete four semesters of studio instruction in their chosen instrument or voice, taken for at least one credit per semester.

**Residency**

Music majors in the BA program are required to complete at least 14 credits toward the major in residence at Binghamton University, including at least two semesters of studio lessons and ensemble participation. Students considering transferring to Binghamton from another university are advised to begin taking courses in music theory prior to transferring.

**Music Major — BMus Degree**

Students who wish to become music majors in the BMus program should first consult the undergraduate director as early as possible to ensure that the appropriate courses are taken during the first year of study. Admission to the BMus program is open only to students who demonstrate excellence in music performance; acceptance to the program is based on an audition normally taken either before enrollment at Binghamton or within the first three semesters of study.

For music majors pursuing the BMus degree, the department prescribes a core of 86 credit hours in music:

**Theory & Musicianship (to be taken in sequence)**

- MUS 215. Theory I, and MUS 216. Musicianship I
- MUS 217. Theory II, and MUS 218. Musicianship II
• MUS 315. Theory III, and MUS 316. Musicianship III
• MUS 317. Theory IV, and MUS 318. Musicianship IV

Conducting
• MUS 427. Conducting I

History and Literature (to be taken in sequence)
• MUS 301. History of Western Music I (prerequisite: MUS 215)
• MUS 302. History of Western Music II (prerequisite: MUS 217)
• MUS 303. History of Western Music III

Ethnomusicology
• MUS 304. Introduction to Ethnomusicology (prerequisite: MUS 217)

Performance Courses
• Primary concentration (eight semesters/at least 28 credits total)
• Secondary concentration (two semesters/at least two credits total)
• Ensemble participation (eight semesters/may be taken for zero credit)
• MUSP 394. Junior Recital (two credits)
• MUSP 494. Senior Recital (four credits) or MUSP 498. Senior Honors Recital (four credits)

Music Electives
• Two additional 300- or 400-level courses, designated specifically for music major credit. Composition may be
  used only once to satisfy one music elective (eight credits).
• Two additional performance/applied courses (four credits), including the study of pedagogy and literature.

Residency
Music majors in the BMus program are required to take at least 38 credits toward the major in residence at
Binghamton University, including at least four semesters (16 credits) of studio lessons, four semesters (4 credits) of
major ensembles, two semesters (4 credits) of applied electives, the junior half-recital (2 credits), and the senior full
recital (4 credits). Students considering transferring to Binghamton and auditioning for the BMus program are advised
to begin taking studio lessons and courses in music theory and musicianship early in their college careers, and to
contact the Music Department as early as possible to discuss audition requirements.

Music Minor
Students who wish to minor in music should first make an appointment with the undergraduate director for advising
and formal declaration of the minor after completing MUS 215 and MUS 216. Studio instruction is encouraged but
may not substitute for any of the required courses:

Theory and Musicianship
• MUS 215. Theory I and MUS 216. Musicianship I
• MUS 217. Theory II and MUS 218. Musicianship II
Student's choice, one of the following:

- MUS 315. Theory III and MUS 316. Musicianship III
- MUS 323. Counterpoint (not offered every year)

History and Literature - two courses taken in sequence, as follows:

- MUS 301. History of Western Music I
- MUS 302. History of Western Music II

OR

- MUS 302. History of Western Music II
- MUS 303. History of Western Music III

Ethnomusicology

- MUS 304. Introduction to Ethnomusicology (prerequisite: MUS 217)

Performance

Music minors are required to participate for at least two semesters in a major vocal or instrumental ensemble, or accompanying. Students are placed by the director(s) of the appropriate program(s).

Honors (BA Degree)

To register for a senior honors project (MUS 499, maximum total of four credits) a student must have declared a music major or music minor, have a 3.5 grade-point average in music courses and be recommended by the person who agrees to serve as the faculty advisor (studio teacher, history/theory teacher or composition teacher). The recommendation must include evidence of appropriate accomplishment in the field of the proposed project: in performance, an evaluation by the prospective advisor and one other faculty member of a performance by the student in a Thursday department recital in the semester preceding that of the proposed project; in research and composition, an evaluation and/or an example of written work from a previous or current course. With the supporting documentation, a petition to register for honors, including the specific proposal, must be submitted to the director of undergraduate studies during the semester preceding that of the initiation of the proposed project, and is subject to approval by the Undergraduate Committee. When the final performance has been given or the written project completed, a committee consisting of the advisor and two other full-time faculty members decide if the project meets expected standards. If so, a grade of A is assigned with honors, high honors or highest honors designated; if not, the course registration reverts to independent study and the course grade is given by the advisor. Faculty committee members are selected by the student.

A checklist for the student considering an honors recital and the appropriate forms for the submission of the program to the Undergraduate Committee for approval, as well as for the evaluation of both the mid-day recital and the final performance, are available from the undergraduate director.

Honors (BMus)

The BMus student may use the senior recital as a senior honors project under the following conditions:

- The student must have a 3.5 average in music courses.
• The student must be recommended by the primary concentration faculty member.

• The repertoire to be performed must be of sufficient difficulty to merit the honors designation. The program requires the approval of the Undergraduate Committee at least two months preceding the performance. Any changes in the program, once approved, also require approval by the committee.

• The performance is held to an extremely high standard, with at least two members of the Undergraduate Committee serving on the jury (in addition to the student’s principal advisor.)

• Recitals in voice and keyboard instruments, in which the custom is to perform from memory, must be memorized. Recitalists on other instruments, whose tradition may not include memorization, are required to perform at least one quarter of the program from memory.

The BMus student pursuing honors should register for MUSP 498 for four credits rather than MUSP 494. The grade of A must be received to qualify for honors; if not, the registration reverts to MUSP 494, Senior Recital.

A checklist for the student considering an honors recital and the appropriate forms for the submission of the program to the Undergraduate Committee for approval, as well as for the evaluation of the final performance, are available from the undergraduate director.

Philosophy

Philosophy lies at the core of the liberal arts education. Philosophy asks fundamental questions about the world we live in: about the meaning of human life; the nature, purpose and limit of human knowledge; the character and contents of our moral experiences; and the fundamental features of human societies. Philosophy covers a range of related inquires such as ethics, social and political philosophy, the philosophy of law, feminist philosophy, logic and critical reasoning, metaphysics and epistemology, and the history of philosophy. Philosophy courses challenge students to think deeply and to reflect on their own commitments and opinions, to learn about the variety of ways that the human experience has been described and interpreted, and to come to a fuller understanding of themselves and their society.

The study of philosophy also trains students in a range of skills that are fundamental to education in its widest sense. Philosophy courses teach students how to read with attention and sensitivity to language, concepts, and meaning; how to analyze and construct arguments; and how to speak and write clearly and effectively. The philosophy major is valuable not only for students planning to continue the study of philosophy at the post-graduate level, but also for anyone considering a career in law, business, politics and diplomacy, the non-profit world, and any other career emphasizing analytical, linguistic, writing and logical skills.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

• 126 credits

• 90 liberal arts and sciences credits

• Minimum of 44 upper-level credits

• Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).

• Minimum of 44 credits in residence in Harpur College

• 2.0 or higher GPA
Philosophy Undergraduate Programs

The Philosophy major’s requirements call for the completion of ten (10) courses in philosophy. Of these:

A. One introductory course:
   - PHIL 101. (Introduction to Philosophy) or
   - PHIL 105. (Introduction to Asian Philosophy) or
   - PHIL 107. (Existence and Freedom) or
   - PHIL 490. Capstone Seminar

B. One course in Logic:
   - PHIL 121. (Methods of Reasoning) or
   - PHIL 122. (Elementary Logic);

C. Two courses in the history of philosophy:
   - PHIL 201. (Plato and Aristotle) and
   - PHIL 202. (Descartes, Hume, and Kant);

D. At least five of the ten Philosophy courses must be advanced level (300-400). Of these, at least one must be selected from group A and one from group B:
   - Group A (metaphysics, epistemology, philosophy of mind): PHIL 423 (Philosophy of Science), PHIL 431 (Metaphysics), PHIL 433 (Epistemology), PHIL 436 (Philosophy of Mind), PHIL 444 (Philosophy of Social Science), PHIL 445 (Buddhist Metaphysics)
   - Group B (value theory): PHIL 340 (Ethical Theory), PHIL 342 (History of Western Social and Political Philosophy), PHIL 344 (Buddhist Ethics), PHIL 345 (Philosophy of Law), PHIL 448 (Advanced Topics in Medical Ethics), PHIL 455 (Advanced Philosophy of Law), PHIL 456 (Advanced Topics in Law and Political Theory), PHIL 457 (Advanced Topics in Law and Morality), PHIL 458 (Advanced Topics in Law and History), PHIL 486 (Advanced Topics in Ethics), PHIL 488 (Advanced Topics in Social and Political Philosophy)

E. At least one course bearing the General Education “C” designation.

Double majors must complete eight (8) courses in philosophy, including at least four courses in the 300-400 levels. Double majors must fulfill the distribution requirement (D) above.

Philosophy, Politics and Law (PPL) majors who are pursuing a double major in philosophy must take at least one upper-level philosophy course in addition to the upper-level philosophy courses required by PPL.

When appropriate, students can petition to have a different course count as fulfilling requirements for courses in Group A or B.

Honors in philosophy. Honors work in philosophy is usually pursued in the Pell Honors Program. This demanding program, normally open to students with a GPA of at least 3.5, involves writing an article-length thesis under the supervision of an expert advisor, revising that thesis in dialogue with fellow students and the Honors Program director, and presenting the result to be evaluated by a faculty jury at a conference in December. But honors work
can be pursued individually as well. Students interested in honors work should consult the director of undergraduate studies (DUS) in the Department of Philosophy or the director of the Pell Honors Program.

No courses fulfilling major requirements may be taken Pass/Fail. All courses fulfilling major requirements must be passed with at least a C–.

Philosophy, Politics, and Law

Program Components

"The study of the law should be introduced as part of a liberal education, to train and enrich the mind. . . . I am convinced that, like history, economics and metaphysics—and perhaps even to a greater degree than these—the law could be advantageously studied with a view to the general development of the mind."—Justice Louis Brandeis

Law’s influence on our lives is pervasive. It limits and protects us, from before our birth until after we are long dead. Law shapes our lives in every respect: economic, personal, professional and political. To study law seriously, in all its facets, leads far beyond the narrow confines of legal cases to perennial questions of law’s origins, operation and justification. Its study within the liberal arts crosses disciplinary boundaries; law must be viewed from many different vantage points.

Philosophy, politics, and law (PPL) is an interdisciplinary BA program designed for both liberal arts students and students interested in law school. Though many enter law school, other majors go on to graduate school or pursue careers in teaching, business or government. Courses for the major, selected for their content, include classes in philosophy, political science and history, along with selected cognate courses from other areas. Students are thus able to tailor the major to suit their own interests and needs.

The director of the philosophy, politics, and law program is in the Department of Philosophy. Additional faculty members are also designated as advisors. See http://www.binghamton.edu/philosophy-politics-and-law/ for more information and updates.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Requirements for Philosophy, Politics, and Law Major

Students must take a total of 12 courses to fulfill the requirements for the major. Four courses must be in philosophy (146; either 147, 148, or 149; 345; and either 455, 456, 457 or 458, of any letter/title); any two political science
courses from list B, at least one of which must be 300-level or above; and any two history courses from list C. The remaining four courses may be selected from among all the classes listed under Philosophy, Political Science, History or Cognates. At least half of the courses must be at the 300-level or above.

A. Philosophy Required:

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 146. Law and Justice</td>
</tr>
<tr>
<td>PHIL 147. Markets, Ethics and Law or PHIL 148 Medical Ethics or PHIL 149 Environmental Ethics and Policy</td>
</tr>
<tr>
<td>PHIL 345. Philosophy of Law</td>
</tr>
<tr>
<td>PHIL 455. Advanced Philosophy of Law or PHIL 456, Problems in Law and Political Theory (of any letter/title); or PHIL 457, Problems in Law and Morality (of any letter/title); or PHIL 458, Problems in Law and History of Philosophy (of any letter/title)</td>
</tr>
</tbody>
</table>

Optional Philosophy:

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PHIL 121. Methods of Reasoning</td>
</tr>
<tr>
<td>or PHIL 122. Elementary Logic</td>
</tr>
<tr>
<td>PHIL 140. Introduction to Ethics</td>
</tr>
<tr>
<td>PHIL 147. Markets, Ethics and Law</td>
</tr>
<tr>
<td>PHIL 148. Medical Ethics</td>
</tr>
<tr>
<td>PHIL 149. Environmental Ethics and Policy</td>
</tr>
<tr>
<td>PHIL 242. Classics in Political Philosophy</td>
</tr>
<tr>
<td>PHIL 340. Ethical Theory</td>
</tr>
<tr>
<td>PHIL 344. Buddhist Ethics</td>
</tr>
<tr>
<td>PHIL 403. Topics in Ancient Philosophy (of any letter/title)</td>
</tr>
<tr>
<td>PHIL 455. Advanced Philosophy of Law</td>
</tr>
<tr>
<td>PHIL 456. Problems in Law and Political Theory (of any letter/title)</td>
</tr>
<tr>
<td>PHIL 457. Problems in Law and Morality (of any letter/title)</td>
</tr>
<tr>
<td>PHIL 458. Problems in Law and the History of Philosophy (of any letter/title)</td>
</tr>
<tr>
<td>PHIL 488. Topics in Social and Political Philosophy (of any letter/title)</td>
</tr>
<tr>
<td>PPL 480. Advanced Topics in Philosophy and Law</td>
</tr>
<tr>
<td>PPL 471/472. Honors</td>
</tr>
</tbody>
</table>

B. Political Science Courses (minimum of two required, at least one of which must be 300-level or above):

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 111. Introduction to American Politics</td>
</tr>
</tbody>
</table>
PLSC 113. Introduction to Comparative Politics
PLSC 115. Introduction to Ideas and Politics
PLSC 117. World Politics
PLSC 300. Political Psychology
PLSC 319. Issues in World Politics
PLSC 321. American Presidency
PLSC 322. American Political Parties and Pressure Groups
PLSC 323. The Congress in American Politics
PLSC 327. American Foreign Policy
PLSC 331. Constitutional Law and Politics
PLSC 333. Civil Rights and Liberties
PLSC 340. Public Opinion
PLSC 348. Human Rights
PLSC 360. Political Behavior
PLSC 366. U.S. Labor Politics, Policy and Law
PLSC 369. American Electoral Behavior
PLSC 373. American Political Thought
PLSC 375. International Law
PLSC 380. Topics in World Politics (of any letter/title)
PLSC 382. Topics in American Politics (of any letter/title)
PLSC 384. Topics in Policy Analysis (of any letter/title)
PLSC 387. Topics in Political Theory (of any letter/title)
PLSC 389. Topics in Comparative Politics (of any letter/title)
PLSC 420. Judicial Politics and Behavior
PLSC 421. American Politics: Congress
PLSC 424. American Political Process
PLSC 425. The American Congress, Structure and Power
PLSC 426. Voting Rights
PLSC 474. Voting Behavior
PLSC 481. Seminar in American Politics (of any letter/title)
### C. History (minimum of two required):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>HIST 103</td>
<td>Foundations of America (of any letter/title)</td>
</tr>
<tr>
<td>HIST 104</td>
<td>Modern American Civilization</td>
</tr>
<tr>
<td>HIST 264</td>
<td>Immigration and Ethnicity in the U.S.</td>
</tr>
<tr>
<td>HIST 266</td>
<td>U.S. Women since 1874</td>
</tr>
<tr>
<td>HIST 267A</td>
<td>Asian American History</td>
</tr>
<tr>
<td>HIST 268</td>
<td>Native American Culture and History</td>
</tr>
<tr>
<td>HIST 280H</td>
<td>African American History since 1825</td>
</tr>
<tr>
<td>HIST 300</td>
<td>Ancient Law and Society</td>
</tr>
<tr>
<td>HIST 310</td>
<td>Revolutionary and Napoleonic Europe</td>
</tr>
<tr>
<td>HIST 333</td>
<td>Human Rights since 1945</td>
</tr>
<tr>
<td>HIST 336</td>
<td>Slavery, Nature, Empire</td>
</tr>
<tr>
<td>HIST 345</td>
<td>The Holocaust</td>
</tr>
<tr>
<td>HIST 356</td>
<td>American Legal History</td>
</tr>
<tr>
<td>HIST 357</td>
<td>U.S. Diplomatic History</td>
</tr>
<tr>
<td>HIST 362</td>
<td>U.S. in the 1960s</td>
</tr>
<tr>
<td>HIST 365</td>
<td>U.S. in the Depression &amp; WWII</td>
</tr>
<tr>
<td>HIST 380</td>
<td>Special Topics in U.S. History (of any letter/title)</td>
</tr>
<tr>
<td>HIST 430</td>
<td>War Crimes Trials and Justice</td>
</tr>
<tr>
<td>HIST 432</td>
<td>Latin America and the U.S.</td>
</tr>
<tr>
<td>HIST 480</td>
<td>Senior Seminar in U.S. History (of any letter/title)</td>
</tr>
<tr>
<td>HIST 486</td>
<td>Senior Seminar in World or Comparative History (of any letter/title)</td>
</tr>
</tbody>
</table>

### D. Cognate Courses (all are optional):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 364</td>
<td>Political Anthropology</td>
</tr>
<tr>
<td>BE 304</td>
<td>Intellectual Property Law</td>
</tr>
<tr>
<td>CLAS 381A</td>
<td>Persuasion in Ancient Greece</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Poverty and Discrimination</td>
</tr>
<tr>
<td>ECON 160</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>ECON 162</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 331</td>
<td>Environmental Economics (ECON majors/minors only)</td>
</tr>
<tr>
<td>ECON 343</td>
<td>Intro to Labor Economics and IR (ECON majors/minors only)</td>
</tr>
<tr>
<td>ECON 350</td>
<td>U.S. Financial System: Markets and Institutions (ECON majors/minors only)</td>
</tr>
<tr>
<td>ECON 426</td>
<td>History of Economic Thought (ECON majors/minors only)</td>
</tr>
<tr>
<td>ECON 445</td>
<td>Public Expenditure and Public Choice (ECON majors/minors only)</td>
</tr>
<tr>
<td>ECON 461</td>
<td>Game Theory (ECON majors/minors only)</td>
</tr>
<tr>
<td>ENVI 239</td>
<td>Environmental Planning Policy</td>
</tr>
<tr>
<td>ENVI 312</td>
<td>Environmental Law and Policy</td>
</tr>
<tr>
<td>ENVI 415</td>
<td>Environmental Planning</td>
</tr>
<tr>
<td>ENVI 481</td>
<td>Ethics and Policy Seminar (letter may vary)</td>
</tr>
<tr>
<td>PPL 487</td>
<td>Topics in Philosophy, Politics and Law (of any letter/title)</td>
</tr>
<tr>
<td>SOC 240</td>
<td>Women of Color in the U.S.</td>
</tr>
<tr>
<td>SOC 251</td>
<td>Deviant Behavior</td>
</tr>
<tr>
<td>SOC 260</td>
<td>Social Problems in the United States</td>
</tr>
<tr>
<td>SOC 340</td>
<td>Women and Criminal Justice</td>
</tr>
<tr>
<td>SOC 370</td>
<td>Social Inequality</td>
</tr>
<tr>
<td>SOC 374</td>
<td>Oil Politics</td>
</tr>
<tr>
<td>SOC 378</td>
<td>Law and Society</td>
</tr>
</tbody>
</table>

**Notes:**

1. Students must earn a grade of C– or higher in courses fulfilling the major and courses cannot be taken Pass/Fail.

2. Substitution of courses (except courses from other universities automatically transferred into the PPL major) must be approved by the student's PPL advisor. Substitutions of Binghamton University courses not currently included in the major will be granted only in unusual circumstances, and are considered only in the senior year. Courses taken at other universities, similar to courses in the PPL major, may be approved for inclusion in the major by the student's PPL advisor.


4. Students interested in becoming a PPL major should see the philosophy department secretary for a PPL welcome packet and instructions to meet with a PPL advisor.

**Honors in Philosophy, Politics, and Law**

Honors may be pursued through the unique Pell Honors Program, led each year by a faculty in the philosophy department. The Pell program is supported by the generous contributions of Owen Pell ’80, who shares the vision...
that students in the liberal arts should have opportunities to pursue intensive writing and research with individual faculty. The Program includes the development of an independent research paper, participation in a juried conference, and the possibility of publication in a book series through an academic press. Honors may also be pursued through independent study with a faculty member in any PPL-related discipline. Your advisor will have details about requirements.

Five-Year Graduate Program in Philosophy, Politics, and Law

PPL offers a combined BA/MA program with the department of philosophy. This unique program allows a small number of ambitious students to graduate with a BA degree in PPL and an MA degree in philosophy in five years. Students in the program enroll in graduate courses in philosophy and work closely with the philosophy faculty and other doctoral graduate students. The program is especially suited for PPL majors who excel in their philosophy courses and wish to continue further graduate training in philosophy prior to pursuing law school, other graduate training, or other career options. Applications are competitive. Contact an advisor for additional information.

Institute for Philosophy, Politics, and Law

PPL hosts various activities through its PPL Institute, including a Visiting Scholars program, a PPL Lecture Series, informational sessions about law school and other professions, and regular lunches between PPL students and faculty. The institute hosts most of the non-curricular activities of the PPL program and is made possible through the generous contributions of PPL alumni.

Physics, Applied Physics and Astronomy

Undergraduate Programs

Students in the physics concentration receive training in most basic areas of physics and mathematics. The concentration provides a firm foundation in the principles of physics of contemporary interest. A student with such training is prepared to go on to graduate school for additional specialization in physics, engineering or other applied science fields or professions. The undergraduate degree in physics provides an adequate basis for teaching physics in high schools and research and development work in industry.

Although it is preferable for the potential physics major to start physics courses as a freshman, the structure of the physics curriculum is such that the Harpur College student is able to satisfy the requirements for the BA degree in physics in two years of study following the completion of general physics and a year of calculus. If the student wishes to complete the requirements for the BS degree, an earlier start than the sophomore year is highly advisable.

The department offers a 3-2 combined physics-engineering program in which students spend three years at Harpur College and two years at an engineering school. Such students receive the BA in physics and the bachelor’s degree in engineering after five years from either Thomas J. Watson School of Engineering and Applied Science or a school other than Binghamton University.

The department also offers a 3-2 combined physics-materials science program in which students receive the BS in physics and the MS degree in materials science and engineering.

In cooperation with the Computer Science Department of Watson School, the department has established a five-year program leading to the BS in physics and the BS in computer science.

Students not planning to specialize in physics may find our astronomy courses to be of interest. Taken together, ASTR 114 and 115 satisfy the General Education Laboratory Science requirement. PHYS 115 - Great Ideas of Physics is also for students not planning to specialize in physics and satisfies the General Education Laboratory
Science requirement. General Physics, Sophomore Laboratory, and various other courses are intended both for the specialist and non-specialist. These courses also satisfy the General Education laboratory science requirement.

No courses taken to satisfy the requirements for the major in physics may be taken with the Pass/Fail option when letter grades are available for the courses. Credit by examination is not granted for courses taught by the department apart from the Advanced Placement procedure.

The student is expected to develop computer skills and apply such skills to the solving of problems encountered within the framework of courses required for the degree. The student is also expected to satisfy the Harpur College requirements as well as the General Education requirements.

Course Prerequisites

The Physics Department views the prerequisites listed for physics courses as essential. If a student does not have the prerequisites, or the equivalent, he or she may take a course only after successful petition to the departmental undergraduate committee.

Also note that the following courses are required courses for the Physics major: MATH 224 and PHYS 121. If students do not place into MATH 224, then MATH 223 and, if needed, MATH 108 are also required for completion of the major. If students do not place into PHYS 121, then MATH 108 is also required for completion of the major.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Physics BA Degree

Students planning to major in physics with a BA degree should take PHYS 121 and 122 (or 131 and 132) and should complete MATH 224/225, 222 or 226/227 and 323 as quickly as possible. Mathematics should be continued at least through ordinary (MATH 324 or MATH 371) and partial differential equations (MATH 471). In addition, a major in physics normally requires PHYS 227, 323, 327, 331, 332, 341 and 421 (a total of nine full courses in physics).

Prospective physics majors should discuss their programs with a member of the department at their earliest convenience.

Four of the six required 300- and 400-level PHYS courses must be taken in residence at Binghamton University. These courses do not include General Education requirements.

BS Degrees
The department also offers a Bachelor of Science degree in physics for students who want recognition of increased concentration in physics. The BS degree in physics requires the same nine physics courses and five math courses as with the BA degree, plus an additional three full courses (PHYS 411, PHYS 422 and PHYS 427/428 (or PHYS 429).

The following is a typical sequence of courses for students who major in physics beginning in their freshman year, with suggested electives shown in parentheses, excluding the General Education requirements.

Six of the nine required 300- and 400-level PHYS courses must be taken in residence at Binghamton University.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 131 or 121</td>
<td>PHYS 132 or 122</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 227**</td>
<td>PHYS 331</td>
</tr>
<tr>
<td>PHYS 323</td>
<td>MATH 323</td>
</tr>
<tr>
<td>MATH 324 OR 371</td>
<td></td>
</tr>
<tr>
<td><strong>Junior</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 332</td>
<td>PHYS 327**</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>PHYS 341</td>
</tr>
<tr>
<td></td>
<td>MATH 471</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 411*</td>
<td>PHYS 422*</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>PHYS 427/428, or 429***</td>
</tr>
<tr>
<td>(PHYS 463)</td>
<td>(PHYS 474)</td>
</tr>
<tr>
<td></td>
<td>(PHYS 472)</td>
</tr>
</tbody>
</table>

*Required for BS, not required for BA.

**Offered fall and spring.

**Applied Physics Emphasis**

For the student planning a career in applied physics, engineering physics, geophysics, materials science or other areas of engineering, the department offers the Bachelor of Science degree in physics with an emphasis in applied
Appropriate choices from among the elective courses that may be used to complete this degree will provide preparation for students intending to pursue a career in one of these applied areas. For further details and advice, the student is urged to consult the departmental undergraduate director.

The program of study for this degree represents a modification of the traditional BS in physics. The requirements to earn the BS-applied physics degree are the same as the BS-physics degree plus an additional 12 credits taken from the following list of required elective courses: PHYS 422, 463, 472; PHYS/GEOL 450, PHYS/GEOL 451, GEOL 453; ME 311, ME 361; CHEM 444, CHEM 481.

The following is a typical sequence of courses for students who major in applied physics, beginning in their freshman year.

Six and 1/2 of the required 10 and 1/2 300- and 400-level PHYS courses must be taken in residence at Binghamton University.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 131 or 121</td>
<td>PHYS 132 or 122</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 323</td>
<td>PHYS 331</td>
</tr>
<tr>
<td>PHYS 227*</td>
<td>MATH 323</td>
</tr>
<tr>
<td>MATH 324 or 371</td>
<td></td>
</tr>
<tr>
<td><strong>Junior</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 332</td>
<td>PHYS 341</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>PHYS 327*</td>
</tr>
<tr>
<td>required elective**</td>
<td>MATH 471</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>PHYS 427/428 or 429*</td>
</tr>
<tr>
<td>PHYS 411</td>
<td>required elective**</td>
</tr>
<tr>
<td>required elective**</td>
<td></td>
</tr>
</tbody>
</table>

*Offered fall and spring.
**Select a required elective from list of elective courses.**

**Engineering Physics Emphasis**

For the student wishing to pursue graduate studies in engineering, the department offers the Bachelor of Science degree in physics with an emphasis in engineering physics.

Appropriate choices from among the elective courses that can be used to complete this degree will provide preparation for students intending to pursue a career in engineering.

The program of study for this degree represents a modification of the traditional BS in physics. The requirements of the engineering physics degree are identical to those of the physics BS degree plus 12 credits taken from the following list of required elective courses: ME 351, ME 421 and 441; EECE 301, EECE 315 and EECE 361.

The ME courses are preparation for a graduate ME program. The EECE courses prepare the student for entrance into a graduate EE program.

For further details and advice, the student is urged to consult the departmental undergraduate director.

**Mathematical Physics Emphasis**

For students interested in pursuing graduate education or careers in mathematical physics, or other theoretically oriented fields of physical science, the department offers an emphasis in mathematical physics. Students interested in this degree should contact the undergraduate director in the Physics Department as soon as possible.

The 18 courses required for this degree are: PHYS 131 and 132 (or 121 and 122), 323, 331, 332, 341, 411, 421 and 422; MATH 224/225, 222 or 226/227, 304, 323, 330, 371, 471 and 478; and one additional PHYS course at the 400 level. One of these courses may be substituted by a MATH course numbered 375 or above, with the approval of the Physics Department undergraduate director.

Students are encouraged to take laboratory courses in physics, as these courses may broaden their opportunities in graduate schools. Six of the nine 300- and 400-level PHYS courses required for the completion of the degree must be taken in residence at Binghamton University.

The following is a typical sequence of courses for students pursuing the BS in mathematical physics, beginning in the freshman year.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 131 or 121</td>
<td>PHYS 132 or 122</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 323</td>
<td>PHYS 331</td>
</tr>
<tr>
<td>MATH 304</td>
<td>MATH 323</td>
</tr>
</tbody>
</table>
BA or BS Degree Starting in the Sophomore Year

Prior to the junior year, the student must have taken PHYS 121 and 122 (or 131 and 132), MATH 323 and, if possible, MATH 371. Candidates for the BS degree should have also completed CHEM 111 (or CHEM 107 and 108).

The programs for the junior and senior years are identical to those prescribed in the next section for transfer students from two-year colleges.

BA or BS Degree after the Two-Year College Degree

The department has structured its curriculum so that the graduate of a two-year college may complete a BA or BS degree program in two additional years. It is assumed that such students have completed the equivalent of two semesters of general physics and three semesters of calculus by the time of enrollment. If they have not, an additional semester or two may be necessary. A general physics course with a weekly three-hour laboratory normally satisfies the equivalent of PHYS 121, PHYS 122 and PHYS 227, although the student must still complete the total required number of physics courses for the degree. If the student is working for the BS degree, it is also important that as many general education requirements as possible be fulfilled at the two-year school.

The following is a typical sequence of courses for those students who major in physics after transferring from a two-year college.

For the BA degree:

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Junior</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 227*</td>
<td>PHYS 341</td>
</tr>
<tr>
<td>PHYS 323</td>
<td>PHYS 331</td>
</tr>
<tr>
<td>MATH 324 or 371</td>
<td></td>
</tr>
</tbody>
</table>
### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 332</td>
<td>PHYS 37</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>MATH 47</td>
</tr>
</tbody>
</table>

*Elective if general physics with weekly laboratory is transferred.

### For the BS degree:

#### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 227*</td>
<td>PHYS 34</td>
</tr>
<tr>
<td>PHYS 323</td>
<td>PHYS 33</td>
</tr>
<tr>
<td>MATH 324 or 371</td>
<td>PHYS 32</td>
</tr>
</tbody>
</table>

#### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 332</td>
<td>PHYS 42</td>
</tr>
<tr>
<td>PHYS 411</td>
<td>PHYS 42**</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>PHYS 42**</td>
</tr>
<tr>
<td></td>
<td>PHYS 407***</td>
</tr>
<tr>
<td></td>
<td>MATH 47</td>
</tr>
</tbody>
</table>

*Elective if general physics with weekly laboratory is transferred.

**Required for applied physics degree, PHYS 429 may be taken in place of the combination of PHYS 427 and PHYS 428.

***Required for traditional BS.

It is advantageous for the BS candidate to be more advanced in mathematical preparation than is shown here.

The transfer student from a two-year college interested in the BS-mathematical physics degree must have completed at least General Physics (PHYS 121, 122 or equivalent), and calculus through ordinary differential equations (or the equivalent of MATH 371) prior to enrollment in Harpur College.

### 3-2 Program in Physics and Engineering

The combined engineering program is an educational affiliation between Binghamton and several engineering schools. The 3-2 program enables a student to devote three years to the study of liberal arts and sciences at Binghamton before transferring to an engineering school for two years of engineering education. This program leads to a BA in physics from Binghamton and a bachelor’s degree from the engineering school. The range of engineering specializations available is large, so that preparation for almost any engineering career is available in at least one of the engineering schools. In the past, arrangements have been made with SUNY at Buffalo College of Engineering, Columbia University School of Engineering and Applied Sciences, Rochester Institute of Technology College of
Engineering, Clarkson University School of Engineering, SUNY at Stony Brook College of Engineering, University of Rochester College of Engineering and Applied Science, and Watson School at Binghamton. Arrangements with other engineering schools are possible and encouraged.

The completion of two sets of requirements in the short period of five years requires careful planning of courses even in the freshman year. Not taking certain crucial courses in the first year may make it difficult to undertake the program in the 3-2 pattern. Though entrance to any given engineering school cannot be guaranteed, our experience has been that careful planning and good academic performance on the part of the student are essential. The student is strongly encouraged to make contact with the chosen engineering school as early as possible so that a careful selection of courses may be made.

Normally, students should take MATH 224/225 and 222 or 226/227, and PHYS 121 and 122, or PHYS 131 and 132, in the first year. The requirements for the BA in physics in the 3-2 combined engineering program are the same as for the normal BA in physics. These include PHYS 131 and 132 (or PHYS 121 and 122), PHYS 227, PHYS 323, PHYS 327, PHYS 331, PHYS 332, PHYS 341 and PHYS 421. In addition, the following mathematics courses are required: MATH 224/225, MATH 222 or 226/227, MATH 323, MATH 371 and MATH 471. It is expected that the student will also meet the general education requirements and other Harpur College requirements. Other elective courses that may be appropriate include CHEM 111, Engineering Graphics and Statics. Depending on the chosen engineering field and school, still other courses may have to be considered.

The following is a typical sequence of courses when the chosen engineering school is not Watson School (commonly selected electives are shown in parentheses):

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td></td>
</tr>
<tr>
<td>PHYS 131</td>
<td>PHYS 132</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
</tr>
<tr>
<td>(CHEM 111)</td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td></td>
</tr>
<tr>
<td>PHYS 227</td>
<td>PHYS 331</td>
</tr>
<tr>
<td>PHYS 323</td>
<td>MATH 323</td>
</tr>
<tr>
<td>MATH 324 or 371</td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>PHYS 327</td>
</tr>
<tr>
<td>PHYS 332</td>
<td>PHYS 341</td>
</tr>
<tr>
<td></td>
<td>MATH 471</td>
</tr>
</tbody>
</table>

When the chosen engineering school is the University’s Watson School, the suggested course sequence is

444/669
somewhat different. In this case, the student takes some Harpur College humanities and social science courses during the fourth and fifth years. The following is a sample course program. The blanks below indicate Watson School courses to be chosen with the help of a Watson School academic advisor.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td></td>
</tr>
<tr>
<td>PHYS 131</td>
<td>MATH 222 or 226/227</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>PHYS 132</td>
</tr>
<tr>
<td></td>
<td>WTSN -</td>
</tr>
<tr>
<td></td>
<td>WTSN -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 227</td>
<td>MATH 323</td>
</tr>
<tr>
<td>PHYS 323</td>
<td>CHEM 111</td>
</tr>
<tr>
<td>MATH 324 or 371</td>
<td>PHYS 331</td>
</tr>
<tr>
<td></td>
<td>WTSN -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 421</td>
<td>PHYS 327</td>
</tr>
<tr>
<td>PHYS 332</td>
<td>PHYS 341</td>
</tr>
<tr>
<td>WTSN -</td>
<td>MATH 471</td>
</tr>
</tbody>
</table>

For further information about this program, contact the director of undergraduate programs in the Department of Physics, Applied Physics and Astronomy.

**Combined Degree Programs in Science: BA/MAT**

The special combined 3/2 BA/MAT (biology, chemistry, earth science and physics) and 3/2 BS (earth science only)/MAT programs accommodate the needs of a select group of Harpur College students who wish to efficiently combine an undergraduate science degree with a graduate-level teacher certification program. Students should declare their interest in this degree as soon as possible to ensure proper undergraduate course selection. This combined program includes the entire current Harpur science BA (or BS) degree program and the current NYSED-registered MAT (biology, chemistry, earth science and physics programs). The combination results from the inclusion of 16 credits of graduate education coursework that are counted in the undergraduate degree requirements and GPA, and also considered in the awarding of the MAT (courses occur during the student's fourth year of study). The combined program saves the student one semester of time relative to the separate, sequentially taken BA/BS and MAT degrees. Students may apply for the program early in their junior year.

What follows are sample course sequences from each of these combined degree programs.
## Physics Adolescence Education

### Grades 7-12 (126 BA and 40 MAT credits)

#### Sample Course Sequence Table

<table>
<thead>
<tr>
<th>Course</th>
<th>credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1  PHYS 121/131.</td>
<td>4</td>
</tr>
<tr>
<td>MATH 224/225.</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>S2  PHYS 122/132.</td>
<td>4</td>
</tr>
<tr>
<td>MATH 222 or 226/227.</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>S3  PHYS 227.</td>
<td>4</td>
</tr>
<tr>
<td>MATH 323.</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 323.</td>
<td>4</td>
</tr>
<tr>
<td>S4  PHYS 331.</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>MATH 324.</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>S5  PHYS 332.</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>S6  PHYS 327.</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 341.</td>
<td>4</td>
</tr>
<tr>
<td>MATH 471.</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>S7  PHYS 421.</td>
<td>4</td>
</tr>
<tr>
<td>SEC 500.</td>
<td>4</td>
</tr>
<tr>
<td>SEC 501.</td>
<td>2</td>
</tr>
<tr>
<td>SEC 502.</td>
<td>2</td>
</tr>
<tr>
<td>LTRC 519.</td>
<td>4</td>
</tr>
<tr>
<td>S8  Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>Gen Ed/Harpur Req</td>
<td>4</td>
</tr>
<tr>
<td>SEC 593D.</td>
<td>4</td>
</tr>
<tr>
<td>Undergrad elective</td>
<td>4</td>
</tr>
<tr>
<td>S9  SEC 590/591.</td>
<td>8</td>
</tr>
<tr>
<td>SEC 594D.</td>
<td>4</td>
</tr>
<tr>
<td>S10 S10 PHYS 5XX.</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 5XX.</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 5XX.</td>
<td>4</td>
</tr>
</tbody>
</table>

(Up to here fulfills requirements for graduation with the BA in physics, counting 16 credits of courses that are counted in the undergraduate degree requirements and GPA, and also considered in the awarding of the MAT)
For more information about combined-degree programs in science, contact Dr. Andy Cavagnetto at acavagne@binghamton.edu or 777-6793. Additional Information is also available at: http://www.binghamton.edu/grad-school/prospective-students/academic-programs/accelerated-degrees/index.html.

BS (Physics) and BS (Computer Science) Degree Five-Year Program

The department, in cooperation with the Department of Computer Science in Watson School, has established a five-year program leading to the BS in physics and the BS in computer science. Graduates of this program are prepared to pursue careers or graduate studies in physics or computer science.

Due to the extensive depth of the program, interested students are urged to contact the undergraduate program director in the Physics Department before their initial registration.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year I</strong></td>
<td></td>
</tr>
<tr>
<td>CS 140</td>
<td>CS 210</td>
</tr>
<tr>
<td>MATH 224/225</td>
<td>MATH 222 or 226/227</td>
</tr>
<tr>
<td>PHYS 121 or 131</td>
<td>PHYS 122 or 132</td>
</tr>
<tr>
<td>CS 101 (1 credit P/F)</td>
<td></td>
</tr>
</tbody>
</table>

| **Year II**           |                   |
| CS 220                | CS 240            |
| PHYS 323              | MATH 314          |
|                       | MATH 323          |
|                       | CS 325            |

| **Year III**          |                   |
| CS 333                | CS 350            |
| CHEM 111              | PHYS 331          |
| CS 373                | MATH 471          |
| MATH 324 or 371       |                   |

| **Year IV**           |                   |
| CS 471                | CS elective        |
| MATH 341              | PHYS 327          |
Physics Minor

Requirements for the minor in physics are as follows: (1) PHYS 131 and 132 or (PHYS 121 and 122) and PHYS 323. (2) Any other three 300- or 400-level courses that must be taken for a letter grade. PHYS 227 may be substituted for one of these courses. The 300- and 400-level courses must be taken in residence at Binghamton University.

Additional Opportunities for the Physics Major

Honors in Physics

An upper-class physics major who has demonstrated superior academic ability may earn Honors in Physics in one of two ways:

Research Work: With departmental approval, the student enrolls in PHYS 498 - Physics Honors, for a full- or half-course load. The student then works closely with a faculty member on a research project agreed upon by the faculty member, for a total of at least four credit hours. The results of this project are presented in a senior thesis defended by the student at a departmental seminar. A successful defense demonstrating a superior research competence and mastery of the subject earns the recognition of distinguished independent work in physics. Further details are available from the department.

Coursework: The student successfully completes two graduate courses: PHYS 521 - Analytical Dynamics, and PHYS 522 - Electrodynamics I, both with a grade of B or better. In addition, the student completes either PHYS 524 - Quantum Mechanics I, with a grade of B or better, or successfully completes a “capstone” project based on a course already taken. The project is a 15- to 20-page paper prepared under a faculty member’s supervision while registered for a one-credit independent study. Further details are available from the department.

Sigma Pi Sigma

Sigma Pi Sigma, a chapter of the National Physics Honor Society, has existed in the department for many decades. The physics major who has achieved a grade-point average in physics of 3.2 or higher in addition to an overall grade-point average of 3.0 or higher are invited to join this prestigious society in their junior or senior year. All students who accept the invitation to join are inducted into Sigma Pi Sigma at a ceremony in the spring.

George E. Moore Award for Academic Achievement in Physics
This award is given annually to an outstanding senior physics major. This award was established to honor the late George E. Moore, a professor in the department for a number of years, by his wife. The award is based on academic achievement, research work and an overall dedication to physics.

**George E. Moore Scholarship Endowment**

Established in 1986, the endowment awards scholarships to freshman students pursuing an undergraduate degree in physics at Binghamton University. The award selection is based on the student's prior academic achievements, as reflected in the student's high school transcripts, Scholastic Aptitude Test scores and other evidences of scholastic merit. The scholarship is renewed every year based on satisfactory progress towards a degree in physics.

**Robert J. Penfield Award for Academic Promise in Physics**

The Robert J. Penfield Award is given each spring to a Physics Junior who has shown high interest and outstanding academic promise in Physics. Robert Penfield earned his PhD at Syracuse University in 1952. He dedicated the next 40 years to teaching and advising undergraduate students at Binghamton University. When he joined the faculty, we were known as *Harpur College* which was located in Endicott. When he retired, we were *Binghamton University* here in Vestal.

**Political Science**

**Undergraduate Programs**

Political science studies and evaluates theories and practices of politics and government at various levels — domestic, foreign, and international. Depending on the area studied, particular emphasis may be given to the role and performance of institutions and political systems, to the political behavior of individuals and groups, or to questions of a philosophical nature.

Courses in political science are structured on three levels: introductory (numbered below 200); upper-level intermediate (300-399); and advanced (400-499). Unless otherwise specified, courses above 400 may be counted toward the department’s seminar requirements. There are four introductory courses that assume no prior background in the discipline: (1) PLSC 111 (Introduction to American Politics), (2) PLSC 113 (Introduction to Comparative Politics), (3) PLSC 115 (Introduction to Ideas and Politics) and (4) PLSC 117 (Introduction to World Politics). These serve as prerequisites for more advanced courses but may not be required of students who have equivalent prior coursework in political science or related disciplines, including advanced placement credit in American government or comparative politics.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the *Bulletin*. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA
Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Political Science Major**

Requirements for the BA in political science include 40 credits in political science including not more than three introductory courses (PLSC 111, 113, 115, 117), not more than two 4-credit independent study courses, with at least 24 credits at the 300- or 400-level, and at least two 400-level seminars to be taken in residence at Binghamton University. Students must take at least one four-credit course in three of four subfields: American politics, political theory, comparative politics, and international relations. Courses acceptable for meeting the distribution requirements are identified as American, Theory, Comparative or International in the course descriptions that follow. With the approval of the student’s advisor, appropriate alternative courses may be used to satisfy the distribution requirements.

The Political Science Department views the grade of D as passing but unsatisfactory. Courses passed with a grade of D do not fulfill requirements for the major or the related field requirement. Courses taken Pass/Fail do not count toward the major or fulfill the related field requirement.

The major also requires complementary courses in other social sciences, the purpose of which is to expose students to a broad cross-section of social science research. Majors must complete four courses in at least three other social science departments (Anthropology, Economics, Geography, History, or Sociology). Students should select those courses based on their curricular interests.

All students must take at least six political science courses, including two 400-level seminars, in residence at Binghamton. Transfer course grades must be C– or better to count toward the major. No transfer course counting toward the major may have been taken Pass/Fail.

Students of senior standing with appropriate political science background are allowed to take graduate-level courses with the instructor’s consent. Successful completion of such courses is counted toward the seminar requirement of the political science major. Majors are strongly encouraged to complete at least one substantial paper, based on their own investigation of a problem in an area of the political science discipline, either as part of a regular course, through independent study, or as an honors thesis (PLSC 498 and 499).

Prior to pre-registration each semester, a political science major should consult with an advisor.

**Honors Program**

Superior students majoring in political science are considered for admission to the honors program upon the successful completion of five semesters or 80 credit hours (including at least 24 in political science). The program consists of a six-credit research project (PLSC 498 with a grade of B+ or better) in the first semester of the senior year, one graduate seminar in either the fall or spring semester, a six-credit thesis project (PLSC 499), and a successful defense of an honors thesis in the spring semester. Students should consult with the departmental honors director or the director of undergraduate studies for full information.

**Independent Study and Internships**

Independent study and internship courses are open only to juniors and seniors and, except for PLSC 394, require a substantial paper incorporating advanced political analysis. Students with internships should have junior standing, at least a 3.0 GPA, and taken at least three PLSC courses appropriate for the internship in question. No credit is given for internships as such; students must do specific academic work to earn internship credit. In addition, students contemplating internships or independent study projects must secure prior approval for the research and writing they plan to undertake. For internship requirements and eligibility, consult the guidelines available from the department
Psychology

Undergraduate Programs

The undergraduate psychology major (BA) is designed to introduce students to the understanding of behavior, cognition, emotion and their underlying processes. Emphasis is placed on the areas represented by our present department faculty: Cognitive and Brain Sciences, Behavioral Neuroscience, and Clinical Psychology. Psychology is a science; therefore, the program emphasizes an empirical methodological approach to understanding behavior, cognition, emotion and other topics. The goal of the program is to provide students with the framework of the scientific method, which they can then use to evaluate any topic in psychology. Most courses are geared towards a general understanding of the diverse psychological phenomena and the methodology used to approach them. The program is especially designed for students interested in pursuing graduate studies in psychology and related areas or in other areas of specialization. The research orientation of the program is evident in the number and diversity of courses offered that include a scientific approach and in the efforts of faculty to involve undergraduate students in hands-on research.

Students interested in majoring in psychology are advised to seek information directly from the department office no later than their fourth semester, and preferably earlier. It is very important for transfer students intending to major in psychology to contact the psychology undergraduate academic advisor when they arrive on campus. In order to declare their major, students should go to the Psychology Department Advising Office (Science IV, room 230B). Meeting with the advisor to go over the major requirements is highly encouraged. For potential and declared psychology majors, several handouts are available online at http://www.binghamton.edu/psychology/undergraduate/, discussing topics such as careers in psychology, major requirements, honors in psychology, research opportunities, internships, and the Psi Chi (national honor society) chapter at Binghamton. Psychology majors receive a BA upon graduation.

The declaration of major states one's intent to complete the degree requirements for the major. In order to graduate with a degree in the major, students must complete PSYC 111 and 243 with a grade of C or better. Students may take PSYC 111 and 243 a maximum of two times. No course may be taken more than twice.

Harpur College Requirements

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

Psychology Major
The Psychology major program requires a minimum of 14 four-credit courses (or 15 four-credit courses, if the student chooses the substitution specified in the third bullet below), plus one laboratory. These courses must be distributed as follows:

- PSYC 111, 243 and 344;
- Three courses from PSYC 350, 351, 356, 358, 360, 362 and 385, and one corresponding laboratory course from PSYC 352, 355, 357, 359 and 363 (PSYC 344 is a required prerequisite for all labs);
- Two four-credit courses from PSYC 406, 470, 473, 475 and 476 (except that 8 credits of independent study, PSYC 397, 490, 493, 494 or 499 may be substituted for one of the aforementioned 400-level courses); alternatively 8 credits of internship, PSYC 395 or CDCI 385 psychology section only (with approval of undergraduate director to fulfill psychology credit) may also substitute for one of the aforementioned 400-level courses; a combination of research and internship credits is also acceptable as long as 8 in total are completed;

24 additional elective credit hours from the Division of Science and Mathematics, 16 of those credits must be taken outside the Psychology Department, and of those, at least eight taken from the same department. A list of math/science electives is available on the following website: https://www.binghamton.edu/psychology/files/psyc_maj_requirements_fall_2017.pdf. MATH 107, 108, 147 and 148 may not be taken to fulfill this requirement.

These requirements and handouts outlining them can also be found on our website: http://www.binghamton.edu/psychology/undergraduate/psychology-ba.html.

**Additional Stipulations**

- To fulfill the degree requirements students must complete both PSYC 111 and 243 with a grade of C or better (2007; 2015 Bulletin).
- MATH 147 or a similar math/statistics course from another institution is not acceptable as a substitute for PSYC 243 (2004 Bulletin). AP statistics is equivalent to MATH 147 and is therefore not accepted towards the Psychology major (2014 Bulletin).
- Minimum Grade: With the exception of PSYC 111 and 243 (noted above), all courses used to fulfill the requirements for the major, including courses in other departments, must be passed with a grade of C- or better.
- Pass/Fail: one of the four elective courses required outside of the department in the Division of Science and Mathematics may be taken Pass/Fail. Additionally, a Pass grade is accepted for eight credits of Independent Study (PSYC 397, 490 or 499) or internship (PSYC 395).
- Psychology courses may only be repeated one time in an attempt to meet the minimum grade requirements (C for PSYC 111 and PSYC 243; C- for all remaining courses). A grade of C or better in PSYC 243 is required to register in PSYC 344 Research Methods.
- No independent studies, supervised teaching or internships may count toward satisfaction of the four elective courses required outside of psychology in the Division of Science and Mathematics.
- Independent Study/Research: Eight credits of independent study (PSYC 397, 490, 493, 494 or 499) may substitute for one of the two 400-level courses OR 4 credits can count as one of the Psychology electives. Note: Harpur College policy states that no more than 16 credits of independent study can count toward graduation. Honors Research (PSYC 499) does not count toward this independent study limit. Note that PSYC 397 is only offered on a Pass/Fail basis.
Internship: eight credits of internship (PSYC 395 or CDCI 385, see advisor for specific psychology section) may substitute for one of the two 400-level courses or 4 credits can count as one of the psychology elective. Note: Harpur College policy states that no more than 8 credits of internship can count toward graduation and that PSYC 395 is only offered on a Pass/Fail basis.

- Students must take 16 credits of the major while in residence at Binghamton University.
- Except under very special circumstances, the minimum number of two 400-level courses in psychology must be taken at Binghamton, and students must take these upper-level courses under the instruction of two different faculty members in the Psychology Department.
- An AP psychology score greater than or equal to 4 is equivalent to PSYC 111. Other AP equivalencies can be found on the Harpur Advising Transfer webpage: https://binghamton.edu/harpur/advising/transfer-credit-evaluation/index.html.

The major requirements outlined above represent the minimum number of courses for a major in psychology. This minimum requirement provides considerable flexibility to develop a course of study that reflects an individual student’s interests, abilities and appropriate preparedness for post-graduate study, training or employment. Thus, students are strongly urged to plan their program of study at Harpur College in consultation with their advisors and the Fleishman Center for Career and Professional Development.

The Psychology Department has a strong research orientation. A solid experimental background at the undergraduate level forms an essential basis for further post-graduate study and training in all areas of psychology and related fields. Undergraduate students have the opportunity to become involved in ongoing research with faculty in the department by taking PSYC 397, 490, 493, 494 or 499 and are strongly encouraged to do so. Credit for approved internships can also be received via PSYC 395 or CDCI 385.

In addition, it is generally possible for a student to volunteer to serve as an undergraduate research assistant in a faculty member’s research program. This kind of experience, whether for academic credit or not, may be extremely valuable. Information on the specific types of research experience available through such independent study coursework is available on our website: http://www.binghamton.edu/psychology/undergraduate/get-involved/research.html. Prior to advance registration, students should contact directly the faculty member(s) in whose research program(s) they are interested. Such contact is essential and provides detailed information about prerequisites, requirements and availability of opportunities for the coming semester. PSYC 397, 490, 493, 494 and 499 may be taken only with the consent of the instructor.

Some laboratory work in psychology courses involves work with non-human animals. That fact is noted in the course description for PSYC 357 and PSYC 363. In addition, research work in PSYC 397, 490 and 499 may also involve work with animals, depending on the research projects of particular faculty members.

PSYC 111 is a prerequisite for all other courses in the department; it should be taken in the freshman year by potential majors (who should not take it Pass/Fail). Ordinarily it should be followed by PSYC 243 and by PSYC 344, which are pre- or co-requisites for most subsequent courses. Course-related experience in research typically is obtained by participation as a subject in psychological experiments or through alternate research arrangements in a number of psychology courses.

Only those courses or sections so designated in any given semester fulfill Harpur’s writing requirement; such designations change from semester to semester.
Psychology Major Track in Applied Behavior Analysis

The psychology major has a track in applied behavior analysis (ABA). It is designed to prepare students who have strong interest in children’s services for graduate school and/or careers in human services, specifically applied behavior analysis, clinical psychology, education, speech language pathology, research, and public policy. Concentration is in autism spectrum disorder, developmental disabilities, learning disabilities and assessment/measurement/evaluation. The course sequence of the track has been approved by the Behavior Analyst Certification Board.

Those individuals completing courses within the ABA Track who plan to obtain NY state certification (Certified Behavior Analyst Assistant) or licensure (Licensed Behavior Analyst) are informed that the licensed practice of ABA in New York State is restricted to Autism Spectrum Disorders and related disorders. If students wish to apply ABA to other diagnoses or presenting problems in New York State, additional training and licensure in another field of mental health or psychology is required.

Applied behavior analysis is a specific conceptual and methodological approach for assessment and intervention that historically derives primarily from research in psychology on basic learning processes. Applied behavior analysis refers to the precise analysis of behavior and learning patterns and the conditions that serve to elicit and maintain these behaviors and patterns.

In addition to drawing upon work in experimental psychology, applied behavior analysis incorporates research from the fields of clinical psychology, developmental psychology, educational psychology and neuropsychology. Further, applied behavior analysis must also be discussed within the context of the particular characteristics of the individual receiving services, as well as family, social and political contexts. The choice of setting, structure and goals is highly dependent upon the diagnostic issues surrounding the individual, whether that is autism, learning disability, etc. Strong emphasis is placed upon knowledge of basic and applied research, professional ethics and practical skills.

Admission to the track in applied behavior analysis is open only to students who are enrolled in or who have completed PSYC 355, Laboratory in Child Behavior. To declare this track, students must meet with an academic advisor in the Psychology Department. Students are expected to complete all requirements of the Psychology major as well as track specific requirements.

More information about the ABA track can be found here:
http://www.binghamton.edu/psychology/undergraduate/applied-behavior-analysis.html.

The psychology major ABA track program requires a minimum of 15 courses. These courses must be distributed as follows:

- **PSYC 111, 243 and 344 (PSYC 111, 243 and 344 may only be retaken once in order to meet the minimum requirements; C for PSYC 111 and PSYC 243 and C- for PSYC 344);**
- **PSYC 356, plus two courses from PSYC 350, 351, 358, 360, 362 and 385;**
- **PSYC 476 or PSYC 476R;**
- **PSYC 220 and 223;**
- **PSYC 355, 493 and 494 (by consent of instructor only); note that PSYC 493 and 494 are not counted toward Harpur’s 16-credit limit on independent study;**
- **12 additional elective credit hours from the Division of Science and Mathematics, to be taken outside the Psychology Department; of those, at least eight must be taken from the same department; a list of math/science electives is available on the following website:**
The following seven courses form the ABA track core:

- PSYC 220. Developmental Psychology
- PSYC 223. Behavior Disorders
- PSYC 356. Experimental Psychology (Learning)
- PSYC 476. ASD, Related Disorders, & ABA or PSYC 476R. ASD & Related Disorders
- PSYC 355. Laboratory in Child Behavior
- PSYC 493. Assessment, Intervention and Evaluation II
- PSYC 494. Assessment, Intervention and Evaluation III

In addition to the psychology major requirement that all courses be passed with a grade of C– or higher, all of the courses in the ABA track core must be passed with a grade of B or higher. Note that the additional stipulations listed under the heading “Psychology Major” also apply to the ABA track.

Practicum: Undergraduates enrolled in courses within the ABA Track will complete practicum experiences at the Institute for Child Development for PSYC 355, 493, and 494. These practicum experiences will include direct contact with children enrolled in the ICD’s programs on the Binghamton University campus.

Students in the ABA track may also take PSYC 490, which is additional supervised study for advanced students, once they have completed the ABA track. This course is considered independent study by Harpur and does count toward the 16-credit limit on independent study.

**Honors Program**

Outstanding students are urged to consider the honors program in psychology. To graduate with honors in psychology, known as distinguished independent work in psychology, the student must attain a 3.5 GPA for all courses attempted that count toward satisfaction of the psychology major requirements and for all psychology courses taken, as well as a 3.0 GPA for all courses necessary for graduation.

Students in the psychology honors program must propose a research project in conjunction with a faculty advisor who will sponsor the work. An honors committee composed of at least three Psychology Department faculty members, selected by the student in consultation with the advisor, evaluates the senior honors thesis proposal, the completed written thesis and the oral defense of the thesis.

Students doing honors thesis work must register for at least four credits of PSYC 499, preferably over two semesters (note that PSYC 499 credits will not be counted toward Harpur’s 16-credit limit on independent study). See our website for more information: [http://www.binghamton.edu/psychology/undergraduate/get-involved/honors.html](http://www.binghamton.edu/psychology/undergraduate/get-involved/honors.html).

**Certificate of Excellence**

Non-psychology majors or exceptional students who lack one or more of the psychology major requirements may petition the undergraduate program director(s) for acceptance into the psychology honors program. Alternatively these students can apply for the Certificate in Excellence in Research in Psychology. See our website for more information: [http://www.binghamton.edu/psychology/undergraduate/get-involved/honors.html](http://www.binghamton.edu/psychology/undergraduate/get-involved/honors.html).

**Religious Studies**

Religious Studies is a multidisciplinary field, which draws on the varied disciplines of the human, social, and biological sciences. Harpur College now offers a wide range of courses that allow students to learn about different...
religious traditions through these many methodologies. The minor incorporates these already existing courses into a focused curriculum. Religion continues to be a significant and influential social force. Studying multiple religious traditions from a variety of academic perspectives not only provides students with training in critical reading and interpretation skills, but also in the multicultural world in which we live. The minor in religious studies offers a wide range of courses in Art History, Africana Studies, Asian and Asian American Studies, Biology, Judaic Studies, Philosophy and other programs and departments. Students will be encouraged to draw on courses in multiple departments to gain experience in how different disciplines address the questions that arise in the study of religion. Faculty members from a variety of disciplines offer regular courses in religious studies. Each semester the religious studies minor publishes a list of courses relevant to the program.

**Requirements for Religious Studies Minor**

Students must take a minimum of 6 courses (24 credit hours), including 2 foundational (100-200 level) and 4 upper-level courses (300-400 level). Students must complete at least three of the 300-400 level courses at Binghamton University. The program recommends that RELG 101 be taken as a foundational course and that PHIL 315 be taken as an upper level course if possible. Courses must be drawn from at least two disciplines and include at least two religious traditions.

Students may count two courses from their major area of study toward the minor. At least one course must carry the General Education “C” designation. No courses which count toward the minor may be taken P/F. Students must complete at least three of the 300–400 level courses at Binghamton University. A grade of C or better is necessary for a course to count towards the Minor.

Traditions include but are not limited to: African religions, Asian religions, Islam, Judaism, Christianity.

Disciplines include but are not limited to: Religion (RELG), Anthropology, Biology, Comp Lit, EvoS, History, Philosophy, Psychology, Sociology.

**Romance Languages and Literatures**

**Undergraduate Programs**

The Romance Languages and Literatures Department offers baccalaureate degrees in French, Italian and Spanish. Each major program provides students with a strong foundation in language comprehension, speaking, reading, and writing, as well as an understanding of national cultures and literature. Each program also develops students’ analytical and creative skills. Department courses use a variety of approaches that incorporate written texts, film and music. Language tables and clubs supplement course offerings.

Students may major or minor in more than one language within the department. Generally, majors complete 10 courses in a language above the 115 introductory level, while minors complete six non-introductory courses. Romance Languages majors may also qualify for the International Studies Certificate, and they may use department courses as a foundation for Global Studies. Additional details on these options, as well as information on study-abroad programs and guidelines for membership in language honor societies, are available through a department advisor. Majors may seek scholarship support for study abroad, and they may also qualify for departmental tuition scholarships and awards.

All students, whether or not they intend to major, are invited to take courses in the Romance Languages department.

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:
- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Romance Languages and Literatures Major and Minor Guidelines**

The declaration of major or minor is completed in the Romance Languages and Literatures Departmental office, Glenn G. Bartle Library building, room LN 2216. Forms are available for this purpose.

Students who intend to pursue a major are encouraged to make their declarations as early as possible, preferably early in the sophomore year or before, whereupon they are assigned departmental advisors. Any deviations from program requirements must be discussed with and approved by the student's advisor or the minor's advisor. Minor declarations may be made in the department upon successful completion of 60 college credits.

Courses taken under the Pass/Fail grading option do not count toward the major or the minor.

A minimum grade of "C" is required for a course to be applied toward the major or minor and defines "satisfactory performance" in the course.

Of the 10 courses required of all majors, a minimum of three 400-level courses in French or Italian and five courses (minimum of three 300- and 400-level courses including at least two at the 400-level) in Spanish must be taken at Binghamton University.

For language course 491 (Teaching College French, Italian or Spanish), consent of the instructor or supervising coordinator is mandatory. This course is intended for students who are advanced in the study of the language, and it does not count toward the major or the minor.

**French Major**

Undergraduates may choose to major in French Language and Literature or in French Language and Linguistics. Each track consists of a total of ten (10) courses, as described below.

**Option 1. Language and Literature**

This major consists of:

(5) 200-, 300- and 400-level FREN courses

(2) 400-level FREN literature and culture courses

(2) 400-level FREN language and linguistics courses

(1) additional 400-level FREN course
NOTE: At least three (3) 400-level courses must be taken on campus. 400-level transfer credits, including study abroad, must be approved by the department.

**Option 2. Language and Linguistics**

This major consists of:

(3) 300- and 400-level FREN language courses

(1) LING 118

(3) 200-, 300- and 400-level LING courses

(3) 300- and 400-level FREN literature and culture courses

NOTE: At least three (3) 400-level courses must be taken on campus. 400-level transfer credits, including study abroad, must be approved by the department.

**Italian Major**

The major in Italian consists of 10 courses in language, culture, and literature, and accommodates students with no previous preparation in the language (Option 1) and those with some previous knowledge, typically beginning with ITAL 211 (Option 2).

Note: Students should consult placement guidelines provided by the department. Depending on prior exposure to the language, ITAL 111 and ITAL 115 may be required prerequisites for the major.

**Option 1**

Students who begin at 111 or 115 (if both are taken, they count as one), take nine (9) additional courses, four of which must be at the 400 level.

**Option 2**

Students who begin at 211 take 10 courses, four of which must be at the 400 level.

(Note: In both Option 1 and 2, a student may occasionally substitute 370, 375, 380 or 397 for a 400-level course.)

**Spanish Major**

Students majoring in Spanish will take of a total of ten (10) courses, beginning at the Intermediate Spanish level (SPAN 211) or above, according to the following requirements:

A. A minimum of six (6) courses must come from offerings at the 300- and 400-levels.

B. The following courses are required for the major: SPAN 250,* 251, 344, 360, and 370. Students with native fluency in written and oral Spanish may not take SPAN 250. They must discuss with their advisor the waiver option for this course.

C. At least five (5) courses must be taken on Binghamton University campus, including one (1) 300/level course and two (2) 400-level courses.
Courses offered through the Binghamton University sponsored program in Madrid/Malaga (Spain) are considered “on campus” courses. However, starting in the summer of 2018, students will not be able to take more than two (2) 400 level courses in this program.

D. A minimum grade of C is required for any course in Spanish applied toward the major and defines “satisfactory performance” in the course.

NOTES:

Prior to their enrollment in abroad courses or programs, students must consult a departmental adviser for course selection approval.

Students wishing to transfer courses from other institutions, especially at the 400-level, must obtain approval by a departmental advisor.

Students who have not taken college Spanish courses previously, should consult and follow placement guidelines provided by the department before enrolling in a course.

Honors Program

The department offers an honors program for junior and senior major students of demonstrated motivation and ability within the fields of language and literature. Generally, students complete, in one or two semesters, a project or thesis in the subject language and at the direction of a faculty advisor. For details, consult the department.

Minors

The minor in French, Italian, or Spanish consists of six courses beyond the level of 115; one must be in literature, two must be at the 300 or 400 level. Of the six courses, three must be taken at Binghamton University, including one at the 300 or 400 level. Courses taken as Pass/Fail do not count toward the minor.

Five-Year Program leading to a Bachelor of Arts in French, Italian, or Spanish and a Master of Public Administration

The five-year program leading to a BA in one of the romance languages of the department and the master of public administration (MPA) gives students a strong foreign language background combined with skills to work in the public or nonprofit sector. It requires the student to complete the regular language requirement (10 courses beyond the elementary level), round out the undergraduate curriculum with graduate courses in public administration, and then complete a 5th year, which consists exclusively of graduate courses in public administration. Application for conditional admission to the MPA program is made at the end of the junior year after consulting with the academic advisor. Because of the challenging nature of combined-degree programs, only highly qualified students are admitted. During the senior year, students apply formally to the Graduate School. All admissions to combined-degree programs are conditional due to the nature of the program; regular admission status as a graduate student is only granted after the senior/4th year is completed satisfactorily.

Five-Year Programs leading to Bachelor and Master of Arts Degrees in French, Italian, and Spanish

The five-year programs within the Romance Languages and Literatures Department allow students the opportunity to complete both an undergraduate degree (BA) and a graduate degree (MA) within five years. In this combined-degree program, commonly known as “3 + 2,” motivated, advanced-standing students begin graduate courses in their senior year, substitute these courses for Harpur College electives, and fulfill the requirements for a master of
arts in their fifth year of studies. Typically, students complete the standard 10-course sequence for a French, Italian, or Spanish major plus the standard nine graduate courses in that language/literature/culture. Early identification of the preferred field of study is essential, while main advantages for the student are a focused undergraduate/graduate curriculum and a well-defined linguistic and literary education within a shortened period of time.

Application for admission to the five-year program is made no later than the beginning of the junior year after consultation with the department’s graduate director. Application is made through the department and then, during the fourth/senior year, to the Graduate School. Admission is restricted to students with exceptional academic records, normally a cumulative GPA of 3.3 or higher. Students must submit an official transcript, the names of two professors who may serve as references, and a writing sample. The student will be evaluated based on the quality of the grades, references, writing sample and interview. Upon acceptance to the program, students will be advised that there are further requirements: successful completion of the BA in year four (including both the General Education and Harpur College requirements for graduation); a “B” or better in graduate coursework; core graduate course requirements; and satisfactory completion of the Comprehensive Examinations.

**Russian and East European Studies**

The cross-disciplinary concentration in Russian and East European Studies permits students to gain a broad, interdisciplinary knowledge of one of the most important regions of the world—Russia and Eastern Europe. Faculty members in Comparative Literature, History, Political Science and Russian offer a diverse selection of courses that allow students to gain a broad overview of the region’s history, culture and political environment; specialized courses then allow students to focus more attention on selected topics and problems.

Students can earn either a major or a minor in Russian studies with an area studies concentration.

Details on the minor and major in Russian and East European Studies can be found in the German and Russian Studies section of this University *Bulletin*.

Students are encouraged to spend a summer, semester or academic year in a study-abroad program and may, upon approval of the director, satisfy some requirements abroad.

**Sociology**

**Undergraduate Programs**

The sociology curriculum seeks to broaden and deepen students’ understanding of social organization and social change in the United States and throughout the world. To do this, it provides perspectives and methods that will be useful in examining real world social problems. By connecting immediately-experienced social troubles to broader social issues, students will be encouraged not just to understand the social world but to think about how they can change it for the better.

An undergraduate degree in sociology offers an excellent foundation for a critically-informed understanding of and engagement with contemporary social issues. It is an excellent preparation for graduate-level work leading to careers in journalism, law, politics, healthcare, social planning, social services and other professions that must take into account social organization and social relations.

A sociology major or minor combines readily with racial, ethnic, area and women’s studies, as well as with other interdisciplinary social sciences.

**Harpur College Requirements**
Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the Bulletin. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the Bulletin.

**Sociology Major**

The department requires 10 sociology courses* for the major. These must include the following three courses:

- SOC 100. Social Change: An Introduction to Sociology;
- SOC 200. Foundations of Social Theory;
- SOC 305. Social Research Methods.

Six of the required 10 sociology courses must be numbered 300 or above; one of these courses must be a General Education Composition (C) writing course. SOC 305 will count as one of this group of six 300-level courses.

Students may count only one of the following (for a maximum of 4 credit hours) toward the major requirements: SOC 395 (Internship), SOC 397 (Independent Study), SOC 491 (Teaching Practicum) or SOC 498 (Independent Research).

Sociology courses taken at other colleges or universities may, in some cases, substitute for sociology courses offered at Binghamton. But we require that at least five of the 10 required sociology courses, and four of the six required upper-division sociology courses, be taken at Binghamton. In addition, some courses offered by other departments at Binghamton are "cross-listed" as sociology courses and are accepted toward the sociology major or minor. All courses required for the major must be passed with at least a C-.

*Only one of the 10 sociology courses (but not to include SOC 100, 200 or 305) may be taken on a Pass/Fail basis.

**Honors Program**

To earn honors in sociology, a student majoring in sociology must earn a grade-point average of 3.5 or above in sociology, 3.3 or above overall and have completed four courses towards the sociology major. In the fall, the student must enroll in the senior Honors Seminar (SOC 471), and in the spring in SOC 499 (to write the honors research paper). In order for the student to receive honors, that paper must be judged to be of honors quality. SOC 499 constitutes an "11th course"; that is, a course in addition to the 10-course requirement to fulfill the sociology major.

Consult the director of undergraduate studies for more information.

**Sociology Minor**

Six courses* (24 credits) are required: one Sociology Research Methods course (SOC 305); two additional sociology courses numbered 300 or above; and three other sociology courses. We require that three of the six required
sociology courses, and two of the three required upper-division sociology courses, be taken at Binghamton. All courses required for the minor must be passed with at least a C-.

*Only one of the courses in the minor may be taken with a Pass/Fail grading option (excluding SOC 305).

5 Year BA/MA Degree

Sociology: Fast Track BA/MA

Exceptional sociology majors have the opportunity to accelerate their education and complete both the BA and MA in five years. This combined degree program is suitable for those students capable of undertaking graduate level work in their senior year. It offers the benefit of an MA degree, which can be particularly valuable for students planning careers in public service and the non-profit sector, as well as those who want to strengthen their skills and knowledge in preparation for PhD program applications. Students considering the program should consult the Director of Graduate Studies.

Course Sequence and Timetable

Prior to their senior year, students must complete 96 credits that meet all of the undergraduate requirements for Harpur College, including upper-level writing and general education courses. During the senior year, the student takes three graduate courses. Successful completion and defense of a BA Honors thesis (enrolled as SOC 499) in the senior year may be substituted for one of these courses. The graduate credits earned in the senior year are doubly counted as undergraduate elective credits and MA credits. After the 4th or senior year, when all undergraduate requirements are met, the student will be awarded a degree. After that point, the student enrolls in graduate level sociology courses. The student must complete each semester satisfactorily, with none of the undergraduate major courses below a grade of 3.0 and with a cumulative GPA of 3.0 for graduate coursework.

Application and Admissions

Students considering applying should first meet with the Director of Graduate Studies, and then apply for the combined program no later than the beginning of the second semester of their junior year. Admission decisions for the combined degree program will be made no later than spring of the junior year. Application and admissions processes are through the Sociology Department and subsequently the Graduate School. Applicants are expected to have a strong academic record: normally a cumulative GPA of 3.3 or better is required. Students must submit to the department:

- A completed application form, (available at [http://www.binghamton.edu/sociology/undergraduate-program/5_year_degree.html](http://www.binghamton.edu/sociology/undergraduate-program/5_year_degree.html));
- the names of two professors who may serve as references;
- an 800-1,000 word maximum personal statement addressing the reasons for pursuing the MA;
- and a writing sample.

Applicants should forward electronic copies of all documents to sociology@binghamton.edu.

The applicant will be evaluated based on the quality of the grades, references, personal statement, writing sample, and interview. Once approved by the department, the applicant will formally submit an application to the Graduate School.

Continuing Eligibility

Upon admission to the combined degree program, successful completion of benchmark requirements is necessary
for continued standing in the program. This includes:

- completion of the undergraduate degree in the fourth year of study,
- maintenance of a cumulative GPA of 3.3 or better,
- acceptance to the Graduate School by the beginning of the fifth year,
- and successful completion of coursework in the fall and spring semesters of the fifth year.

**Tuition and Financial Aid**

Students admitted to the combined degree program are formally considered undergraduates and pay undergraduate tuition rates for the first four years of the program until they graduate with the BA degree. During the fifth year in the combined degree program, students are formally considered graduate students and pay graduate student tuition rates.

**Theatre**

**Harpur College Requirements**

Harpur College students must complete the following requirements in addition to those listed for the major:

- 126 credits
- 90 liberal arts and sciences credits
- Minimum of 44 upper-level credits
- Completion of the Harpur College writing requirement (4 to 5 courses as described in the All-College Writing section of the Harpur College Undergraduate Information section of the *Bulletin*. Maximum of one C/J course and 2 W courses may be transferred).
- Minimum of 44 credits in residence in Harpur College
- 2.0 or higher GPA

Harpur College requirements are described in detail in the Requirements for Graduation section of the Harpur College Undergraduate Information section of the *Bulletin*.

**Theatre Major**

Students majoring in Theatre are required to take a minimum of 15 courses: two outside the department and 13 from the Theatre Department as described below:

- THEA 203. Technical Production
- Corequisite: THEP 213 or 214 or 215 or 216. Technical Production Lab (2 credits)
- THEA 306. Introduction to World Dramatic Literature
- THEA 304. History of the Theatre
- THEA 309. Performance and Modern Culture

and

- THEA 207. Actor Training I: Basic Processes
- or THEA 208. Acting I: (for advanced beginners)
or THEA 225. Dance Technique I: Ballet
or THEA 226. Dance Technique I: Jazz
or THEA 227. Dance Technique I: Modern
or THEA 228. Dance Technique I: Tap
or THEA 223 (2 Sections-2 credits each)

One upper-level design/technical course chosen from the following courses:

- THEA 246. Theatrical Make-Up Techniques

or THEA 340. Scene Design Workshop

or THEA 341. Stage Lighting

or THEA 342. Costume Design

or THEA 343. Costume Technology

or THEA 344. Sound Design

or THEA 389F. Rendering

or THEA 346. Scene Painting

or THEA 347. Drafting for Theatre

- The equivalent of 2 1/2 four-credit courses in technical theatre practica (10 credits total) is required. Six of the 10 technical credits must be earned by working in the scene shop (THEP 270, 370, 470 or 213) and costume shop (THEP 273, 373, 473 or 214), with a minimum of two credit hours in each. (Therefore, this requirement may be satisfied by earning three credit hours in each shop or four credits in one and two credits in the other. It is also possible to earn two of the six credits by hanging and focusing lights [THEP 272, 372, 472 or 215].) The remaining four of the 10 credits may be in any assignment that qualifies for technical practicum. Performance practica are granted for participation in performance assignments.

Note: Performance practica are numbered, THEP 260-266, THEP 360-366 and THEP 460-466. Technical practica are numbered THEP 213-216, THEP 270-276, 370-376 and 470-476.

Additional Courses by Emphasis

Each emphasis requires 16 credits, depending on the student’s declared emphasis.

Acting/Directing Emphasis

- THEA 307. Intermediate Acting: Meisner
- THEA 308. Intermediate Acting: Scene Study
- THEA 310. Actor Training: Body Work
- THEA 311. Actor Training: Voice Work
Dance Emphasis

- One of THEA 225/226/227/228/223-2 sections-2 credits each, that has not already been taken
- Two upper-level dance courses in their area of specialization (selected from THEA 325, 326, 327, 328 or 323-2 sections-2 credits each)
- THEA 322. Choreography

Design/Technical Emphasis

- One of THEA 246/340/341/342/343/344/346/347/389F (upper-level tech) not already taken
- 4 credits of 300/400-level practicum as a design assistant/stage manager/assistant stage manager/assistant technical director on a mainstage production
- 8 credits of 400-level practica in student's area of specialization

Masters of Public Administration (MPA)

- For students pursuing the combined degree in Theatre/MPA, 16 credits may be selected from any of the courses in the three emphasis areas (Acting/Directing, Dance and Design/Technical).

  Note: *If students do not complete the MPA, they must meet the 16 credit requirement in one emphasis area to complete their undergraduate major.

Note: *Pass/Fail grading option is not acceptable for the 13 departmental courses (including Practica) taken to satisfy the theatre major.

Courses Required outside the Department of Theatre

The courses required outside the Department of Theatre vary by area of emphasis as follows: (These courses may be taken Pass/Fail).

Acting/Directing Emphasis

Four credits drawn from any combination of the following classes:

- MUS 121. Music Fundamentals
- MUS 143A. Beginning Voice
- MUS 101. Introduction to Music
- Dance classes: THEA 223, 224, 225, 226, 227, 228, 229 or another dance course taught in the Theatre Department and approved by the undergraduate director
- THEA 3870. Musical Theatre Singing
- Private voice lessons through Music or Theatre Department

And one of the following:

- ENG 245. Shakespeare
- ENG 420. Topics in Drama
- ENG 422. Contemporary Drama
- CLAS 214. Greek Drama in Translation
- FREN 461. Topics in French Drama

**Dance Emphasis**
- MUS 101. Introduction to Music
- MUS 121. Music Fundamentals

**Design/Technical Emphasis**
- ARTS 171. Drawing I
- ARTH 103. Introduction to Architecture or an art history survey course (with approval of undergraduate advisor)

**Master’s of Public Administration (MPA) Select one from each of the 2 lists of courses below:**

**Section 1**
- THEA 223. Tap (2-credit version)
- THEA 224. Basic Dance for Musical Theatre (2 credits)
- THEA 225. Ballet I
- THEA 226. Jazz I
- THEA 227. Modern I
- THEA 228. Tap I
- THEA 229. Beginning African Dance
  Or another dance course taught in the Theatre Department approved by undergraduate advisor

**Section 2**
- MUS 101. Introduction to Music
- ENG 245. Shakespeare
- ENG 420. Topics in Drama
- ENG 422. Contemporary Drama
- CLAS 212. Greek Drama in Translation
- FREN 461. Topics in French Drama
- ARTS 171. Drawing
- ARTH 103. Introduction to Architecture
- Four-credit Art History Survey Course (with approval of undergraduate advisor)

**Note to Theatre Majors:**

Various samples of recommended sequences of courses are provided to help plan the student’s academic career. Supplemental courses covering other aspects of the field such as computers, musical theatre, sound, MIDI, costumes, drama and history are also offered.
The Theater Department requires that at least 28 credits be taken in residence. Of those 28 credits, four credits of technical practica must be taken in residence. It is possible to transfer any of the core courses (including THEA 207 and 208 and upper-level tech courses) into the Department of Theatre, as well as practica and courses outside the major, up to the limit prescribed above. Courses that transfer in must cover equivalent material and have similar course descriptions. A syllabus and course description may be required. Decisions about equivalency will be made by the undergraduate advisor, with the advice of the appropriate teacher for the courses considered. Dance classes must require at least 63 hours of in-class dance practice to transfer.

**Suggested Tracks within the Theater Major**

The department provides the following sequence of courses for each emphasis and an order in which it suggests they be taken. These various interests within the sequences are not required and some of the courses are not required, but will help make the most of the student's theatre major.

**Suggested Tracks within the Acting/Directing Emphasis**

**Acting Sequence**

**Freshman**

- 2 cr. Run Crew
- THEA 207 or 208. Actor Training I: Basic Processes
- THEA 203. Technical Production
- THEA 213 or 214 or 215 or 216. Technical Production Laboratory
- THEA 308. Intermediate Acting: Scene Study I
- THEA 310. Actor Training: Body Work
- MUS 121. Music Fundamentals
- MUS 143 Beginning Voice
- THEA 224

**Sophomore**

- 4 cr. Shop Practica
- THEA 306. Introduction to World Dramatic Literature
- THEA 307. Intermediate Acting: Meisner
- THEA 304. History of the Theatre
- THEA 311. Actor Training: Voice Work
- Or two credits in dance
- Acting/Directing Elective
- Perform in show(s)

**Junior**

- 2 cr. Run Crew
- 2 cr. Shop Practica
Upper-Level Tech

- THEA 407. Advanced Scene Study: Meisner II
- THEA 408. Advanced Scene Study
- THEA 410. Actor Training: Body and Voice/Scene Study
- THEA 309. Performance and Modern Culture
- Two credits in dance
- Perform in show(s)

Senior

- THEA 412. Advanced Topics in Acting: A, B and C
- Perform in show(s)
- Another THEA 412 topic not already taken or THEA 489: Advanced Special Topics Course
- English/Classics/French Department drama class

Directing Sequence

Freshman

- 2 cr. Run Crew or Assistant Stage Manager: Main Stage
- THEA 207 or 208. Actor Training I: Basic Processes
- THEA 306. Introduction to World Dramatic Literature
- THEA 308. Intermediate Scene Study
- THEA 203. Technical Production
- THEA 213 or 214 or 215 or 216. Technical Production Laboratory

Sophomore

- 4 cr. Shop Practica
- 2 cr. Run Crew or Stage Manager: Main Stage
- English/Classics/French Department Drama Class
- THEA 304. History of the Theatre
- THEA 310. Actor Training: Body Work
- THEA 307. Intermediate Acting: Meisner
- THEA 407. Advanced Scene Study: Meisner II
- Assistant Director Main Stage
- Perform in show(s)

Junior

- THEA 309. Performance and Modern Culture
- THEA 311. Actor Training: Voice Work
- THEA 359. Directing
Stage Management or Assistant Directing Practicum
THEA 408. Advanced Scene Study or
THEA 412. Advanced Acting or
THEA 489. Special Topics
Additional Course Outside Department or Theatre Dance Course

Senior

Directing Practica
THEA 410. Actor Training: Body and Voice/Scene Study or THEA 412. Advanced Acting or THEA 489. Advanced Special Topics Course
Assistant Director Main Stage

Acting (Musical Theatre) Sequence

Freshman
THEA 207 or 208. Actor Training I: Basic Processes
THEA 101. Introduction to Musical Theatre
2 cr. Run Crew
THEA 203. Technical Production
THEA 213 or 214 or 215 or 216. Technical Production Laboratory
THEA 289(O). Broadway for Beginners
and/or THEA 387(O) Musical Theater Singing
and/or Music Theory or Private Voice Lessons
THEA 224. Basic Dance-Musical Theatre

Sophomore
THEA 308. Intermediate Acting: Scene Study I
THEA 389(O). Techniques of Musical Theatre
THEA 304. History of the Theater
4 cr. Shop Practica
THEA 225. Dance Technique I: Ballet
THEA 226. Dance Technique I: Jazz
THEA 310. Actor Training: Body Work
Music Theory and/or Ear Training/Piano
and/or Private Voice Lessons/Coaching

Junior
Upper-Level Tech
2 cr. Shop Practica
- THEA 311. Actor Training: Voice Work
- THEA 306. Introduction to World Dramatic Literature
- THEA 228. Dance Technique I: Tap or other Technique I
- Perform in a musical
- 2 cr. Run Crew
- THEA 489(O). Advanced Techniques of Musical Theatre
- Private Voice Lessons/Coaching

**Senior**

- THEA 307. Intermediate Acting: Meisner
- THEA 325. Dance Technique II: Ballet or Other Dance Technique II
- THEA 326. Dance Technique II: Jazz II or other Technique II
- Upper level performance elective(s)
- Perform in a musical
- THEA 309. Performance and Modern Culture
- Outside the major Dramatic literature class
- Private Voice Lessons/Coaching

**Suggested Track within the Design/Technical Emphasis**

**Design/Technical Sequence**

**Freshman**

- THEA 207. Actor Training I: Basic Techniques

or Dance Technique I

or THEA 226. Dance Technique I: Jazz

or THEA 227. Dance Technique I: Modern

or THEA 228. Dance Technique I: Tap

or THEA 223 (2 sections-2 credits each)

- 2 cr. Run Crew
- THEA 203. Technical Production
- THEA 213 or 214 or 215 or 216. Technical Production Laboratory
- THEA 306. Introduction to World Dramatic Literature

**Sophomore**

- 4 cr. Shop Practica
- Upper-level tech in area of interest
• ARTS 171. Drawing I
• THEA 304. History of the Theatre
• ENG 245. Shakespeare
• 300/400. Practica (4 credits) as design assistant/assistant stage manager/stage manager/assistant technical director on the main stage

**Junior**

• THEA 309. Performance and Modern Culture
• 400-level Technical Practica (4 credits)
• ARTH 103. Introduction to Architecture or an art history survey course
• 2 cr. Shop Practica
• Studio Season Practicum
• Upper-level tech in area related to area of interest

**Senior**

• 400-level Technical Practica (4 credits)
• Another upper-level tech not already taken
• Independent study or thesis in area of interest

**Suggested Track within the Dance Emphasis**

**Dance Sequence**

*Freshman*

• THEA 225. Dance Technique I: Ballet

*or* THEA 226. Dance Technique I: Jazz

*or* THEA 227. Dance Technique I: Modern

*or* THEA 228. Dance Technique I: Tap

*or* THEA 223 (2 sections-2 credits each)

• 2 cr. Run Crew
• THEA 306. Introduction to World Dramatic Literature
• MUS 101. Introduction to Music

*Sophomore*

• Another Dance Technique 1 not already taken
• THEA 203. Technical Production
• THEA 213 or 214 or 215 or 216. Technical Production Laboratory
• THEA 304. History of the Theatre
• 2 cr. Shop Practica
• Dance Performance Practicum

**Junior**

• 2 cr. Run Crew
• 2 cr. Shop Practica
• THEA 341. Stage Lighting *or* THEA 344. Sound for the Theatre
• THEA 322. Choreography I
• Dance Performance Practicum
• THEA 309. Performance and Modern Culture
• 300-level dance class
• Another THEA 225, 226, 227 or 228.

**Senior**

• 2 cr. Shop Practica
• 300-level dance class
• Dance/Choreography Performance Practicum

**Senior Thesis**

The Department of Theatre views senior thesis as a reward for excellence in the student’s area of specialization. Students should discuss thesis availability with their advisors. Students are urged to declare their theatre major at an early date. This will enable them to plan their course of study carefully with the director of undergraduate studies.

**Honors Program**

Departmental honors are awarded to senior majors who have completed a substantive body of significant work, in one or more areas of specialization, which meets exceptionally high standards. These students must have demonstrated consistently noteworthy motivation and development over a period of at least four semesters of participation in departmental activities.

A logical progression would be to do outstanding work in both semesters of the junior year and first semester of the senior year. During the latter term, the student would be nominated as suggested below, thereby bringing his or her work to the attention of those voting members unaware of his or her accomplishments to date and alerting them to be aware of the student’s endeavors during the upcoming term in which the deciding vote will be cast.

Students may be nominated for honors by individual faculty members or professional staff personnel (it is considered appropriate for students to have sought support and sponsorship from a member of the faculty or professional staff who would then nominate them). The final decision regarding the awarding of honors rests with the entire Theatre Department non-student membership.

To receive regular honors, students must have a cumulative GPA of 3.25 in the major. High honors requires a cumulative GPA of 3.5 in the major. Highest honors will be given only to those with a cumulative GPA of 3.75 or above in the major.

**Theatre Minor**
A minor in theatre consists of four non-practicum theatre courses (16 credits), plus eight credits of practicum. One of the non-practica courses (beginning with the prefix THEA) must be chosen from the following:

**COURSES**

- THEA 203. Technical Production and THEP 213 or 214 or 215 or 216. Technical Production Lab (does not count toward practica below)
- or THEA 304. History of the Theatre
- or THEA 306. Introduction to World Dramatic Literature
- or THEA 309. Performance and Modern Culture

The other three non-practica courses may be chosen from any non-practicum theatre courses (beginning with the prefix THEA) for which the student is eligible, except THEA 391 and THEA 491.

**PRACTICA**

To satisfy the practicum requirement, the student must earn four credits of technical practica. The remaining four credits of practica may be satisfied by earning 4 credits of performance practica or an additional four credits of technical practica, or any combination of technical and performance practica, THEP 213, 214, 215 and 216 are not acceptable for this section.

**NOTE:** The Pass/Fail grading option is not acceptable for courses taken to satisfy the six-course theatre minor.

**NOTE:** The Theater Department requires that 12 credits be taken in residence. Of those, 4 credits of technical practica must be taken in residence to receive a theatre minor.

*Note: Performance practica are numbered THEP 260-266, THEP 360-366 and THEP 460-466. Technical practica are numbered THEP 270-276, 370-376 and 470-476.*

**Translation Research and Instruction Program**

The Translation Research and Instruction (TRIP) program offers three degree tracks: a minor in translation studies; a graduate translation certificate; and a PhD in translation studies, the first one of its kind in the United States.

**Minor in Translation Studies**

The minor allows students with advanced language capabilities to show their commitment to translation either as an area of career expertise or as an area of research.

**Prerequisites**

Exceptional writing skills in English and a near-native command of a second language. Those who are not native English speakers must show evidence of a near-native command of English as well as an ability to write in their native language.

**Requirements**

- Two semesters of the Translation Workshop (TRIP 472 or 473, non-literary or literary), 8 credits in total.
- Two courses on translation studies, 8 credits in total.
- Two semesters of upper-level courses directly related to the languages chosen by the student, 8 credits in
Program of Courses

<table>
<thead>
<tr>
<th></th>
<th>Credits</th>
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<tbody>
<tr>
<td>*TRIP 472 or 473. Translation Workshop (two semesters)</td>
<td>8</td>
</tr>
<tr>
<td>Translation Studies courses (select two)</td>
<td>8</td>
</tr>
<tr>
<td>Two upper-level courses related to the foreign language</td>
<td></td>
</tr>
<tr>
<td>chosen by the student</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

* These courses with their cross-list rubrics are acceptable.

Women, Gender and Sexuality Studies

Women, Gender and Sexuality Studies [WGSS] is a transdisciplinary program for students who wish to explore gender and its relation to other axes of power such as race, class, ethnicity, nationality, religion and sexuality. WGSS covers a complex variety of theoretical and empirical scholarship both within traditional disciplines and in transdisciplinary frames in the humanities, social sciences and natural sciences, as well as combinations of the three. The program is committed to critical perspectives and bodies of knowledge that contribute to possibilities for transformation and change. Towards this end, WGSS courses emphasize participatory education in which student involvement, critical thinking and personal insight are encouraged and made relevant in the learning process.

Students can pursue a Women, Gender and Sexuality Studies major through the auspices of the Individualized Major Program. Please contact Harpur College Academic Advising for further details.

Requirements for WGSS Undergraduate Certificate

Eight courses:

- WGSS 200: Introduction to Women, Gender and Sexuality Studies;
- One course in Theoretical Inquiries in WGSS (WGSS 281, WGSS 381, WGSS 481);
- One course in Social Justice, Social Movements and WGSS (WGSS 282, WGSS 382, WGSS 482);
- Two courses in either one or both of the following areas: Critical Humanities (WGSS 283, WGSS 383, WGSS 483) or Critical Social Sciences (WGSS 284, WGSS 384, WGSS 484);
- Two elective courses. The elective courses can be selected from the courses designated as WGSS. Any course not designated as WGSS must be approved by a WGSS advisor;
- A course at the 400-level course can be either a seminar or WGSS 495 (Internship), or WGSS 497 (Independent study).

Of the eight courses described above:

- At least four courses must be at the 300 level or higher;
- Most courses in WGSS are cross-listed with courses from other departments. Students need to select courses that are cross-listed with courses from at least three different departments;
- At least half of the courses must be taken at Binghamton University;
- Students must receive a minimum of a C grade in order for a course to fulfill requirements for the certificate, and no courses taken under the Pass/Fail option may be credited toward the certificate.

Requirements for WGSS Minor

Six courses:

- WGSS 200: Introduction to Women, Gender and Sexuality Studies;
- One course in Theoretical Inquiries in WGSS (WGSS 281, WGSS 381, WGSS 481);
- One course in Social Justice, Social Movements and WGSS (WGSS 282, WGSS 382, WGSS 482);
- One course in one of the following areas: Critical Humanities (WGSS 283, WGSS 383, WGSS 483) or Critical Social Sciences (WGSS 284, WGSS 384, WGSS 484);
- Two elective courses. The elective courses can be selected from the courses designated as WGSS. Any course not designated as WGSS must be approved by a WGSS advisor;

Of the six courses described above:

- At least three courses must be at the 300 level or higher; one of those three courses must be at the 400 level;
- Most courses in WGSS are cross-listed with courses from other departments; Students need to select courses that are cross-listed with courses from at least three different departments;
- At least half of the courses must be taken at Binghamton University;
- Students must receive a minimum of a C grade in order for a course to fulfill requirements for the minor, and no courses taken under the Pass/Fail option may be credited toward the minor.

Harpur College of Arts and Sciences - Graduate

Harpur College graduate students enjoy stellar performance and arts facilities, outstanding research laboratories and libraries, and multidisciplinary collaboration and cross-cultural activities. Experiential learning coupled with rigorous coursework helps graduates obtain rewarding positions. The strength of Harpur College’s graduate programs rests on the high quality of a faculty distinguished for its scholarship as well as its teaching. Graduate students typically learn in small seminars and prepare their work with close supervision from faculty members. Departments assign faculty advisors to help new graduate students choose courses appropriate to their programs and interests; as students progress through coursework toward research for the master's or doctoral degrees, they have mentors in their fields of research. As a selective university center, Binghamton offers doctoral programs in arts and sciences. These doctoral programs help fulfill one of the University's crucial missions: to prepare a professoriate and a capable, trained workforce that is ready to think through the problems of the future and to contribute creativity and invention in a variety of disciplines. All of these programs offer master's degrees as well, and many collaborate with the Department of Education in the College of Community and Public Affairs to offer MAT and MSEd degrees for students who plan to teach at the elementary or secondary levels. Several advanced certificate programs, which may be pursued in addition to a degree program, emphasize interdisciplinary study in various fields. Master's-level study prepares students for professional practice and encourages habits of analysis and reflection that lead some students to further study in the discipline. For more information on graduate policies and procedures, please see the “Academic Policies and Procedures – Graduate” section of the University Bulletin.

Anthropology — Graduate
Graduate Programs

Anthropology seeks to understand the forms and processes of social and cultural production, and the nature and origins of human biological variability through systematic exploration and scientific examination of human groups and their artifacts and lifeways, past and present. Anthropology’s traditional emphasis is on the study of small-scale societies, but recent practical and theoretical concerns have broadened the scope of anthropological research to include the entire range of ethnically complex and globally interdependent societies of the world. Ecological, physiological, psychological, historical, economic, artistic, technological and political phenomena all fall within the current purview of anthropology. The discipline thus draws freely on various fields of study in the humanities, physical and natural sciences, and in the various social sciences in its exploration of the patterns of human social life and adaptation.

There are four traditionally recognized subfields of the discipline: archaeology, biological anthropology, linguistics and sociocultural anthropology. Binghamton University’s faculty represent the four subfields, and this coverage is key to the training of its students. However, departmental research and graduate training is also structured around three domains of research and theory that cross-cut the subdisciplines. These approaches are:

- ecological and biobehavioral anthropology, an approach that employs ecological, biomedical, evolutionary and population paradigms in conjunction with natural science and sociocultural perspectives;
- political economy, which seeks to understand the ways that forces at the state and suprastate levels interact with local-level institutions and practices; and
- critical anthropology, which attempts to ascertain the influence of culturally-instituted power in the structuring of social science practices, including methodologies and theory building.

The programs leading to the degrees of Master of Arts (except for the Master of Arts with the Public Archaeology (MAPA) track) and Doctor of Philosophy in Anthropology contain a requirement of study in all four of the subfields.

A central objective of graduate training in anthropology is the ability to develop and communicate original thought and research. To this end, all recipients of graduate degrees submit original written work in demonstration of their ability to apply appropriate findings, concepts and analytical techniques of anthropology to a problem identified by the individual student.

Master of Arts Program

The Master of Arts Degree in Anthropology is awarded to students who demonstrate a substantial command of the subject matter of the discipline and an ability to engage in the professional pursuits of anthropologists, as defined above.

Admission

A bachelor’s degree—not necessarily in anthropology—from an accredited college is required for admission. All applicants must submit recent Graduate Record Examination aptitude test scores and a statement of career goals. Students who are not citizens or permanent residents of the United States must also submit proof of English proficiency (such as TOEFL, IELTS, or PTE Academic scores).International students who have received a college or university degree from an institution in the United States, United Kingdom (England, Northern Ireland, Scotland and Wales), Ireland, Australia, New Zealand or some Canadian provinces are not required to submit TOEFL, IELTS or PTE Academic scores. Additionally, all international students must provide immigration forms guaranteeing financial support.

Course Requirements
A total of 30 credits is the minimum required for the degree, but this minimum is often exceeded upon the recommendation of the student’s principal advisor.

**Core Courses:**

- ANTH 501. History of Anthropological Thought, is required for the MAPA, any student who enters graduate study without a degree in anthropology, and at the discretion of the student's primary advisor.
- One four-credit course in each subdiscipline, as designated by each subdisciplinary causus, that includes history and theory of the subdiscipline.

Course electives (exclusive of ANTH 580, 590 and 591) may include no more than four credits of ANTH 597 and/or ANTH 599.

At least six credits of electives are to be chosen with the advice of the student’s principal advisor. No more than eight credits taken outside of anthropology may be applied.

**Subfields Requirement:**

Four courses (16 credits), one from each subfield, which is updated annually, all passed with a grade of B– or better.

Courses taken to meet the above 30-credit minimum must be passed with a B average (3.0).

It should be stressed that the above is a minimum credit requirement. Individual students may be required to complete courses in excess of the 30-credit minimum to acquire master’s-level command of the subject matter of the discipline and to meet the needs of their master’s degree research.

**Foreign Language**

Students must demonstrate an ability to read research literature in a major language of scholarship in addition to English. This requirement may be fulfilled in a variety of ways. Students should consult with their graduate advisor or the director of graduate studies early in their careers to discuss arrangements for the satisfaction of this requirement.

**Teaching**

Students planning a career in teaching may want to complete the requirements for the Certificate in Teaching College Anthropology, details of which are available from the Graduate School. Students may also gain practical experience in teaching as part of their graduate training, either through a teaching assistantship in the department and/or through ANTH 580, Issues in Teaching College Anthropology, or ANTH 591, Practicum in College Teaching, although this credit may not be applied toward the minimum credit requirements for a graduate degree.

**Master’s Colloquium**

Each student must present a colloquium to their advisor and reader in the third semester of full-time registration on the student’s thesis topic or the topics of the two-paper option.

**Thesis**

Each student must either write a thesis, or—with the approval of the original seminar instructors—two revised seminar papers in lieu of a thesis. (Students undecided about further graduate work beyond the MA degree are usually required to complete a thesis.) In either case, the thesis or revised seminar papers must each be read and approved by the student’s principal advisor and one other member of the department faculty who will read both
papers. Students may count up to four credits of ANTH 599, Thesis, toward the minimum total credit requirement for the master’s degree (if they have not already used four credits of ANTH 597, Independent Study).

**MA in Public Archaeology Track (MAPA)**

The master of arts in anthropology with the public archaeology track (MAPA) is a 20-month program of coursework and practical training designed to prepare students for a range of professional positions. The degree is offered through the Anthropology Department and in conjunction with the Public Archaeology Facility (PAF), a research center on the Binghamton University campus specializing in cultural resource management. The focus of the program is the intersection between archaeology and the many organizations that have a stake in the management, protection, study and conversation of the archaeological record. As such, graduates can expect to find careers in private environmental, engineering, energy, and architectural firms, and governmental sectors, such as federal, state, tribal, and local agencies. With training from MAPA, students can also prepare themselves for careers in agencies that define policies for educational initiatives, heritage organizations that work directly with descendant communities, institutions that award and administer grants, and museums that are both privately and publicly funded.

Students enrolled in the public archaeology MA track will be expected to complete the regular MA program in anthropology. In addition, they will take 10 additional credits (total 40) that include a summer internship and courses specifically designed for this track. Students in the public archaeology MA track do not have to complete the language requirement for the MA.

Prerequisite for admission to the program:

Students must have completed an archaeological field school of at least 5 weeks in duration or equivalent to be admitted to the MA track in Public Archaeology. The choice of field school must be approved by the admissions committee.

For the public archaeology track in the master’s degree in anthropology, a student must complete with a GPA of 3.0 or better and satisfy the following:

1. Pass, with a B- or better each of these 4-credit courses; ANTH 501 – History of Anthropological Thought, ANTH 551 – Strategies in Archaeology, ANTH 554G – Heritage and Communities, ANTH 585 – Heritage Resource Management – Policy and Procedures, and ANTH 555 – The Practice of Public Archaeology.

2. Enroll for 4 credits of ANTH 595 - Internship, and complete a summer internship in public archaeology.

3. Present a colloquium based on the student's summer internship experience and proposed MA thesis.

4. Complete 3 elective courses, two of which must focus on methodological practica while the third can be a practicum course or ANTH 576 – Problems in Archaeological Area Studies.


**MS in Biomedical Anthropology**

The Master of Science (MS) degree in Biomedical Anthropology is a program that prepares professionals for a variety of health-related fields. This MS is an applied program geared towards the development of versatile professionals, and it emphasizes interdisciplinary approaches toward understanding the dynamic interactions among biological, biomedical, cultural and behavioral factors that shape health outcomes. Students interested in becoming applied professionals as well as those interested in preparation for doctoral-level training will find this program to be of interest. The program’s research and training facilities include nine on-site, state-of-the-art, wet and dry laboratories, as well as fieldwork opportunities in local, national and international settings.

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Individuals holding a baccalaureate degree in anthropology, biology, bioengineering, nursing, pre-medicine, public and international health programs, psychology and other sciences and social sciences are invited to apply. All applicants must submit recent GRE or MCAT scores and a statement of career goals. International students, particularly those in the medical and public health professions, will find this program of benefit. Students who are not citizens or permanent residents of the United States must also submit proof of English proficiency (such as TOEFL, IELTS, or PTE Academic scores). International students who have received a college or university degree from an institution in the United States, United Kingdom (England, Northern Ireland, Scotland and Wales), Ireland, Australia, New Zealand or some Canadian provinces are not required to submit TOEFL, IELTS or PTE Academic scores. Additionally, all international students must provide immigration forms guaranteeing financial support.

Degree Requirements

For the Master of Science degree in biomedical anthropology, a student must:

- Pass ANTH 501 (History of Anthropological Thought) with a grade of B– or better;
- Pass with a grade of B– or better 38 additional course credits, of which 28 are specified by the program;
- Satisfactorily complete an approved 320-hour summer internship (one additional credit), and give a formal summary presentation in the department; and
- Successfully complete an oral examination administered by program faculty at the completion of the second year of study. (There is no thesis requirement.)

Required Courses:

- ANTH 501. History of Anthropological Thought
- ANTH 540. Human Skeletal Biology or ANTH 572J. Stress Chronobiology and Health
- ANTH 543. Human Biological Variation
- ANTH 544. Forensic Anthropology OR ANTH 550. Coevolution of Humans and Pathogens
- ANTH 572K. International Health OR ANTH 572R. Epidemiology
- ANTH 572L. Laboratory Practicum OR other approved lab course
- ANTH 572M. Molecular Anthropology (one credit) OR ANTH 559. Molecular Anthropology OR ANTH 547. Anthropological Genetics
- ANTH 572S. Advanced Multivariate Statistics OR other approved advanced statistics course

Strongly Recommended Elective Courses:

- ANTH 572B. Methods in Biomedical Anthropology
- BIOL 603. Scientific Integrity, or similar (one credit)
- ANTH 515. Evolutionary Theory
- ANTH 546. Human Paleontology
- ANTH 572T. Darwinian Medicine
- ANTH 572N. Molecular Lab
- ANTH 572W. Evolution and Women's Health

All required courses are offered at least often enough to ensure that the student can finish the program in 2 consecutive years.
Foreign Language Requirement: There is no foreign language requirement for the MS degree.

Thesis Requirement: There is no thesis requirement. Because this is an applied program, the internship and presentation are in lieu of the thesis.

Financial Aid: That is, students enrolled in this program cannot be awarded graduate assistantships or teaching assistantships. However, some financial support may be available through specific professors who have grants for ongoing laboratory and/or field research. Generally, such support is not available for the first semester. Students should inquire with the program director and individual professors about such opportunities. Students may also apply for other forms of financial aid consideration directly to the Student Financial Aid and Employment Office, Binghamton University, PO Box 6000, Binghamton, NY 13902-6000. International students from a Fulbright Fellowship-eligible country should apply through their home institution for the Fulbright program. For more information, visit the program website at [http://www.binghamton.edu/anthropology/about-us/biological-anthropology/biomed-program.html](http://www.binghamton.edu/anthropology/about-us/biological-anthropology/biomed-program.html) or contact the director of the biomedical anthropology program.

Doctor of Philosophy Program

The degree of Doctor of Philosophy in Anthropology is awarded to students who have shown mastery of the general materials of anthropology and a substantial command of the specialized subject matter of one or more of the four subfields and who have successfully carried out research that constitutes an original contribution to the discipline.

Admission

Students with an MA/MS (or professional equivalent) may apply directly to our PhD program; students with a BA may also apply for admission to our PhD program, and will be required to complete an MA before being considered for advancement in our PhD program.

Courses

Students in the PhD program must complete the same requirements as for the MA program (see above for details), plus additional electives and dissertation credit requirements, as follows:

<table>
<thead>
<tr>
<th>credits</th>
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<tbody>
<tr>
<td>• minimum credits from MA requirements</td>
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<tr>
<td>(subfields requirement)</td>
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<tr>
<td>• additional electives</td>
</tr>
<tr>
<td>(exclusive of ANTH 580, 590, 591, 599, 698 and 699, and no more than eight credits of ANTH 597, and no more than eight credits of coursework outside of anthropology) to be chosen with the advice of the student’s doctoral committee and the written approval of its chair</td>
</tr>
<tr>
<td>• ANTH 699, Dissertation, as required to maintain registration after admission to candidacy</td>
</tr>
<tr>
<td>MIN. TOTAL</td>
</tr>
</tbody>
</table>

Students who have completed appropriate graduate courses at another university may be exempted from up to 30 credits, including one or more of the four required subfield courses, but not usually from core courses. All entering students are advised at the time of initial registration concerning individual course exemptions and requirements. In this regard, it should be understood that these are minimum course requirements. Specialized graduate work often requires coursework beyond this minimum.
Foreign Language and Research Skills

See language requirement for the master’s degree. Students having completed an MA at another university that required a language examination may submit evidence of having satisfied this requirement. In some instances, the choice of research area by the student may require demonstration of additional language proficiency (e.g., due to lack of relevance of the language competence previously demonstrated). Students should seek the advice of the members of their doctoral committee regarding appropriate language and research skills for the pursuit of their individualized programs of study.

Teaching

Teaching requirements are the same as for the MA degree.

Admission to Candidacy

To be admitted to candidacy, students must satisfactorily complete all course and language and research skill requirements as determined by their guidance committee. Following this, they must:

- Pass a written examination covering three specialized topics selected in consultation with their dissertation committees;
- Present a colloquium in which they describe their dissertation research plans to the students and faculty of the department;
- Pass an oral examination administered by the dissertation committee and covering the material treated in the candidacy examination and the dissertation colloquium; and
- Within six months after admission to candidacy, submit an acceptable dissertation prospectus.

Students may register for ANTH 699. Dissertation, only on admission to candidacy.

Granting of the Degree

Each doctoral candidate must demonstrate the ability to carry out an original research project and submit the findings in a dissertation acceptable to the student’s dissertation committee. On satisfactory completion of the dissertation, the candidate defends it before an examining committee, consisting usually of the dissertation committee plus an outside examiner appointed by the Vice Provost and Dean of the Graduate School. On successful completion of these requirements and receipt of the final draft of the dissertation, the department then recommends that the candidate be awarded the degree of Doctor of Philosophy in Anthropology.

Certificate in College Teaching

Graduate students in anthropology may receive a Binghamton University Certificate in College Teaching concurrent with receipt of a graduate degree. The requirements for the Certificate in College Teaching are as follows:

- Completion of the department’s teaching program, which includes a minimum of three terms as teaching assistant, instructor of record or other teaching role;
- Successful completion of ANTH 580 or ANTH 591 with a grade of B– or better;
- Completion of 10 hours of teaching workshops, conferences and/or teaching alliance discussions;
- A journal or record of teaching experiences, which will be included in the teaching portfolio;
A teaching portfolio.

Further details of the certificate program are available from the Graduate School.

**Art History — Graduate**

**Graduate Programs**

For three decades, Binghamton University has pioneered new approaches to art history.

The graduate program in the History and Theory of Art and Architecture was among the first graduate degree programs in the United States to offer opportunities for advanced study and research in a department with a particular commitment to new theoretical perspectives and to interdisciplinary, cross-cultural, and global approaches to the history of art, architecture, and visual culture. The success of the department has been aided by a campus with strong interdisciplinary programs in cultural history, theory and global studies and by University strengths in history, sociology, anthropology, and critical theory.

The program aims to foster innovative teaching and research and to develop scholars, teachers, museum curators, and planning professionals capable of interpreting the role of art, architecture, visual culture, and cultural production in the broadest sense. Because of its programmatic links with other interdisciplinary research centers and graduate programs within the University, the program in the history and theory of art and architecture also offers a unique opportunity to graduate students wishing to undertake innovative studies of a cross-disciplinary nature, with a stress on the development of critical theoretical and historical perspectives in relation to the visual arts, photography, architecture, planning, and the wider built environment, at local, national, and global levels.

The program caters effectively to a broad range of students from diverse national backgrounds who wish to pursue careers in research, education, museum and gallery practice, and publishing, as well as in related areas in cultural policy, urban design, planning, and conservation. Essential to our integrated program is the active working relationship between faculty and students in an intellectual environment in which students are offered a unique opportunity to engage in advanced studies and research in theory and criticism, the social history of art, feminist interpretations of art, the history and theory of photography, and architectural history, from Medieval, Renaissance and Early Modern, to Modern and Contemporary.

In addition to organizing the department’s cross-disciplinary lectures, workshops, and symposia, faculty and students are actively involved in the teaching and conference activities of other interdisciplinary centers and programs, including: Africana Studies; the Center for Medieval and Renaissance Studies; the Fernand Braudel Center for the Study of Economies, Historical Systems, and Civilizations; Latin American and Caribbean Area Studies; the program in Philosophy, Literature, and Criticism; and Women, Gender and Sexuality Studies.

Faculty also play a prominent role in interdisciplinary programs that offer graduate students the opportunity to study for Graduate Certificates in, for example, Feminist Theory or Global Studies.

**Master of Arts Program**

**Admission**

Applications are invited from students in a variety of disciplines concerned with the history and theory of art, architecture, and cultural production. Taking account of different backgrounds, students may be directed toward additional courses or supervised reading programs designed to broaden their knowledge of the field.
Course Requirements

A minimum of eight graduate-level courses (32 credits) with regular letter grades and a B average or better, to be distributed as follows:

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ARTH 500. Theory and Methods (required in the first year)</td>
<td>4</td>
</tr>
<tr>
<td>• Seven courses (including at least six art history seminars; taken with at least four different faculty members in art history)</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total minimum number of credits to be taken</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

*(For courses outside the department and all independent studies, students submit a petition to the graduate committee.)*

Foreign Language

Students must pass an examination demonstrating an ability to read research literature in their areas of interest in an appropriate language of scholarship in addition to English. The examination must be taken by the end of the second semester (24 credit hours). Work in certain fields may require additional language skills.

NOTE: Students may seek a waiver of the language requirement by petitioning the graduate committee in writing, and providing appropriate documentation of their competency in the language in question.

Master’s Comprehensive Examination

The Master’s Comprehensive Examination has been incorporated into the mandatory seminar on Theory and Methods. All students are required to pass ARTH 500, Theory and Methods, with a grade of B or better. At the discretion of the Art History Graduate Committee, students failing to achieve the required grade may be asked either to repeat the course or, in exceptional cases, to redo the examination assignment.

Master’s Thesis

Students are required to produce a Master’s thesis, finished to a professional standard and approximately 30 pages in length. The paper will be supervised by a selected art history faculty member and refereed by a second reader assigned by the departmental Graduate Committee. The final thesis must be approved by both readers and submitted electronically in accordance with Graduate School regulations (with hardcopy required by the department). Students must be registered for at least 1 credit of Thesis (ARTH 599) during the semester in which the degree is completed.

Doctor of Philosophy Program

Admission

The doctoral program admits qualified applicants who wish to continue beyond the master’s level in one or more areas of current faculty strengths. Students coming to Binghamton’s doctoral program from other university degree
programs must have either a master’s degree in the history of art, architecture or visual culture or a degree in a cognate discipline with training that links effectively with one of the department’s areas of specialization. Students coming from other fields may have to supplement the minimal course requirements with additional art history courses to carry out their programs of study. The program’s rigorous interdisciplinary nature also requires that students remain in residence in the area until they have finished their coursework.

**Course Requirements**

A minimum of eight graded graduate-level courses (32 credit hours) must be completed with regular letter grades and a grade average of B or better, in addition to required registration for dissertation research and preparation. The Art History Graduate Committee may require additional coursework as a condition for admission. Students who have not taken the required graduate-level seminar in Theory and Methods (ARTH 500) as part of their Master’s degree must also include this in their doctoral program; others may be required to do so by the Graduate Committee, through the DGS. Students must petition the graduate committee for a waiver for this course.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ARTH 500. Theory and Methods (required in first year)</td>
<td>0-4</td>
</tr>
<tr>
<td>• Graduate courses in art history and related subjects (500/600 level; at least four courses [16 credits] must be taken with different faculty members in art history, including associated and visiting faculty)</td>
<td>44</td>
</tr>
<tr>
<td>• ARTH 699. Dissertation registration as required to maintain registration after admission to candidacy</td>
<td>1 or more</td>
</tr>
<tr>
<td><strong>Total minimum number of credits to be taken</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

*(For courses outside the department and all independent studies, students submit a petition to the graduate committee.)*

**Foreign Language**

Doctoral students must pass two examinations demonstrating an ability to read research literature in the student's areas of interest in at least two appropriate languages of scholarship in addition to English. Work in certain fields may require additional languages.

NOTE: Students may seek a waiver of one or more of the language requirements by petitioning the Graduate Committee in writing, and providing appropriate documentation of their competency in the language(s) in question.

**Dissertation Committee**

The student must choose a dissertation supervisor by the beginning of the second year. In conjunction with the student's supervisor, who chairs the committee, the student chooses two additional members from Binghamton University's graduate faculty, at least one of whom must be a member of the Art History faculty. In extremely rare cases, off-campus specialists in the subject area may be invited to serve, though no honorarium can be offered for such services. This committee is then appointed by the Art History Graduate Committee, who must also approve any subsequent changes.

**Dissertation Proposal**

The Dissertation Proposal is a description of the proposed research project that serves as the basis for the dissertation. The student must submit a formal, written proposal for dissertation research on an approved topic,
outlining in detail the problem, method of inquiry and relevant literature on the subject. The three-member dissertation committee must accept this proposal. The committee must include the supervisor as chair, and at least one additional member from the art history faculty.

**PhD Comprehensive Examination**

Students must pass a Comprehensive Examination before a committee designated by the Art History Graduate Committee. This examination will focus on: i) the circulated dissertation proposal; ii) professional knowledge and practice, based on a familiarity with broad methodological and historiographical questions in the discipline, as demonstrated by syllabi and/or proposals in the student's chosen professional field, as agreed with the chair of the examining committee.

**Admission to Candidacy**

To be accepted for candidacy by the art history faculty, a student must have:

- completed the coursework described above for the doctoral program, including any additional coursework that may have been required by the graduate committee;
- passed the foreign language requirement;
- submitted a formal written dissertation proposal. This proposal must be accepted by the three-member dissertation committee;
- passed the PhD comprehensive examination before a committee designated by the graduate committee.

**Dissertation and Defense**

When the final draft has been accepted by the student's supervisor and committee, the dissertation is defended in an oral examination that is open to the public and is conducted by the student's dissertation committee and an external examiner, appointed by the Dean of the Graduate School. The final dissertation must be submitted electronically in accordance with Graduate School regulations (with hardcopy required by the department). An acceptable dissertation demonstrates the student's ability to handle significant problems in the history of art, architecture, visual culture or the built environment in a critical and scholarly manner and makes a contribution to the discipline.

**Dissertation and Degree**

The art history graduate committee recommends for the degree of doctor of philosophy a student who has:

- completed an approved program of study and residence requirements, as described above;
- submitted a dissertation acceptable to the department and to an outside reader appointed by the dean of the Graduate School;
- defended the dissertation before a committee designated by the art history graduate committee and approved by the dean of the Graduate School.

**MA-PhD Combined Degree in Art History**

**Admission**

The combined MA-PhD program in Art History is a two-stage program that provides the opportunity for a graduate student to complete a MA degree during the course of working towards a PhD degree. This combined program allows applicants who have a MA degree in another related field (such as a Master's of Education or a Master's in Museum Studies) or qualified students with BA degrees to apply directly to the PhD program. This fast-track program does not require a MA thesis and entails fewer credits than the two separate degrees combined.
Course Requirements

A minimum of 12 graduate-level courses (48 credit hours) must be completed with regular letter grades and a grade average of B or better, in addition to required registration for dissertation research and preparation. The Art History Graduate Committee may require additional course work as a condition for admission.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 500: Theory and Methods of Art History (required in first year)</td>
<td>4</td>
</tr>
<tr>
<td>Graduate courses in art history and related subjects (500/600 level; at least four courses [16 credits] must be taken with different faculty members in art history, which may include associated and visiting faculty)</td>
<td>44</td>
</tr>
<tr>
<td>ARTH 699: Dissertation (as required to maintain registration after admission to candidacy).</td>
<td>1 or more</td>
</tr>
</tbody>
</table>

Total minimum number of credits to be taken 48

(For courses outside the department and independent studies, students submit a petition to the graduate committee.)

Foreign Language Requirements

MA-PhD students must pass two examinations demonstrating an ability to read research literature in the student's areas of interest in at least two appropriate languages of scholarship in addition to English. Work in certain fields may require additional languages. One language examination must be passed before the MA is awarded and before the student is formally admitted into the PhD program.

NOTE: Students may seek a waiver of one or more of the language requirements by petitioning the Graduate Committee in writing, and providing appropriate documentation of their competency in the language(s) in question.

Master’s Comprehensive Examination

The Master's Comprehensive Examination has been incorporated into the mandatory seminar on Theory and Methods. All students are required to pass ARTH 500, Theory and Methods, with a grade of B or better. At the discretion of the Art History Graduate Committee, students failing to achieve the required grade may be asked either to repeat the course or, in exceptional cases, to redo the examination assignment.

Master’s Qualifying Paper

The master's qualifying paper is required only of students in the MA-PhD track; this qualifying paper substitutes for a master’s research thesis (as required for the regular MA track). The qualifying paper should be a revised and properly formatted version of a paper written for a graduate art history course at Binghamton. The formally approved dissertation supervisor and one other departmental faculty member chosen in consultation with the student read, approve and offer comments on the qualifying paper. The departmental Graduate Committee reviews the evaluations of the two readers, along with evaluations of coursework solicited from other faculty members who have taught the student at the MA level. The multiple evaluations give the Graduate Committee an overall picture of the student's progress and enable the Committee to decide if the student should continue on to the PhD program or instead
complete the program at the MA thesis level. The student must submit the qualifying paper for approval by the beginning of the second semester of the second year in order to be eligible to be considered for the PhD program. If the qualifying paper is approved, the student will be awarded a MA degree and will be given PhD status. A copy of the approved qualifying paper should be submitted to the department for the student’s file. If the student is directed out of the MA-PhD track, the student will be advised on how to complete the semester with a master's thesis.

**Dissertation Committee**

The student must choose a dissertation supervisor by the beginning of the second year. In conjunction with the student's supervisor, who chairs the committee, the student chooses two additional members from Binghamton University’s graduate faculty, at least one of whom must be a member of the Art History faculty. In extremely rare cases, off-campus specialists in the subject area may be invited to serve, though no honorarium can be offered for such services. This committee is then appointed by the Art History Graduate Committee, who must also approve any subsequent changes.

**Dissertation Proposal**

The dissertation proposal is a description of the proposed research project that serves as the basis for the dissertation. The student must submit a formal, written proposal for dissertation research on an approved topic, outlining in detail the problem, method of inquiry, and relevant literature on the subject. The three-member dissertation committee must accept this proposal. The committee must include the supervisor as chair, and at least one additional member from the art history faculty.

**PhD Comprehensive Examination**

Students must pass a Comprehensive Examination before a committee designated by the Art History Graduate Committee. This examination will focus on: i) the circulated dissertation proposal; ii) professional knowledge and practice, based on a familiarity with broad methodological and historiographical questions in the discipline, as demonstrated by syllabi and/or proposals in the student's chosen professional field, as agreed with the chair of the examining committee.

**Dissertation and Defense**

When the final draft has been accepted by the student's supervisor and committee, the dissertation is defended in an oral examination that is open to the public and is conducted by the student's dissertation committee and an external examiner, appointed by the Dean of the Graduate School. The final dissertation must be submitted electronically in accordance with Graduate School regulations (with hardcopy required by the department). An acceptable dissertation demonstrates the student's ability to handle significant problems in the history of art, architecture, visual culture or the built environment in a critical and scholarly manner and makes a contribution to the discipline.

**Asian and Asian American Studies - Graduate**

**Master of Arts Program**

The Master of Arts program of the Department of Asian and Asian American Studies (DAAAS) offers six fields of study: **Chinese Studies, Japanese Studies, Korean Studies, Asian American and Diaspora Studies, Global Asia Studies, and South Asia Studies.** The DAAAS master's degree program encourages approaches that are
interdisciplinary, comparative, and/or global in methodology and theory, including work that examines the intersection of social, economic, political, historical, intellectual, linguistic, psychological, and other factors in the study of Asia and Asian diasporas, both regionally and across national and other boundaries.

Admission

Applicants for admission to the MA program are required to submit all undergraduate and graduate transcripts, a writing sample, three letters of recommendation, a 1-page statement of purpose, and Graduate Record Examination scores. For international students, proof of English proficiency is required. A minimum score of 80 on the internet-based version, 213 on the computerized version, or 550 on the paper version of the Test of English as a Foreign Language (TOEFL) is required for admission. We will accept IELTS scores in lieu of TOEFL scores, with a minimum requirement of 6.5 with no band below 5.0. We will also accept PTE Academic scores in lieu of TOEFL scores, with a minimum requirement of 53. If a student received a college or university degree from an institution in the United States, United Kingdom (England, Northern Ireland, Scotland and Wales), Ireland, Australia, New Zealand or some Canadian provinces, they are not required to submit TOEFL, IELTS or PTE Academic scores.

Requirements

Students choose one of the six fields and then take a minimum of eight graduate courses for a total of 32 credits. The eight courses must include: the pro-seminar; four courses that relate directly to the student’s chosen field of study; and three approved elective courses. Approval of elective courses will be made by the advisor, in consultation with the graduate committee. A cumulative GPA of 3.0 or better is required for graduation.

Language Requirements

Students choosing the Chinese, Japanese, or Korean Studies field must reach proficiency in the relevant language equivalent through the fourth-year level of study by the time of completion of the MA. Students admitted to one of these fields will already have had at least two, and in many cases, three or even four years of undergraduate language training.

The Asian American and Diaspora Studies and Global Asia Studies fields have no explicit language requirement, but if a particular language is necessary for the student’s course of study, that student will be expected to develop competence in it by the time of completion of the MA. Proficiency levels can be satisfied in one of two ways: transcript with 6 or 8 semesters of college-level study of a single language with a grade of B or better, or a satisfactory completion of a proficiency examination administered by DAAAS faculty or by DAAAS-approved specialists elsewhere. It is expected that students enrolled in the South Asian Studies field will have third-year level proficiency in an Asian language relevant to their course of study by the completion of the MA. This requirement can be waived in some cases, based on the student’s particular course of study.

Thesis/Examination

All graduate students are required to complete a thesis or sit for a written examination at the end of their course of study. Both the thesis and written examination require an oral defense.

Advising and Guidance

All incoming students are assigned a temporary advisor upon enrolling in the MA program. By the end of their first year, students select an advisor who will serve as the supervisor for their thesis or field examination. Thesis and field exam committees consist of the advisor and at least two other faculty members.
DAAAS Combined 5-Year BA and MA Degree Program

The department also offers students the opportunity to complete both the BA and MA in five years.

Prior to their senior year, students must complete 96 credits that meet all of the undergraduate requirements for Harpur College including upper-level writing and general education courses plus all but 12 credits needed for the major. During the senior year, students will complete 12 credits in the major which will be satisfied by graduate level DAAAS MA coursework, and the remaining 20 credits needed for the undergraduate degree.

Students should apply for the combined program in the third semester, and no later than the beginning of the junior year. Admission decisions for the combined program will be made no later than spring of the junior year. Application and admissions processes are through the Graduate School and the Department of Asian and Asian American Studies. The AAAS BA-MA Combined Degree Program will restrict admissions to students with exceptional academic records; normally, a cumulative GPA of 3.5 or better in the AAAS undergraduate program is required. Students must submit a personal statement, official transcript(s), the names of two professors who may serve as references, and a writing sample. The student will be evaluated based on the quality of the personal statement, grades, references, writing sample, and interview. Upon acceptance to the program, students will be advised that there are further requirements: successful completion of the BA and all Harpur and Gen Ed requirements by the end of the 4th year; graduate course requirements; a "B" or better in all graduate coursework and satisfactory completion of the thesis and thesis defense.

Once admitted, students will be required to fulfill all the normal requirements for the AAAS BA and MA degrees, with the exception that 12 credits of the 500-level courses will count for both the BA requirements and the MA requirements. Course offerings in the AAAS BA-MA Combined Program will coincide with the normal offerings of the existing AAAS BA and MA Programs.

DAAAS/MPA Combined 5-Year BA and MA Degree Program

The department also offers students the opportunity to complete both a bachelor of arts (BA) and a master of public administration (MPA) in five (5) years. In order to qualify for the combined degree, students must have a cumulative GPA of at least 3.5. In addition:

- Prior to their senior year, students must complete 96 credits that meet all of the undergraduate requirements, including Writing and General Education plus all but 12 credits needed for the major. During the senior year, students will complete 12 credits in the major and the remaining 20 credits needed for the undergraduate degree, which will be satisfied by graduate level MPA coursework.

- Students should apply for the combined degree program no later than the beginning of the junior year, and admission decisions for the combined-degree program will be made no later than spring of the junior year. Application and admissions processes are through the Department of Public Administration and the Graduate School. Upon acceptance to the program, students will need to successfully complete the BA in year four (including all General Education and major requirements); a "B" or better in all graduate courses; and satisfactory demonstration of skill and competency before placement in internships.

- Once admitted, the student must take 20 credits of course work in the Department of Public Administration program during their senior year. These double-count as undergraduate elective credits and MPA credits. That work constitutes the baccalaureate degree.

- The fifth year is devoted to graduate coursework to complete the master's degree. All requirements of the master's program must be met, including maintaining a minimum cumulative 3.0 GPA for graduate work.

Asian and Asian American Studies Graduate Certificate
The Graduate Certificate in Asian and Asian American Studies (AAAS) provides a means for graduate students who are already enrolled in existing graduate programs the opportunity to enhance their studies with a focus on topics related to Asian Studies and Asian American Studies. The AAAS Graduate Certificate seeks to produce research and scholarship that engages "Asia Across the World" in its many forms, including consideration of hybridity, transnationalism, and global/local tensions.

**Objectives**

Students will learn how Asian and Asian diasporic societies, cultures, histories, and migrations mutually engage with global processes of social and cultural change. They will become conversant in the comparative study of different Asian cultures and regions and learn how social, cultural and historical phenomena in Asia and Asian diasporic societies have appeared, developed, and interacted with the rest of the world.

**Requirements**

Certificate students will be required to take a minimum of three graduate courses (12 credit hours). At least two (2) of the three courses must be chosen in consultation with the student's graduate advisor, based upon the student's primary interests and previous background. In addition, students concentrating on Asian Studies must take one Asian American Studies and Diasporic Studies course and students concentrating on Asian American and Diasporic Studies must take one Asian Studies course.

No transfer credit will apply to the certificate. In addition, students must maintain a minimum GPA of 3.0 and all courses used to complete the certificate must be taken with a normal grading option.

**Application**

Students apply for the AAAS Graduate Certificate through the Binghamton University Graduate School's online application process.

**Biological Sciences — Graduate**

**Graduate Programs**

The Department of Biological Sciences offers:

- PhD research program
- Master of Science — research thesis
- Master of Arts — non-thesis
- 3+2 BA/master's degree (MA or MS)
- Certificate in Advanced Biological Studies
- Certificate in College Teaching

Students may specialize in one of these tracks:

- Biochemistry, cell biology and molecular biology
- Ecology, evolution and behavior

**Admission**
Admission to the graduate program is open to qualified students with a bachelor’s degree or its equivalent in biological sciences or biochemistry. All applicants should submit a complete set of official transcripts, at least two letters of recommendation, a statement of professional interests and goals, and scores for the Graduate Record Examination. For application to the PhD program, applicants should have some undergraduate research experience.

Doctor of Philosophy — Research Program

The Biological Sciences Department is made up of many sub-disciplines, each with its own special requirements. Graduate students entering these sub-disciplines have a variety of backgrounds and future needs. The department recognizes these differences by stressing maximum flexibility for the program of each individual student. This flexible planning is the province of the committee supervising the research program of the graduate student.

The PhD is a research degree. Entering graduate students must affiliate with a professor, form a four-person supervisory committee and begin research in the first semester. Regular meetings with the supervisory committee are required. The major steps leading to the granting of the degree are to:

1. Take the Concentration Examination by the end of the first full year of study.
2. Take the Formal Research Proposal Examination by the end of two months into the fourth semester.
4. Submit the dissertation.
5. Give a final oral defense of the dissertation, including a departmental seminar on the research.

Course Requirements

Doctoral students must meet the course requirements of the MS. Beyond that, the number of semester-credit hours required for completion of the PhD is determined for each student by the supervising committee.

Concentration Examination

Completion of the Concentration Examination is the formal entry into the doctoral program. The purpose of the examination is to help the student develop graduate-level expertise in his or her sub-discipline. The examination is written and/or oral, consisting of specialty sections, and is administered over one to three days. The specialty sections are determined by the student’s supervisory committee. The areas of specialty include, but are not limited to, behavior, biochemistry, cell biology, ecology, endocrinology, evolution, evolutionary genetics, genetics, immunology, microbiology, molecular biology, neurobiology, animal physiology and plant physiology.

At this time, the need for the ability to read and/or speak a foreign language is evaluated. The need for a foreign language varies considerably within the different sub-disciplines of biology. The requirement is therefore flexible (usually one or no foreign language) and is determined by the individual supervising committee.

Formal Research Proposal Examination

The purpose of this examination is to ensure a doctoral level of general research skills (e.g., ability to write an NSF- or NIH-type grant proposal, ability to discuss and defend ideas, competency in review and interpretation of the literature, competency in experimental design). The examination consists of the student submitting a formal research proposal to the student’s supervisory committee and then defending the proposal at a meeting with the committee. The proposal should be in the style of a standard grant proposal to the National Science Foundation, National Institutes of Health or another federal funding agency with similar proposal requirements.
Dissertation Prospectus

A dissertation prospectus must be submitted within six months following the completion of the Formal Research Proposal Examination. This prospectus is a revised version of the research proposal submitted to the supervising committee for the Research Proposal Examination. The four-member supervising committee must approve the revision in writing. A copy of the approved revision must be submitted to the department. Meetings between the student and supervising committee should continue on a regular basis to allow committee members to monitor the progress of the research.

Final Oral Defense

After the dissertation is submitted, the research must be defended in an oral examination. A five-member committee made up of the supervising professor, the other three members of the supervising committee and an outside examiner appointed by the Graduate School conduct this examination. This examination covers the details, background and implications of the student’s research.

Seminar Requirement

PhD candidates must present a formal seminar to the department based on their research dissertation.

Master of Science — Research Program

The MS degree allows students to expand their background in a particular area of the biological sciences and to gain experience in research. Entering students must affiliate with a professor, form a three-member supervising committee and begin research in the first semester. Soon after formation, the committee meets with the student to establish the nature and scope of the research. The committee meets regularly to assess the student’s progress.

Course Requirements

A minimum of 30 semester-credit hours beyond the bachelor’s degree is required for completion of the MS degree. These credits are distributed as follows:

- 16 to 24 credit hours of courses numbered 500 or above (exclusive of BIOL 585, 591, 599 and all MAT/MSEd courses). A maximum of 12 credit hours of BIOL 597, Independent Study, is allowed.
- Zero to eight credit hours of elective courses outside of the biological sciences. Approval of the departmental graduate committee is required.
- Six credit hours of BIOL 599, Investigations in Biology — Thesis, are required.

Granting of the Degree

The department requires that each candidate for the degree of master of science in biological sciences complete the following additional requirements:

- maintain a 3.0 grade-point average in all graduate credit courses;
- complete a thesis acceptable to the supervising committee;
- pass a final oral examination on the subject matter of the thesis and related biological knowledge;
- present a formal seminar to the department based on the thesis research.
Master of Arts — Non-Thesis Program

The master of arts non-thesis degree is designed for students who want to expand their knowledge of the biological sciences primarily through coursework. The degree is designed to be completed in one year. Entering students may either:

- A. affiliate with an individual faculty advisor and form a three member supervising committee, or
- B. join the group of the MA coordinator and progress through the special capstone courses.
- C. complete a coursework-only program focused on health-related courses

Pathways A and B require the completion of a major review paper; pathway C does not require the completion of a major review paper.

Degree Requirements

A minimum of 30 semester-credit hours beyond the bachelor’s degree is required for completion of the master of arts —non-thesis degree. A cumulative grade-point average of 3.0 or above is required. These credit hours are to be distributed as follows:

For Tracks A and B:

1. 24 credit hours of formally structured courses numbered 500 or above (exclusive of BIOL 591, 595, 597, 599 and all MAT/MSEd courses). Four of the credit hours for this requirement may be taken as courses outside of the biological sciences with the approval of the supervisory committee (track A) or the MA coordinator (track B).
2. At least two credit hours of BIOL 680 (various topics in biology).
3. At least four credit hours of BIOL 597 (Independent Study). BIOL 597 may be either a library or laboratory research project designed to acquaint the student with the principles of experimental design.
4. MA Project: The student’s faculty advisor assists the student in developing a subject for review. The review proposal must be approved by the student’s supervisory committee, consisting of a faculty advisor and two other faculty members (track A), or the MA coordinator for track B. Approval of the review subject can be obtained by e-mailing a short summary (up to three pages) as appropriate. The MA Project is expected to be a thorough review of the appropriate literature in a critical, synthetic manner. The review should be a comprehensive synthesis of a research field, based on the primary literature, not a published review paper. The quality and length of the review should be similar to an article that would appear in the Quarterly or Annual Review of Biology or Biological Reviews. The MA Project paper should have a minimum length (with 1-inch margin and 12-point font) of approximately 50 double-spaced pages containing tables and figures, but not including references (usually 70-150 references cited), and should not exceed 100 pages unless specified by the committee. The final review paper should include an MA Project title page, a signature page as described in the Graduate School manual, and should be bound.

Review paper should consist of the following:

- Abstract (250 words)
- Review (use subheadings)
- Conclusion section
- References cited

Submission of MA Project. The review paper must be submitted to the supervising professor for evaluation at least
one month before the student wants to defend it to the committee. But it may take 2-3 months of revising to get it in
acceptable shape for defense. It is to your advantage to plan ahead and meet regularly with your advisor to develop
and revise it. The corrections must be incorporated into the review, and the supervising professor must give approval
for distribution to the supervisory committee. The review paper must be submitted to members of the supervisory
committee at least two weeks before the student wants to defend it to the committee. Failure to submit the paper to
your supervising professor or the supervisory committee on time may cause the delay of your defense, requiring you
to register for additional credits during semester break or even the following semester to finish your defense, or you
may not be able to obtain your MA degree. The student must defend the review to the supervisory committee in an
oral 30-minute defense, followed by the committee’s questions and comments on your review project. No formal
presentation is required. The presentation and/or the review paper can be rejected by the simple majority of your
committee, resulting in a failure to graduate with an MA degree.

For Track C:

1. 22 credit hours of formally structured courses numbered 500 or above (exclusive of BIOL 591, 595, 597, 599
and all MAT/MSEd courses).
2. At least 4 credit hours of BIOL 680 (various topics in biology) of which two must be in the seminar series
680X.
3. Up to 8 credit hours could be taken from outside of BIOL courses (see graduate director for a list of approved
courses or get approval of the graduate committee).
4. Up to 8 credit hours could be BIOL 597 (independent study).
5. Up to 4 credit hours could be BIOL 585 (internship).
6. Students will complete a special project approved by the graduate committee.

**Five-Year BA/Master’s Program (MA or MS)**

The program is designed for exceptional Binghamton University students who want to combine BA and a master’s
degree in five years. Students in the program receive a BA and a master’s degree at the end of the program. The
requirements for completion of the combined BA/master’s degree program are identical to those for completion of the
two separate degrees. However, because 12 hours of coursework taken for the master’s degree (500-600 level) also
count for the undergraduate degree, students are able to complete the course requirements for the BA in four years
and the course requirements for the combined BA/master’s degree in five years. By completing the BA requirements
during the first four years, students are assured of the bachelor’s degree if, for any reason, they do not complete the
fifth year.

Students are encouraged to declare their interest in the program as soon as possible, preferably in the freshman or
sophomore year. A limited number of students are accepted into the program at the end of the junior year. Admission
into the program is based on academic performance and sponsorship by a faculty member, who will be the student’s
research advisor for the master’s degree.

**BA Requirements**

The department’s standard requirements apply. In the fourth year, the candidates for the BA/master’s degree take 12
credits of BIOL 500-600 courses, excluding BIOL 599. They should begin their research or non-thesis project and
may receive credit by registering for BIOL 597. In the summer of the fourth year, they take BIOL 597/599 (four
credits), which means they work on their research or non-thesis project during the summer before their final
academic year of study.

**Master’s Degree Requirements**
- All master’s degree candidates must complete 24 credits of BIOL 500-600, excluding BIOL 599.
- All master’s degree candidates must complete 30 credits for graduation.
- All master’s degree candidates must maintain a GPA of 3.0 or above for graduation.
- The MS degree requires that the candidate complete a research thesis and defend that research to the department. This is a standard master’s research degree format.
- Because the MS degree is a research degree, the MS portion of the BA/MS program requires full-year participation (the fourth summer for research and perhaps the fifth summer to complete the writing and defense).
- The MA degree of a BA/MA program requires completion of a substantial review paper of publishable quality (instead of a thesis), which a supervisory committee must accept.

**Admission**

Students should formally apply during their junior year. They should have at least 16 credits of BIOL and 16 credits of CHEM completed. They should have a 3.2 GPA in biology and a 3.2 GPA overall. They must provide two letters of recommendation from people who have the expertise to evaluate their potential in a graduate research program. They need to submit a statement (500 or fewer words) indicating why they desire this program. Students must have a faculty sponsor in the department. All requirements of applicants by the Graduate School and department must be met, except that GREs are not required for this program.

**After Admission**

The student must obtain approval of a proposed program of study from the department’s graduate committee, which includes courses per semester and an outline of the MS research or MA project. The student must maintain a 3.2 GPA in biology during the remainder of the bachelor’s work.

**Certificate in College Teaching**

Colleges and universities frequently want new faculty to have a demonstrated proficiency in teaching as well as research. This certificate provides tangible evidence of the teaching skills of the graduate student. Students must participate in University-wide teaching workshops, complete required teaching-related activities within the department, demonstrate teaching and presentational skills in a formal setting and prepare a teaching portfolio.

**Certificate Requirements**

- Attend at least one fall-semester orientation for new teaching assistants;
- Attend 10 hours of University-wide teaching events such as the University Science Education Workshops, Spring Teaching Event and Poster Sessions, and Alliance for Teaching meetings. Other activities, such as being the participating representative from the Department of Biological Sciences to the fall-semester orientation for new teaching assistants, may be substituted at the discretion of the graduate committee;
- Participate as a teaching assistant in at least four semesters of laboratory sections or recitation sessions for biology undergraduate students, with at least one class-observation visit per semester by the faculty instructor who formally evaluates the student’s performance;
- PhD students: Present at least one oral research presentation in the Department of Biological Sciences’ fall symposium. Master’s students: Give at least one oral presentation, either at the departmental symposium or at an organized lunch seminar, e.g., for the EEB or BCMB groups.
Complete at least two BIOL 680 seminar courses:

BIOL 680, Survival Kit for Scientists: Part I-Teaching Issue

or

BIOL 680 Science Education

- Complete at least one course that emphasizes communication skills, such as BIOL 680, How to Write a Grant Proposal, which stresses written and oral expression. Courses that qualify are determined by the graduate committee;
- Submit a teaching portfolio with contents specified by the Department of Biological Sciences and approved by the departmental director of graduate studies.

Admission

This certificate is only for graduate students in the Biological Sciences Department; therefore, no formal admission process is necessary. However, the student must check with the graduate secretary of the department for detailed instructions on how to proceed with fulfilling the requirements for this certificate.

Other Graduate Degrees

Master of Arts in Teaching (MAT) and Master of Science in Education (MSEd) degree programs in Biology Adolescence Education, Grades 7-12, are available in the School of Education.

Chemistry — Graduate

Graduate Programs

The Chemistry Department offers programs leading to the degrees of master of arts, master of science and doctor of philosophy. These programs train the student broadly in chemistry and require original investigation in a specialized area. The PhD places major emphasis on training in depth, with the expectation of a significant contribution in the specialized area. Practical experience in teaching chemistry and an understanding of the ethical conduct of research and scholarship are also recognized objectives both in master’s and in PhD programs.

Master of arts in teaching (MAT) and master of science in education (MSEd) degree programs in Chemistry Adolescence Education, grades 7-12, are available in the Graduate School of Education.

A University certificate in college teaching is awarded to students who satisfy certificate requirements as defined by the Chemistry Department.

Interdisciplinary Programs

In addition to the four traditional areas of chemistry—analytical, inorganic, organic and physical—the department also offers MS and PhD degrees with specializations in the interdisciplinary areas of biological chemistry and materials chemistry.

Requirements

Admission
All applicants should submit scores for the Graduate Record Examination aptitude test and the GRE advanced test in chemistry.

**Placement Examinations**

On entering the graduate programs, students are expected to demonstrate a general competence equivalent to the baccalaureate degree with a major in chemistry, or to be prepared to make up deficiencies by taking appropriate courses. Proficiency is determined by placement examinations in the major subject areas of the field. In the week preceding registration for each semester, a written comprehensive examination is given in each of the areas of organic, inorganic, physical and analytical chemistry.

A student in the biological chemistry program must demonstrate proficiency in any two traditional subdisciplines of chemistry (organic, analytical, inorganic, physical) and a placement examination in biochemistry. A student in the materials chemistry program must demonstrate proficiency in inorganic and physical chemistry and in solid state and materials sciences (the last topic may be replaced by taking placement examinations in both analytical and organic chemistry).

Students who perform satisfactorily are admitted to graduate courses numbered 500 and above. Students showing deficiencies in specific areas are required to correct these deficiencies, normally by taking appropriate courses at lower levels or by passing subsequent examinations. Undergraduate deficiencies may be removed by audit (without credit), wherein all the requirements, including examinations, must be completed; the instructor provides a grade used by the departmental graduate committee in evaluating the student’s progress. To remain in the program, students are ordinarily expected to pass at least two placement examinations, or otherwise remove deficiencies prior to the beginning of the second semester; all such examinations must be successfully completed by the beginning of the second calendar year of study.

**Master of Arts Program**

The master of arts program in chemistry satisfies the needs of students who desire a master’s degree based primarily on coursework.

The departmental graduate committee recommends for the degree of master of arts in chemistry students who complete the following requirements:

- completion of an acceptable research project (at least four credits of CHEM 597);
- participation for one semester in the graduate seminar (CHEM 592);
- two semesters of Frontiers in Chemistry (CHEM 593);
- six graduate courses, at least four of which are in chemistry, the balance to be related courses approved by the departmental graduate committee;
- public presentation of a seminar on the subject of the research project;
- a total of at least 32 graduate credit hours obtained under the above requirements.

**Master of Science Program**

A candidate for the degree of master of science in chemistry is expected to demonstrate a general knowledge in the field and the ability to do original work in a specialized area of the field of chemistry, leading to an acceptable thesis. The program is guided by an advisor and the departmental graduate committee until certification and approval of a research subject and advisor. The research problem is started as early as possible in the student’s graduate education, consistent with the attainment of an acceptable general proficiency as determined by the satisfactory
The departmental graduate committee recommends for the degree of master of science in chemistry students who complete the following requirements:

- completion of an acceptable research project and thesis (CHEM 599);
- participation for one semester in the graduate seminar (CHEM 592);
- two semesters of Frontiers in Chemistry (CHEM 593);
- four graduate courses, at least three of which ordinarily are in chemistry, the balance in related courses approved by the departmental graduate committee; a student in the biological chemistry program must complete at least two courses in chemistry, and the remainder from the fields of biological sciences and other sciences (physics, computer science, geology, mathematics or engineering) approved by the faculty advisor; a student in the materials chemistry program must complete at least two courses in chemistry, including CHEM 544, and at least two courses from the fields of materials science and engineering, geology, physics or engineering approved by the faculty advisor;
- passing an oral examination on the subject of the research thesis;
- a total of at least 30 graduate credit hours obtained under the above requirements.

The examining committee for each candidate consists of at least three faculty members appointed by the departmental graduate committee. In interdisciplinary programs, one member may be from another department.

**Doctor of Philosophy Program**

The PhD is awarded for original investigation leading to a significant advance of knowledge in a specialized area. Courses and seminars provide necessary background in the knowledge, basic principles, methods and theories of chemistry. Under the guidance of the departmental graduate committee, students complete those courses that best serve their particular needs. In the course of their training, they are expected to demonstrate by appropriate examinations a breadth of knowledge in chemistry; a perspective of the relation of chemistry to other fields of knowledge—particularly the fields of mathematics, physics and biology—and competence in depth in a specialized area of chemistry. At the earliest date consistent with their general progress, students select a research topic and begin research (see below under “Research and Dissertation”).

**Courses**

A student is normally expected to take six to eight courses, two of which may be from the fields of physics, mathematics and biology. A student in the biological chemistry program must complete at least three courses in chemistry, and the remainder from the fields of biological sciences and other sciences (physics, computer science, geology, mathematics, or engineering) approved by the faculty advisor, for a total of six to eight. A student in the materials chemistry program must complete at least three courses in chemistry, including CHEM 544, and at least two courses from the fields of materials science and engineering, geology, physics or engineering approved by the faculty advisor, for a total of six to eight. Most of the basic graduate courses in a student’s program should be taken during the first year of residence.

**Comprehensive Examinations**

Proficiency in a specialized area (organic, inorganic, analytical, physical, biological, or materials chemistry) is established by passing written examinations and an oral examination. Students are required to complete all comprehensive examinations and obtain the ABD (All But Dissertation) status before the beginning of fifth semester.
For all students except those in the biological and materials chemistry programs, the written examination requirement consists of a series of cumulative examinations. Normally students are required to take them in uninterrupted sequence until they pass three out of the eight examinations in the selected area of specialization. Failure to pass three out of eight such examinations is normally considered sufficient reason for dismissal from the PhD program. Following the satisfactory completion of the cumulative examinations, students are required to stand an oral examination in the area of specialization.

For students in the biological and materials chemistry programs, a written examination will be prepared by an examination committee. If the student fails the examination, the student will have the opportunity to take a second written examination within six months. Failing the written examination a second time will be grounds for dismissing the student from the PhD program. Following the satisfactory completion of the written examination, the student is required to pass an oral examination.

For those students pursuing research in an alternative interdisciplinary area, an alternative examination option is available under the guidance of an interdisciplinary examining committee.

Seminars

All graduate students in chemistry attend and participate in seminars based on lectures presented by fellow students, faculty and visiting scientists. Appropriate questions from such seminars are normally incorporated in the cumulative examinations.

Research and Dissertation

Since the PhD is earned primarily on the basis of original investigative work, students begin research early in their training. The departmental graduate committee reviews each student’s progress at frequent intervals, at least after each semester of residence. The selection of a problem and the advisor is made with the advice and approval of the committee, at the earliest date consistent with the student’s progress in satisfying the general requirements of the program, and normally not later than the beginning of the second year. Thereafter the advisor serves as the student’s advisor. The investigation is described in a written dissertation, prepared and submitted in accordance with the prescribed regulations of the graduate committee. The student is required to pass an oral examination in defense of the thesis.

Summary Requirements

- normally, at least six courses, two of which may be from the fields of physics, mathematics or biology; for students in the biological chemistry program, at least three courses must be in chemistry; for students in the materials chemistry program, at least three courses must be in chemistry and at least two courses must be in other fields;
- except for the biological and materials chemistry emphasis, passing of three out of eight cumulative examinations in a specialized area, followed by an oral examination in the specialization; for the biological and materials chemistry emphasis passing a written examination, as described above, followed by passing an oral examination;
- one semester of graduate seminar (CHEM 592);
- two semesters of Frontiers in Chemistry (CHEM 593);
- completion of an original investigation in a specialized area of chemistry;
- submission of a written dissertation and oral defense of thesis.
Comparative Literature — Graduate

Graduate Programs

The graduate programs provide qualified students with a framework for studying a broad range of literatures, for exploring literature and other arts, and for pursuing translation studies or other forms of interdisciplinary inquiry. To enter one of the degree programs, students must be able to do graduate-level work in one or more foreign languages. In courses in comparative literature, they make substantial use of the foreign languages they command. In addition to the body of knowledge and methodology appropriate to their individual programs of study, students are expected to acquire a considerable familiarity with world literature and with literary theory and criticism.

Students work closely with the departmental director of graduate studies and the directors of specific programs - Translation Studies or Philosophy, Literature and the Theory of Criticism (PLC) - to formulate a curriculum that meets their needs and maintains the standards of the discipline. While the normal pattern of requirements for the MA and PhD degrees is described below, students may have certain courses waived because of their previous training or professional goals.

All applicants must submit scores for the verbal, quantitative and analytical Graduate Record Examination aptitude test.

International students whose native language is not English, and who have not received a degree in the United States or another English-speaking country as defined by the Graduate School, are required to submit proof of English proficiency, such as Test of English as a Foreign Language (TOEFL), IELTS, or PTE Academic scores. The minimum TOEFL score for admission to the Department of Comparative Literature is 100.

Master of Arts Programs

The master of arts degree programs introduce students to the comparative study of literature, to interdisciplinary studies involving literature, and to the theory and practice of literary translation. Essential to the programs is the acquisition of the critical tools required by comparative literary studies, as well as the development of the ability to do graduate work in at least two literatures. All students, before completing the degree, must demonstrate proficiency in a language other than English. To be admitted to the programs, students must have a BA (or equivalent) and show potential for graduate work. The department offers 2 tracks for the Masters: Plan A is the standard program, often leading to the PhD; Plan C is a vocationally oriented translation studies degree, which must be pursued in conjunction with a graduate certificate in translation. The completion of the Plans A and C usually take at least three semesters of coursework.

Course Requirements

Plan A: Standard

| credits |
|-------------|-------------|
| • COLI 592. Proseminar | 4 |
| • First literature | 12 to 16 |
| • Second literature or minor | 8 to 12 |
| • Electives | 0 to 8 |
| TOTAL | 32 |

500/669
Plan C: Translation studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>COLI 592. Proseminar</td>
<td>4</td>
</tr>
<tr>
<td>COLI 572 and 573.</td>
<td>8</td>
</tr>
<tr>
<td>COLI 580. Topics in Translation Theory</td>
<td>4</td>
</tr>
<tr>
<td>Linguistics, language theory or history as suited to individual program needs</td>
<td>8</td>
</tr>
<tr>
<td>Literature in source languages (two courses)</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

Languages

MA candidates are expected to demonstrate proficiency in a language other than English, as well as to show an adequate command of English. By the time the student takes the MA examination, he or she must have met the language requirement.

Examinations

Students following Plan A take a written examination consisting of four sections (Literature I and II, Theory, and Literary Specialization). Reading lists for these examinations are available to students at the departmental office. Students following Plan C, translation studies, take one of the following sections: Literature I, Literature II and Theory. MA Plan C students must also successfully complete a graduate certificate in translation. (For information on the graduate certificate in translation, see: [http://www2.binghamton.edu/comparative-literature/graduate/trip/degree/certificate.html](http://www2.binghamton.edu/comparative-literature/graduate/trip/degree/certificate.html).) Students in Plan A who wish to qualify for study toward the doctorate must achieve a grade of B+ or better on all sections of the examination. A grade of B or better on each section constitutes a passing grade. These examinations are given in November, and, when necessary, also in April; they may be repeated once.

Doctor of Philosophy Programs

Doctoral studies in comparative literature assume a foundation in the study of literature approximately equivalent to the one described under the MA programs. The doctoral program provides opportunities for the study of literature from a comparative point of view, extending the reach of inquiry into fields such as philosophy, history and art. Basic to the program is a solid foundation in critical methodology and in the history of criticism.

Doctoral Program in Literary Studies

Each student’s program is expected to achieve the following objectives: an in-depth knowledge of one literature, including the main critical sources for its study; a knowledge of a substantial number of works in a second literature; a knowledge of a large number of master works of world literature (such as those represented in the MA reading list); a concentration in a period, a genre or other area of study encompassing at least two literatures; a good knowledge of the history of criticism and of contemporary literary theory. Highly unusual majors or minors require the approval of
the departmental faculty.

**Admission to the Program**

Formal admission to the program entails one of the following procedures:

- Students who have passed the MA examination (see above) with a grade of B+ or better may be recommended to the program at the discretion of the departmental examination committee.
- Students presenting an MA degree in a national literature from another department or university, or an MA in comparative literature from another university, are normally not required to take the master’s examination (doctoral qualifying examination).

Applicants to the doctoral program should include in their application some samples of their writing (e.g., one or more term papers).

**Requirements**

Students are expected to design their own curricula in accordance with their scholarly interests and their professional goals, and to prepare their own reading lists in consultation with members of the faculty. All PhD students are encouraged to seek the guidance of an advisor at the beginning of their third semester to assist them in designing their programs and choosing dissertation topics.

The minimal course requirement for the PhD is 60 credits. Students must take COLI 592, the Proseminar, usually in their first semester. Ordinarily, eight courses are taken in the major, and approximately the same number of courses are distributed among the minor, literary theory, electives, etc.

Comparative literature courses at Binghamton are, basically, of two kinds: broadly based seminars covering the evolution of a genre, the history of criticism, etc., or monographic-type courses concentrating on one or more authors, a development in literature or in literary theory, a particular interdisciplinary approach, etc. A student’s program should aim at achieving the objectives of the program through a balance among the studies of literary history and theory and the comparative study of specific works and authors. In addition to the courses and seminars offered by the Comparative Literature Department, students are encouraged to take courses offered by other departments in their fields of specialization.

PhD candidates must show native or near-native fluency in one foreign language and demonstrate a solid reading knowledge in a second. Both languages must directly relate to the student’s areas of research, and must be approved by the director of graduate studies (or program director). Philosophy, literature and the theory of criticism (PLC) students are required to demonstrate proficiency in French and German. Students are expected to satisfy the language requirements by the fifth semester of study (or if entering with an MA degree, by the end of the third semester).

**Comprehensive Examination**

The comprehensive examination consists of four parts:

- A *Dissertation Proposal* (in the format of a substantial paper): This paper is expected to review primary and secondary sources and articulate the problem(s) that the student will focus on.
- *Historical Construction of a Topic*: This section of the exam is devoted to a theme that treats the student’s area of expertise in its historical dimension. This is a 72-hour take-home exam.
- *Minor Field*: This is a second area of specialization that may be conceived in such a way as to complement
the major area of expertise or to represent an altogether different focus. This is a 72-hour take-home exam.

- **Oral Examination**: This segment is based on the dissertation proposal and on the preceding portions of the exam and involves all of the examiners. Students are expected to make an oral presentation of their doctoral project at the beginning of the examination.

Students choose an examination committee (subject to the approval of the graduate director) with a minimum of three examiners. All committee members are encouraged to participate in the process of writing the proposal. The graduate director must be informed of the student’s intention to take the exam in the first week of the semester in which it is to be scheduled. Reading lists for parts two and three of the examination should be developed through close collaboration with the examiners and must meet with their approval. The dissertation proposal must be submitted no later than March 15 for an examination in the spring semester and October 15 for an examination in the fall semester. The oral examination should take place while classes are in session in fall or spring.

The student is formally admitted to candidacy once he/she passes the comprehensive examination. Once formally admitted to candidacy, the student has five years in which to complete and defend the dissertation.

**Dissertation**

The dissertation should be comparative in its scope and implications and demonstrate the student’s ability to deal with theoretical problems and to organize and present the research methodically. In general, a dissertation should not have fewer than 200 pages in its final form. At the discretion of the comparative literature faculty, a student may do an extended critical translation as a dissertation. This includes an introductory study equivalent in substance to what is required of the other type of dissertation. The Graduate School requires that the candidate, while working on the dissertation, register for one credit hour of COLI 699.

On the initial approval of the dissertation by its readers, the candidate is expected to defend it at an oral examination lasting from one to two hours.

**Doctoral Program in Philosophy, Literature and the Theory of Criticism (PLC)**

This program offers students a course of study responsive to the interdisciplinary nature of work in literary theory, literature, and philosophy. It provides an extensive background in literary history and methods of reading, as well as significant preparation in philosophy and modern theories of language and interpretation informed by research from such fields as anthropology, the humanities, linguistics, psychoanalysis and semiotics. As a site for joint research and inquiry, the philosophy, literature and criticism group seeks to bring into focus such topics as the disciplinary articulation of knowledge and truth, the nature of epistemological and metaphysical foundations, the possibilities and limits of theory, and the politics of understanding and signification. It draws on the campus resources in the areas of philosophy and modern theory of criticism, and seeks to bring these into vital interplay with literary research and work in the visual arts.

Students who enter with a BA earn a PhD in comparative literature with a specialization in the theory of criticism, as well as an MA in philosophy. Students who are admitted to the program with a master’s degree have a choice between two tracks: the option to pursue a master’s degree in philosophy and a PhD in comparative literature or to earn a PhD in comparative literature with a PLC specialization (without the master’s degree in philosophy). Graduates are qualified for joint appointments in philosophy and literary programs and single appointments in Comparative Literature and national literature departments. Administered by the Comparative Literature Department, the program is supervised directly by the co-directors and a PLC program committee.

**Admission to the Program**
Qualified students holding a bachelor’s or master’s degree are eligible for admission (check website of Binghamton Graduate School). An undergraduate specialization in philosophy or literature is desirable but not essential for admission. Students considered insufficiently prepared for work in the program may be required to do additional work to make up deficiencies.

During the first year of study, students entering with a BA are considered to be enrolled in a master’s-level program. At the end of the third semester, students take a 72-hour take-home qualifying examination covering some of the core material of the program and part of the PLC reading list. Students entering with a master’s degree will take a qualifying exam after the second semester of study.

Students who fail the examination may take it once again. Students not admitted to the doctoral level may be permitted to continue work toward a master’s degree in philosophy, comparative literature or a national literature, according to the requirements of the appropriate department.

Course Requirements

For students entering with a BA, the minimum course requirements for the PhD are 60 credits. Students are required to take COLI 592, the Proseminar, courses in literary criticism, theory, and literature, and six semester courses with philosophical content. The courses that fulfill this last requirement are determined every semester, but three of them must be taken in the philosophy department. Some of the specific requirements may be modified on the basis of the student’s prior experiences. Students may be asked to take additional courses in philosophy or in literature, depending on career goals and specializations.

Language Requirement

Students are required to demonstrate proficiency in French and German. The standard proficiency-level evaluations accepted by the Comparative Literature Department are used. These, however, represent minimal requirements, and students are advised to develop stronger proficiency in languages essential to their dissertations. Students are expected to have satisfied the language requirements by the end of their fifth semester of study.

Examinations

PLC students take two examinations: The first is a qualifying examination, taken by students entering with a bachelor’s degree in the third semester and by students entering with a relevant master’s degree in the second semester. The examination is based on the PLC background core reading list (comprising philosophical and literary texts representing the core of the PLC program) and on the student’s coursework.

Comprehensive Examination

The comprehensive examination consists of four parts:

- A Dissertation Proposal (in the format of a substantial paper): This paper should review the significant primary and secondary sources relevant to this area of work, and should articulate the problem(s) that the student will focus on.
- PLC Core (Philosophical texts): Based on the reading list provided by the student. This is a 72-hour take-home exam.
- PLC Core (Literary Texts): Based on the reading list provided by the student. This is a 72-hour take-home exam.
- Oral Examination: This segment is based on the dissertation proposal and on the preceding portions of the
Students choose an examination committee (subject to the approval of the graduate director) with a minimum of three examiners. Reading lists for parts two and three of the examination should be developed through close collaboration with the examiners. The dissertation proposal must be submitted no later than March 15 for an examination in the spring semester and October 15 for an examination in the fall semester. The oral examination should take place while classes are in session in fall or spring. The student is formally admitted to candidacy once he or she passes the comprehensive examination. Once formally admitted to candidacy, the student has five years in which to complete and defend the dissertation.

Program Committee

Professor Brett Levinson, Comparative Literature, Program Co-Director
Melissa Zinkin, Philosophy Department, Program Co-Director
Gisela Brinker-Gabler, Comparative Literature
Jeroen Gerrits, Comparative Literature

Program Faculty

The PLC program draws on a rich resource faculty that includes:

Comparative Literature
Pavlovskis-Petit, Zoja

German
Pages, Neil Christian

Philosophy
Allen, Jeffner M.
Bar On, Bat-Ami
Guay, Robert
Pensky, Max A.

Art History
McDonough, Thomas
Tagg, John

Dissertation

The dissertation is similar in nature and scope to that required of students in the program in literary studies.

Translator Training
The certificate program in translator training is administered by the translation research and instruction program. For a detailed description, see the Translation Research and Instruction Program section.

Economics — Graduate

Graduate Programs

The department offers graduate programs leading to MA and PhD degrees in economics. The focus of the PhD program is on the applied aspects of the discipline. A strong foundation in economic theory is initially developed, followed by exposure to several sub-disciplines of economics. Courses usually place an emphasis on the sub-discipline’s empirical and policy applications. The programs provide a flexible framework adaptable to a wide variety of professional objectives. The PhD program prepares individuals for careers in teaching, government and research. The program offers the opportunity to specialize in various fields.

The MA program in Financial Economic Analysis prepares students for employment in economic research at government, and private organizations. The MA program may also provide a base for further graduate work in economics.

Graduate students receiving assistantships are usually assigned responsibilities that prepare them for teaching and research.

Admission

- Qualified students holding a bachelor’s or master’s degree are eligible for admission. Applicants to the MA program must not have been previously awarded a Master’s degree in financial economics.
- Applicants are required to submit scores from the Graduate Record Examination.

Master of Arts Program

The MA program in Financial Economic Analysis requires 32 credit hours of coursework and typically takes three semesters of full-time work. Successful completion leads to the award of the MA degree in Economics.

Course Requirements

Program in Financial Economic Analysis

<table>
<thead>
<tr>
<th>course</th>
<th>credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 500. Microeconomic Theory</td>
<td>4</td>
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<tr>
<td>ECON 501. Macroeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>ECON 502. Econometric Methods</td>
<td>4</td>
</tr>
<tr>
<td>ECON 503. Mathematical Analysis for Economists</td>
<td>4</td>
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<tr>
<td>ECON 504. Economic Forecasting</td>
<td>4</td>
</tr>
<tr>
<td>ECON 509B. Economics of Transactions in Firms</td>
<td>4</td>
</tr>
<tr>
<td>ECON 542. Advanced Financial Economics</td>
<td>4</td>
</tr>
</tbody>
</table>
Other Requirements

Courses presented for the degree must all be completed with grades of C- or better and a cumulative grade-point average of at least 3.0 (B average). Students studying toward the doctoral degree may request that the MA degree be awarded once they have fulfilled all the MA degree requirements (PhD-level courses may substitute for MA courses).

Doctor of Philosophy Program

The PhD in Economics requires a total of 58 credits, and normally takes five years of full-time work to complete. The degree requirements may be divided into four general areas — core courses (28 credit hours), electives (28 credit hours), PhD Seminar (2 credit hours) and dissertation. In addition, the student must pass two comprehensive examinations: microeconomic theory and macroeconomic theory. Successful completion of the program leads to the award of the PhD degree in Economics.

PhD Fields of Specialization

The department offers the following PhD fields of specialization:

- Econometrics — applied and theoretical
- Labor economics
- Advanced macroeconomics
- Environmental economics
- Development economics

Course Requirements

Economics

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECON 611 and 612. Microeconomic Theory</td>
<td>8</td>
</tr>
<tr>
<td>ECON 613 and 614. Macroeconomic Theory</td>
<td>8</td>
</tr>
<tr>
<td>ECON 615, 616 and 617. Statistics and Econometrics</td>
<td>12</td>
</tr>
<tr>
<td>Economics electives</td>
<td>28</td>
</tr>
<tr>
<td>ECON 693 and 694. PhD Seminar in Economics</td>
<td>2</td>
</tr>
<tr>
<td>ECON 699. Dissertation</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>58</strong></td>
</tr>
</tbody>
</table>
The elective courses are normally taken in economics. Courses taken outside of economics require permission of the Director of Graduate Studies. Ordinarily the University-wide residence requirement is met by registration in 24 credits, excluding ECON 597, 697 and 699.

Courses presented for the degree must be completed with grades of C- or better and a cumulative grade-point average of at least 3.0 (B average).

**Third-Year Paper**

PhD students are required to complete a research paper by the end of their sixth semester. Students who fail to present an acceptable paper by this time will be designated as not making satisfactory progress and will be terminated from the program.

**Dissertation**

The student must submit a dissertation that embodies original work on some significant topic in theoretical or applied economics. Before undertaking the dissertation, the student arranges for an advisory thesis committee consisting of faculty whose research interests are appropriate to the proposed problem.

After completing all comprehensive examinations, course requirements and the third-year paper, the student must develop a written prospectus of the dissertation topic and obtain the approval of the prospectus by the thesis committee. The prospectus must include a brief statement of the problem and the student’s proposed approach to answering the problem. In the case of empirical studies, the student must also include a discussion of the data.

When the initial prospectus has been developed to the extent that it is ready for examination by the entire department, the student must present and defend the prospectus to a graduate seminar of faculty and students. The presentation must be made with the advice of the student’s dissertation committee. This seminar provides feedback on the dissertation topic. It must be presented at least six months prior to the final oral examination in defense of the dissertation.

The two-course sequence ECON 693 and ECON 694 is normally taken during the third year and beyond of graduate work. All resident PhD candidates who have completed their comprehensive examinations are required to register for either ECON 693, 694, 698 or 699.

**Admission to Candidacy**

The student who satisfies the following requirements is recommended for candidacy for the doctor of philosophy in economics.

- **Course Requirements:** Complete the program of coursework described above.
- **Other Requirements:** Completion of the third-year paper as specified above.
- **Comprehensive Examinations:** The PhD theory comprehensive examinations in microeconomic theory and macroeconomic theory must be taken at the end of the second semester of study following completion of the four required theory courses — ECON 611 and 612 for microeconomic theory, and ECON 613 and 614 for macroeconomic theory. These examinations are offered within two weeks of each other in June. Students who do not pass one or both examinations may retake the examination(s) not passed later in the summer. If a student fails either theory examination the second time, that student is terminated from the economics PhD program; a third attempt is not allowed.*

*Consent to take any examination may be denied to students whose cumulative grade-point average for all courses taken for credit in the Economics Department is below 3.0 (B).
Final Examination

After the student's admission to candidacy, the degree of doctor of philosophy in economics is recommended by the department for the student who has completed an approved program of study, submitted a dissertation acceptable to the advisory committee, and passed a final oral examination in defense of the dissertation.

English, General Literature and Rhetoric — Graduate

Graduate Programs

The graduate program offers the MA and the PhD degrees. The MA stresses breadth; the PhD program encourages students to pursue their special interests, whether broadly or narrowly defined. MA candidates do not specialize, but develop a broad knowledge of English literature and language, American literature and literary theory, and criticism. Such breadth of knowledge is a prerequisite for PhD candidates, who concentrate on specific fields of scholarly interest before writing a dissertation.

Master of Arts Program

Qualified students holding a bachelor’s degree are eligible for admission to the program. An undergraduate major in English is desirable for admission. All applicants should submit a sample of their critical writing (10-20 pages), as well as GRE general test scores. Those wishing to enter the MA program with a specialization in creative writing should so indicate on the front page of the application and should submit together with a sample of their critical writing a portfolio of their creative work (not more than 50 pages of fiction or 25 pages of verse).

The application deadline for fall admission to the MA is Feb. 15. The application deadline for spring admission to the MA, whether or not the student wishes to be considered for financial aid, is Nov. 15. All applicants for the MA should go to the website http://www.binghamton.edu/grad-school/admissions/apply/index.html in order to enter an online application.

The master of arts in English is granted on satisfactory completion of the following requirements.

Courses

In consultation with the director of graduate programs, the student plans a program of at least 9 graded courses, or 36 credits:

- One literature course before 1800
- One course in literary theory
- Seven additional topics courses

Students normally take no more than two appropriate courses in other departments and no more than two courses from the same faculty member. Students who wish to take independent study courses must seek the consent of a faculty member who is willing to direct the independent study. Students are limited to two independent study courses as part of their program.

Students who wish to apply for doctoral programs are advised to plan a curriculum that emphasizes the development of a broad knowledge of English and American literature, although some specialization in a single field may be appropriate. The student must maintain at least a 3.0 average to remain in the program: more than one C grade normally requires dismissal. A student not in residence must register each semester to remain in good standing.
Thesis

Students may wish to write a master’s thesis. Such students must submit to the graduate director a plan that shows adequate preparation for their proposed thesis, a brief prospectus of the proposed investigation and a signed approval from the faculty member with whom the student wishes to work. The thesis is a substantial (50-75 pages) piece of original research or criticism. Only students whose thesis plan has been approved may register for ENG 599, Master’s Thesis; ENG 599 may be taken twice for credit, and it may be used for as many as two of the five electives required for the degree. When the thesis has been approved by the faculty advisor, the director of graduate programs appoints a qualified second reader to review it. Theses must conform to the Graduate School requirements, as outlined in the Faculty and Student Graduate Degree Handbook. Students may plan a course of study that does not include the writing of a thesis.

MA in English/Creative Writing

In addition to meeting the requirements for admission to the English Department’s Master of Arts program (i.e., GRE general test scores, transcripts, recommendations and a critical writing sample), students wishing to enroll in this program must also submit a substantial portfolio of their work in fiction or poetry (not more than 50 pages of fiction or 25 pages of verse), along with a critical writing sample of 10-20 pages. On completion of the following requirements, students in this program receive the MA in English/creative writing:

- one literature course before 1800;
- one literature course before 1900;
- two additional literature courses in any period after 1800;
- two workshops or tutorials in the writing of fiction or poetry;
- ENG 589, Teaching of College English;
- ENG 599, Thesis, for four credits;
- two electives, one of which may be taken outside the department in a related art.

In their first semester, students who are appointed as teaching assistants and who have no previous teaching experience are required to take ENG 589, The Teaching of College English, which will count as one of their electives.

Students normally take no more than two appropriate courses in other departments and no more than two courses from the same faculty member. Students who wish to take independent study courses must seek the consent of a faculty member who is willing to direct the independent study. Students are limited to two independent study courses as part of their program.

Students must maintain at least a B average to remain in the program; more than one C grade normally requires dismissal. A student not in residence must register each semester to remain in good standing.

Foreign Language

All MA candidates in English/creative writing must demonstrate, during the time of their program, a reading knowledge of at least one foreign language. Such competence may be demonstrated in any one of four ways:

- Evidence of the student having passed a certified translation examination in a graduate program at some other institution.
- Presenting transcript evidence of at least three years (six semesters) of college-level study of a single foreign language (fourth- and fifth-year high school study in the same language counts as two semesters each) with a
grade average of B or better, completed no more than five years before admission to the MA program at Binghamton University.

- Successful completion of a graduate course in a foreign language or of a graduate course in comparative literature in which a significant portion of the work is done in a foreign language.
- Successful completion of a graduate proficiency workshop and examination (TRIP 707).

Creative Thesis

At the conclusion of their coursework, students must submit to the director of creative writing a collection of poems, a collection of stories or a novel. The director of creative writing constitutes a panel of at least two professors who evaluate this thesis. The thesis is the most important requirement for the MA in English/creative writing; it must be of substantial length and publishable quality, and it must conform to the Graduate School requirements for a thesis, as outlined in the Graduate School Student Handbook.

Master of Arts in Teaching and Master of Science in Education

The English Department cooperates with the program in education, which offers both the MAT (master of arts in teaching) degree, Grades 7-12, in English Adolescence Education, and the MSEd (master of science in education) degree in Adolescence Education in English.

The MAT degree program is for those with an undergraduate degree in English who are seeking provisional certification to teach English in grades 7-12. The MSEd degree program is for those who already hold provisional certification to teach in New York state, and leads to permanent certification in New York state to teach English in grades 7-12. Requirements for these degrees are listed in this publication in the section on the Graduate School of Education.

Inquiries about these programs should be directed to the Graduate School of Education.

Doctor of Philosophy Program

Admission

Students entering the PhD program in English usually are expected to have an MA in English literature. This does not preclude the admission of students whose education has been in other fields, but we do expect that a student must have had at least eight to 10 courses in literature at the graduate level in order to be considered for the PhD program. Often students with MFAs do not have this amount of literature coursework, and will be expected to get the MA in English before applying to the PhD program. After admission and while completing their eight PhD courses, candidates develop specializations in three fields of scholarly interest preparatory to field examinations in a specific area of expertise leading to the dissertation.

The English graduate admissions committee admits qualified students to the PhD program on the basis of their total records, including transcripts, GRE general test, recommendations and a sample of their critical writing (10 to 20 pages). Applicants who wish to choose the creative writing option for the dissertation should so indicate on the front page of the application and should submit a portfolio of their creative work (not more than 50 pages of fiction or 25 pages of verse) in addition to the critical writing sample.

The application deadline for fall admission to the PhD program, whether or not the student wishes to be considered for financial aid, is February 15. The application deadline for spring admission to the PhD program, whether or not the student wishes to be considered for financial aid is November 15. All applicants for the PhD should go to the website at http://www.binghamton.edu/grad-school/admissions/apply/index.html in order to enter an online
Program of Study

The graduate director serves as the new PhD student’s initial advisor. After taking several courses, the student chooses an advisor in his or her main area of interest. In consultation with the advisor, the student plans a program of study comprising at least eight courses and begins to determine three areas of special interest (see below under “Field Exams”). As part of their eight-course minimum, students may take no more than three creative writing workshops, no more than two appropriate courses in other departments, and no more than two graded courses from the same faculty member. Those students who are admitted to the creative writing dissertation option must take at least two creative writing workshops. Students may take no more than two independent studies. One of the eight required courses must be ENG 589, Teaching of College English. Beyond the eight-course minimum, these limits do not apply.

Students must maintain at least a B+ average to remain in the program; more than one C grade normally requires dismissal. Students not in residence must register each semester to remain in good standing.

PhD Field Examinations

Coursework is normally completed at the end of the second year of doctoral study. Students are then expected to complete three distinct field examinations by the end of the third year (though many students will begin taking these examinations earlier). While areas acceptable as fields of study are not predefined, they must be approved by the graduate director. A field of study may be defined in various ways: e.g., by nationality and chronology, genre, topic or critical theory. Students may coordinate their fields of study so that the time spent preparing for their examinations will provide a foundation for their dissertations, as well as preparation for their professional identities.

In the fourth semester of coursework, each student, in consultation with the graduate director, works with a chosen professor to define each field examination, draw up a reading list and pursue the topic chosen. All three examinations are normally administered in the third year of study.

Detailed guidelines for PhD students working on field exams are available in the English Department Graduate Office.

Foreign Language

All PhD candidates must demonstrate, during the time of their program, a reading knowledge of at least one foreign language at a level of competence sufficient for the understanding of scholarly and critical materials. Such competence may be demonstrated in any one of four ways:

- Evidence of the student having passed a certified translation examination in a graduate program at some other institution.
- Presenting transcript evidence of at least three years (six semesters) of college-level study of a single foreign language (fourth- and fifth-year high school study in the same language count as two semesters each) with a grade average of B or better, completed no more than five years before admission to the PhD program at Binghamton University.
- Successful completion of a graduate course in a foreign language or of a graduate course in comparative literature in which a significant portion of the work is done in a foreign language.
- Successful completion of a graduate proficiency workshop and examination (TRIP 707).
Dissertation

In the course of doctoral study, the student establishes a dissertation committee consisting of a director and two readers. The dissertation is a substantial study of some significant topic in the area of the student’s professional interest or a creative writing dissertation for those students who are admitted to the creative writing dissertation option.

The student’s dissertation director must formally approve, and submit to the graduate director, a written prospectus of the dissertation, or for those submitting a creative dissertation a sample of work in progress, at least one semester prior to completing the dissertation. The prospectus or the sample of creative work in progress will be shared with all members of the dissertation committee. On completion of all other requirements, the student submits a finished dissertation for approval and defends the dissertation in an oral examination. The submitted dissertation must conform to the Graduate School requirements for a dissertation, as outlined in the Graduate School Handbook.

After successful completion, defense and submission of the dissertation, the student is awarded the PhD in English.

Evolutionary Studies Program (EVOS)

Graduate Program Requirements

The requirements of the graduate EvoS program are as follows:

- **16 credits of eligible courses**, including two semesters of the 2-credit **Current Topics in EvoS seminar (BIOL 680S)**. **Evolution and Human Affairs (BIOL 570)** is recommended but not required as an introduction.

To learn more about the program visit the [Evolutionary Studies website](#).

Geography — Graduate

Five-Year BA/MA Program

The program is designed for exceptional Binghamton University students with a GPA of 3.0 and above who wish to complete both the BA and MA degrees in five years. Students in the program receive both degrees at the end of the program. The requirements for completion of the combined BA/MA degree are identical to those for completion of two separate degrees. However, because 16 credits of coursework taken for the master’s degree (500-level courses) are taken while studying for the undergraduate degree, students are able to complete the course requirements for the BA in four years and the course requirements for the combined BA/MA degree in five years. By completing the BA requirements during the first four years, students are assured of the bachelor’s degree if, for any reason, they do not complete the fifth year.

Students are encouraged to declare their interest in the program as early as possible. A limited number of students are accepted into the program at the end of the junior year. Students should begin the application process early in the junior year by applying to the combined degree program at the departmental level. The student will complete a departmental application, including a statement of purpose; provide transcripts; and obtain the strong recommendations from two geography faculty members.

MA Program
The department’s Master of Arts program in geography educates qualified students for work toward the PhD degree, and for professional careers in government service, industry and regional or urban planning. There is a thesis option for each of the four tracks. Each track requires a total of 40 credits, as well as defense of a project or a thesis.

An undergraduate specialization in geography is not required. However, students lacking a suitable background in geography may be required to take appropriate undergraduate work beyond course requirements for the MA degree. The deficiencies to be made up are determined by the department.

**MA, Track 1: General Geography**

The program provides disciplinary foundation along classical liberal arts lines that may lead to interdisciplinary work in scholarly areas such as conservation, environmental management, economic development and international studies. A total of 40 credits are required.

**Required Courses**

- GEOG 500. Geographical Theory
- GEOG 533. Statistics for Geography

*Select two (2) of the following:*

- GEOG 573. Seminar in Physical Geography
- GEOG 575. Resource Management (2 cr.)
- GEOG 581. Applied Urban Research
- GEOG 599. Thesis

*plus six electives, no more than three in any one area (Electives are to be approved by advisor):*

<table>
<thead>
<tr>
<th>Area 1</th>
<th>Area 2</th>
<th>Area 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 508</td>
<td>GEOG 502</td>
<td>GEOG 509</td>
</tr>
<tr>
<td>GEOG 535</td>
<td>GEOG 532</td>
<td>GEOG 511</td>
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<td>GEOG 546</td>
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<td>GEOG 552</td>
<td>GEOG 566</td>
<td>GEOG 542</td>
</tr>
<tr>
<td>GEOG 557</td>
<td></td>
<td>GEOG 576</td>
</tr>
</tbody>
</table>

**MA, Track 2: Cartography and Geographical Information Systems**

This track educates students as spatial analysts, with emphasis on cartography, remote sensing and geographic information systems. Among the essential components of the program are theory, research methods and advanced statistics. The objective of this track is career preparation in the specified area. This track also provides the option of pursuing the PhD degree at many institutions. A total of 40 credits are required.

Prerequisites include Math 147 Elementary Statistics and GEOG 360, Introduction to GIS and Cartography, or their equivalents.

**Required Courses**

- GEOG 500. Geographical Theory
- GEOG 502.* GIS and Spatial Analysis
- GEOG 503A and 503B. GIS in Visual Basic
- GEOG 533. Statistics for Geography
- GEOG 545. ** Advanced GIS and Spatial Analysis **

Select three (3) of the following:
- GEOG 532. Remote Sensing of the Environment
- GEOG 550. Photogrammetry
- GEOG 555. ** Seminar in GIS Research **
- GEOG 566. Advanced Statistical Techniques for Geographical and Spatial Analysis II
- GEOG 577. Analysis in Retail Geography
- GEOG 598. Internship in Geography, Cartography and Planning

Select two (2) of the following (substitution is at the discretion of the director of graduate studies):
- GEOG 573. Seminar in Physical Geography
- GEOG 574. Economic Geography Seminar
- GEOG 576. Environmental Health & Sustainability
- GEOG 597. Independent Study (in Cartography or GIS)
- GEOG 599. Thesis Research

* If you have taken GEOG 502 GIS and Spatial Analysis – substitute it with 532.

** GEOG 545 must be taken before GEOG 555.

MA, Track 3: Environmental and Resource Management

This track focuses on the integration of the environmental aspects of planning and resource use, incorporating both physical geography and institutional considerations of resource management. Among the essential components of this concentration are geographic techniques, environmental analysis, resource management theories and strategies, and application to local issues. Graduates from this track might work for planning agencies, in the private sector, or pursue an advanced degree.

Prerequisites: elementary statistics or equivalent.

Required Courses
- GEOG 500. Geographical Theory
- GEOG 502. GIS and Spatial Analysis
- GEOG 509. Conservation of Natural Resources
- GEOG 533. Statistics for Geography
- GEOG 542. Water Resource Management
- GEOG 573. Seminar in Physical Geography
- GEOG 576. Environmental Health & Sustainability

*515/669*
Select three (3) of the following:

- GEOG 511. Advanced Geomorphology I – Fluvial
- GEOG 522. Biogeography
- GEOG 523. Soils and Environment
- GEOG 530. Natural Hazards
- GEOG 534. Qualitative Analysis
- GEOG 545. Advanced GIS and Spatial Analysis
- GEOG 546. Environmental Hazards and Health
- GEOG 552. Population Geography
- GEOG 566. Advanced Statistical Techniques for Geographical and Spatial Analysis II
- GEOG 575. Resource Management (2 cr.)
- GEOG 582A. Environmental Assessment (2 cr.)
- GEOG 597. Independent Study
- GEOG 598. Internship in Geography
- GEOG 599. Thesis Research

MA, Track 4: Urban Planning and Applied Geography

The program encompasses urban analysis and planning, as well as retail geography, site selection and market analysis, with emphasis on the integration of the institutional, environmental, and urban-economic aspects of both public and private planning. Essential components of the program are geographical techniques, urban development, community involvement, retail geography, GIS applications, seminars in urban planning, and practical experience through internship programs. As with Track 2, graduates from this program might work for planning agencies or pursue an advanced degree.

Prerequisites: elementary statistics or equivalent.

Required Courses

- GEOG 500. Geographical Theory
- GEOG 508. Urban Planning Seminar I
- GEOG 533. Statistics for Geography
- GEOG 535. Urban Sustainability Planning
- GEOG 537. Urban Patterns - Processes & Sustainability

You must select a total of 5 courses with a minimum of two courses from each selection below:

Urban Geography and Spatial Analysis Coursework:

Select two (2) or three (3) of the following:

- GEOG 502. GIS and Spatial Analysis
- GEOG 534. Qualitative Analysis
- GEOG 581D. Urban Structure and Urban Process
GEOG 581. Special topics: Spatial Analysis of Urban Topics use geo-technologies

Specialized Urban Planning and Urban Geography Topics:

*Select two (2) or three (3) of the following:*

- GEOG 518. Legal Aspects of Planning
- GEOG 575. Environmental Planning
- GEOG 577. Analysis in Retail Geography
- GEOG 581D. Urban Structure and Urban Process

*Either four credit hours for Thesis (599) or an Independent Study (597) must be taken.*

**MA, Track 5: Race and Ethnicity**

This track emphasizes the importance of race and ethnicity in the socio-political-cultural environments of native and immigrant groups. Spatial settlement patterns, ethnic enclaves and dispersions, and changes in the patterns permit students to learn historic and contemporary dimensions.

**Required Courses**

- GEOG 500. Geographical Theory
- GEOG 502. GIS and Spatial Analysis
- GEOG 533. Statistics for Geography
- GEOG 534. Qualitative Analysis
- GEOG 552. Population Geography
- GEOG 553. Seminar in Ethnic Geography
- GEOG 576. Environmental Health & Sustainability

*Select four electives chosen in consultation with the advisor.*

**Geological Sciences — Graduate**

**Graduate Programs**

These programs enable students to pursue advanced studies in the geological sciences, leading to the degrees of master of science and doctor of philosophy in the areas of geomicrobiology, environmental geology, hydrogeology, geomorphology, sedimentology, petrology, geochemistry, geophysics, seismology, structural geology and tectonics.

**Requirements**

For the MS and PhD programs, students with a bachelor’s degree in the geological sciences should have completed undergraduate courses in surficial processes (physical geology), Earth materials (mineralogy), Earth history, the Earth’s interior and field geology or equivalent field experience. Additional coursework in hydrology, environmental geology, structural geology, paleobiology, sedimentology and stratigraphy, and petrology is recommended; as are two semesters each of general chemistry, of mathematics (through integral calculus), and of general physics or general biology. For students entering with a bachelor’s degree in one of the cognate sciences, undergraduate courses in the allied sciences may be accepted in lieu of certain geology requirements. All applicants are required to submit scores for the Graduate Record Examination.
Graduate students are expected to demonstrate breadth of training in the departmental foci areas of surficial processes, geochemistry, and geodynamics by completing graduate courses outside their area of specialization. The courses are selected in consultation with the student’s advisor and the department’s graduate committee.

**Master of Science Program**

On matriculation, each student is assigned an advisor. On approval of a thesis topic, the student is assigned a research advisory committee. Programs of study must be approved by the advisor and departmental graduate committee.

Students who satisfy the following departmental requirements are recommended for the degree of master of science in geological sciences:

- completion of an approved program of at least six graduate courses (a minimum of 24 credit hours of graduate courses) plus six credit hours of thesis;
- submission of a thesis proposal with committee endorsement at the commencement of thesis research; and
- successful defense of the thesis in an oral examination and submission of an approved final copy.

**Doctor of Philosophy Program**

Qualified students with either the bachelor’s or master’s degree who have demonstrated an understanding of fundamental problems in a wide range of Earth science disciplines are eligible for admission into the PhD program. Students in this program take courses to strengthen their understanding of the broad principles and practices of the geological sciences, as well as to provide training within their chosen specialization. This program may be supported by coursework in appropriate allied sciences, but students are not subject to specific course or credit-hour requirements beyond the Graduate School requirements.

Programs of study must be approved by a faculty advisor and the departmental graduate committee. Before undertaking the dissertation, the student is assigned an advisory committee consisting of faculty whose research interests are appropriate to the proposed problem.

Students pursuing the PhD degree must demonstrate an ability to read scientific literature in a language other than English or demonstrate a research skill outside of the geological sciences. The particular language or research skill and the level of proficiency are determined by the student’s supervisory committee.

**Admission to Candidacy**

Students who satisfy the following departmental requirements are recommended for candidacy for the doctor of philosophy in geological sciences:

- completion of an approved program of coursework, including language or research requirements;
- passage of the departmental qualifying examination, composed of two parts:
  - a general oral examination;
  - oral defense of a proposal for a dissertation that has been approved by the student’s advisory committee.

**Granting of the Degree**

The degree of doctor of philosophy in geological sciences is recommended for candidates who have completed an
approved program, received approval of the dissertation by the departmental graduate committee and by the student's advisory committee, passed an oral examination in defense of the dissertation and submitted an approved final copy of the dissertation.

**German and Russian Studies Graduate**

**The Graduate Certificate Program in German Cultural Studies**

The Graduate Certificate Program in German Cultural Studies enables graduate students who are working on degrees in the Humanities and Social Sciences to acquire language proficiency and to engage and conduct interdisciplinary research with a focus in German Studies. Graduate work in German Studies with faculty from a wide array of interdisciplinary fields (German Studies, Anthropology, Art History, English, Cinema, Comparative Literature, Judaic Studies, Philosophy, Sociology, Translation) can make an important contribution to students' scholarly careers.

The program invites applications from graduate students who have been admitted to one of the fields listed above, who have at least intermediate level competence in German, and who are committed to building proficiency in German and to expanding their conceptual and methodological approaches to research.

Upon completion of the program, students will be awarded a Graduate Certificate of German Cultural Studies.

**The Certificate Program has the following goals:**

- Interdisciplinary in nature, the program seeks to encourage research and scholarship that engages German and Central European studies in its many forms.
- Participating students will develop fluency in the German language and expertise in German Cultural Studies.
- The program builds on research links and support structures that have been developed between German Studies faculty and faculty in other departments. It broadens and deepens students' academic research; it allows students to benefit from collaborations between faculty members and disciplines.

**Program Requirements:**

- Students must establish competence in the German language at the third-year level.
- It is expected that students spend one regular term or one summer in research and/or language study in a German-speaking country. Students can apply for financial support for this part of the program through the Paul Weigand Scholarship.
- Students are required to take a total of 16 credits in German Cultural Studies and/or in relevant independent study projects in their field of research. Undergraduate courses offered at the 300-400 level may be taken in partial fulfillment of this requirement, provided that the course requirements are modified to conform to graduate-level course expectations.

**History — Graduate**

**Graduate Programs**

The Department of History offers a full range of courses and programs in the fields of European and American history and also has strength in Ottoman and Middle Eastern history as well as in East Asian history. It offers exceptionally strong training in the fields of women's and gender history and in the history of science, technology,
and medicine. While concentrating on the history of one nation or geographic area, students are encouraged to develop a comparative or global perspective in their work.

The department cooperates closely with a wide variety of interdisciplinary programs and departments to offer students additional instruction in comparative and world history perspectives. These include the Fernand Braudel Center for the Study of Economies, Historical Systems, and Civilizations; the Center for the Historical Study of Women and Gender; the Center for Medieval and Renaissance Studies; the Asian and Asian American Studies Department; the Middle East and North Africa Studies Program; the Judaic Studies Department; the Africana Studies Department; the Latin American and Caribbean Area Studies Program, and the Women's Studies Program.

Admission

Applicants for admission to graduate work in history are required to submit their college transcripts and scores in the Graduate Record Examinations, an example of their written work (e.g., a paper submitted in an advanced undergraduate or graduate course), two letters of reference, preferably by professors, and a statement of their research interests and career goals.

Advisor and Guidance Committee

Students are advised by a faculty member in their fields of concentration during their first semester in the graduate program. Before the beginning of the second semester, the student selects an appropriate member of the faculty as principal advisor (sponsor) and chair of a guidance committee. The student, in consultation with the principal advisor, solicits two additional faculty members to serve on the guidance committee. The chairperson of the guidance committee, with the assistance of colleagues and the director of graduate studies, aids students in their choices of courses, advises them on the fulfillment of other academic requirements and in general guides them through the graduate program. Normally, the guidance committee forms the core of the student’s comprehensive examination committee. In most cases, too, a student’s guidance committee serves as a three-person dissertation committee.

Normally, full-time matriculated students take three courses per semester. A student’s coursework should be closely correlated with the proposed major and minor fields and should include a balance between general colloquia and specialized research seminars. Students are encouraged to work with a number of different professors to broaden their exposure to different historical styles, methods and theories. In addition to the work completed for their courses, students are expected to pursue a coherent program of readings in preparation for their comprehensive examinations. Independent readings courses may be arranged with individual instructors to cover special topics, but must not be used to satisfy more than one-third of a student’s degree requirements. At the Master’s level, only one independent study of between one and four credits may be taken under the S/U grading option and still count toward the master’s degree. At the doctoral level, only four (additional) credits of independent study taken under the S/U grading option will count towards the minimal number of course credits required for the degree. All graduate seminars counted toward the history degree must be taken for a letter grade.

No faculty member is required to accept a particular student as an advisee. By the same token, a student may, for reasonable cause, petition the director of graduate studies for a change of principal advisor or guidance committee.

Master of Arts Program

The master of arts in history is granted on completion of the following requirements:

- **Credit Hours**: Thirty-two graduate credit hours with a B average or better. All master’s degree students are required to take HIST 592, Historiography, and one 600-level research seminar. MA students who choose to write a master’s thesis are not required to take the 600-level research seminar for the master’s degree; however, all master’s students, including those who write a thesis, must pass the master’s examination. Twenty-four of the credits offered must be taken in residence.
All students completing the MA are required to pass a master’s examination or successfully defend a research portfolio.

**Master’s Examination:** The master’s examination is a three-hour written examination in the student’s field of specialization given by three faculty members, at least two of whom must be members of the history department. An MA degree may be earned in one or two fields. These fields may be drawn from the list of major and minor fields in the Graduate Student Handbook. Examinations are offered once each semester, and should be taken during the semester in which the student completes all other degree requirements.

The research portfolio defense is an oral examination of a student's written work, including an article length paper (approx. 10,000-15,000 words inclusive of footnotes) based upon original research, and a historiographical paper (approx. 4,000-7,000 words inclusive of footnotes), which should be substantially distinct from the research paper. The examination committee is made up of the student’s guidance committee. Typically students will defend their research portfolio in either their third or fourth semester in the program, which can be scheduled after a student completes at least 20 credits in the program.

**Doctor of Philosophy Program**

**Admission**

Admission to the PhD program is determined by the department when the student has completed work for the MA degree or its equivalent. All students who enter the program with an MA degree in history from another institution have their work reviewed by the department at the end of their first semester to confirm their admission to the doctoral program. Students entering with MA degrees in history from the outside institutions are required to take an additional eight credits beyond the additional 24 credits needed for the PhD degree.

**Admission to Candidacy**

At least two semesters must elapse between admission to candidacy and the granting of the degree. Requirements are as follows:

- **Coursework:** Not fewer than 56 graduate credits (excluding credit for the dissertation, but including credits earned toward the MA), with an average of B+, as follows:
  - Courses in major fields;
  - Courses in minor fields;
  - HIST 592. Historiography;*
  - Two 600-level research seminars (one of which must have been taken at the master’s level).

*Students are encouraged to fulfill this requirement in their first year.

**Languages:** All PhD students must demonstrate proficiency in a foreign language; the language is determined by the student in consultation with his or her guidance committee. Students for whom English is not their native language must demonstrate proficiency in English. The guidance committee may also require additional languages necessary for scholarship in the student’s field.

- **Comprehensive Examination:** The comprehensive examination consists of examinations in the major and minor fields and a dissertation prospectus. Doctoral candidates must take a comprehensive examination in one major and two minor fields OR in two major and one minor fields. Every major field has a written component, either a one-day exam of six to eight hours or a take-home exam completed over a period of two weeks. The student will be examined on the written answers in the subsequent oral portion of the examination, which also tests the student’s knowledge in the minor field(s), includes a defense of the prospectus, and lasts three hours. Detailed lists of both major and minor fields are available from the
Dissertation Prospectus: Presentation of an acceptable prospectus is assumed to be part of the PhD comprehensive examination. Students may, in consultation with their guidance committees, separate their prospectus presentation from the comprehensive examination; in such cases, they must have a colloquium on the prospectus within three months of the PhD oral comprehensive examination. If necessary, revisions to the prospectus may be made following the comprehensive examination or prospectus colloquium. The final prospectus must in any case be on file in the department within six months of passing the comprehensive examination.

PhD Candidacy: Students are officially admitted to candidacy for the PhD degree upon satisfactory completion of the comprehensive examination. Candidates for the PhD degree must maintain registration (dissertation or continuous) until all the degree requirements are completed. (See also the Graduate School policy statement.)

Granting of the Degree

The PhD in history is granted, after admission to candidacy, on successful completion of the following requirements:

- Submission of a dissertation approved by the candidate’s dissertation committee. The dissertation must present a new interpretation of a familiar subject, or an investigation of a subject hitherto neglected, and must be written under the supervision of a member of the graduate faculty;
- Successful defense of the dissertation in an oral examination.

Waiver of Regulations and Requirements

The department reserves the right to alter these regulations and requirements without notice, pending the publication of the next scheduled issue of this publication.

Mathematical Sciences — Graduate

Graduate Programs

The department is committed to the idea that pure and applied mathematics are two faces of the same subject. The research of the faculty and the training of the students cover a wide variety of topics in pure mathematics, as well as probability and statistics. The department offers a lively research atmosphere. Students are encouraged to take a broad range of courses. Teaching assistants are given varied assignments intended to increase their experience and employability.

The department has a tradition of developing intellectual independence in its graduate students. Much time is given to the education of graduate students, both individually and in small classes. The distinguished research faculty offers considerable personal attention to graduate students.

The department offers MA and PhD degrees. Research areas of faculty expertise include algebra, number theory, analysis, combinatorics, dynamical systems, geometry/topology, graph theory, probability and statistics.

The MA program is intended to give the student a solid professional basis either for proceeding to the PhD program or for work in government, industry or teaching at the community college level. The PhD degree prepares a student for university or college teaching and for higher-level employment in government and industry. Entering students having substantial graduate-level training may enter the PhD program, skipping the MA.

The MA program also has a track in Applied Statistics. The MA Track in Applied Statistics provides students with a solid foundation of practical knowledge to work with applied statistics in depth, preparing them for future careers in the public and private sectors as data scientists, consultant and engineers who manage and analyze data.
The department is noted for its method of graduate education. In first-year courses, the emphasis is on training the student to do mathematics in depth. Many students report that these courses are the formative experiences of their professional lives.

Teaching assistantships are available. They provide not only financial support but also valuable experience, either in teaching a variety of courses or assisting faculty in special courses. The aim is to enhance students’ training with actual experience helpful in obtaining employment.

Department members assist students in obtaining suitable employment and offer advice for career development.

The department cooperates with the School of Education, which offers both the MAT (master of arts in teaching) degree in mathematics adolescence education and the MSEd (master of science in education) degree in adolescence education in mathematics. Details about these programs and requirements for the degrees are listed in the School of Education section of this Bulletin.

Within the MA or PhD program there is a choice of two areas of emphasis. The flavor of these areas is indicated as follows:

**Mathematics**

The mathematics component provides students both with breadth and depth of higher level pure mathematics. In pure mathematics, the department has special emphasis in algebra, analysis, combinatorics and geometry/toplogy. In addition, the students are encouraged to be acquainted with some applications, and to take some courses in statistics and/or computer science.

**Statistics**

The statistics component gives broad training. The master’s degree prepares students for jobs as statisticians and data analysts in government and industry. The PhD degree prepares students for university teaching and research, as well as consulting and research roles in industry and government. Students are given training in many diverse statistical methods used to analyze data, as well as the mathematical, statistical and probabilistic foundation.

**Admission**

For admission to regular standing, a student should have a bachelor’s degree and have completed (with an average of at least 3.0 in general) a set of mathematics courses approximately equivalent to those required for a bachelor’s degree at Harpur College with a specialization in mathematics. The department requires submission of Graduate Record Examination scores for the general test and, if possible, the subject test in Mathematics.

**Master of Arts Program**

Except for the track in Applied Statistics, the official requirement for a master’s degree is a minimum of 32 credit hours at the graduate level and satisfactory performance on an oral examination or the completion and defense of a master’s thesis. The credit hours requirement may technically be satisfied in three semesters. However, the 32-hour requirement is regarded as minimal, and most students take four semesters to complete the master’s degree. Each student’s program is worked out in consultation with an advisor, under the general supervision of the graduate committee.

The official requirement for a master’s degree in the applied statistics track is satisfactory completion of 42 credit hours at the graduate level, including ten 4-credit courses and two 1-credit capstone seminars, to be finished in four semesters. The program grants Master of Arts degrees in Mathematics, with a concentration in Applied Statistics.

A detailed explanation of the requirements for the master’s degree (including the applied statistics track) can be found in the School of Education section of this Bulletin.
Doctor of Philosophy Program

24 credit hours of coursework beyond those presented for the master’s degree are required for the PhD. These 24 credit hours may not include Math 591, 599, 698, 699, 700, and 707. A total of five or six years of full-time graduate study (including study toward the MA) are normally required to complete the doctorate.

A student should be admitted to PhD candidacy before the start of the fifth year. The student must do research and write a dissertation under the supervision of a thesis advisor. The dissertation must be defended in an oral examination.

A detailed explanation of the requirements can be found in the Graduate Handbook.

Music — Graduate

Mission Statement

The mission of the Binghamton University Music Department is:

- To train professionally-oriented students for careers in music: in performance, composition, music history, and music theory. We aim to accomplish this objective through our bachelor’s degrees and our graduate programs. Our professional music degrees are supported by a broad foundation in the liberal arts, a historical strength of Harpur College.

- To enrich the musical life of all students on campus through specially designed courses, various ensemble participation, and studio instruction in most instruments and voice; these are open and available to all matriculated students. Indeed, the Department has always prided itself on the rich "hands-on" choices for music study it provides to the general liberal arts student. In addition, there are numerous concerts of all kinds that enrich the musical life of the university community.

- To serve as an important arts resource for the civic community and region through the active presentation of faculty, guest, and student concerts (over 100 per year), special courses, lectures, workshops, master classes, community outreach programs, and cooperative projects with other musical institutions in the area. We view this as central to our mission as a public institution in a relatively small metropolitan area.

- To expand the Department of Music’s reputation through the active concert touring of its artist faculty and through the publications of its scholars so that the department’s influence is felt not only regionally, but nationally and internationally as well.

Graduate Programs

The Department of Music offers graduate studies leading to the master of music degree. In the master of music degree, the field of specialization may be composition, music history or performance (instrumental, vocal, opera, conducting).

Admission

All students entering the master of music program must satisfy the general conditions for admission as stated in the University Bulletin.

Students applying for the master of music program in composition or music history should submit examples of their recent work and arrange for a personal interview. Students applying for the master of music program in all
performance areas are expected to arrange for an audition and should submit a pre-audition tape exemplifying recent performance capabilities.

**Placement Examinations**

Upon admission to the graduate program, students are expected to demonstrate levels of achievement in music history and theory equivalent to those for the baccalaureate degree with a major in music. Proficiency is determined by written placement examinations normally given each semester during the week preceding the beginning of classes. The results are used for diagnostic and advisory purposes; students may be required to do remedial work before taking specified graduate courses.

**Master of Music Program**

**Course Requirements (Except Opera Specialization)**

A minimum of 32 graduate credits in music, with a grade of at least a B-, must be completed. Distribution requirements are the following:

<table>
<thead>
<tr>
<th>credits</th>
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<tbody>
<tr>
<td>MUS 501. Music History and Research I</td>
<td>4</td>
</tr>
<tr>
<td>MUS 502. Music History and Research II</td>
<td>4</td>
</tr>
<tr>
<td>MUS 521. Music Theory</td>
<td>4</td>
</tr>
<tr>
<td>Field of specialization</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
<tr>
<td>MUS 599. Thesis</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

**Course Requirements (Specialization in Opera)**

Offered by the University in collaboration with the Tri-Cities Opera company, this is generally a two-year program of professional training in preparation for an operatic career. A minimum of 36 graduate credit hours in music with a grade of at least a B- must be completed. (In the two-year program, full-time students normally exceed the 36-hour minimum.) Distribution requirements are the following:

<table>
<thead>
<tr>
<th>credits</th>
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<tbody>
<tr>
<td>MUS 501. Music History and Research I</td>
<td>4</td>
</tr>
<tr>
<td>MUS 520. Theory Review (unless excused by examination)</td>
<td>2*</td>
</tr>
<tr>
<td>Studio Voice lessons</td>
<td>6</td>
</tr>
<tr>
<td>Opera Workshop</td>
<td>6</td>
</tr>
<tr>
<td>Lyric Diction: Italian, French, English/IPA, German (4 semesters)</td>
<td>4**</td>
</tr>
<tr>
<td>Vocal Literature</td>
<td>1</td>
</tr>
</tbody>
</table>
Comprehensive Examinations

All master of music students are required to take comprehensive examinations during their program of study, prior to graduation. The examinations consist of two components: an oral examination by a faculty committee and a listening examination. Details concerning these examinations are made available to each entering master of music student.

Additional Requirements (Master of Music/Music History)

All music history candidates must demonstrate a reading knowledge of one foreign language (German or one Romance language). Proficiency is demonstrated by translating a passage from a reading in the field of music, chosen by the music history faculty.

Piano proficiency must be demonstrated by the ability to play a Bach chorale.

Thesis

Candidates in composition must submit two substantial compositions; acceptability is judged by the thesis committee, consisting of the principal advisor and two other faculty members.

Candidates in music history must submit an acceptable written thesis that demonstrates knowledge of appropriate research techniques. Acceptability of the thesis is judged by a thesis committee consisting of the principal advisor and two other faculty members, and an oral defense of the thesis must be made before the same committee.

Candidates in performance (except those specializing in opera) must present two recitals. In most cases, one includes ensemble performances. Consult the director of graduate studies concerning recital requirements.

Candidates whose field of specialization is opera must present one solo recital and perform a minimum of one of the following:

- One leading or featured role; or
- Two supporting roles

Candidates in conducting must conduct, in public performances, one substantial work (or concert segment) with a major ensemble and at least two additional appropriate performances.

All thesis recitals and roles must be approved in advance by the graduate committee and the performance be judged satisfactory by a thesis committee, consisting of the principal advisor(s) and two other faculty members.

Evaluation
All MM degree candidates are reviewed at the end of each semester of study; continuation in the program of specialization is contingent on satisfactory academic progress, as well as satisfactory artistic progress as judged by a committee of faculty experts in, or appropriate to, the candidate’s discipline.

**Philosophy — Graduate**

**Graduate Programs**

**Graduate Program in Social, Political, Ethical and Legal Philosophy (SPEL)**

The graduate program in social, political, ethical and legal philosophy (SPEL) offers graduate students advanced coursework and individual research in classical, modern and contemporary social and political philosophy, ethics and the philosophy of law.

SPEL recognizes and respects work in both the Anglo-American (analytic) and the Continental (European) traditions, as well as in various non-Western traditions, in feminist philosophy and critical race theory, and in other emerging areas of philosophy.

The SPEL program also helps students gain the skills and experience necessary to become excellent teachers of philosophy and prepares students for other aspects of a career in philosophy. SPEL faculty understand that the primary professional goal of PhD students in philosophy may or may not be to gain an academic position. Professional development and placement are central to the SPEL program and are tailored to individual students’ goals. For students pursuing a terminal master’s degree in SPEL and who intend to go on to other careers or other graduate work such as law school, the program can also be tailored towards these ends.

The SPEL faculty offers both graduate seminars and individualized instruction in their sub-fields.

Qualified students with a bachelor’s degree or equivalent and students with a master’s degree are eligible for admission. An undergraduate or master’s level specialization in philosophy is not required for admission; a broad background in the humanities or social sciences, as well as philosophy, can constitute a proper preparation for this graduate program.

**MA in SPEL**

Students may pursue the MA either as a preparation for entrance into the PhD part of the graduate program or as a terminal degree. A terminal philosophy MA through SPEL is an excellent preparation for further professional development in public policy, law, government service, medicine or business.

The MA degree may be earned by completing the following requirements (for which students may request waivers based on their particular circumstances).

Required coursework (any one course may simultaneously fulfill more than one of these requirements):

- A minimum of 32 credits (eight seminars, seven of which must be SPEL seminars and one of which may be chosen from other philosophy graduate courses or in consultation with the student’s advisor from among courses offered by other departments) with a cumulative grade-point average of at least 3.3.
- One first-year SPEL seminar in social and political philosophy and one first-year SPEL seminar in ethics, to be taken during the first year of residency (one in the fall, the other in the spring).
- At least two SPEL seminars emphasizing the history of philosophy. This is broadly construed, ranging from the ancient world to the 17th, 18th, 19th and early 20th Centuries, and may be in Western or non-Western philosophy.
One SPEL seminar that draws mainly from the Anglo-American tradition, and one SPEL seminar that draws mainly from the Continental European tradition.

One SPEL seminar in metaphysics, epistemology, philosophy of language, philosophy of science or philosophy of mind.

During each semester of their first two years in the program, all students (including those entering with an MA degree) are required to enroll in the SPEL colloquium.

Proficiency Requirements

- Level 1 logic requirement: A grade of B or higher in an undergraduate course on formal logic, or completion of the final examination in (undergraduate) Elementary Logic (PHIL 122) with a grade of B or higher, or a grade of at least B on the SPEL examination in Basic Formal Logic.
- History of Philosophy requirements: A grade of B or higher in undergraduate courses in ancient Greek philosophy and modern philosophy, or completion of the final examinations in (undergraduate) Plato and Aristotle (PHIL 201) and Descartes, Hume and Kant (PHIL 202) with grades of B or higher.

Comprehensive Exams or Thesis

- All students earning an MA and seeking acceptance into the PhD program must pass the MA comprehensive exams, which consist of two written exams, one in social and political philosophy, and the other in ethics. Reading lists are provided to assist students in preparing for these exams. Students are required to take the exams in September of their second year in the program. A student who fails either or both of the comprehensive exams may be allowed to retake the exam(s) once, in January of their second year in the program.
- Students seeking a terminal MA may either pass the comprehensive exams described above, by January of their second year in the program, or may write a master’s thesis. The thesis must be passed by April of a student's second year in the program.

PhD in SPEL

Acceptance into the PhD program requires satisfactory completion of the MA requirements described above or their equivalent (such as an appropriate MA degree from another institution). Under normal conditions, students accepted with an MA in philosophy from another institution are exempt from all MA requirements other than the first-year SPEL seminar and the colloquium. However, students who did not study social and political philosophy and ethics as part of their MA work will be asked to take the MA comprehensive exams as described above.

Required Coursework

- Students entering with an MA from another institution must take the first-year SPEL seminars during the first year of residency, and must enroll in the SPEL colloquium every semester for their first two years of residency.
- A minimum of 24 additional course credit hours (six seminars), with a cumulative grade point average of at least 3.3, which may, when applicable, be chosen from departments other than the Philosophy Department, in consultation with the student's advisor. Students must also complete the appropriate number of dissertation credits required by the Graduate School.

Proficiency Requirements

- Demonstration of proficiency in one language other than English or a level 2 logic proficiency (which can be satisfied by taking a graduate-level class or independent study in intermediate logic and passing with a grade
Qualifying Exam and Dissertation

- Acceptance of a dissertation prospectus and satisfactory performance on a PhD qualifying examination given by the student's third semester of full-time residence in the PhD program (i.e., the third semester after completing the MA requirements). A committee of three faculty members, the majority of whom are members of the Philosophy Department, approve the prospectus and administer the exam which includes both a written and an oral component.

- Satisfactory completion of a dissertation under the direction of a dissertation committee chosen by the student in consultation with her or his faculty advisor. The committee is composed of at least three faculty members, the majority of whom must be members of the Philosophy Department. The dissertation must be approved by the dissertation committee and defended in an oral examination.

The 5-Year Combined-Degree Program

The SPEL graduate program and the undergraduate program in philosophy or in philosophy, politics and law (PPL) offer an option that enables students to receive both BA and MA degrees in five years. This program combines the undergraduate philosophy or PPL major with the SPEL MA in such a way that the student's fourth year in the undergraduate major is also her or his first year in the SPEL MA program. Students may apply to this program in the spring of their junior (third) year or the fall of their senior (fourth) year. If accepted, they take two graduate seminars during their fourth year. In the fifth year they take a full graduate load of three graduate seminars per semester, and write an MA thesis or take the MA comprehensive exams.

Students enroll in this program for various reasons, including wanting to strengthen their application to law school, prepare for further graduate education in philosophy, position themselves better on the job market or simply enjoy an additional year of studying.

Physics — Graduate

Graduate Programs

The Physics, Applied Physics and Astronomy Department offers a four-year PhD degree in physics. The PhD is awarded for original investigation leading to a significant advance of knowledge in a specialized area.

Physics also offers a two-year masters degree in physics, generally based upon a research thesis. Our goal is for students, upon completing their degree, to be able to choose between working as a physicist or continuing in a PhD program.

Physics is also a participating department in the materials science/engineering PhD program. Additional information is available at http://www.binghamton.edu/mse/index.html.

Our department offers relatively small classes in the core curriculum of graduate physics. Elective graduate courses include Solid State Physics, condensed matter physics/materials science, and more specialized seminars such as Electronic Thin Film Science. Applicants from smaller colleges have been successful in our two-year program that includes integrated undergraduate-graduate quantum mechanics, electricity and magnetism, and special topics courses. We encourage early assimilation of students into research groups.

Graduate assistantships are available for full-time PhD graduate students. Generally new students begin with teaching assistantships, though a number of research assistantships are also available. National Science Foundation (NSF) fellowships are also available.
Funding for the fall semester for graduate applicants is considered beginning February 15 and continues until positions are filled. Throughout the spring semester, we welcome applications and campus visits.

Current physics teaching assistantships include a stipend of $18,000 for nine months, together with a tuition waiver. Binghamton-area living expenses are significantly less than in larger metropolitan areas. There may also be additional summer support.

Admission

Normally, an applicant for graduate study must have a bachelor’s degree and a record that indicates a proficient level of scholarship. Specialization in physics or related fields at the undergraduate level is desirable but not essential for admission. Graduate Record Examination scores for the general and subject tests are helpful in evaluating applicants. Potential applicants are encouraged to contact the director of graduate programs in the department for further information or for answers to specific questions about admission procedures.

Doctor of Philosophy in Physics

This degree will prepare graduates to lead efforts in industry or academia in the areas of condensed matter physics, applied physics and materials physics. The PhD is awarded for original investigation leading to a significant advance of knowledge in a specialized area. Courses and seminars provide necessary background in the basic principles, methods and theories of physics. Initial research emphases will be in the energy sciences, biophysics and information sciences, with the intent to leverage significant research infrastructure investment recently established under the Small Scale Systems Integration and Packaging Center at Binghamton University.

In the course of their training, students are expected to demonstrate, by appropriate examinations, a breadth of knowledge in physics and in-depth competence in a specialized area of physics. At the earliest date consistent with their general progress, students select a research topic and begin their research. The requirements for the doctoral degree include a total of at least 24 credit hours of course study (six to eight courses) and at least 24 additional credits of dissertation work. The specific course requirements will be determined in consultation with the student's guidance committee (a committee consisting of three Physics faculty members, one of whom is the student’s principal advisor). These course requirements must be approved by the graduate program committee, and will normally include those expected for the master's degree in physics.

Most of the basic graduate courses in a student's program should be taken during the first year of residence. Proficiency in solid state physics, quantum mechanics, electrodynamics, statistical thermodynamics and communication skills will be attained through classroom study, research and teaching. Students will enroll full-time and complete the degree in four to five years. Typically this will involve two semesters of first-year graduate courses and a teaching assistantship in introductory physics courses. All graduate students in physics attend and participate in seminars presented by fellow students, faculty and visiting scientists, and attend professional meetings. The second year in the program may be seen as transitional, including elective courses and potentially a second year of a teaching assistantship, with a growing focus on a research problem. By the end of the second year, the preliminary examination, including a presentation of a proposed dissertation topic, is completed. Dissertation research, writing a dissertation and a public defense complete the degree requirements. The time it takes to earn a degree for a well-prepared student will be four years; an average time to degree between four and five years is to be expected.

Master of Science Program

This program is for students seeking careers in applied physics or in research and development in industrial laboratories. It is also intended for technical personnel in industry who wish to attain a higher level of understanding of the physical principles on which modern technology is based.

The MS degree requires the completion, with at least a B average, of 30 credit hours of graduate work and
satisfactory performance on a comprehensive examination, or the completion and defense of an acceptable thesis. The courses are normally selected from the required courses (shown below) and other graduate courses offered by the department. A number of courses within the Physics Department have been designed with an emphasis in applied physics. A student’s selection of courses must have the prior approval of the Graduate Committee.

Under the examination option, the candidate must pass a comprehensive examination prepared by the Graduate Committee, covering the basic principles of physics and applied physics and the student’s special area of interest.

Under the thesis option, no more than six credit hours of PHYS 599 may be counted toward the 30-credit requirement for the degree. After submission of the thesis, the candidate must pass an oral examination on the material pertaining to the research area.

The following courses are normally required as part of the 30-credit requirement:

- PHYS 521. Analytical Dynamics
- PHYS 522. Electrodynamics I
- PHYS 524. Quantum Mechanics I
- PHYS 527. Graduate Laboratory

(This requirement may be waived if a comparable course is included in previous coursework.)

The following courses have been designed with an emphasis in applied physics. PHYS 511, 514, 563 or 572 may be substituted for PHYS 521 and/or 524 listed above.

- PHYS 511. Statistical Thermodynamics
- PHYS 514. Applied Mathematical Physics
- PHYS 563. Coherent Optics
- PHYS 565. Laser Physics and Quantum Electronics
- PHYS 567. Integrated Optics and Electro-Optics
- PHYS 569. Non-Linear Optics
- PHYS 572. Introduction to Solid State Physics
- PHYS 573-574. Applied Solid State Physics and Devices I, II
- PHYS 581. Contemporary Topics in Applied Physics

Because of the breadth of the field of applied physics, each student’s coursework is carefully planned to tailor the program to meet the individual’s particular interests and needs. All students, on entering the program, meet with the director of graduate programs to plan their curriculum, and the department’s graduate committee oversees students’ progress.

**Political Science — Graduate**

The Department of Political Science offers a graduate program of study leading to the master of arts (MA) and doctor of philosophy (PhD) degrees. The primary goal of both the MA and PhD programs is to educate scholars who will contribute to the development of political science through careers in teaching and research.

The program emphasizes a broad based theoretical understanding of political behavior and institutions coupled with the ability to carry out systematic empirical analysis. Students choose two primary substantive foci from among the subfields of American politics, comparative politics, or international relations.
The organization of the graduate program is based on two convictions. One is that political science is a unique subject matter that requires specialization. The second is that all of the social sciences, including political science, rely on systematic evidence and quantitative analysis.

Students pursuing the PhD are normally required to take five semesters of coursework, including five courses providing training in research methodology and statistics. Beyond coursework, completion of the PhD program requires passing comprehensive examinations in both of a student's primary areas of expertise. When a student passes these examinations, completes all the requirements outlined above and presents a prospectus for the dissertation, he or she receives a master’s degree. Remaining requirements for the PhD consist of researching, writing, and defending the PhD dissertation.

Master of Arts Program

Admission

Applicants for admission are required to submit scores of their Graduate Record Examinations. An undergraduate specialization in political science is desirable but not essential. A broad background in the social sciences, humanities, languages, statistics, and mathematics is considered a desirable preparation for study in the discipline. Applicants are expected to present minimum cumulative undergraduate grade-point averages of 3.0 in all subjects and 3.2 in political science courses. The middle-50% of those admitted to our graduate program have verbal GRE scores between 530 and 640 (new scale: 155-162), and quantitative scores between 640 and 760 (new scale: 151-160).

For a student with insufficient preparation in political science or related subjects, the departmental graduate committee may, at the time of matriculation, specify:

- additional credits to be earned beyond the 32 to 40 normally needed for the MA degree; or
- additional study without graduate credit in subject areas in which the student may be deficient.

Committee Selection

During their first or second semesters, master’s students must organize a guidance committee composed of their principal academic advisor and two other faculty members.

To do this, students should obtain the nomination form from the graduate secretary and approach the relevant faculty members for their signatures. The Director of Graduate Studies must approve each student's selected committee.

The Nomination of Guidance Committee form must be filed with the graduate committee each time a change in committee composition is proposed. The Director of Graduate Studies must approve all committee changes.

Coursework

Conventional master’s candidates may choose either a thesis or non-thesis option. Students adopting the thesis option must complete seven seminars with a B average or better, plus a thesis. Of the seven seminars, at least six must be taken within the department; three of the six must be in the student's primary area of specialization and one must be PLSC 500 (Research Methods and Statistics I). Students adopting the non-thesis option must complete nine seminars with a B average or better. Of the nine seminars, at least seven must be taken within the department; three of the nine must be in the student’s primary area of specialization and one must be PLSC 500 (Research and Methods and Statistics I).
Examinations

Different examination procedures exist for thesis and non-thesis students. Thesis students are examined by their guidance committee on the thesis and on knowledge of their area of specialization. Non-thesis students must take a written examination, which tests the student’s general knowledge of the field of political science as well as specific knowledge in the specialization area. Students choosing to take Masters Exams will do so during the third semester (nine seminars) of course work. Prior to that semester, students should designate a committee chair in their particular subfield; that committee chair will then participate with members of the subfield in constructing questions for and grading a written, one-day (8-hour) exam to be scheduled by the director of graduate studies. That same committee will evaluate the written answers and assign grades of Pass or Fail. In the event an exam receives a grade of Fail, the student, in consultation with the director of graduate studies and the committee chair will determine if and when the student will retake the exam. The exam can only be retaken one time and must be retaken by the end of the semester immediately following the first exam.

All master’s students must file a Graduate Application for Degree (GAFD) form, available on the Graduate School website, during the semester in which they intend to receive their master’s degree.

Doctor of Philosophy Program

Admission

Applicants for admission to the PhD program are required to submit scores of their Graduate Record Examinations and are expected to have a minimum undergraduate grade-point average of 3.3. The middle-50% of those admitted to our graduate program have verbal GRE scores between 530 and 640 (new scale: 155-162), and quantitative scores between 640 and 760 (new scale: 151-160). Formal admission to the PhD program occurs only when the student has completed at least one semester in full-time residence in the department's graduate program and has successfully passed the qualifying examination in the fall of their second year. Until these requirements are fulfilled, all admissions to the PhD program are provisional.

Committee Selection

Doctoral candidates must have a guidance committee and a dissertation committee during their stay at Binghamton University. These committees may be composed of the same members throughout or may change if the student or a committee member wishes. Each committee serves a slightly different function, as described below.

General Guidance Committee: Doctoral candidates must organize a general guidance committee by the end of their fourth semester in residence. This committee is made up of three members of the department faculty. The guidance committee advises the student on courses and other requirements needed to complete the degree. The guidance committee may be organized by obtaining the Nomination of Graduate Committee form from the graduate secretary, collecting the signatures of the proposed members and submitting it to the Director of Graduate Studies for approval.

Dissertation Guidance Committee: The dissertation guidance committee serves in advisory and evaluative capacities during the preparation of the dissertation prospectus and the dissertation itself. Again, this three-member committee may be different from the general guidance committee and may include extra-departmental faculty. If changes are made, the Nomination of Graduate Committee form should be filed immediately after the student passes the comprehensive examination. Admission to candidacy may not be completed without the dissertation guidance committee in place. Changes may be made during the dissertation phase as the student deems necessary and with approval of the Director of Graduate Studies. An examiner from outside the department is assigned to the committee by the vice provost and dean of the Graduate School to participate in the oral defense.
Coursework

The Ph.D. curriculum is divided into four sub-fields: American Politics, Comparative Politics, World Politics, and Political Methodology. Students are expected to identify two sub-fields in which they will specialize from among the substantive subfields of American Politics, Comparative Politics, and World Politics. The exact mix of courses and the distribution requirements are determined in consultation with a student’s General Guidance Committee.

All students must take five courses in political methodology: PLSC 500 (Research Methods and Statistics I), PLSC 501 (Research Methods and Statistics II), PLSC 502 (Introduction to Formal Theory) and two advanced skills courses. These lay the foundation for the methodological skills and general theoretical framework required for political analysis. In addition, individuals are required to take the core graduate course in American Politics, Comparative Politics, and World Politics, to ensure they acquire some sense of the breadth of the political science discipline. Students are required, as well, to take a minimum of three seminars (beyond the core courses) in each of their sub-fields of specialization. Typically, students take three in one of their chosen sub-fields and four in the other of their chosen subfields. Additionally, all students are required to take PLSC 690 (Advanced Research Seminar) during the sixth semester, immediately following comprehensive exams. A minimum of 16 seminars (64 hours) is required for the PhD degree, though a student’s Guidance Committee or the Graduate Committee may require courses beyond the minimum. Students may enroll in independent studies under the supervision of faculty in the department but only under special circumstances and only with prior approval of the Graduate Committee.

Skill Requirements

The skill requirement has two parts: basic and advanced. Successful completion (with a grade of B or better) of PLSC 500, PLSC 501 and 502 (which are required for all PhD students) fulfill the basic skill requirement. The advanced research skill may be acquired in either research methodology or a foreign language, though virtually all of our students pursue the research methodology option consistent with the focus of our program and the availability of suitable classes in the Department. Further, students are encouraged to attend a summer Inter-University Consortium for Political and Social Research (ICPSR) program in methodology at the University of Michigan or a comparable alternative program that will materially aid their dissertation research.

Advanced Skill in Research Methodology: Students entering the program with a BA or BS degree must complete a minimum of eight credit hours (two seminars) in research methodology beyond the three-course basic skill requirements.

Advanced Skill in Foreign Language: Students whose native language is English may satisfy the foreign language skill requirement by taking and completing (with a grade of B or better) an advanced foreign language course at Binghamton. The language course must include composition and conversation. Students whose first language is not English may satisfy the foreign language skill by passing a course requiring a substantial amount of attention to writing skills in Binghamton’s Department of English, General Literature and Rhetoric. The student’s General Guidance Committee as well as the Graduate Committee must approve (in advance) the use of a language to fulfill the advanced skill requirement, as well as the course(s) to be taken, must be approved in advance by the student’s General Guidance Committee as well as the Graduate Committee.

Examinations

Qualifying Examination: In late November or early December of the third semester in the program, all graduate students must take a three-hour written exam in one subfield of their choosing. The exam will be written and graded by the entire faculty in the appropriate subfield. The exam is open book and note. It will be administered and monitored by the faculty member teaching the advanced methods seminar that semester, either during a regular three-hour session of that class, or at a separate time the instructor designates.
The implementation of the exam, its structure, and style (hand written, typed, etc.) will be determined by the DGS. The DGS will make choices aimed at eliciting short and on-point answers. The subfields themselves will write the questions, determine the number of questions, and place limits (if any) on length of answer.

There are three possible grades and outcomes to this exam:

- Sufficient to continue in the doctoral program.
- Insufficient to continue in the doctoral program, sufficient for MA. Student exits program at end of the third semester with an MA degree.
- Fail. Student exits program.

Evaluation of the Qualifying Exam will also involve consideration of performance in the program so far, especially performance in classes, in determining whether the student should continue in the doctoral program.

Once exam grades are determined by each subfield, the full faculty must approve the grades. This will normally occur in a faculty meeting, but implementation is left to the Chair of the Department and the Director of Graduate Studies.

Comprehensive Examination:

Paper Requirement

In the fifth semester, every PhD student must present a single-authored paper to the entire faculty (usually in one of the standing workshops in the Department). Papers must be presented no later than the end of October of the fifth semester, unless there are special circumstances and approval of the Graduate Committee is secured. The presentation will usually be 10-15 minutes; the remainder of the time will be for questions. Other graduate students are encouraged to attend.

The full faculty will consider the paper and presentation as evidence regarding the student’s capacity to perform original research, and regarding the student’s prospects for completing the dissertation. If the faculty believes the paper and presentation demonstrate that the student is capable of independent research, the student will proceed to the comprehensive exam. Students are not eligible to take the comprehensive exam without faculty approval.

Written Requirement

In January of the sixth semester, PhD students who have successfully completed the paper requirement of the comprehensive exam with a grade of Pass must complete a written exam in the second of their declared fields (that is, not the field represented by the paper presented in the paper component of the comprehensive exam). PhD students who have completed the paper requirement of the comprehensive exam with a grade of Low Pass must complete a written exam in each of their declared subfields. The exams will be open book. The content, number of questions, and page limit (if any) will be determined by the subfield. Each exam will span three to eight hours, at the discretion of the subfield. The DGS, in consultation with the faculty, will make the appropriate decisions regarding the exam’s implementation.

There are three possible outcomes to this exam:

- Pass: The student continues in the program. The dissertation prospectus must be successfully defended within six (6) months of successful completion of the comprehensive exam(s).
- Provisional Pass: The student must retake the exam. The provisional pass is a temporary grade and will be replaced with a grade of Pass or Fail based on the retake. The deadline for the retake is at the field’s discretion but may not be later than one month after the student has been notified on the exam result. Depending upon the nature and quality of the answers provided on the original exam, and at the field's
discretion, the retake may be in whole or in part, and may be oral or written in format. The retake must be in the same field as the original exam.

- Fail: The student may retake the exam one time. The deadline for the retake may not be later than the end of the semester. The retake will follow the same format as the original exam and must be in the same field as the original exam. A second failure results in dismissal from the program.

**Dissertation Prospectus:**

Students should defend their dissertation prospectuses within six months of passing their comprehensive examination. The prospectus proposes a theoretically grounded important question and demonstrates how the research is to be conducted for and reported in the dissertation will answer the question. It should be submitted to all members of the student’s PhD guidance committee one month prior to its oral defense. It is the student’s responsibility to schedule the oral defense in consultation with his or her guidance committee.

**Dissertation and Defense:** The development of the dissertation is aided by the dissertation supervisor. Students should take care to choose someone with whom they can work closely and who has an interest in the proposed research. The supervisor gives advice on the direction the research should take, critiques work in progress, encourages the advisee to finish the task within a reasonable time frame and assists in job placement. A final draft of the dissertation must be submitted to the dissertation committee within five years of successful completion of the PhD comprehensive examinations. Before the PhD may be conferred, the candidate must defend his or her work in an oral public defense. The dissertation committee must unanimously recommend conferral of the degree. Specific guidelines regarding the dissertation may be found in the *Faculty and Student Graduate Degree Handbook*. The handbook clearly outlines all the procedures for proper preparation and submission of the dissertation, including formatting, microfilming and binding. Protecting the research through copyright is explained as well. Students are advised to consult the handbook throughout the degree process.

**Psychology — Graduate**

**Graduate Programs**

The psychology graduate programs provide the student with a basic knowledge of the major areas of psychology and intensive training in theory and research in one of three areas: Behavioral Neuroscience ([https://www.binghamton.edu/psychology/graduate/behavioral-neuroscience/index.html](https://www.binghamton.edu/psychology/graduate/behavioral-neuroscience/index.html)), Clinical Psychology ([https://www.binghamton.edu/psychology/graduate/clinical-psychology/index.html](https://www.binghamton.edu/psychology/graduate/clinical-psychology/index.html)), or Cognitive and Brain Sciences ([https://www.binghamton.edu/psychology/graduate/cognitive_and_brain_sciences/index.html](https://www.binghamton.edu/psychology/graduate/cognitive_and_brain_sciences/index.html)). There is a strong emphasis on direct research experiences. The programs allow flexibility for individual students and encourage inter-area and interdisciplinary endeavors.

Students may also receive formal training and experience in the teaching of psychology and are exposed to didactics regarding ethical issues involved in research and education. Each student’s faculty mentor and the student's master's thesis, qualifying examination, and doctoral dissertation committees are critical in helping the individual student to develop a personalized program of study. It is important for students to work closely with their mentors and area heads to ensure progress toward their career goals.

**Admission**

Admission to the graduate program is highly competitive. The credentials of most applicants include a bachelor’s degree (or its equivalent) in psychology or a related discipline. Students are admitted directly into the PhD program. There is no master’s program per se, although a master’s degree is earned en route to the PhD. Additional information, including a more extensive description of the regulations and requirements of the program, may be obtained via the internet: [https://www.binghamton.edu/psychology/graduate/index.html](https://www.binghamton.edu/psychology/graduate/index.html). After reading these web
pages, additional information can be obtained by contacting the area head of the specific program in which the student is interested.

Applicants are required to submit a complete set of official transcripts, at least two letters of recommendation, a brief personal statement concerning their research experience, interests and goals, and scores from the Graduate Record Examination aptitude tests. The GRE achievement test in psychology is required for applicants to the Clinical program, but not for applicants to the Behavioral Neuroscience of Cognitive and Brain Sciences programs. The application form used to seek admission also serves as an assistantship application; ordinarily a stipend and tuition scholarship is provided for all doctoral students in good standing. Applicants seeking fall admission should have all credentials submitted by December 1 for the Clinical program, December 15 for the Behavioral Neuroscience programs and January 3 for the Cognitive and Brain Sciences program. Applications received after these dates will be reviewed on a space available basis. Typically, students are not admitted in the spring.

Transfer Students

Transfer students, including those who enter with a master’s degree, are required to qualitatively satisfy all core-course requirements. This may be done by taking specified Binghamton courses or transferring credit for equivalent courses taken elsewhere and completed with a grade of B or better. All master’s theses accepted by another institution must be reviewed by the departmental graduate committee in order to ensure equivalence of work to that required at Binghamton.

This review of transfer students’ qualifications should be completed either prior to arrival or early during the first semester in residence.

Master of Science

Requirements:

- 32 credit hours approved by the departmental graduate committee and an overall GPA of 3.0 or better;
- In addition to area-specific coursework, all students receiving the MS en route to the PhD in psychology must fulfill the core requirements regardless of area specialization. Currently, core requirements are satisfied by obtaining a B or better in each of the following two courses:
  - PSYC 503. Statistics and Design I (4 credits)
  - PSYC 550 or 551. Professional Ethics and Research (2 credits)

Alternatively, students may satisfy requirements by taking equivalency examinations. Equivalency examinations cover the same content in the same depth as Binghamton University courses and must be passed with a grade of B or better. In some cases, equivalency may be demonstrated by proof of satisfactory completion of an equivalent course and consent of the director of graduate studies, area head, and/or the student's advisory committee. Students do not receive course credit for the passing of equivalency examinations, but do receive credit for courses that are formally transferred if they match a Binghamton course.

- While the student is in residence, a minimum of one credit hour per semester of research (PSYC 596 or 599) is required during every semester to document the student’s continuing involvement in ongoing research;
- Active participation in psychology colloquia is expected;
- Satisfactory completion of a master’s thesis (PSYC 599).
- For the clinical program, students are required to make satisfactory progress in clinical work, as evidenced by evaluations and/or grades from community placements and/or practica in the Psychological Clinic.
Additionally, each semester a student is in residence until the student achieves Course Complete (CC) status, registration is required in PSYC 592 (Weekly Research Lunch in Cognitive and Brain Science), PSYC 594 (Weekly Research Lunch in Behavioral Neuroscience), or PSYC 595 (Weekly Case Conference in Clinical Psychology).

Doctor of Philosophy

Requirements:

- At least a B- in all courses, as well as an overall GPA of at least 3.0;
- Adequate progress in research;
- Successful completion of the MS thesis requirements;
- Completion of Statistics and Design I (PSYC 503) and Statistics and Design II (PSYC 504) (4 credits each). These courses are ordinarily taken during the first and second semester, respectively, of the first year. Details of other course requirements are area dependent and determined by the student’s advisory committee;
- Completion of PSYC 590, Teaching of Psychology (2 credits). It is recommended that this course be taken very early in a student’s training as it is a requirement for summer teaching opportunities. Students in the Behavioral Neuroscience and Cognitive & Brain sciences tracks must also teach a lecture course;
- Completion of PSYC 590, Teaching of Psychology, is no longer required of clinical students. It is required for those who wish to teach as instructor of record while at Binghamton University and strongly recommended for those who wish to teach in their career;
- While in residence, the student must register for a minimum of one credit hour per semester of research (PSYC 698 or 699) to document the student’s continuing involvement in ongoing research;
- In general, there is no minimum number of credit hours required for the PhD. However, each student should check on his or her area’s website for specific requirements. If these are not sufficiently clear, the student should consult with their faculty advisor or area head;
- Satisfactory completion of the PhD qualifying examination in the student’s specialty field of concentration. Depending on area, the qualifying examination is formulated by the student’s PhD advisory committee in consultation with the student, or in the clinical program, the qualifying examination requires a written review paper and overall portfolio review, which are tailored to the students interests and career trajectory collaboratively with the student's committee;
- Satisfactory completion of the PhD dissertation (PSYC 699) and its defense.

Distributional Requirements

For students in the Behavioral Neuroscience and Cognitive and Brain Sciences areas, students must take one course outside of the student’s area from the following list:

- PSYC 508. Sensation and Perception (2 credits)
- PSYC 509. Conditioning and Learning (2 credits)
- PSYC 510. Psycholinguistics (2 credits)
- PSYC 511. Memory (2 credits)
- PSYC 512. Cognitive Development (2 credits)
- PSYC 513. Attention and Performance (2 credits)
- PSYC 540. Psychopathology (4 credits)
PSYC 571. Neuroanatomy (4 credits)
- PSYC 572. Neurophysiology (2 credits)
- PSYC 573. Neurochemistry (2 credits)
- PSYC 574. Psychopharmacology (4 credits)
- PSYC 575. Basic Neuroscience I (2 credits)
- PSYC 576. Basic Neuroscience II (2 credits)
- PSYC 577. Human Neuropsychology (4 credits)

One additional course from outside the student’s area, which could come from the above list or from some other department, is required. In the latter case, the course must be approved by the student’s advisory committee.

The recommendation of the Behavioral Neuroscience area is that students in the Clinical or Cognitive and Brain Sciences areas with a strong background in physiological psychology take PSYC 571, 572, 573, 574/575, or 576.

In addition:
- Students in the Behavioral Neuroscience track must take PSYC 571, 572, 573, 574, 575, 576, 594 (each semester) and six credits of PSYC 609.
- Students in the clinical science track must take PSYC 537, 541, 542, 543, 555, 575/576 or 577, 595 (each semester), 598 (6 semesters), 612, 613 (four credits), 614, as well as two graduate-level seminars at least one of which must be a clinical seminar.
- Students in the Cognitive and Brain Sciences track must take six 2-credit CORE courses (e.g., PSYC 508, 509, 510, 511, 512, 513, 514, and 515) and five 2-credit advanced graduate seminars (e.g., PSYC 603 and 607) as well as enroll for at least one research credit.
- In some cases, equivalency can be demonstrated by proof of satisfactory completion of an equivalent course and consent of the director of graduate studies, area head and/or committee.
- For the clinical program, students are required to make satisfactory progress in clinical work, as evidenced by evaluations and/or grades from community placements and/or practica in the Psychological Clinic.

Romance Languages and Literatures — Graduate

Graduate Programs

The Romance Languages and Literatures Department provides instruction in the French, Italian, and Spanish languages, literatures, and cultures with the programs leading to Master of Arts degrees. A candidate for the MA is expected to acquire oral and written proficiency in one romance language, sound knowledge of the principal aspects of the literature and culture in that language, and familiarity with various methods of scholarship and criticism.

The Master of Arts degree in each of the three languages follows a similar structure: nine (9) graduate courses (36 credits). Two of the nine are considered electives, selected with the student’s advisor or department graduate director and tailored to the student’s needs and future objectives, in closely related subject matter within the general framework of the Master’s program. Of the remaining seven courses, the student is immersed in the literature and culture of the language being studied. A parallel program is available whereby one course substitution of a Thesis may be selected. All students are required to take Comprehensive Examinations. Graduate Record Examination (GRE) aptitude test scores are required for admission (this requirement is waived for students applying to the 5-year BA/MA program).

The requirements for the MA in French, Italian, or Spanish may be satisfied according to Plan A or Plan B described...
Course Requirements

MA Plan A

Total courses required: nine (exclusive of 591 and 599)

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<tr>
<td>Electives (500-level courses in another field with the consent of the department)</td>
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<tr>
<td>Comprehensive examination</td>
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</table>

TOTAL 9

MA Plan B

Total courses required: nine (exclusive of 591)

<table>
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<th>Requirements</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major literature/language/culture</td>
<td>6</td>
</tr>
<tr>
<td>Electives (500-level courses in another field with the consent of the department)</td>
<td>2</td>
</tr>
<tr>
<td>Thesis</td>
<td>1</td>
</tr>
<tr>
<td>Comprehensive examination</td>
<td></td>
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</tbody>
</table>

TOTAL 9

Comprehensive Examinations

Written and oral comprehensive examinations in the major language/literature/culture are offered at the end of each semester. These examinations, based on a reading list as well as coursework, test the candidate’s familiarity with core works of literature/culture/linguistics, knowledge of the general historical development of those works, and ability to use the language correctly. The comprehensive examinations are normally taken at the end of the third semester of coursework for the degree and may be taken after the student has completed 20 credit hours of coursework (five courses). For details regarding the comprehensive examinations, consult the department’s graduate director.

Thesis

Under Plan B, the student fulfills the thesis requirement by submitting a thesis, presented through the respective advisors to the chairperson of the departmental graduate committee, at least eight weeks before the last day of classes of the semester in which the degree is to be granted. The student may be required during this time to make corrections, additions or other alterations to bring the work up to the standard required for thesis credit.

Sociology — Graduate
Doctorate Program

The doctoral program of the Department of Sociology is distinguished by its emphasis on world-historical social science. It offers promising scholars the opportunity to pursue the critical study of political economy, culture, power, knowledge and hierarchies of class, race and gender. Inquiry is guided by multiple theoretical approaches and research methodologies and addresses the interplay of the local and the global, as well as the past and the present. Substantive research interests include, but are not limited to, labor, work, and world-scale capital accumulation; imperialism, colonialism, and diasporic formations; state formation and hegemony; social movements; racial, ethnic, and gendered forms of domination; processes and institutions of knowledge production and distribution; world-systems; historical sociology; and alternative paths of technological and economic change and their divergent social and environmental consequences.

Within this broad framework, the department stresses independent scholarly development, rather than standardized training in established specializations. Students are encouraged to develop their own intellectual pursuits and, in consultation with faculty, design their programs of study and select their own areas of scholarly competence. Individual programs of study generally include introductory and advanced seminars, colloquia and doctoral research seminars in the department. Relevant coursework in other departments, programs or schools and independent study with department faculty may be taken only with the approval of the director of graduate studies. Students may also have occasion to collaborate with faculty on research of mutual interest, including in collaborative student/faculty research groups. Additional opportunities for advanced research are also available at the Fernand Braudel Center and other campus research institutes.

Students considering the program should carefully note the department's thematic strengths, faculty breadth and research interests, and course and program requirements.

Admission and Funding

The program relies on close working relations between faculty and students and is, therefore, kept relatively small. Applicants are expected to have a superior academic record and an informed interest in pursuing advanced studies in the Department of Sociology at Binghamton University. The program is as demanding intellectually as it is flexible structurally, and adequate preparation is indispensable. Nonetheless, prior work in a department of sociology is not essential. Preparation, for instance, in history, geography, economics, anthropology, philosophy or political science may be just as appropriate. A working knowledge of modern languages can be especially useful. Admissions are based on a variety of criteria. Students must submit appropriate samples of their writing that they consider indicative of their scholarly promise. Students are also asked to submit a carefully framed statement that addresses why they specifically want to come to Binghamton and spell out the directions they anticipate developing in their work while here. In addition, letters of recommendation, transcripts and appropriate standardized test scores (GRE and, if needed, TOEFL/IELTS/PTE Academic) are required. Experience suggests, however, that while test scores are helpful, the writing samples along with the statement and letters of recommendation are better indicators of potential for success in the program.

The Graduate School requires all applicants to submit their scores in the three Graduate Record Examination areas (verbal, quantitative and analytical). No advanced test score is necessary.

How to Apply

Admission information, including electronic forms, can be found at http://www.binghamton.edu/grad-school/admissions/apply/index.html. A personal interview is not required, although the department encourages and can help coordinate campus visits. The department only admits applicants for the doctoral degree. Applicants should feel free to send questions by e-mail to the director of graduate studies or any member of the faculty specializing in
research areas in which the applicant may also have an interest. For further information, see the faculty listings on the department’s website. The Graduate School may be contacted directly at:

Graduate School  
Binghamton University  
PO Box 6000  
Binghamton, NY 13902-6000  
607-777-2151  
e-mail: gradadmission@binghamton.edu

Completed applications are due January 15 for consideration for departmental funding.

**Funding**

A small number of department assistantships are awarded each year to entering students. Awards are highly competitive. In arriving at a decision on admission and funding, the department pays primary attention to an applicant’s scholarly promise as indicated by submitted written work, the statement of purpose and past academic record as indicated in transcripts and letters of recommendation. Normally, a student in good standing remains eligible for funding for four years if the student enters the doctoral program with a bachelor’s degree or equivalent, and for three years if the student already has a master’s degree or equivalent. Graduate assistant/teaching assistant awards come with a benefits package; for further information, contact the Office of Human Resources. The University offers Clark Fellowships ([http://www.binghamton.edu/grad-school/cost-aid-funding/financial-support/clifford-clark-fellowship.html](http://www.binghamton.edu/grad-school/cost-aid-funding/financial-support/clifford-clark-fellowship.html)) to selected students who contribute to the diversity of the program. Advanced students may be nominated to receive dissertation support fellowships. Adjunct teaching positions are available, on a competitive basis, to students admitted to PhD candidacy.

**Program of Study**

The department offers coursework, supervised independent study and research guidance at various stages of study. Core courses are offered in world-system studies; contemporary capitalism; world-historical perspectives on race, class and gender; methodologies; and theoretical studies. In addition, there are colloquia and seminars that prepare students for advanced research and writing.

**Coursework During the First Two Years**

Each student’s program is worked out in consultation with the director of graduate studies and one or more faculty advisors in light of the student’s preparation and interests. Ordinarily a first-year program consists of six courses, including four of the five core courses offered by the department. During the second year, the student completes remaining course requirements by taking advanced seminars along with an Independent Studies course (SOC 697) arranged by agreement with a selected faculty advisor.

**Core Courses**

- SOC 601: Study of the Modern World-System. Modern world-system from its origins to the present. Core-periphery relations; expansion/incorporation; the interstate system and hegemony; movements/revolutions; imperialism and anti-colonialism.
- SOC 602: Contemporary Capitalism. Introduction to the political economy of contemporary capitalism, including regimes of accumulation, theories of crisis; theories of globalization; states and class formation.
- SOC 603: Structural Inequalities. Global and local patterns of enduring inequalities; world-historical study of the
construction of inequalities based on race/ethnicity, class, gender and sexuality.

• SOC 604: Theoretical Studies. Social theories relating to such topics as long-term, large-scale social change, the emergence and functioning of capitalism, market formation, social class, state formation, revolutionary social change, structural inequalities of race and gender, post-structuralism, feminism, and post-coloniality.

• SOC 605: Problems of Method. A grounding in how to think methodologically, including the discussion, of epistemologies and underlying assumptions, research design (for example, ethnographic studies, archival work, case studies versus comparisons, and the like), and the uses and abuses of evidence (identifying sources, gathering evidence, sorting evidence, and evidence in support of argument).

A second group of courses is regularly offered to cover key subject areas, including courses in the areas of political economy, inequalities, and world-systems/world-historical studies. Special, advanced topics courses are also regularly offered. A full listing of regular courses is available in the Binghamton University Bulletin; current course offerings are listed in the BU Brain system.

Advanced Studies

In advanced studies, students concentrate their work in two fields, with an aim in demonstrating a high level of competence in each, and in developing a dissertation-research project. The actual program of studies is jointly worked out by the student and a study committee chosen by the student.

Before students become course complete, they are required to form study committees that may initially start with one or two faculty but will eventually consist of two faculty members (including the chair) and a reader from the department. A study committee's role combines guiding the student in advanced studies, evaluating the work as it progresses, and assessing when a required level of competence in each field has been demonstrated. A student begins a demonstration of competence in an area within one month of course completion. The first examination should be completed within 6 months from its beginning and the second within the same duration from the completion of the first (excluding summer and winter breaks).

When students become course complete, they are required to register and attend a writing practicum. This seminar trains students in academic writing and prepares them to produce publishable work in academic outlets.

Area Papers

Competence in a field of intellectual inquiry (whether established or newly defined by the student) is demonstrated in part by successful completion of an Area Paper which comprises 1) a critical review of the literature (debates, theories, research methods and practices, and matters of generally accepted 'fact', along with a 'mapping' of the origins, trajectories, and inter-relations among these diverse approaches, as relating to a particular theoretical area of inquiry; 2) an indication of one's own understanding and theoretical approach to the debates in this field, and 3) how one would move forward in his/her own later research and teaching as relating to this field. This area should be discussed and developed in close consultation with one's Area Paper committee chair, with whom students often take an independent study in their last semester of coursework and with at least one other committee member. Demonstration of competence in an area is based on the successful oral defense of the Area Paper, presentation of syllabi, research papers, and other supporting material, and an indication of how one's future research and teaching activities will be informed by one's work in this area (see Graduate Handbook for further discussion of the Area Paper).

The Dissertation and PhD

After successfully passing the two examinations, students form a PhD dissertation committee, to be comprised of at
least three persons, including a chair and at least two other members from among the department faculty. The Chair of the dissertation committee must be a regular tenured or tenure track member of the Department of Sociology. In certain circumstances, a member of the committee may be non-tenure track (e.g., international adjunct, visiting professor), with permission of the Director of Graduate Studies and the Graduate School. Within six months of the second examination, the student must submit a dissertation prospectus (proposal) which must then be approved by members of the dissertation committee. The filing of the approached prospectus confirms official admission to PhD candidacy (ABD status).

The department recommends that the University grant the PhD in sociology when the student has fulfilled the University residence and doctoral-research requirements; passed an oral examination (“the defense”) administered by the University on the topic of the dissertation; and deposited with the University a copy of the dissertation approved by the examining committee.

**Degree Requirements**

**Master of Arts Degree**

The MA Degree requires 9 courses of graded coursework.

**Doctor of Philosophy (PhD) Degree**

The PhD requires satisfaction of the following course requirements: twelve courses if entering with a BA, nine courses if entering with an MA; successful demonstration of competence in two fields (the two Area Papers); committee approval of the dissertation prospectus; and completion and successful defense of the dissertation.

**Typical Program of Study for Those Entering With a BA**

**First Year:** Four core courses; two advanced colloquia.

**Second Year:** Five advanced seminars (two if entering with an MA) plus one Independent Study (SOC 697) normally taken during the final semester of course-work. The MA may, upon petition, be awarded upon completion of 32 credits.

**Third Year:** Area Paper Seminar (two semesters) and area examination(s).

**Fourth Year:** Completion of all requirements for advancement to candidacy; doctoral research.

**Fifth Year:** Doctoral research and dissertation writing.

**International Student Information**

The department makes every effort to attract and retain international students. This includes close liaison with the Office for International Student and Scholar Services. International students should carefully review application requirements and U.S. immigration regulations, including SEVIS requirements and full-time certification. On this and related matters, see the International Student and Scholars Services website and e-mail: isss@binghamton.edu.

**Theatre — Graduate**

**Master of Arts Program**

The master of arts in theatre exists to provide a broad-based, comprehensive body of knowledge regarding theatre.
and drama at an advanced level. It is designed to appeal especially to students who wish to teach or to undertake an intensive pedagogical experience en route to the PhD. Furthermore, it serves as a practical training ground for students hoping to enter an MFA program or the professional theatre. The program includes a carefully planned combination of theory and practice; however, with attentive counseling, students determine a sub-specialization in history, criticism or some aspect of performance, technology, or design.

**Admission**

Undergraduate specialization in theatre is not required; however, students lacking a suitable background in theatre studies upon completion of their bachelor’s degree are obligated to complete appropriate undergraduate courses in addition to courses required for the MA degree. The deficiencies to be made up are determined by the graduate committee of the department. The Graduate Record Examination is required, as is the TOEFL for foreign applicants whose native language is not English.

**Course Requirements**

Students matriculated in the MA program are obligated to satisfactorily complete a minimum of 32 credit hours to qualify for the master of arts degree in theatre. Four specific courses (four credits each) and a thesis (four credits) are required of all such students. The remaining credits/classes should complement each student’s interests and should be chosen in consultation with the director of graduate studies. The four required courses are:

- THEA 544. Theatre Production Technology
- THEA 569. Theories of Acting and Directing (any section)
- THEA 572. Seminar in Dramatic Theory and Structure (any section)
- THEA 579. Seminar in Theatre History (any section)

**Other Requirements**

Matriculated students who are candidates for the MA degree must receive at least a full B (3.0) in all required courses and achieve an overall grade average of at least a B (3.0) for any 32 graduate credits in order to successfully complete the program. All graduate students are expected to participate actively in the department’s various projects.

**Thesis**

Given the department’s objectives, all candidates for the Master of Arts in theatre are required to demonstrate a general knowledge of the field plus cultivated skills in a specialized area of theatre, culminating in an acceptable thesis. In the Theatre Department, these fall into two broad categories:

- Critical thesis (THEA 599), consisting of an extensive written document of a scholarly or reflective nature;
- Creative thesis (THEA 598) centering around a project, performance or other activity, and accompanied by a brief written “summary paper” laying out the nature of the project and evaluating its success, with other materials presented in appendix form as appropriate.

**Translation Research and Instruction Program — Graduate**

**Graduate Certificate Program**
Although most students in the program are matriculated in one of the University degree programs, the translation study courses listed below may be taken as a separate track. For degree programs identified as especially suitable for the integration of translator training, see the appropriate sections of the Bulletin (comparative literature MA in translation studies, MA in romance languages, and doctoral tracks). Acceptance of these credits toward advanced degrees is up to the individual departments of Harpur College and to the appropriate committees in the other schools.

**Admission**

Students pursuing the certificate as a separate track must follow the standard Graduate School matriculation procedures. The following are basic prerequisites: A demonstrable ability to write texts in English, as well as a near-native command of a second language, from which they will generally be translating. Residence in the country of the second language is recommended, either prior to or during their translator-training program. Students who have not had any experience with translation are advised to take one semester of the translation workshop (see below) before formally applying to the program. After the first semester, the TRIP director will evaluate their performance and advise them either to apply or to improve their language skills before they go on with their training.

**Program of Courses**

<table>
<thead>
<tr>
<th>Credits</th>
<th>A. Program of Courses: Literary Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1. TRIP 572. Translation Workshop: Literary <em>(two semesters)</em></td>
</tr>
<tr>
<td>4</td>
<td>2. TRIP 580A. Introduction to Translation Studies</td>
</tr>
<tr>
<td>4</td>
<td>3. One graduate course in source literature</td>
</tr>
<tr>
<td>16</td>
<td>TOTAL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>B. Program of Courses: Non-Literary Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1. TRIP 573. Translation Workshop: Non-Literary <em>(two semesters)</em></td>
</tr>
<tr>
<td>4</td>
<td>2. TRIP 580A. Introduction to Translation Studies</td>
</tr>
<tr>
<td>4</td>
<td>3. One graduate course in area of specialization</td>
</tr>
<tr>
<td>16</td>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Students interested in certification must obtain a B grade or higher in all the required courses. Those interested in more than one language combination, i.e., Spanish>English and Korean>English, are required to take at least one more semester of the translation workshop in order to practice translating from the second source language of their choice in addition to a graduate course involving the history or culture of this same language.

**Examination**

After successfully concluding the required credits, students may request to take the examination, typically offered at the end of the fall and spring semesters. In consultation with appropriate faculty, the TRIP director establishes each student’s examination committee. The examination includes sections on both theory and practice.
For the translation practice examination, students can choose the genre (literary or non-literary), and the language combination involved. To pass this examination, students are expected to show that they can translate at a professional level. This means that they can produce publishable translations without faculty supervision.

The theory examination is a 72-hour take-home examination, and students answer a question on translation theory, as well as a question on copyright issues pertaining to translation.

In order to pass, students must obtain a grade of A- or higher on each section. Each section of the examination may be taken twice.

Certification

When students have fulfilled the course requirements and successfully passed the examination above, they are eligible to receive a certificate of translator proficiency, specifying the language combination(s) and subject area(s). The passing grades are B– in theory, A– in practice.

PhD in Translation Studies

The program is primarily designed to prepare its graduates both for careers in the academic field and scholarly research, including research-informed translation. It offers individualized interdisciplinary tracks to accommodate a variety of backgrounds. The features of this doctoral program are:

1. Inclusive curriculum including, but not limited to, history and traditions of translation studies, literary studies, cultural and postcolonial studies, and philosophy
2. Individualized interdisciplinary tracks with the option to take courses in other academic departments
3. Learner-centered atmosphere through discussion seminars and independent studies to make learning an enriching exchange among students and faculty

Admission

Students pursuing the PhD in translation studies must follow the standard Graduate School matriculation procedures.

Graduate students should demonstrate the following upon entering the program. This background can be attested by transcripts, letters of recommendation, personal statement and an interview. Admission decisions are made by the TRIP director in consultation with the advisory committee and any other faculty member whose expertise seems appropriate for the applicant.

1. Near-native fluency in English, as well as (and especially) the ability to write academic texts in English.
3. Optional, but desirable: good reading knowledge of a third language; this means the applicant can read reliably with a dictionary.
4. Previous immersion in a culture where second language is spoken.
5. A master’s degree, high GREs, GMATs or LSATs, high TOEFL scores (100+), a writing sample, letters of recommendation, etc.; applicants with no graduate course work in languages should also be prepared for a diagnostic examination during the application process.
6. Background in translation studies; applicants who do not have a documented background in translation studies, or who do not have any formal certification in translation, may be provisionally admitted; full admission will be granted only after passing the certificate examination.
Program of Courses

1. **Required Core Curriculum**

   **Credits**

   **Translation Practice:**
   - TRIP 572. Translation Workshop: Literary 4
   - TRIP 573. Translation Workshop: Non-Literary 4

   (Students who present workshop credits from Binghamton University or elsewhere may petition to have the preceding courses waived. However, these credits must still be fulfilled with other relevant classes.)

   **Translation Theory:**
   - TRIP 580A. Introduction to Translation Studies 4
   - TRIP 580B. Scholarly Methods in Translation Studies 4

2. **Allied and Disciplinary Electives** 24

   Depending on their interests, students will be able to choose electives from a variety of courses in other academic departments, encompassing disciplines such as:
   - Criticism and textual analysis (e.g., Comparative Literature, Philosophy)
   - Cultural studies (e.g., Anthropology, Sociology, area-specific studies)
   - World languages and literatures
   - Technical fields (e.g., business or the sciences, for those specializing in non-literary translation)
   - Pedagogy (Education and language departments)

3. **Dissertation**

   **Credits**

   - TRIP 698. Pre-dissertation Research 1+
   - TRIP 699. Dissertation 1+

   **Total Credits Required (without a previous master’s degree in a related field)** 48

   **Total Credits Required (with a previous master’s degree in a related field)** 36

   The total number of credits required should remain the same, even when students are exempted from taking workshop classes (TRIP 572 and 573).

**Residency Requirement**

Students are expected to be in residence during their formal course work, which will usually take two academic years. It is also advisable that they stay in residence during the parallel requirements described below.

**Parallel Academic Requirements**
Comprehensive Examination

The comprehensive examination is divided into four parts and will be evaluated by a committee composed of at least three examiners chosen by the student (subject to approval by the TRIP director or graduate director following Graduate School guidelines for Binghamton University faculty and other committee members):

1. **Field Paper/Dissertation Proposal.** This is a longer paper (approximately 40-50 pages) devoted to a theoretical issue, or sub-area explicitly related to translation studies, which will help students establish the direction of their dissertations. It should involve substantial scholarship and show that students are familiar with the current bibliography on the topic selected and are able to articulate their arguments in an academically acceptable format. The paper also serves as a dissertation proposal in that it defines the areas that the student will be focusing on for their research.

2. **Main Area of Concentration.** Students are required to define an area that reflects their main interest in the field. Suitable topics might be, for example, translation pedagogy, political aspects of translation theory, translation and ethics, linguistic approaches to translation, translation criticism, or a focus on the literary works of a particular period/language. (This is a 72-hour take-home examination scheduled by the student.)

3. **Minor Field.** This section of the exam will focus on a field that either complements or expands the students’ main area of concentration. Thus, if a student’s main area of concentration is, for example, translation pedagogy, her/his minor field might be contemporary approaches to education or the training of translators in medieval Spain. (This is a 72-hour take-home examination scheduled by the student.)

4. **Oral Examination.** This component will be based on the preceding parts of the examination, and will involve all the examiners.

In order to pass their PhD comprehensive examination, students must achieve a grade of B+ or better on each part. At the discretion of the examiners and in consultation with the graduate advisor, a student who has failed to achieve this standard may retake the part (or those parts) in which the grade was below B+.

**Dissertation**

Original research project which may comprise of a case study, an annotated translation, a speculative essay, a literature survey or some other form approved by the student’s committee, presented and defended in a public forum. The dissertation should be at least 200 pages plus bibliography and any tabular materials.

**School of Management**

**Undergraduate Programs**

Binghamton University’s School of Management (SOM) is one of five professional schools on campus. Its programs allow students to appreciate the complexity of modern organizations, the intricate relationships that exist between organizations and the social frameworks of which they are a part, and the challenges of administration at its broadest levels. The curriculum offerings are diverse, and they prepare students for professional careers as well as for undertaking advanced academic work.

The undergraduate programs of the school have a pre-professional orientation and stress breadth of knowledge while allowing limited specialization. They provide students with a comprehensive management education aimed at developing and expanding their capacity for dealing with an increasingly complex business environment, on both a national and international level, and they familiarize students with the computer and its applications to the functional areas of management. As part of their graduation requirements, students take a course in management policy and strategy, which acts as a capstone experience.
The undergraduate business administration curriculum provides students with a strong liberal arts background; a sound foundation in the basic disciplines and functional areas of management; and an awareness of the legal, environmental and societal factors that affect decision making in organizations. In addition, the undergraduate business administration student has the opportunity to acquire greater depth of understanding in one or more functional areas by electing concentrations in those areas.

The undergraduate accounting curriculum option provides strong pre-professional training in the theory and practice of accounting, within the context of a sound general education that exposes the student both to the liberal and to the management arts. The program serves students interested in careers in public and corporate accounting, as well as students who intend to pursue advanced studies in various graduate and professional schools.

The School of Management also offers a PwC Scholars program to which highly qualified entering freshmen are offered entrance at the time of their admission to the School of Management.

Admission

The procedure for individuals applying for admission to the School of Management, as either freshmen or transfer students, is the same as for other undergraduate schools of the University. Specific information may be found in the Admissions section of the University Bulletin.

Academic Policies

Students in SOM are subject to all general regulations listed in the Academic Policies and Procedures section of the Bulletin. In addition, the following policies also apply to management students.

Courses Taken in Other Schools

Cross-disciplinary study is encouraged, and students are required to take approximately one-half of the coursework for their degrees in the other undergraduate components of the Binghamton campus (the various departments of Harpur College of Arts and Sciences, the College of Community and Public Affairs, the Decker School of Nursing, the School of Education or the Thomas J. Watson School of Engineering and Applied Science).

Grading System

The following are valid grades in SOM undergraduate courses: A, A–, B+, B, B–, C+, C, C–, D, F, W, WF and I. The grade of P (Pass) may be given only in internship, teaching practicum, independent study or readings and research coursework. This grading option (P) is available for independent study and readings and research courses only with consent of both the instructor and the school’s advising office; whereas it is the default grading option for internship and teaching practica experiences. Students matriculated in SOM must adhere to this grading system in all courses taken in SOM.

When taking courses in other schools at Binghamton University, SOM students are permitted to take the grading option of those schools if they wish. They may also petition to be graded according to the SOM system, if the instructor is willing and if the school offering the course permits such petitions. Grades earned in other schools at Binghamton University by SOM students are entered into the student’s record and printed on transcripts as they are given.

Undergraduate students from other schools at Binghamton University who register for SOM courses may petition the respective instructors to be graded by the system existing in the school in which they are enrolled.

All graduate students taking an undergraduate course in SOM are graded according to the grading policies of the Graduate School.
**Academic Standing**

To remain in good academic standing, students are required to maintain a minimum cumulative grade-point average of 2.0. Students must also maintain a 2.0 minimum GPA for all SOM coursework. The SOM GPA will be calculated only after twelve credits of SOM coursework have been completed. Students who fail to meet a cumulative GPA and/or an SOM GPA of 2.0 will be placed on probation and are expected to raise their average to a 2.0 level or better within a maximum of two full-time semesters of study. Students who fail to raise their grade-point average or have a cumulative GPA that falls below dismissal index (see chart below) are subject to dismissal. Academic probation does not necessarily preclude a student from registering or from receiving financial aid; standards for financial aid eligibility are described in the Financial Information section of this publication.

While students may carry an overall grade-point average slightly below 2.0 and be allowed to continue their studies "on probation" for one or more semesters, those who fall considerably below a cumulative GPA of 2.0 are dismissed rather than allowed to continue. These decisions are made in accordance with the following guidelines:

**Academic Dismissal Indexes**

<table>
<thead>
<tr>
<th>Hours Completed (including advanced minimum standing)</th>
<th>Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-34</td>
<td>1.440</td>
</tr>
<tr>
<td>35-51</td>
<td>1.625</td>
</tr>
<tr>
<td>52-68</td>
<td>1.715</td>
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<td>69-85</td>
<td>1.800</td>
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<tr>
<td>86-102</td>
<td>1.875</td>
</tr>
<tr>
<td>103-119</td>
<td>1.950</td>
</tr>
<tr>
<td>120+</td>
<td>2.000</td>
</tr>
</tbody>
</table>

Grade point averages are calculated by assigning the following point values to the respective grades:

- A = 4.0
- A– = 3.7
- B+ = 3.3
- B = 3.0
- B– = 2.7
- C+ = 2.3
- C = 2.0
- C– = 1.7
- D = 1.0
- F = 0.0
- WF = 0.0
- P, AU, and W generate no grade points and are not included in the GPA calculation.

A student who has been dismissed for academic reasons for the first time may apply for immediate readmission. In some instances, this may be granted; however, the school has the discretion to refuse immediate readmission and
ask for additional contingencies to be met. Students will only be immediately readmitted after signing a readmission contract. Failure to achieve the level of performance indicated in the contract, or a GPA of less than a 2.0 in future academic semesters will result in a final dismissal, with no opportunity for readmission. A student may petition the Office of the Dean of SOM regarding their standing.

Incomplete Policy

A notation of Incomplete, rather than a grade, may be reported by the instructor when a student has made substantial progress but has not been able to complete a course. The student must have a valid reason, such as, illness or other justifiable circumstances, for requesting an Incomplete. The issues of substantial progress, potential to pass the course and the reason for the request are decided by the instructor. When giving an Incomplete, the instructor must:

- complete a contract, which is signed by the instructor and the student, which specifies the work needing to be done in order to complete the course and receive a grade;
- submit the contract to the SOM Advising Office along with the submission of the Incomplete grade;
- specify in the contract how and when the course will be completed. The student must be in compliance with SOM rules regarding the number of Incompletes a student may carry at one time (a student may not carry more than eight credit hours of Incompletes at any time without the specific approval of the Dean’s office);
- indicate in the contract, in any extenuating circumstances (e.g., sabbatical), the signature of any additional instructor needed for successful completion of the course. This signature is to be obtained by the originating faculty member, not the student.

An Incomplete grade becomes a grade of “F” 72 hours after the last scheduled final in the next regular semester following the issuance of the Incomplete, unless a change of grade is submitted by the instructor. It is the student’s responsibility to ascertain that the coursework has been completed according to the contract and that a new grade is submitted. An extension of this deadline must be approved by the instructor and the Dean’s Office and is approved only in highly unusual circumstances. Contracts and other required forms may be obtained from the SOM Advising Office by the instructor.

Withdrawal Regulations

If they wish for their records to indicate good standing, students who withdraw from the University must follow a formal withdrawal procedure. Mere absence from class does not constitute due notice of withdrawal. Withdrawal applications may be obtained from the School of Management office. When students withdraw entirely from SOM, and also simultaneously withdraw from all courses for which they are registered, there is no academic penalty associated with the withdrawal from courses. A grade of W is assigned to each course, and a notation indicating withdrawal from the University is placed on the transcript.

Formal readmission is necessary for any student who has not been in attendance for one or more semesters. Students who officially withdraw during the regular academic year are eligible to register for the next academic semester without requesting a formal readmission.

The following regulations govern withdrawals from individual SOM courses:

- As indicated in the University regulations section, on the subject, students may withdraw from a course without restriction and with no recorded grade until the end of the second week of class. After that, and until the end of the official University withdrawal deadline, a grade of “W” is recorded.
- Students wishing to withdraw from courses after the withdrawal deadline and still receive a grade of “W,” rather than a failing grade, are required to provide evidence, in a timely manner, that extraordinary
circumstances beyond their control occurred after the withdrawal deadline. Poor class performance and/or poor judgment are not considered appropriate reasons for a late withdrawal. Petitions for late withdrawals should be submitted to the SOM undergraduate advisor who will review them with the respective instructor and obtain final approval from the Dean’s office.

**Transcript Policy**

The Registrar’s Office maintains a single transcript for all Binghamton University students, which serves both internal and external purposes. As an external transcript, it is the official record of the student’s performance and is forwarded to prospective employers and graduate schools. As an internal transcript, in conjunction with a degree audit report, it is used by the University and SOM for administrative and academic advising purposes. The following reflects SOM policy on transcripts:

- The semester and cumulative grade-point averages recorded on the transcript are based on the student’s academic work in all units of Binghamton University;
- SOM students who complete all of their academic work at Binghamton University are limited to 16 credit hours of "Pass," "Satisfactory" or similar grades in non-SOM coursework during their undergraduate programs. Those who transfer from other institutions are limited to the equivalent of one such grade for each year of attendance at Binghamton University. Courses with a mandatory Pass/Fail grade option are excluded from this limit.

All grades are recorded on the student’s transcript as they are received in courses.

**Independent Study, Teaching Practica and Internships**

While independent study is a useful and important adjunct to a student’s academic preparation, no student is allowed to present more than eight credit hours of independent study, internship and/or practicum in college teaching coursework in fulfillment of SOM degree requirements. Independent study, internships and practicum in college teaching generally are taken on a Pass/Fail basis.

**Physical Education**

Physical education for SOM students is governed by the General Education policies in place at the time of matriculation. At this time, all SOM students are required to complete a minimum of 2 credits of physical education, one credit of which must have a wellness component and one credit which must have an activity component. No student is allowed to present more than six credits in physical education/health and wellness in fulfillment of their SOM degree.

**Writing Requirement**

The writing requirement consists of completion of two composition courses from within Harpur College or equivalent courses transferred from other colleges or universities. Such courses carry a General Education indicator of C. One of these C courses serves as the General Education Composition course. Joined courses (Gen Ed J) are also acceptable as these courses combine the Composition component with an Oral Communication component.

**Academic Honors**

**Graduation Honors**

Undergraduate students with outstanding academic records are awarded graduation honors at Commencement. Determinations are made in accordance with the following guidelines:
Selections are made on the basis of the student’s entire academic career at Binghamton University.

Individual designations are determined as follows:

- Students with cumulative grade-point averages of 3.85 or greater (on a 4.0 scale) receive the designation *summa cum laude*;
- Students with cumulative grade-point averages of between 3.70 and 3.84 receive the designation *magna cum laude*;
- Students with cumulative grade-point averages of between 3.50 and 3.69 receive the designation *cum laude*.

- Students who have entered Binghamton University after completing a portion of their degree requirements at another institution must present cumulative GPAs of at least 3.5 (on a 4.0 scale) for all coursework taken at other institutions, and must complete at least 60 credit hours in residence at Binghamton University, with GPA equivalent to those specified above, in order to be eligible for graduation honors.

- As indicated above, four-year students may present no more than 16 credit hours of Pass (“P”) grades. Transfer students are limited to four credit hours of Pass grades per full year of attendance at Binghamton University.

Students who fail to satisfy any of the above criteria are not considered for graduation honors unless an exception is granted through the Dean’s Office.

**Dean’s List**

At the end of each regular semester, SOM students who have earned exceptional grades during that semester are accorded Dean’s List recognition. Such recognition is limited to those students having the highest semester grade-point averages while completing at least 14 credit hours for letter grades. A minimum grade-point average of 3.75 is required.

**Awards**

See the Scholarships, Awards and Fellowships section of the University *Bulletin*.

**Requirements for BS Degree**

In order for students to receive a bachelor of science degree from SOM, they must have:

- earned a minimum of 126 credits;
- a minimum cumulative grade-point average of 2.0, both overall and in SOM courses;
- completed a minimum of 50 percent of the business administration/accounting coursework at Binghamton University;
- no more than one non-SOM course with a grade of Pass (“P”) for each full year of attendance at Binghamton University (mandatory P/F graded courses are excluded from this limitation);
- fulfilled the General Education requirements for Binghamton University;
- fulfilled the core SOM requirements and any specified requirements of the area in which they are candidates for a degree;
- been in residence at Binghamton University during the last 30 credit hours immediately preceding graduation, unless specifically exempted from this requirement by the SOM Academic Advising Office;
Elective Courses, Specializations, Concentrations

Students who wish to specialize in accounting to qualify for the CPA license in New York state are urged to elect the degree program in accounting and to confer with the SOM Academic Advising Office no later than their sophomore year. Students completing the baccalaureate program in accounting are eligible to sit for the CPA examination but would not yet be eligible for the CPA license. A degree program consisting of a minimum of 150 credit hours is required to qualify for the CPA license. SOM offers a combination BS/MS in accounting program to satisfy the requirements for the NYS CPA license. Students who wish to obtain a CPA license in another state should consult the regulations for that state to see whether or not the Binghamton curriculum is satisfactory. Students who wish to have a career in accounting other than with public accounting firms are also advised to elect the BS/MS in Accounting degree program. For further information, consult with the school’s advising office.

Students in the business administration baccalaureate program may elect one or more concentrations, preferably by the end of the fifth semester. A concentration consists of four (4) or more courses designed to provide depth in a specialized area, in addition to the broad program provided by the core requirements. Through judicious selection of a concentration and the remaining electives, a student may tailor a program of study to meet specific needs and goals. The student’s concentrations are recorded on the official transcript at the time of graduation. Guide sheets on all concentrations are available in SOM Advising and on the SOM website. While a student may declare more than one concentration, the same courses cannot be used to fulfill requirements in multiple concentrations.

Students who intend to continue their studies in graduate school should consider the fact that many graduate programs may require additional competence in mathematics and statistics. Consequently, students with this goal may want to select as electives additional courses from these areas.

BS in Accounting

The following courses, or their equivalent(s), are required for the major and must be completed before the junior core of classes: MATH 220 or MATH 224 and 225. If students do not place into MATH 220 or 224, then MATH 108 or MATH 223 (or the equivalent) is also a required course for completion of the major. If students do not place into MATH 108, then MATH 107 is also required for completion of major.

To be granted the bachelor of science degree in accounting from SOM, students must complete the following courses:

A. Liberal Arts

1. Requirements

   • ECON 162. Macroeconomics
   • MATH 220, MATH 224 and 225. Calculus

2. Electives
• Liberal arts electives (to include most General Education coursework, two composition courses and a minimum of three (3) Upper Level electives in the Liberal Arts, to a minimum of 64 credits.)*

**B. School of Management**

1. Requirements

- CQS 111. Computer Tools in Management**
- MGMT 111. Intro to Decision Making in Management
- BL&S 111 & 112. Legal Environment of Management I and II
- CQS 112. Statistics for Management**
- IBUS 311. International Business
- MGMT 311. Organizational Behavior
- FIN 311. Financial Management
- MIS 311. Management Information Systems
- MKTG 311. Introduction to Marketing
- OPM 311. Operations Management
- CQS 311. Advanced Computer Tools for OPM and MIS
- MGMT 411. Global Strategic Management
- ACCT 211. Financial Accounting
- ACCT 305. Cost Accounting****
- ACCT 311. Intermediate Accounting Theory I
- ACCT 312. Intermediate Accounting Theory II
- ACCT 460. Auditing
- ACCT 476. Taxation for Entities
- ECON 160. Micro-economics

**C. Physical Education (two credits)*****

*Students must take two writing-emphasis courses (Gen Ed indicators C or J) in liberal arts to fulfill the writing requirement. The term “upper level” refers to those courses for which there are prerequisites and/or courses numbered above 300. A course with no prerequisite and a number below 300, but specified as being intermediate or advanced in nature by the department teaching the course, may be used as an upper level elective.

**CQS 111 may be waived for transfer students at the discretion of the academic advising office.
SOM recommends that students take CQS 112 as their required course in statistics. No more than one introductory statistics course may count toward the degree.

No credit is granted in the accounting curriculum for ACCT 212: Managerial Accounting.

Students must take two credits and may elect to take up to four more credits to substitute for an elective under Part A2.

Standard Curriculum Sequence for Accounting Option

The following represents the normal sequence of courses that SOM students are expected to follow in completing degree requirements in accounting during their four years at Binghamton University. It reflects the school's belief that professional coursework must be preceded by a sound liberal arts background combined with coursework in necessary foundation areas. Three courses, OPM 311, MIS 311 and CQS 311, constitute the S-Core and must be taken together in the same semester during the sophomore year. FIN 311, MGMT 311, MKTG 311 and IBUS 311 constitute the J-Core and must be taken together in the same semester during the junior year. Transfer students should consult their academic advisors to determine where and how their previous work fits into this sequence. Each course is four credits unless noted.

**First Semester (16 hours)**

- MATH 220 or MATH 224 and 225. Calculus
- CQS 111. Computer Tools for Management (2 cr.)
- MGMT 111. Intro to Decision Making in Management (2 cr.)
- ECON 162. Macroeconomics
- Liberal Arts elective

**Second Semester (17 hours)**

- CQS 112. Statistics for Management
- BLS 111. Legal Environment of Business I (3 cr.)
- Liberal arts elective*
- ECON 160. Microeconomics
- Physical education (2 cr.) (Physical education may be taken any semester)

**Third Semester (17 hours)**

- Liberal Arts elective
- Liberal Arts elective
- OPM 311. Operations Management (3 cr.)
- MIS 311. Management Information Systems (3 cr.)
- CQS 311. Advanced Computer Lab in OPM & MIS (3 cr.)

**Fourth Semester (15 hours)**

- BLS 112. Legal Environment of Business II (3 cr.)
- ACCT 211. Financial Accounting
- Liberal arts elective
Fifth Semester (16 hours)
- ACCT 311. Intermediate Accounting Theory I
- FIN 311. Financial Management (3 cr.)
- MGMT 311. Organizational Behavior (3 cr.)
- MKTG 311. Introduction to Marketing (3 cr.)
- IBUS 311. Introduction to International Business (3 cr.)

Sixth Semester (16 hours)
- ACCT 305. Cost Accounting
- ACCT 312. Intermediate Accounting Theory II
- Liberal arts elective
- Liberal arts elective

Seventh Semester (16 hours)
- ACCT 476. Taxation of Entities
- Liberal arts elective
- Liberal arts elective
- Liberal arts elective

Eighth Semester (13 hours)
- ACCT 460. Auditing
- MGMT 411. Global Strategic Management
- Liberal arts elective
- Liberal arts elective (1 or more credits)

*Students must take two composition courses (C) in liberal arts to fulfill the writing requirement.

**BS in Business Administration**

The following courses, or their equivalent(s), are required for the major and must be completed before the junior core of classes: MATH 220 or MATH 224 and 225. If students do not place into MATH 220 or 224, then MATH 108 or MATH 223 (or the equivalent) is also a required course for completion of the major. If students do not place into MATH 108, then MATH 107 is also required for completion of major.

To be granted the bachelor of science degree in management from SOM, students must complete the following courses:

**A. Liberal Arts**

1. Requirements

- MATH 220 or MATH 224 and 225. Calculus
• ECON 160. Microeconomics
• ECON 162. Macroeconomics
• CQS 112.* Statistics for Management

2. Electives

Liberal arts electives (To include two composition courses and a minimum of three (3) upper-level electives, to a minimum of 64 credits)**

B. School of Management

1. Requirements

• CQS 111. Computer Tools for Management***
• MGMT 111. Intro to Decision Making in Management
• ACCT 211-212. Financial and Managerial Accounting
• BL&S 111. Legal Environment of Management I
• IBUS 311. International Business
• MGMT 311. Organizational Behavior
• FIN 311. Financial Management
• MKTG 311. Introduction to Marketing
• OPM 311. Operations Management
• MIS 311. Information Systems and Their Applications
• CQS 311. Advanced Computer Tools for OPM and MIS
• MGMT 411. Global Strategic Management

2. Concentration courses (4 or more courses required for the concentration)

C. Electives as needed or second concentration

D. Physical education (two credits)****

*SOM recommends that students take CQS 112 as their required course in statistics. No more than one introductory statistics course may count toward the degree.

**Students must take two writing emphasis courses (Gen Ed indicators C or J) in liberal arts to fulfill the writing requirement. The term “introductory level” refers to those courses for which there are no prerequisites and/or courses numbered below 300. A course with no prerequisite and which is numbered below 300, but specified as being intermediate or advanced in nature by the department teaching the course, may be used as a non-introductory elective.
Each student in this degree program may elect one or more concentrations by the junior year by filing a Declaration of Concentration form in the SOM Advising Office.

The concentrations and their requirements are:

**Consulting and Leadership Concentration**

The purpose of this concentration is to prepare students for entry-level consulting positions in areas such as human resource management, management information systems or marketing. Courses in the concentration focus on individual leadership and influence, team and shared leadership, and strategic leadership and change management. Communication technologies such as the Internet, e-mail, groupware collaborative systems and videoconferencing are used extensively. Students usually combine this concentration with a second concentration in areas such as marketing or management information systems.

- LEAD 351. Leadership Skills and Development
- LEAD 352. Team and Group Leadership or LEAD 354 Innovation and Creativity
- LEAD 353. Organizational and Strategic Leadership
- One additional quantitative elective from the list of approved courses available from the SOM Advising Office.

**Entrepreneurship**

The focus in these courses is on the identification and evaluation of new venture opportunities; the development of effective business plans; and financing, establishing and operating new businesses. Four courses are required:

- ENT 460. and
- three additional electives chosen from entrepreneurship guide sheet available in SOM advising office

**Finance**

- FIN 322. Investments
- FIN 324. Corporate Finance
- Two FIN concentration electives: one (1) additional undergraduate FIN elective above FIN 311, excluding independent studies, and one (1) elective from the list of acceptable FIN concentration electives are required (see FIN guidesheet). Students should consult with the Finance faculty for guidance in choosing appropriate FIN electives for their intended career paths. The Finance guide sheet found in the SOM Advising Office and on the SOM website also provides guidance.

**Quantitative Finance (formerly Financial Engineering)**

Recent innovations in financial markets have led to an increased demand for analytically skilled students. Understanding pricing models in derivatives and other exotic securities requires knowledge in finance and also statistics, stochastic processes and differential equations. The quantitative finance program is designed to provide students with opportunities to pursue a mathematically challenging program of study.
In addition to meeting the usual School of Management requirements, students in the quantitative finance concentration complete courses in the following groups:

- Additional Math requirements
  - MATH 222 or (MATH 226 and 227). Calculus 2
  - MATH 304. Linear Algebra
- Additional Economics Course
  - ECON 466. Introduction to Econometrics
- Finance Courses
  - FIN 322. Investments
  - FIN 450. Derivatives
  - FIN 465. Arbitrage Strategies
- Finance Elective: One (1) additional undergraduate FIN elective as defined by the Quantitative Guide Sheet available in the SOM Advising Office.
- SCM 360. Advanced Spreadsheet Modeling

The program is designed for placement of students in investment banks. Only outstanding undergraduate students with a cumulative GPA above 3.5 will be admitted. It is in their best interest to maintain that GPA while they are in the program.

**Marketing**

- MKTG 320 — Marketing Research or MKTG 475 or other analytics course (see SOM Marketing guide sheet in SOM advising for additional options)
- Two additional MKTG electives
- Fourth elective selected from marketing guide sheet available in SOM advising office

**Global Management**

Contact School of Management Advising Office for details on this concentration.

**Management Information Systems**

Management Information Systems students must take

- MIS 323 (Systems Analysis and Design)
- Two additional courses from the set of MIS electives that are offered, excluding independent study and internship.
- One additional MIS elective or other elective class specified in the MIS guide sheet, available in the SOM Advising Office.

**Supply Chain Management**
In addition to meeting the usual School of Management requirements, students in the Supply Chain Management concentration must complete courses in the following groups:

- SCM 365.
- SCM 360.
- SCM 460 or MKTG 475.
- One additional SCM course above the 311 level or other analytics class noted on Supply Chain guidesheet located in SOM advising.

### General Management

Students may take any four undergraduate management electives above the 311 level.

### Standard Curriculum Sequence for Business Administration Option

The following represents the normal sequence of courses that SOM students are expected to follow in completing degree requirements in management over their four years at Binghamton University. It reflects the school’s belief that professional coursework must be preceded by a sound liberal arts background combined with coursework in necessary foundation areas. Three courses, OPM 311, MIS 311 and CQS 311, constitute the S-Core and all must be taken together during the same semester, generally during the sophomore year. FIN 311, MKTG 311, MGMT 311 and IBUS 311 constitute the J-Core and all must be taken together during the same semester, generally during the junior year. Transfer students should consult with their academic advisors to determine where and how their previous work fits into this sequence.

#### First Semester (16 hours)

- CQS 111. Computer Tools for Management
- MGMT 111. Intro to Decision Making in Management
- Non-management elective*
- MATH 220 or MATH 224 and 225. Calculus
- ECON 162. Macroeconomics

#### Second Semester (17 hours)

- ECON 160. Microeconomics
- Non-management elective
- BLS 111. Legal Environment of Business I (3 cr.)
- CQS 112. Statistics for Management
- Physical Education (2 cr) (may be taken any semester)

#### Third Semester (17 hours)

- OPM 311. Operations Management (3 cr.)
- MIS 311. Management Information Systems (3 cr.)
- ACCT 211. Financial Accounting
- CQS 311. Advanced Computer Tools in OPM & MIS (3 cr.)
- Non-management elective

**Fourth Semester (16 hours)**
- ACCT 212. Managerial Accounting
- Non-Management elective
- Non-Management elective
- Non-Management elective

**Fifth Semester (16 hours)**
- FIN 311. Financial Management (3 cr.)
- MKTG 311. Introduction to Marketing (3 cr.)
- MGMT 311. Organizational Behavior (3cr.)
- IBUS 311. Introduction to International Business (3 cr.)
- Non-management elective

**Sixth Semester (16 hours)**
- Concentration elective
- Concentration elective
- Non-management elective
- Non-management elective

**Seventh Semester (16 hours)**
- Concentration elective
- Non-management elective
- Non-management elective
- Free elective

**Eighth Semester (12 hours)**
- MGMT 411. Global Strategic Management
- Concentration elective or free elective
- Free elective

*Students must take two writing-emphasis courses (GenEd C or J) to fulfill the writing requirement.*

**PwC Scholars Program**

The PricewaterhouseCoopers (PwC) Scholars Program is focused on developing future leaders through Academic Excellence, Professional Development, Community Service/Fundraising, and Unique Networking Opportunities. The goal is to attract superior students and challenge them to reach their full potential. PwC Scholars augment the normal SOM curriculum with additional requirements geared to better prepare them to excel in their careers. PwC Scholars are provided with special opportunities to enhance both their written and oral communication skills. To
facilitate oral communication skills, Scholars are required to participate in reading and discussion sections each semester.

PwC Scholars are required to complete additional coursework in their primary field of management concentration, complete a second concentration in another management area, or minor in another university discipline. Additional benefits of the program include the opportunity to participate in the Scholars Junior Level International Experience and the Sophomore Level Case Competition. In addition, the Scholars have the opportunity to hear from a variety of successful speakers as part of the Scholars Speaker Series.

Completion of the PwC Scholars Program is noted on the student's official transcript and through a PwC Scholars Program certificate issued by SOM.

Admission to the program is competitive and is limited to no more than 10 percent of the entering freshman class. Students are invited to participate in the program when they are accepted for admission to the University. Those freshmen who are not admitted upon entry to the University are offered a chance to apply as sophomores if their freshman Grade Point Average is 3.6 or higher.

Additional SOM Requirements for PwC Scholars Students:

SOM requirements that are unique to the PwC Scholars Program are designed to further enhance students' breadth and depth of knowledge in management and their area of specialization. While it is not required, it is expected that many of the participants in the honors program will have earned college credit prior to their enrollment at Binghamton University. These credits may partially or fully offset the additional credit requirements.

PwC Scholars students augment their programs with the following additional requirement:

- Scholars Seminars: Students must participate in the PwC Scholars seminars during each semester in which they are enrolled in the PwC Scholars Program.
- Additional Writing Course: Students are required to take at least one additional writing course (GenEd C or J) beyond the standard two-course SOM requirement.
- Scholars Courses: MGMT 150 Ethics in Business, MGMT 251 Scholars Case Competition and MGMT 350 Community Service Project are required of all PwC Scholars.

PwC Scholars students are also required to fulfill one of the following options:

- Major Area Requirement (four additional credits): Experiential learning course as defined by Degree Works audit. This additional coursework may include independent studies or courses not listed on the Degree Works audit with the approval of the program director.
- Concentration in business for accounting majors or second concentration for business administration majors: see above concentrations for options and requirements.
- Minor: A Minor may be completed without taking extra courses by careful utilization of liberal arts electives. See the Bulletin/Catalog section for the department offering the desired minor for requirements.

Participants in the PwC Scholars Program are expected to maintain and graduate with a cumulative GPA of at least 3.6. If the student's cumulative GPA is below 3.6 for two consecutive semesters, the student may not continue in the program. Scholars coursework may also be counted toward the traditional SOM degrees, therefore discontinuation of participation in the program does not normally result in additional coursework requirements or delay the completion of a degree program in the School of Management.

For more information about the program contact the SOM Advising Office at 607-777-2316.
SPECIAL OPPORTUNITIES FOR SOM AND NON-SOM STUDENTS

SOM offers opportunities to further students' understanding of and exposure to the arena of international management.

Opportunities for study in England, Australia, Italy, Scotland, China, Korea and other countries have provided students in accounting and in business administration with an opportunity to study management practices at prestigious business schools in these countries. Students interested in any of these programs should contact the school’s advising office or the Office of International Education and Global Initiatives.

SOM students are permitted to take up to two upper-level business courses while studying abroad from an AACSB- or EQUIS-accredited school.

SOM international students who wish to study abroad in their home country are limited to taking one upper-level business course from an AACSB- or EQUIS-accredited school.

Adjunct Management Option

This special program responds to requests by non-SOM students for the opportunity to complete a limited selection of courses in SOM while completing degree requirements in their chosen school. The adjunct management option gives a limited number of students an introduction to basic subject matter in the areas of management and accounting. It is not in any way equivalent to an academic major or minor, but rather is a supplement to appropriate majors in another school. The adjunct option consists of the completion of four specific courses which are offered on a distance learning basis during the winter and summer sessions. The four courses are: ACCT 211 (Financial Accounting), FIN 311 Principles of Finance, MKTG 311 Principles of Marketing and MGMT 311 Introduction to Organizational Behavior. In order to properly prepare for taking the Finance, Marketing and Organizational Behavior courses, students should have junior standing and have completed the appropriate prerequisites as part of their non-SOM course work. These include calculus, statistics, microeconomics and macroeconomics.

To qualify, non-SOM students must:

- apply at the SOM Advising Office.
- meet the following general entrance criteria:
  - completion of at least 24 academic hours, thereby having sophomore standing;
  - a GPA of 3.2 or better.

Students who successfully complete this special program option will have this fact reflected on their transcripts upon graduation.

*Note: Students should be aware that the adjunct management option is not related to the five-year program described in this publication. Students who contemplate study for the MBA degree are well advised to complete their regular liberal arts degrees and to put off their professional studies until entering graduate school or to consider the Combined Degree programs noted below.*

Accounting Five-Year Program

The accounting five-year program provides an opportunity for qualified students to complete their BS and MS degrees in accounting within a five-year period. In addition, the five-year program meets the requirements for the 150-credit-hour degree that is required for licensing in New York State.

To be eligible for admission into this special program, students must possess academic qualifications that allow
admission into the graduate programs at the end of their senior year. Interested students may begin the application procedure in the fall of their senior year by submitting a completed graduate application to the University’s Graduate School. The GMAT exam is also required for all spring applicants. Further information about the five-year program for accounting may be obtained from the SOM Advising Office or at http://www2.binghamton.edu/som/graduate/mba-ms-programs/ms-accounting.html.

**Combined-Degree Programs**

- Harpur College/School of Management Fast-Track MBA Program
- Watson School of Engineering and Applied Science/School of Management Fast-Track MBA Program

These special programs allow a limited number of highly qualified and well-motivated undergraduate students from the above stated programs the opportunity to combine their undergraduate studies with graduate work in Binghamton University’s School of Management, whereby they may complete both a bachelor’s and a master’s degree within a five-year period. The combined program is more completely described in the SOM graduate portion of this publication.

Further information about the combined program for Harpur College students may be obtained from the Harpur College Academic Advising Office or the SOM Advising Office.

**School of Management - Graduate**

**Graduate Programs**

The School of Management’s graduate programs challenge students to appreciate the complexity of modern organizations, the intricate relationships that exist between organizations and the social frameworks of which they are a part of, and the responsibilities of administration at its broadest levels. Curricular offerings are diverse and prepare students for professional careers, as well as advanced academic work.

**Admission**

Although it is desired that students have some basic training in economics, accounting or business, and knowledge of the literature and methods of these disciplines, an undergraduate major in one of these areas is not a prerequisite for admission to either of the two major master’s degree programs offered by SOM. Indeed, a broad spectrum of social sciences, sciences and humanities is desirable preparation for advanced work. However, the general requirements for admission to any master's level graduate program at Binghamton University must be satisfied.

To be admitted, an applicant must satisfy the following requirements:

- hold a bachelor’s degree or the equivalent from any college or university of recognized standing;
- achieve an acceptable undergraduate cumulative grade-point average of at least a 3.0.

In support of their applications, students must submit:

- official transcripts of all previous college work;
- two letters of recommendation from persons in the field of the academic major at the institution most recently attended (applicants whose academic references go back more than five years may substitute other references if desired);
- scores on the Graduate Management Admissions Test (GMAT) or Graduate Record Examination (GRE). Official test scores must be sent directly to the Graduate School.
GMAT registration materials and test center locations can be obtained by visiting http://www.mba.com or calling 1-800-GMAT-NOW. GRE registration materials and test center locations can be obtained by visiting http://www.ets.org/gre or calling 1-866-473-4373.

All application materials should be submitted online through the Graduate Admissions Office website at: http://www.binghamton.edu/grad-school/admissions/apply/.

Inquiries on the application process should be sent directly to gradsch@binghamton.edu.

Students should submit their completed applications before March 1.

Master of Business Administration

The School of Management's MBA program provides students with a solid foundation in core business principles and is designed around the most important skills needed in today's global market including communication, problem-solving, strategic thinking, leadership and technical competence. It employs a team-based approach to capitalize on the benefits of the diverse academic, work, and cultural experiences of the student body.

The first year of the MBA program is comprised of core courses that provide the base for more specialized study in the second year. These courses include the functional areas of business that equip students with the important analytical tools essential for critical decision-making. Students work in task-oriented teams, drawing upon the experience and skills of peers to solve challenging business problems. Effective leadership requires the student to understand how all the functional areas are linked. Additionally, the first year emphasizes the role of managers in today's society by integrating social responsibility, leadership and cultural sensitivity. Communications skills, critical to business success, are also enhanced.

In the second year of the program, students have the opportunity to explore various career tracks through numerous elective course offerings, including cross-disciplinary electives and real-world projects and corporate internships. Critical thinking and communication skills are enhanced and tested through the capstone strategic management course that includes a final case competition. The program offers concentrations in the following areas: accounting (for undergraduate accounting majors from a U.S. university), finance, management information systems, marketing, leadership/consulting, or supply chain management. In addition to a concentration, students who take selected quantitative coursework will also have the opportunity to earn a focus in business analytics.

The program requires the completion of 69 credit hours of graduate coursework, which may be achieved in two years of study on a full-time, two-semester-per-year basis. The MBA program is accredited by the Association for Management Education, AACSB International.

Academic Preparation for Degree

Any baccalaureate degree with a strong liberal arts component is acceptable preparation for the MBA program. While no previous business coursework is required, well-developed English and computer skills are expected. Students intending to pursue a concentration in finance or supply chain management are required to have sufficient background coursework in calculus prior to beginning the second year of the program.

MBA Curriculum

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MGMT 501. Accounting for Managers</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 505. Finance for Managers</td>
<td>4</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MGMT 503. Statistical Analysis for Managers</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 508. Organizational Behavior</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 516. Oral and Written Communication</td>
<td>2</td>
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<td>MGMT 514. Professional Development</td>
<td>1</td>
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**Second Semester**

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MGMT 500. Management Information Systems</td>
<td>4</td>
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<tr>
<td>MGMT 502. Managerial Economics</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 506. Marketing for Managers</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 507. Operations Management</td>
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<td>TOTAL</td>
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**Third Semester**

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MGMT 540. Strategic Management</td>
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<td>Three management electives*</td>
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<td>TOTAL</td>
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**Fourth Semester**

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<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MGMT 530. Ethical &amp; Global Issues in Business</td>
<td>2</td>
</tr>
<tr>
<td>Four management electives*</td>
<td>16</td>
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<tr>
<td>TOTAL</td>
<td>18</td>
</tr>
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</table>

*Among these seven total electives, one elective must be an interpersonal skills elective and one must be a technology elective*

Full-time students are required to participate in an internship, which may by used to fulfill an elective requirement or may be pursued on a not-for-credit basis.

**Part-Time Study**

Students may pursue the MBA on a part-time basis. This option is commonly chosen by individuals who are employed full-time. Part-time students are subject to the same requirements as full-time students and are taught by the same faculty. Part-time students are expected to take eight credit hours per semester instead of 16 or 18, a pace that leads to degree completion in approximately four and a half years.

**Fast-Track Program for Undergraduate Business or Accounting Majors**
Students who have earned an undergraduate business or accounting degree within five years of applying to the program, and who have graduated from an Association to Advance Collegiate Schools of Business (AACSB International)-accredited school, may apply to the nine-month fast-track program. This unique program is not for everyone. Students are selected based on their solid foundation in the business essentials. This curriculum option builds on undergraduate coursework and moves the student rapidly into career exploration through the wide variety of electives, internships and professional development seminars. Courses are taught using an integrative approach that allows students to gain a global perspective of the business environment as well as the ethical and social implications of the decision-making process. The program provides the student with solid business fundamentals integrated with leadership, problem solving, communication and team skills. Students tackle real-world problems through corporate internships, projects and case studies.

### Fast-Track Curriculum

#### First Semester

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<th>Course</th>
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<tr>
<td><em>MGMT 540. Strategic Management</em></td>
<td>4</td>
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<tr>
<td>MGMT 516. Oral and Written Communications</td>
<td>2</td>
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<tr>
<td>Three management electives**</td>
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<tr>
<td>MGMT 514. Professional Development</td>
<td>1</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>19</td>
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#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MGMT 530. Global and Ethical Environment</td>
<td>2</td>
</tr>
<tr>
<td>Four management electives **</td>
<td>16</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

*Students that have taken MGMT 411 (Global Strategic Management or its equivalent) may replace MGMT 540 with a graduate SOM elective.

**Among these seven total electives, one elective must be an interpersonal skills elective and one must be a technology elective**

The fast-track program requires the completion of 37 credit hours of full-time graduate coursework. Students are generally admitted in the fall semester.

### Transfer Credit

Students may petition to transfer up to eight graduate credits, elective in nature in lieu of comparable MBA course credit, if these credits have not been applied to another degree.

### Course Waiver Policy

Due to the integrative nature of the two-year and fast-track MBA program, SOM has adopted a no course waiver policy.
Executive MBA

The Executive MBA program is designed to teach management concepts and skills to individuals who are being asked to assume increasing levels of administrative responsibility. Participants completing the Executive MBA program receive in-depth exposure to all functional areas of management, acquire new business tools and sharpen analytic abilities, view responsibilities in a broader context and better understand the challenges confronting their organizations. The program emphasizes leadership, internationalization and a multidisciplinary perspective.

The Executive MBA program is formatted for busy professionals who cannot leave their careers to participate in a full-time program. The concentrated format of this program is possible because of the high quality of the participants. They move through the program as a cohort, sharing the same educational experiences and working together cooperatively, thereby becoming valuable resources to one another and to their organizations while in the program and throughout their professional careers. Technology is used to enhance both the learning process and to facilitate interaction among the participants.

Master of Science in Accounting

SOM offers a graduate program that leads to the master of science in accounting degree and provides students with academic training that qualifies them for positions in both public- and private-sector accounting. Throughout the curriculum, great effort is made to demonstrate the vital role that accounting plays in the conduct of any enterprise, and accounting is offered as the principal medium of financial measurement, communication and control, both within the enterprise and between the enterprise and the investor. It is also shown to be an indispensable means by which society may measure the performance of various organizations and institutions.

The program has two areas of emphasis: public accounting and management accounting. Thus, in addition to providing students the opportunity to fulfill educational requirements for those interested in careers as Certified Public Accountants, the program is excellent preparation for students interested in certification as management accountants, positions in corporate accounting or working with government agencies such as the Treasury Department, General Accounting Office and Securities and Exchange Commission. Finally, the program is an excellent background for students who plan academic work at the doctoral level.

The MS in accounting program provides broad training and emphasizes conceptual understanding, the mastery of analytical techniques and the rigorous use of logical reasoning. It stresses new approaches in accounting theory and the solution of current professional problems, offering the student the opportunity to understand the roles of related disciplines like behavioral science, economics and management information systems in modern accounting practice. For terminal master’s degree students, it offers courses in auditing, taxation and financial and managerial accounting practices. For students ultimately interested in study at the PhD level, it provides a strong theoretical base in the history of accounting thought and the structure of financial accounting theory.

The basic program of 32 graduate credit hours assumes an undergraduate major in accounting from a U.S. AACSB-accredited school and a sound background in management and other complementary disciplines. Students with such a background should be able to complete the program in one year of full-time graduate study, taking 16 credit hours per semester.

While the program is primarily aimed at the student with an undergraduate degree in accounting, students with little or no accounting or business background may be admitted. For such students, the program requires the completion of coursework beyond the basic graduate course requirements. Depending on their individual academic backgrounds and/or proficiency in individual core subjects, students may have some or all of these core requirements waived. Normally all core requirements should be completed before the student begins required degree coursework.

Core Requirements
Principles of Microeconomics
Principles of Macroeconomics
Statistics for Management
Legal Environment of Management I
Legal Environment of Management II
Organizational Behavior
Management Information Systems
Financial Management
Introduction to Marketing
Operations Management
Financial Accounting
Intermediate Accounting Theory I
Intermediate Accounting Theory II
Cost Accounting
Auditing
Taxation of Entities (Corporate Tax)

Competency in the core requirements may be demonstrated in any of the following ways:

- evaluation of previously completed studies essentially equivalent to one or more courses;
- achieving a satisfactory grade on a validation examination;
- completion of a course while enrolled in the MS in accounting program, which is not included in the total graduate requirements for the degree; MS in accounting students are expected to take the graduate equivalents of the background courses.

**Degree Requirements**

All students must complete the following graduate courses to qualify for the master of science degree in professional accounting:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 540. Financial Accounting Theory</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 541. Auditing &amp; Managerial Acct Theory</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 573. Individual Tax</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 555. Advanced Accounting Theory</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 550. Accounting Information Systems</td>
<td>4</td>
</tr>
</tbody>
</table>
Part-Time Study

Similar to the MBA program, the MS in accounting may generally be completed on a part-time basis. Part-time students are expected to take eight credits each semester. Such students require between two and five years to complete degree requirements, depending on their use of summer sessions and course waivers.

Transfer Credit

Students may petition to transfer up to eight graduate credits, elective in nature, in lieu of comparable SOM graduate course credit, if these credits have not been applied to another degree.

Master of Science in Accounting with Concentration in Taxation

The tax concentration in the MS in Accounting program at Binghamton University prepares students for careers in taxation. The concentration is a mixture of regular, specialized and integrative tax courses providing both a broad understanding of tax and policy issues as well as a specialized focus on several areas of taxation important to practice.

The concentration consists of 18 credits of courses. The concentration and its specialized and integrative tax courses are available only through application and admission to the concentration. The courses must be taken in a fall/spring sequence. The program consists of regular, specialized and integrative tax courses taught by experts from practice as well as Binghamton faculty. Admission to this one-year program requires students to have an undergraduate degree in accounting from a U.S. accredited program.

In the fall semester, students take the regular individual income tax (4 cr.) course along with three specialized elective courses (2 cr.) taught by experts from the practice community. The topics of the specialized courses are Asset Management Taxation, Financial Accounting Aspects of Income Tax, and Local and State Tax.

In the spring semester, students take an additional specialized (2 cr.) course in International Taxation as well as two integrative courses. Taxation of Entities and Owners (4 cr.) draws on material from all the tax courses (it is assumed that students have taken corporate income taxation in their undergraduate program) to develop tax strategies for business entities and their owners. The Tax Capstone Project (2 cr.) explores tax policy issues and develops skills in performing and presenting tax research on specific situations. In addition, each student prepares and presents a capstone research project on a tax policy issue.

MS Accounting Tax Concentration Curriculum (pre-requisite: corporate tax)

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 540. Financial Acct Theory or ACCT 541. Auditing &amp; Managerial Acct Theory</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 573. Individual Tax</td>
<td>4</td>
</tr>
</tbody>
</table>
New York CPA Educational Requirements

To fulfill the education requirement for licensure, you must complete:

- an accounting program registered by the Department as licensure-qualifying, or
- an accounting program that is accredited by an accrediting body accepted by the Department. Currently the Association for the Advancement of Collegiate Schools of Business (AACSB) is accepted. Receipt of a Master's degree in accounting from such a program will be deemed as meeting New York's 150 semester hour education requirements, or
- a program determined by the Department, after review of your official transcripts, to be equivalent to a registered program, or
- 15 years of public accounting experience acceptable to the State Board for Public Accountancy.

Option 1

A bachelor’s or higher degree from a program that is registered by the Department as meeting New York’s 150 semester hour education requirements; or a master's degree in accounting from an AACSB accredited accounting program; or a bachelor's or higher degree from a regionally accredited college or university and completion of 150 semester hours in the following content areas, including the following:

- 33 semester hours in accounting with at least one course in each of the following areas:
  - financial accounting and reporting
  - cost or managerial accounting
  - taxation
- auditing and attestation services
- 36 semester hours in general business electives and
- The curriculum must also include, either as stand alone courses or integrated into other courses, the study of business or accounting communications, ethics and professional responsibility, and accounting research.

Effective August 2009, those desiring to qualify for CPA licensing in New York state must complete the 150-credit-hour requirements.

New York will allow applicants who are required to meet the 150 semester hour education requirements for licensure to sit for the exam when they have completed 120 semester hours of course work, including one course in each of the four required accounting content areas: financial accounting and reporting; cost or management accounting, taxation; and auditing. The license, however, will not be issued until the applicant has met New York’s 150 semester hour requirements.

**Option 2**

Fifteen years of experience acceptable to the State Board for Public Accountancy may be substituted for education for admission to the examination and licensure. This experience must be earned under the direct supervision of a U.S. certified public accountant (CPA) or a New York State public accountant (PA).

Complete information on NYS CPA license requirements may be obtained via the New York State Office of the Professions [http://www.op.nysed.gov/prof/cpa/cpalic.htm](http://www.op.nysed.gov/prof/cpa/cpalic.htm).

**Doctoral Program in Management**

The School of Management currently offers the opportunity for doctoral students to pursue concentrations in finance, marketing and organizational behavior. Specializations in other areas of management may also be designed based on student interests and capabilities.

Doctoral students are required to develop a broad understanding of the various functional areas of management and their interrelationships. The program emphasizes the development of research skills based on a wide range of quantitative and qualitative approaches drawing on multiple disciplines and philosophies of science.

The doctor of philosophy program in management provides students with a foundation in theory and research skills and prepares them for careers in teaching, research and/or consulting in college and university, business or government settings.

**Program of Study**

A total of 90 credit hours is required for students entering from an undergraduate program. An advisory committee works with each new doctoral student to determine the course sequence, review performance and evaluate progress.

Students entering with an MBA degree are expected to complete these courses and credit hours toward the PhD degree:

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced quantitative/research methods</td>
</tr>
<tr>
<td>Core courses in concentration area</td>
</tr>
</tbody>
</table>
The MBA program is 69 credits, and PhD courses may be taken as electives toward the MBA degree by students earning both degrees. Previous coursework may result in waiving MBA foundation courses. After completing coursework requirements, students must pass a comprehensive examination and successfully defend a dissertation proposal and dissertation. Students entering doctoral studies with an MBA or equivalent degree may expect to complete the program in four to five years, depending on background.

Beyond coursework, doctoral students are expected to satisfy the following requirements for candidacy:

- maintain an active research program;
- satisfy the University’s residency requirement by completing 24 credit hours in an academic year;
- establish proficiency in computer applications (such as SPSS-X, C++ and SAS) and programming languages;
- attend seminars for doctoral students, in which research and current literature is discussed, and give presentations of their own research;
- develop expertise in teaching; generally, this is accomplished by teaching each year and attending pedagogy sessions;
- satisfactorily complete the written and oral comprehensive examination. Students must obtain permission to take the examination from their advisory committee and the program director. The three-part written examination assesses student’s research and statistical skills, understanding of theory and research applicable to their particular track, and knowledge in their area of specialization/concentration. The oral examination is taken after the written test is passed;
- write and defend an acceptable dissertation.

The program is more completely described in the doctoral program brochure and *Procedural Handbook for Doctoral Work in Management*, which may be obtained from SOM.

Prerequisites: Entering students will have taken introductory coursework in microeconomics, in computer programming and calculus. Students entering with undergraduate degrees must complete the MBA core requirements. Courses for the PhD degree may be taken as MBA elective credits.

Below are several sample schedules for students entering with MBA degrees. As noted above, each student's background and interests are taken into consideration when designing a program of doctoral studies.

**Sample Program for Finance**

Advanced Quantitative/Research Methods: ECON 615, 616, 617

Foundation Courses: ECON 500, 502, 611; FIN 581A, 600, 610, and 630

Specialized Courses: Elective ECON courses (as stipulated by the Economics Department for a minor in Economics)

Teaching Pedagogy: MGMT 602

Independent Study/Pre-Dissertation/Dissertation research (as necessary): MGMT 697, 698, 699
Sample Program for Marketing

Advanced Quantitative/Research Methods: Select from MGMT 503, 600, 601; ECON 615, 616, and 617

Foundation Courses: MGMT 506; MKTG 600, 601, 602, 603, 604, and 605

Specialization Courses: At least two electives in the student's designated minor

Teaching Pedagogy: MGMT 602

Independent Study/Pre-Dissertation/Dissertation research (as necessary): MGMT 697, 698, 699

Sample Program for Organizational Behavior/Leadership

Advanced Quantitative/Research Methods: MGMT 503, 600, 601; LEAD 604, 605

Foundation Courses: MGMT 508; LEAD 600, 601, 602, and 603

Specialization Courses: Three electives in the students' designated minor

Teaching Pedagogy: MGMT 602

Independent Study/Pre-Dissertation/Dissertation research (as necessary): MGMT 697, 698, 699

General Degree Requirements

Master of Business Administration

The degree of master of business administration is awarded if the candidate has:

- completed at least 69 hours of graduate work for the two-year program or 37 credit hours for the nine-month fast-track program;
- maintained the equivalent of a B average in courses approved by the program director and presented for the degree;
- fulfilled all course requirements, with no credit for courses in which a grade equivalent to less than C has been received;
- been recommended for the degree by the Dean’s Office acting on behalf of the faculty of SOM.

A candidate for the MBA degree must complete all requirements for the degree within five years after admission to the school. Exceptions may be made for a part-time student when such exceptions are recommended by the graduate program director in consultation with the dean or his or her appointee.

Master of Science

The degree of master of science is awarded if the candidate has:

- completed at least 32 credit hours of graduate coursework;
- maintained the equivalent of a B average in courses including core requirements approved by the program
director and presented for the degree;

- fulfilled all course requirements, with no credit for graduate courses in which a grade equivalent to less than C has been received;

- been recommended for the degree by the Dean's Office acting on behalf of the faculty of SOM.

A candidate for the degree of master of science must complete all requirements for the degree within five years after admission to the school. Exceptions may be made for a part-time student when such exceptions are recommended by the graduate program director in consultation with the dean or the dean's appointee.

Degree Candidacy

Students must notify the Graduate School, by completing a Graduate Application for Degree, of their intention to graduate at the end of a semester. Such notification should be given early in the student's last semester.

Combined-Degree Programs: Harpur College of Arts and Sciences/School of Management Fast-Track MBA Program

This special program accommodates the needs of a small and select group of Harpur College students. It provides an opportunity for those students to combine efficiently their undergraduate studies with graduate study in SOM. The successful completion of the program results in the award both of the bachelor's and of the MBA degree within a five-year period.

Careful planning at an early date is absolutely necessary for students contemplating entrance into the Harpur/SOM Fast-Track MBA program. Prior to the senior year, the student must complete 94 liberal arts credits, which include Harpur College division, upper-level and writing requirements; departmental major requirements; and general education requirements. At the end of the junior year, the student officially applies for conditional admission to the MBA program. Once admitted, the student takes 35 credit hours of MBA coursework that complete the remaining Harpur degree requirements. The bachelor's degree is then awarded. Provided the student maintains a minimum cumulative GPA of 3.0 for graduate coursework taken during the senior year, the student is then officially admitted by the Graduate School and goes on to complete the final year of the MBA program.

To be eligible for admission into this special program, students must possess academic qualifications that allow their conditional admission into the MBA program at the end of their junior year. Students must begin the application procedure in the spring of their junior year by:

- Sitting for the Graduate Management Admissions Test (GMAT) or Graduate Record Examination (GRE) and
- Submitting MBA application materials directly to the School of Management Graduate Advising Office. The application will consist of a personal statement, two letters of recommendation, resume, GMAT or GRE test score and a copy of the undergraduate transcript.

Because of the challenging nature of the program, only highly qualified students are admitted.

Further information about the Harpur/SOM Fast-Track MBA program may be obtained by visiting http://www2.binghamton.edu/som/graduate/mba-ms-programs/fast-track-mba/harpur-fast-track.html or through the School of Management MBA Advising Office.

Combined-Degree Program: BS, Watson School/MBA, School of Management

Over the past several years, the engineering industry has undergone considerable change. Economic and managerial issues that were previously addressed outside the engineer's domain have been integrated into the
engineer's responsibilities. In recognition of the increasing need for the integration of technology and business administration, the Thomas J. Watson School of Engineering and Applied Science and the School of Management have joined together to offer a program that combines the engineering undergraduate degree with a master's degree in business administration. This program provides a dynamic combination, allowing students the opportunity to explore immediate interests while building a solid, long-term career foundation.

The combined-degree program provides Watson undergraduate students the opportunity to complete their BS degree and MBA degree within five years. In order to complete this program, students are required to take three core MBA courses during the junior and/or senior year. Upon completion of the fourth year, students receive their BS degree. In the fifth year, they are officially admitted to the MBA program.

Specific Program Requirements

- The student applies to the combined program in the junior year. Typically, admission eligibility requires a minimum GPA of 3.3 and a minimum GMAT score of 600.
- During the senior year, the student takes three MBA courses (MGMT 501, 502, and 505). These courses are applied toward fulfilling the technical and/or professional elective component of the undergraduate program.
- At the end of the senior year, the student graduates with the BS degree and is then officially admitted into the MBA program. (In order to advance to the MBA program, the student must maintain a minimum cumulative GPA of 3.0 throughout the senior year and have a minimum grade of 3.0 in all management coursework.)
- MBA curriculum: Based upon the technical components of the undergraduate curriculum, students in all programs are automatically waived from 12 credit hours of graduate elective coursework. Additionally, depending on the specific curriculum, students may be waived from MBA core courses due to the higher level of mathematics, science and technical knowledge required within the accredited engineering and computer science majors.

Specific program information may be obtained through the School of Management Advising Office or at http://www2.binghamton.edu/som/graduate/mba-ms-programs/fast-track-mba/watson-fast-track.html.

General Academic Policies

Grades

The grading system of the Graduate School is applicable to SOM.

Withdrawal

Students who withdraw from all courses for which they are registered at the University must follow a formal withdrawal procedure if they wish their record to indicate good standing. *Mere absence from class does not constitute due notice of withdrawal.* Graduate student withdrawals are initiated with the Graduate School Office. No grades are recorded for students who formally withdraw within the first eight weeks of the semester.

Adds, drops or change of courses are approved through the SOM Advising Office.

Students may add, drop, substitute courses or change credit hours for courses carrying variable credit without penalty within a period of 14 calendar days from the beginning of the semester. After that date, students may make changes only with the approval of the SOM Advising Office and the vice provost and dean of the Graduate School.

Students may withdraw from a course without restrictions through the first two weeks of class without a grade being
recorded. From the second week through the eighth week, courses dropped will automatically receive a grade of W. If it becomes necessary for a student to drop a course after the eighth week of classes, submission of a WF (Withdrawn Failing) or a WP (Withdrawn Passing) grade is determined by the instructor (see the grading system of the Graduate School). When dealing with modular courses, deadlines analogous to those specified above are used. For a module taken during the first mini-semester, the fourth week of the semester is the deadline for dropping without academic penalty. For modules held during the second mini-semester, the 12th week of the semester is the deadline.

Residence Requirement

Regardless of previous graduate experience, the minimum residence requirement for any graduate degree is 24 credits. If a student has interrupted graduate work for more than two semesters, credit for work taken prior to the interruption is reassessed by the school.

Students must be registered during the semester their degree requirements are completed.

Undergraduate Students Beginning Graduate Programs

Undergraduate students in SOM who have completed all but two courses required for graduation may register for up to eight hours of graduate coursework for graduate credit. After securing consent of the respective faculty member(s), students must receive approval of the graduate program director, the vice provost and dean of the Graduate School on the application form available from the Graduate School. No graduate credit is granted unless this application has been completed. Courses submitted for graduate credit are not counted toward the undergraduate degree.

School of Pharmacy and Pharmaceutical Sciences

Doctor of Pharmacy (PharmD) Program

The SOPPS currently offers a graduate-level pharmacy program culminating in the professional degree of Doctor of Pharmacy (PharmD). This program will prepare graduates with the professional competencies for entry-level pharmacy practice in any setting; to ensure optimal medication therapy outcomes, patient safety and patient-centered team-based care; and to satisfy the educational requirements for licensure as a pharmacist. Binghamton’s program develops caring professionals with the knowledge, skills, attitudes and values required for the ethical and effective practice of pharmacy. The PharmD program has three objectives: (1) to educate skilled pharmacists to serve their communities with competence and compassion and in an ethical manner, (2) to promote public health by educating pharmacists to provide drug information and education and (3) to develop skills in pharmacy management, medication distribution and control and in counseling of patients on medications.

The Binghamton University SOPPS PharmD program has been granted Precandidate status by the Accreditation Council for Pharmacy Education (ACPE), 135 South LaSalle Street, Suite 4100, Chicago, IL 60503 (Phone: 312-644-3575; Fax: 312-664-4652; [www.acpe-accredit.org](http://www.acpe-accredit.org)).

On December 13, 2016, the New York State Board of Regents authorized Binghamton University to award the PharmD degree. The New York State Education Department reviewed the program and registered it for professional purposes on February 6, 2017.

Admission

See the SOPPS page of the Admission section of the University Bulletin.
**Additional Matriculation Requirements**

Professional students in the School of Pharmacy and Pharmaceutical Sciences must adhere to the following policies related to professional practice. Some policies will require students to pay additional fees.

**Professional Ethics and Academic Honesty:** Students are expected to comply with the University’s Rules for Student Conduct and the policies related to professional ethics, professional practice and academic honesty as stated in the School of Pharmacy and Pharmaceutical Sciences Student Handbook.

**Program Fees:** Students are required to pay fees that are associated with their professional development that are above and beyond tuition. Those fees include but are not limited to appropriate immunization costs, various clinical certification costs (diabetes care, medication therapy management and immunization certifications), CPR certification costs, simulation fees and third-party professional development software (like CORE-ELM) costs.

**Malpractice and Liability Insurance:** All students are required to obtain Pharmacist Professional Liability Insurance through the Healthcare Providers Service Organization (HPSO; http://www.hpso.com).

**Health Insurance:** All students enrolled in the School of Pharmacy and Pharmaceutical Sciences are required to submit proof of personal health insurance. This documentation must be submitted prior to beginning any clinical experience. Failure to demonstrate evidence of health insurance will prevent the student from beginning clinical experiences in any semester. Health insurance is available for purchase through the University for those students who do not have coverage.

**Drug Testing:** Students are routinely required to undergo drug testing. Students will be asked to submit to drug testing prior to admission through PharmCAS and at the beginning of each academic year through the services of CertiPhi (https://www.certiphi.com). The student is responsible for all costs associated with these requirements. For more information about this process and its associated fees, please see the CertiPhi website (https://www.certiphi.com). All matriculated students assigned to an experiential site may be required by that site to submit to a drug test. The student will comply with directions given regarding the designated vendor and any appropriate follow-up that may be required. Although variable, most required panels test for amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, meperidine, methadone, oxycodone, opiates, phencyclidine and propoxyphene. Costs associated with the additional testing may be incurred by the students.

**Criminal Background Checks:** All School of Pharmacy and Pharmaceutical Sciences students are required to undergo a criminal background screening. Students will be asked to submit to a background check prior to admission through PharmCAS and at the beginning of each academic year through the services of CertiPhi (https://www.certiphi.com). The student is responsible for all costs associated with these requirements. For more information about this process and its fees, please see the CertiPhi website (https://www.certiphi.com).

**Immunizations:** Prior to enrollment, all students are required to submit immunizations to CertiPhi (https://www.certiphi.com). Pharmacy students will not be allowed to register for classes until they have fulfilled these requirements. The immunizations must include:

- **Influenza:** Please provide documentation of a current flu vaccine.
- **Meningitis:** Please provide documentation of a Meningitis (MCV4) vaccine administered. Vaccine must be within the past 5 years
- **MMR:** Please provide documentation of 2 MMR vaccines OR a positive quantitative antibody titer showing immunity. If the titer provided is negative or equivocal, students must repeat the 2-shot series AND provide a second titer.
Varicella (Chicken Pox): Please provide documentation of a positive quantitative titer showing immunity. Students with history of disease MUST demonstrate immunity by a quantitative titer. If the titer provided is negative or equivocal, students must repeat the 2-shot series AND provide a second titer.

TDAP: Please provide documentation of a TDAP vaccine administered within the past 10 years. If the TDAP vaccination is older than 10 years, please provide documentation of a current TD booster. Previous TDAP vaccinations must be provided in order for TD boosters to be accepted.

Hepatitis B: Please provide documentation of 3 Hepatitis B vaccines AND a positive quantitative antibody titer showing immunity. If the titer provided is negative or equivocal, students must repeat the 3-shot series AND provide a second titer. Students repeating the HEP B series will be marked complete at the first shot, but with an expiration date set for one month later when the 2nd shot is due. Once the 2nd shot is provided it will be marked complete, but with an expiration date set for 5 months later when the 3rd shot is due. Once the 3rd shot has been provided the requirement will be marked complete and an expiration date will be set for a month later when the final titer is due. Once a positive titer is provided an indefinite expiration date will be set. Example 01/01/2099.

PPD: Please provide documentation of a 1-step PPD test or Quantiferon TB Gold test. If test is positive, please provide documentation of a clear chest x-ray. Chest x-rays will be good for just one year.

Program Requirements

The Doctor of Pharmacy (PharmD) degree program is a four-year course of study. The curriculum is designed to prepare students to become pharmacy practitioners who possess the knowledge and skills required to function as authorities on the use of medicines and who can apply pharmaceutical and biomedical science to the practical problems of drug therapy. Pharmacists are capable of contributing to the interdisciplinary delivery of primary health care and can function as drug therapy specialists. Students also are prepared for specialty professional studies and for graduate study in the pharmaceutical sciences.

Below is the required curriculum for the PharmD students.

Year 1 (P1)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRM 501: Foundations I</td>
<td>5</td>
</tr>
<tr>
<td>PHRM 504: Integrated Pharmacotherapy I</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 508: Professional Communications and Medical Info</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 510: Health Care Delivery</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 513: Pharmaceutics I</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 514: Pharmaceutical Calculations I</td>
<td>1</td>
</tr>
<tr>
<td>PHRM 579a: Lifelong Learning</td>
<td>0</td>
</tr>
</tbody>
</table>

Subtotal 17
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRM 502: Foundations II</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 503: Foundations III</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 505: Skills Lab – Integrated Pharmacotherapy I</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 509: Foundations for Interprofessional Communications</td>
<td>1</td>
</tr>
<tr>
<td>PHRM 511: Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 512: Pharmacy Law</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 515: Pharmaceutics II</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 516: Pharmaceutical Calculations II</td>
<td>1</td>
</tr>
<tr>
<td>PHRM 561: Intro to Pharmacy Practice Experiences</td>
<td>0</td>
</tr>
<tr>
<td>PHRM 579b: Lifelong Learning</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td>PHRM 562: Introductory Pharmacy Practice Experience I: Community Practice (summer)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Year 2 (P2)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRM 520: Integrated Pharmacotherapy II</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 521: Integrated Pharmacotherapy III</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 522: Integrated Pharmacotherapy IV</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 525: Skills Lab – Integrated Pharmacotherapy II - IV</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 528: Population Health and Study Design Evolution</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 533: Skills Lab – Pharmaceutical Compounding and Dispensing</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 579c: Lifelong Learning</td>
<td>0</td>
</tr>
<tr>
<td>PHRM 564a: Introductory Pharmacy Practice Experience IIA: Hospital Pharm</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Spring**
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRM 523: Integrated Pharmacotherapy V</td>
<td>4</td>
</tr>
<tr>
<td>PHRM 524: Integrated Pharmacotherapy VI</td>
<td>4</td>
</tr>
<tr>
<td>PHRM 526: Skills Lab – Integrated Pharmacotherapy V - VI</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 529: Drug Information and Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 530: Health Care Ethics</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 534: Pharmaceutics III</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 579d: Lifelong Learning</td>
<td>1</td>
</tr>
<tr>
<td>PHRM 564b: Introductory Pharmacy Practice Experience IIB</td>
<td>2</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Year 3 (P3)

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRM 541: Integrated Pharmacotherapy VII</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 542: Integrated Pharmacotherapy VIII</td>
<td>5</td>
</tr>
<tr>
<td>PHRM 544: Skills Lab – Integrated Pharmacotherapy VII - VIII</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 548: Pharmacoepidemiology, Pharmacoeconomics and Health Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 553: Pharmacy, Pharmacogenomics and Precision Medicine</td>
<td>2</td>
</tr>
<tr>
<td>PHRM 566a: Introductory Pharmacy Practice Experience IIIA: Elective Experience</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRM 543: Integrated Pharmacotherapy IX</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 545: Skills Lab – Integrated Pharmacotherapy I - IX</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 549: Topics in Pharmacy Law</td>
<td>1</td>
</tr>
<tr>
<td>PHRM 550: Contemporary Pharmacy Leadership and Management</td>
<td>3</td>
</tr>
<tr>
<td>PHRM 551: Public Health and Global Health Problems</td>
<td>2</td>
</tr>
</tbody>
</table>
PHRM 554: Advanced Skills Lab – Pharmaceutical Compounding  1

PHRM 566b: Introductory Pharmacy Practice Experience IIIB: Elective Experience  2

Elective  3

Subtotal  18

Year 4 (P4)

Progression to Advanced Pharmacy Practice Experiences (APPEs)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRM 572: Advanced Pharmacy Practice Experience I: Community Pharmacy</td>
<td>6</td>
</tr>
<tr>
<td>PHRM 573: Advanced Pharmacy Practice Experience II: Ambulatory Care Pharmacy</td>
<td>6</td>
</tr>
<tr>
<td>PHRM 574: Advanced Pharmacy Practice Experience III: Pharmacy Administration/Institutional</td>
<td>6</td>
</tr>
<tr>
<td>PHRM 575: Advanced Pharmacy Practice Experience IV: General/Internal Medicine</td>
<td>6</td>
</tr>
<tr>
<td>PHRM 581– PHRM 589: Advanced Pharmacy Practice Experience: Elective</td>
<td>6</td>
</tr>
<tr>
<td>PHRM 581– PHRM 589: Advanced Pharmacy Practice Experience: Elective</td>
<td>6</td>
</tr>
<tr>
<td>PHRM 595: Pharmacy Capstone Project</td>
<td>6</td>
</tr>
</tbody>
</table>

Elective  3

Subtotal  42

Total credit hours required for graduation: 156

Capstone Project

Students will complete a pharmacy capstone project that will expose them to research or clinical problems that will require critical thinking and problem-solving skills.
## Capstone Project Design

Acceptable categories for the capstone project include bench or clinical research, business plans, retrospective chart or protocol reviews, educational research, or other pharmacy-related topics.

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3</td>
<td>Clinical, tenure-track or adjunct faculty member assigned to mentor a group of 5 students. One TA is assigned to the group. Students design an independent, pharmacy-related research endeavor that follows the established guidelines for a research paper. Workflow is designed and IRB submission is prepared.</td>
<td>5 hours</td>
</tr>
<tr>
<td>P4</td>
<td>During an APPE rotation, the TA assists the student(s) to collect and analyze data for the project resulting in a rough draft for the mentor by the end of the rotation.</td>
<td>6 weeks (40 hours each week)</td>
</tr>
<tr>
<td>P4</td>
<td>A final poster or platform presentation is due at the end of the fourth professional year. These will be presented in a public forum at the annual School of Pharmacy and Pharmaceutical Sciences Capstone Poster and Presentation Day in late April.</td>
<td>5 hours</td>
</tr>
</tbody>
</table>

Throughout the curriculum, students will be presented and equipped with tools and methods that enable their lifelong learning; the educational philosophy emphasizes that healthcare professionals must be able to replenish their knowledge and skills continually. Skills and methods extend beyond the pharmacotherapy knowledge and clinical skills developed in the integrated pharmacotherapy and accompanying skills lab courses to include human subject research studies that ultimately inform and quickly evolve “best clinical practice” and evidence-based guidelines as well as “bench” or exploratory biomedical research.

## Grades

Grades are on a letter scale: A through C-, D, and F. Grades of S (satisfactory) and U (unsatisfactory) may be used in a limited number of cases, as described in the Academic Policies and Procedures - Graduate section of the University Bulletin, for which no greater precision in grading is required. The grades of S and U are not assigned numerical value and thus are not averaged in with other grades in computing grade-point averages. A grade of S denotes a minimum level of academic performance equivalent to at least a B.

For the purpose of computing semester or cumulative averages, each letter grade is assigned a quality point value. These quality point values are combined with course credit hours to produce a grade-point average. A cumulative grade-point average of a 2.5 is required for graduation. Courses for which a student has received a D or F do not count toward the number of courses required for a graduate degree or certificate.

The School of Pharmacy and Pharmaceutical Sciences assigns percentage ranges are as follows:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Numeric Grade</th>
<th>Percentage Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>92.5 - 100</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>89.5 – 92.4</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>86.5 – 89.4</td>
</tr>
</tbody>
</table>
Course Schedule Change Policies

The School of Pharmacy and Pharmaceutical Sciences follows all of the Graduate School policies regarding changes in course schedules. The SOPPS strongly discourages changes in any course within a pharmacy student’s schedule without consultation from the associate dean for curriculum and assessment and the assistant dean for student affairs within SOPPS. Dropping a course or changing a schedule in any way could result in a significant extension of the time required to earn the PharmD degree. Due to this, changes in academic schedules should only happen in extreme situations.

Residence Requirement

PharmD students will be expected to complete the entirety of their required coursework at Binghamton University. Exceptions for accepting transfer credits from other institutions will be granted only in rare occasions. See the Transfer Credits section below for more information.

Transfer Credit

Approval must be received in writing from the associate dean for curriculum and assessment and the dean of the PharmD program the applicant is transferring to before registering at another institution. Students transferring credits to Binghamton University will need to complete the Request for Transfer Credit form, which is available from the Graduate School.

Part-Time and Non-Matriculated/Non-Degree Study

Part-time and non-matriculated/non-degree study options are not available.

Misconduct Procedures
Students are subject to disciplinary action for violations of any of the SOPPS policies held within the School of Pharmacy and Pharmaceutical Sciences Student Handbook and any policies held within Binghamton University’s Student Handbook or Student Code of Conduct. Any suspected violations of academic, ethical or professional standards may be reported to the SOPPS Offices of Academic or Student Affairs which, at their discretion, may forward these violations to the Committee on Awards and Progression (CAP) for evaluation, and/or to the Binghamton University Division of Student Affairs, for evaluation and adjudication. (See the Student Code of Conduct for more information on the Binghamton University Division of Student Affairs student conduct process and outcomes.)

Within the SOPPS, disciplinary action will be taken by CAP for students who breach the SOPPS Honor Code. The severity of action will depend on the severity of the infraction, the frequency of infractions, and if it is a repeated infraction. Actions can include but are not limited to verbal or written warnings, professional remediation, professional probation, or dismissal. CAP decisions will be communicated to students and their faculty advisors by either the associate dean for academic affairs and assessment or the dean as appropriate. In cases where professional remediation is warranted, a professional remediation plan will be developed incorporating input from the faculty advisor, course faculty and/or preceptors. Students will have the opportunity to have a hearing, given ample notification of the hearing’s time and location, and will be able to follow an appeals process regarding the outcome of the hearing. (For a more detailed description of the conduct process or appeals process, check the School of Pharmacy and Pharmaceutical Sciences Student Handbook and the SOPPS Office for Student Affairs.)

Grievance Procedures

Students are encouraged to make every effort to solve problems informally, by working with their class representatives and class advisors, faculty members, and both the associate dean for academic affairs and assessment and the assistant dean for student affairs. For more formal complaints/grievances, please refer to the process outlined in the SOPPS Student Handbook. Examples of potential reasons for a complaint/grievance include but are not limited to perceived discrimination or harassment, bias of any type, a perceived level of unfairness, etc. Refer to the School of Pharmacy and Pharmaceutical Sciences Student Handbook for the full grievance process. At any time, a student may file a grievance to Accreditation Council for Pharmacy Education. For a statement of the ACPE complaint policy and procedures on how to file a complaint, refer to the following website: https://acpe-accredit.org/complaints/

Academic Grievance Procedures

The student should first attempt to resolve any academic disagreement with the course director/lecturer. If the student fails to reach a satisfactory resolution, the student may appeal the grade in accordance with the following policy on academic appeal.

- The student must submit the appeal in writing along with a description of the results of the communication with the course director/lecturer, and any pertinent graded materials to the Committee on Awards and Progression (CAP). The information that the student presents to the CAP will be shared with the involved course director/lecturer who will be given an opportunity to respond to the student’s appeal. The appeal must be made within five business days after the official end of semester grades are reported.

Grounds for Academic Appeal

For an appeal of a course grade to be considered, it must be based upon one or more of the following grounds and upon allegation that the ground or grounds cited influenced the grade assignment to the student’s detriment:
1. Arithmetic or clerical error
2. Documented ineffectiveness of the course instructor to prepare students for success in the course, on tests, or in assignments

(See the Grievance Appeals Procedure within the Graduate School Manual for appeals processes outside of the School of Pharmacy and Pharmaceutical Sciences.)

Student Progression and Dismissal Policies

Students are expected to progress through the PharmD program in the standard four-year period. Students in good standing will maintain both a semester and cumulative GPA at or above the minimum SOPPS GPA of 2.50 and uphold the academic honesty and professional codes of conduct as delineated in the SOPPS Student Handbook. However, under specific circumstances and for a variety of situations, student progression may be delayed or deferred or under some conditions a student can be dismissed from the PharmD program. A student may elect in consultation with the Office of Student Affairs (OSA) and/or the Committee on Awards and Progression (CAP) to defer their progression for a variety of reasons including medical or family issues as warranted. Student progression can be delayed for multiple reasons stemming from poor academic performance as well as professional or academic misconduct. The range of potential routes for delayed progression or dismissal and SOPPS policies related to progression/dismissal are summarized in the following schematics and discussed below. (Note: Specific definitions/use of terms are given at the end of this document.)

Potential Routes for Delayed Progression

1. Failure to maintain minimum GPA (<2.50) for two consecutive semesters
   1. Students on sustained academic probation may be placed on "success plans" that delay their progression.
2. Unsuccessful remediation of a course grade of D or F or a need to remediate APPE experience
   1. Students who do not successfully remediate a course grade of D or F will be required to take the course during next course offering. This may delay their overall progression.
3. More than two D’s or F’s in a given semester
   1. At the discretion of CAP, the students will repeat the semester which will delay their progression or the student will be dismissed from program if the student previously was on academic probation.
4. Professional or academic misconduct
   1. This will be decided on a case by case basis by CAP per Binghamton University and SOPPS policies.

Potential Routes for Dismissal from the PharmD Program

1. Sustained or multiple placements on academic probation
2. Academic or professional misconduct
3. Need to remediate > 4 courses in P1 – P3 years OR need to remediate > 2 APPEs

Of note, students may simultaneously qualify for more than one of the potential routes for delayed progression or dismissal. For example, a student may unsuccessfully remediate a course grade of “D” or “F” and be on academic probation for two semesters. CAP will take the totality of individual student performance into account when
recommending “success plans” and courses of action. In some cases, a student’s progression will be delayed beyond the four-year period.

Additionally, while CAP, the assistant dean for student affairs (ADSA) and the associate dean for academic affairs and assessment (ADAAA) may make recommendations for dismissal of a student from the PharmD program, ultimately the dean will make all dismissal decisions. While the dean will take into account CAP, ASA and ADAAA recommendations for student dismissal, the dean will make the decision in all dismissal cases and is able to overturn recommendations.

**Academic probation:** Students who fail to maintain a semester or cumulative GPA at or above the SOPPS minimum GPA of 2.50 will be on placed on academic probation. Students’ individual cases will be reviewed by CAP and an individualized “success plan” will be developed by CAP and appropriate faculty. The “success plan” will be designed to focus on ensuring students are being given appropriate supplemental assistance to achieve the learning outcomes and competencies expected of them during each professional year. The student will be placed on their individualized “success plan” and their performance will be reviewed and monitored by CAP while the student is on academic probation. Students on academic probation may have restrictions on extra-curricular activities as deemed appropriate.

**Sustained or multiple placements on academic probation:** Students who are on academic probation for two consecutive semesters will be placed on an individualized “success plan” developed by CAP and appropriate faculty; the student’s performance will be reviewed and monitored by CAP every semester while the student is on academic probation. Students on academic probation may have restrictions on extra-curricular activities as deemed appropriate. Sustained academic probation may result in delayed student progression and will be decided on an individual basis by CAP. Recommendations will be reviewed by the ADAAA. The ADAAA will meet with students to inform and discuss CAP decisions and recommendations. (Of note, all students who are on academic probation in any given, single semester will also be placed on a “success plan.” However, with only a single semester of academic probation and no other academic honesty or professional conduct violations, every effort will be made to assist the student in progressing through the program in the normal four-year cycle.)

Students who are on academic probation for **three or more** consecutive semesters or are placed on academic probation multiple times (not consecutive semesters) will be eligible for dismissal from the PharmD program. Each case will be individually reviewed by CAP with respect to the student’s academic trajectory and progress on their “success plan” and recommendations will be made to the ADSA and ADAAA who will review delayed progression decisions or dismissal recommendations. Progression decisions will be communicated to the student by the ADAAA. The dean, with consideration of recommendations from CAP and the ADAAA, will make and communicate all dismissal decisions to students.

**Any combination of more than two course grades of “D” or “F” in any given semester:** With the recommendation of CAP, students who earn any combination of three or more final course grades of “D” or “F” requiring remediation in a given semester will be required to repeat the semester. This will delay student progression. Students on academic probation prior to the semester in which they have earned three or more final course grades of “D” or “F” will be dismissed from the PharmD program. Recommendations will be reviewed by the ADAAA. Decisions will be communicated to students by the ADAAA in cases of delayed progression. In all cases of dismissal, the Dean will make all dismissal decisions and communicate these decisions to affected students.

**Unsuccessful course remediation of “D” or “F” course grade:** Students who earn a course grade of either “D” or “F” will be given the opportunity to remediate their course grade immediately following the semester in which the student earned the final course grade of “D” or “F.” (Remediation policies are discussed in detail in the following section of this publication.) This includes both didactic and experiential courses. Students may remediate a maximum of two courses in any given semester. Students who do not successfully remediate their final course grade will be required to re-take the course during its next course offering. Depending on course pre-requisites this may delay student progression. See the section entitled Student Remediation Policies for more details on the remediation
Multiple course remediation in P1 – P3 years or in Advanced Pharmacy Practice Experience (APPEs):
Students will be afforded opportunities to remediate courses in which they receive either a final course grade of “D” or “F” up to a maximum number of four courses (including both didactic and Introductory Pharmacy Practice Experience (IPPEs)) in their P1 – P3 years; more than four course remediations in the P1 – P3 years will result in academic dismissal. In the P4 year, students needing to remediate more than two APPE experiences will be dismissed from the program. CAP will review all cases individually and make recommendations to the ASA and ADAAA. The Dean will make all dismissal decisions and communicate them to affected students.

Professional or academic misconduct: Student progression may be delayed for professional honor code or academic honesty code violations as detailed in the SOPPS Student Handbook. These violations include but are not limited to substance abuse, unprofessional conduct, Title IX and confidentiality issues, cheating, plagiarism and fabrication. CAP will individually evaluate each case and recommend a course of action based on the given infraction, its severity and whether or not there have been previous infractions. In some cases, student progression may be delayed while in severe cases or reoccurring cases students may be dismissed from the program. Recommendations will be reviewed by the ADSA and ADAAA. The ADSA and ADAAA will meet with students to inform and discuss CAP decisions and recommendations except in the case of dismissal. In cases of dismissal, the Dean will make all dismissal decisions as well as meet with and inform affected students of the decision.

Student Remediation Policies

Students who earn a final course grade of either “D” or “F” will be assigned an incomplete “I” and will be given the opportunity to remediate the course in lieu of repeating the course at the next course offering. The intent of remediation is to help students develop the appropriate competencies and skills needed to progress successfully through the PharmD program with limited impact on their time to complete the program where possible. Specifically, course remediation for fall didactic courses will occur in early January prior to the start of spring semester classes; course remediation for spring didactic courses will occur at the end of May. Remediation of failed IPPEs and APPEs will be individually scheduled with the Office of Experiential Education. Procedurally, students receiving a final course grade of “D” or “F” will be replaced with a grade of “C-” or “P” with successful remediation in the case of didactic or experiential courses respectively. APPE remediation will likely delay student progression in most cases.

Course remediation will be an intensive review and retaking of the entire course occurring over a two to three-week long program period which will be held shortly after the end of the fall or spring semesters for courses occurring in fall or spring semesters respectively. Didactic course remediations will consist of a cumulative examination and a minimum of one other graded assignment/assessment (which can also be an additional examination but does not have to be) at the course coordinator’s/course facultys’ discretion. Faculty conducting course remediation will have the following responsibilities: (1) Providing a remediation orientation plan and expectations to students including a remediation contract agreement with required signature; (2) Providing time and availability to remediating students for guidance and tutoring individually and in groups. Some of this time must be on-site; and (3) Reviewing individually with each student that student’s individual areas of weakness that require extra studying and preparation. Students must sign the remediation contract and return it to the remediation course coordinator.

Remediation calendars will be disseminated to students, faculty and staff at the beginning of each semester. Detailed schedules will be developed by the ADAAA once mid-term grades for a given semester are available in order to create a plan able to deliver remediation across multiple courses (that require remediation by students in a given semester) and will be disseminated to faculty and staff and students at risk.

Students who do not successfully remediate a course during the remediation period will receive their originally
earned grade of “D” or “F” and be required to take the course during the next course offering. As well, students who elect not to do course remediation will be required to take any course in which they have received a final course grade of either a “D” or “F” the next time the course is offered; their transcript will show both course grades. In most cases this will delay student progression due to scheduling or prerequisite requirements.

*Students may remediate a maximum of two courses in any given semester with a cumulative maximum of four courses over the P1 – P3 years (including IPPEs), and a maximum of two APPEs.* Students requiring more than this level of remediation will be dismissed from the PharmD program as discussed previously.

**Glossary and Definition of Terms**

**Academic probation** - Student fails to maintain the minimum GPA of 2.50 either in a given semester or cumulatively and is placed on a “success plan” with monitoring.

**Academic dismissal** - Removal of a student from the PharmD program due to poor academic performance. Dismissal decisions are made by the dean.

**Deferred academic progression** - Delay of a student’s academic progress/program continuation for up to a full academic year due to circumstances approved by the ADSA, ADAAA such as need for family or medical need. This can be initiated by the student with consultation with the CAP and the ADSA.

**Deferred academic progression** – Mandatory delay of a student’s academic progress/program continuation for up to a full academic year due to poor academic performance.

**Professional probation** - Student is placed on a “success plan” with monitoring due to a violation(s) of the honor code, academic honesty code or policies unrelated to academic achievement. Probation may have restrictions on extra-curricular activities.

**Professional dismissal** - Removal of a student from the PharmD program due to a violation(s) of the honor code, academic honesty code or policies unrelated to academic achievement. Dismissal decisions are made by the Dean.

**Remediation** - Supplemental education for students failing to demonstrate minimal competence during the regular course schedule. This allows students additional opportunities to demonstrate core competencies and learning outcomes for course content and skills. Remediation opportunities are usually made available to students immediately after the semester in which the course is routinely offered and are completed prior to the subsequent semester.

**Undelayed progression** - Student continuation and successful completion of the curriculum/PharmD program in the prescribed four-year course timeline.

**Thomas J. Watson School of Engineering and Applied Science — Undergraduate Programs**

Submit inquiries to:

Watson Academic Advising
Thomas J. Watson School of Engineering and Applied Science
Binghamton University
PO Box 6000
Binghamton, New York 13902-6000
The following Bachelor of Science degrees are offered by the Watson School. For full descriptions, please refer to the individual program sections of this Bulletin:

Bachelor of Science (BS) - Biomedical Engineering
Bachelor of Science (BS) – Computer Science
Bachelor of Science (BS) – Computer Engineering
Bachelor of Science (BS) – Electrical Engineering
Bachelor of Science (BS) – Industrial and Systems Engineering
Bachelor of Science (BS) – Information Systems (Dual Diploma)
Bachelor of Science (BS) – Mechanical Engineering


Various 4+1 BS/MS programs and BS/MBA options are also available to Watson School juniors. For further information on BS/MS programs, contact the department of major. For information on BS/MBA 4+1 options, refer to the School of Management section of this publication.

Other double degrees are possible and may be discussed on an individual basis in the Watson Advising Office.

**Continuing Education Status**

Individuals interested in taking courses for credit, but not in pursuing a degree program, may apply for admission as continuing education students. All continuing education students are subject to the administrative guidelines described elsewhere in this publication. Upon acceptance, they may enroll as space permits in Watson School courses for which they have completed the prerequisites. Courses taken under continuing education status may be accepted later to satisfy requirements in specific Watson School degree programs. A student may take a maximum of 24 credit hours as a continuing education student.

**Academic Policies**

The Watson School follows the academic policies described in the University Bulletin. Watson School students are expected to be familiar with and abide by the regulations in this section.

All matriculated students follow the requirements for graduation listed in the University Bulletin current at the time they are admitted. However, undergraduate students who interrupt enrollments for three or more consecutive semesters are governed by the University Bulletin in effect when they are re-enrolled. Exceptions are made for students eligible to return to Binghamton who were forced to leave because of involuntary call to military service.

**Program Load and Planning**

Undergraduate students are considered full time if they are registered for 12 credit hours or more. The maximum number of credits a Watson School student may take, without an approved petition, is 18. Overloads for Engineering students up to 22 credits with a 3.3 GPA will be automatic after the first week of classes. However, Computer Science
students must submit a petition to the undergraduate director. Others that wish to petition can still use the general academic petition for review.

Watson School students may drop below 12 credits without consent and be classified as part time. Students receiving financial aid should check with the Office of Financial Aid before dropping to part time, because their action may affect aid eligibility.

Requirements for Degrees

To receive any Watson School undergraduate engineering degree, students must satisfactorily complete 30 credits of residency, meaning courses taken entirely in the Watson School. The undergraduate computer science degree requires 40 credits of residency. Requests for exceptions to this policy must be made by petition to the Watson School Undergraduate Studies Committee and be approved by the dean.

Students must not be under any disciplinary action at the time of graduation. They must also pay or satisfactorily adjust all fees and bills.

For additional graduation requirements, consult the descriptions of the specific degrees.

General Education Requirements

All Watson School students are subject to the university's general education requirements (http://gened.binghamton.edu).

Grading System

Students who enroll in courses offered outside of Watson School undergraduate programs are graded according to the grading system of the school offering the course. Such students may petition to have the Watson School's undergraduate grading system apply.

Watson School undergraduate courses are graded in one of two ways:

- A, A–, B+, B, B–, C+, C, C–, D, F, W; or
- Pass/Fail.

Watson School students must meet all degree requirements under the letter grade option. The only exceptions are for any general education activity/wellness courses offered on a pass/fail basis. Computer science majors (only) are allowed an additional four credits of free elective work on a pass/fail basis.

Incompletes

Instructors may temporarily submit a grade notation of Incomplete, which appears in grade reports as “I”. A grade of Incomplete must be removed and replaced with a permanent grade no later than the last day of classes of the semester following the one in which it was received; however, an instructor may set an earlier date for completion of the work. Students should work with their professor to construct a reasonable timeline for work to be completed. If the grade is not removed by the applicable date, and an extension has not been granted, the grade of "I" automatically becomes a grade of "F".

Watson School Policy for Course Withdrawal after the Official University Withdrawal Deadline
Under extraordinary circumstances, a student may seek a late withdrawal from a course through Workflow via BUBrain. This is subject to both instructor’s and Watson Advising approval and requires the following:

- A complete description of extenuating circumstances.
- Accompanying official documentation (medical reports, etc.).

Both of the above are mandatory. A request must be received by the Watson Advising Office no later than 72 hours before the last day of classes in the current semester.

**Repeating Courses**

Under certain circumstances students may repeat a course in which a passing grade was earned; however, only the first passing grade counts in the grade point average. Both grades are displayed on the transcript, with the second passing grade noted as a repeated course. The repeated course counts toward full time enrollment for the semester. As students make their decisions about repeating courses, they should reach out to Watson Advising for guidance.

When students repeat a course, whether due to a failing grade or to receive a better grade, those credits will be counted as attempted for purposes of Satisfactory Academic Progress (SAP) and federal aid calculations to determine rate of completion and maximum timeframe rules. Please refer to the following website for additional information: [https://www.binghamton.edu/financial-aid/services/academic-progress/federal-academic-progress.html](https://www.binghamton.edu/financial-aid/services/academic-progress/federal-academic-progress.html)

**Add/Drop Policies**

Students are expected to be familiar with the University-wide policies governing changes in their course registration, specifically the add/drop deadlines. No changes are made to an undergraduate record after two years have passed.

*Add/Drop Deadline:* The add and drop deadline is midnight on the Friday of the second week of classes.

*Course Withdrawal:* The course-withdrawal period extends from the drop deadline until the end of the ninth week. Students who drop courses online during this period will receive a grade of W. Deadlines for summer courses and variable-credit courses are adjusted accordingly.

All above-mentioned deadlines can be found on the University calendar website.

*Note:* If an academic petition is approved for a late add or late drop because of extraordinary circumstances, a late add/drop fee is placed on your student account.

**Academic Standing**

**Satisfactory Academic Progress**

Students’ academic progress is reviewed at the end of each regular semester to ensure that satisfactory progress is maintained. “Satisfactory progress” is defined as maintaining a 2.0 grade-point average (GPA). The GPA is calculated on a 4.0 system using the following grade-point equivalents:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade-Point Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A–</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C–</td>
<td>1.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
</tbody>
</table>
Academic Honors

Full time students who complete a semester with a 3.5 or better GPA are placed on the Dean’s Honors List. This honor is noted on the permanent transcript.

For graduation honors, the criteria are:

- 3.50-3.69 GPA: *cum laude*
- 3.70-3.84 GPA: *magna cum laude*
- 3.85-4.00 GPA: *summa cum laude*

Academic Probation and Suspension

*Probation:* Students whose cumulative GPA for courses taken at Binghamton falls below 2.0 are placed on academic probation for the following semester, and are subject to the following restrictions:

- They may not register for more than 14 credit hours.
- They may not campaign for or accept any campus office or committee chairmanship.

Students are removed from probation after the fall and spring semesters if their cumulative GPA is 2.0 or above.

Academic probation does not preclude students from receiving financial aid. Standards for financial eligibility are described in the Financial Information section of this publication.

*Suspension:* Students who, for a second time, fail to meet both the 2.0 cumulative GPA and the last-semester GPA given in the table below are suspended. Suspension lasts for one academic semester, not including summer. If approved for readmission after a semester away, the student must maintain the minimum semester average noted below to avoid dismissal. Returning students who meet their last-semester GPA requirement as indicated on the Academic Dismissal Index (see below), but still have a cumulative GPA under 2.0 are once again on probation.

<table>
<thead>
<tr>
<th>Hours Attempted</th>
<th>Last Semester GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-16</td>
<td>2.0</td>
</tr>
<tr>
<td>17-48</td>
<td>2.1</td>
</tr>
<tr>
<td>49-64</td>
<td>2.2</td>
</tr>
<tr>
<td>65+</td>
<td>2.3</td>
</tr>
</tbody>
</table>

*Suspension Appeal:* Appeals will be considered for students, but only if the suspension is due to extreme circumstances. An appeal letter must be written by the suspended student. Any medically-related appeal must be supported by acceptable medical documentation and must include written statements by medical professionals. Any other type of extreme emergency situation must also be carefully and officially documented.

*Suspension Readmission:* Students who decide to request readmission after the minimum of one semester away from school due to suspension are required to contact the Watson Advising Office to discuss their academic plan and
begin the readmission process.

Final Dismissal: Students who, after being suspended and readmitted, again fail to meet the required academic standards are dismissed. All dismissals are final.

Withdrawal and Readmission

Undergraduate students who withdraw from the Watson School during any semester and wish to remain in good standing must follow a formal withdrawal procedure. Mere absence from class does not constitute withdrawal. A grade of W is assigned when the student has withdrawn from all courses and thus from the University. Grades of W do not count as courses taken.

The Watson School applies the same withdrawal and readmission policies as established for the University, except that Watson School students may drop below a 12-credit program without permission.

Undergraduate students must apply for readmission through the Undergraduate Admissions Office if they have not been in attendance for at least three consecutive semesters. Re-enrollment forms are available on the Office of Undergraduate Admissions website.

Students who interrupt enrollment for three or more consecutive semesters are governed by the University Bulletin in effect when they are re-enrolled. Summer sessions and the semester when a student officially withdraws are not included in this count. Exceptions are made for students eligible to continue at Binghamton, who were forced to leave because of involuntary call to military service.

Students who have missed fewer than three consecutive semesters may register online during their assigned registration time.

Student Organizations and Honor Societies

Please refer to the organization webpage: https://www.binghamton.edu/watson/about/student-groups.html.

All Watson School students are eligible to receive the services provided for all students at Binghamton, and to participate in the various student activities. Students should familiarize themselves with the University Bulletin sections on services for students and student activities.

Biomedical Engineering

Undergraduate Programs

The undergraduate program in biomedical engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

The Department of Biomedical Engineering provides undergraduate instruction leading to a Bachelor of Science degree in biomedical engineering. Biomedical engineering prepares students for leadership positions in the biomedical industry, academy, business, education, and entrepreneurship and for success in global environment. Our distinguished faculty includes internationally renowned researchers in biomedical science and engineering. Students will have opportunities to interact with faculty to pursue cutting-edge biomedical engineering research. They will learn and develop professional skills to advance their careers and to become leaders in the field of engineering, biology, medicine, and business. The program places strong emphasis on inter- and transdisciplinary approaches for teaching and learning, and offers ample opportunities for students to design and implement innovative ideas and technologies in a dynamic, enriched, cutting-edge environment. Students will have diverse career opportunities in academia, industries and businesses, working to improve human health and well-being.
through scientific and technological innovations.

The biomedical engineering curriculum builds upon the base provided by the freshman-year engineering program in the Watson School. The first-year core curriculum provides students with a broad foundation in engineering fundamentals, natural sciences, and mathematics. Depth in biomedical engineering is subsequently obtained through a series of required courses. The biomedical engineering curriculum is designed to offer students solid training in core engineering subjects (through core courses) while at the same time providing students with in-depth training in specific areas (through biomedical science and engineering electives). There are four tracks that a student can choose to pursue their career and professional skill training in the Department: the Pre-Med Track offers students training opportunities to pursue medical professions; the Biomaterials and Bio-pharmaceutical Technology Track offers students training opportunities to pursue biotechnology professions; the Biomedical Devices and Instrumentations Tracks offers students training opportunities to pursue biomedical and biomanufacturing professions; and the Computational Biosystems Tracks offers students training opportunities to pursue medical bioinformatics and computational industrial professions.

The educational objectives of the undergraduate program in biomedical engineering are to ensure that our graduates are prepared for the workforce in the broad field encompassed by biomedical engineering, and to pursue graduate studies in biomedical or other engineering fields; the sciences or other disciplines, such as business, law, or medicine.

The department serves incoming freshmen, community college graduates and transfer students from other institutions seeking a Bachelor of Science degree in biomedical engineering.

**Bachelor of Science in Biomedical Engineering**

To receive the BSBME degree, students must complete a minimum of 126 credit hours in the courses outlined below with a minimum cumulative grade point average of 2.0 (C) and a minimum 2.0 grade-point average in required biomedical engineering courses. In addition, all Binghamton University students must also meet the General Education requirements. For more details, refer to the General Education section of the Bulletin, or consult with the Watson School Advising Office, or the Undergraduate Program Director for Biomedical Engineering.

In the table below, the courses listed in the Freshmen Year/Fall Semester and Freshmen Year/Spring Semester constitute the Watson School’s Common First-year program for engineering students. The common first year is administered by the Engineering Design Division, as described in the Engineering Design Division section of the Bulletin. The four-year curriculum listed below provides one possible sequence of coursework. Other course sequences are possible, as long as students meet necessary pre- or co-requisite requirements.

<table>
<thead>
<tr>
<th>Freshman Year/Fall Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 224/225. Differential Calculus/Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111. Chemical Principles</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 111. Intro to Engineering Design</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 103. Engineering Communications I</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>Freshman Year/Spring Semester</td>
<td>Credits</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MATH 226/227. Integration Technique and Application/Infinite Series</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 131. General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 112. Intro to Engineering Analysis</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 104. Engineering Communications II</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

* It is advised that students take one of the required General Education courses in both the fall and spring semesters.

<table>
<thead>
<tr>
<th>Sophomore Year/Fall Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 118. Cell and Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BME 201. Introduction to Biomedical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MATH 324. Ordinary Differential Equations for Scientists/Engineers</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 231. Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year/Spring Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 213. Biomolecular Engineering</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 132. General Physics II Calculus-based</td>
<td>4</td>
</tr>
<tr>
<td>BME 203. Biomedical Modeling and Numerical Methods</td>
<td>3</td>
</tr>
<tr>
<td>MATH 323. Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>General Education Elective (A,G,N,P)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year/Fall Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 318. Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>ME 331. Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>BME 324. Bioinstrumentations</td>
<td>4</td>
</tr>
<tr>
<td>BME 313. Biomaterials</td>
<td>3</td>
</tr>
<tr>
<td>Course Description</td>
<td>Credits</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>BME Depth or Science Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Junior Year/Spring Semester

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 351. Biomedical Engineering Lab</td>
<td>1</td>
</tr>
<tr>
<td>BME 303. Biofluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>BME 340. Bioinformatics and Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 401 or 311. Molecular Genetics or Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>General Education Elective (A,G,N,P)</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Senior Year/Fall Semester

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 450. Biomedical Engineering Senior Design I</td>
<td>3</td>
</tr>
<tr>
<td>BME 413. Biomedical Transport Phenomena</td>
<td>3</td>
</tr>
<tr>
<td>BME 433. Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BME Depth Elective</td>
<td>3</td>
</tr>
<tr>
<td>BME 432. Ethics in Engineering</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Senior Year/Spring Semester

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 451. Biomedical Engineering Senior Design II</td>
<td>3</td>
</tr>
<tr>
<td>BME Depth or Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>BME Depth Elective</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 332 or CHEM 341 or BCHM 302</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

General Education electives must be selected to satisfy the Binghamton University General Education requirements.

BME Depth and Science electives must be selected from a list of approved courses.
Science elective: PSYC 111, PSYC 220, ANTH243/ANTH 240, CHEM 332, CHEM 335 (Lab), CHEM 341, BCHM 302, CHEM 300 level and above, BIOL 300 level and above

BME in-depth electives are prescribed in the following tracks except for Pre-Med track. Students are required to select a track to gain more in-depth knowledge and specialty training in biomedical engineering. Students can take any two courses from a list of courses prescribed in each track to declare their major track or pre-med track.

**Biomaterials and Bio-pharmaceutical Technology Track**
- BME 483 Tissue Engineering
- BME 473 Advanced Biomaterials and Biocompatibility
- BME 463 Bioengineering Processes
- BME 442 Nanotechnology and Drug Delivery

**Computational Biosystems Track**
- BME 470 Advanced Bioinformatics
- BME 453 Modeling Complex Biological Systems
- BME 472 Experimental Design and Statistical Analysis
- ISE 314 Computer Program for Engineers
- ISE 434 Fundamentals of Health Systems
- ISE 439 Human Factors Engineering Healthcare

**Biomedical Devices and Instrumentations Track**
- BME 424 Bioimaging
- EECE 260 Circuits
- BME 420 Biomedical Devices and Diagnostics
- BME 443 Quantitative Instrumental Bioanalysis
- EECE 301 Signals and Systems

**Pre-Med Track**
- CHEM 332 Organic Chemistry II
- CHEM 335 Organic Chemistry Lab
- CHEM 341 Intermediate Inorganic Chemistry
- PSYC 111 Psychology
- BCHM 403 Biochemistry
- ANTH 243/ANTH 240

**Required Course Prerequisites**

The following courses, or their equivalent(s), are required prerequisites for the major:

If students do not place into MATH 224, then MATH 223 (or its equivalent) and, if needed, MATH 108 (or its equivalent) and, if needed, MATH 107 (or its equivalent) and, if needed, MATH 106 (or its equivalent) are required prerequisites for completion of the major.
While CHEM 111 is preferred, in rare cases, under advisement from the Watson Advising Office, the combination of CHEM 107 and CHEM 108 may be used to meet the CHEM 111 requirement. Students who have not had adequate course preparation may need to take CHEM 101 prior to taking CHEM 107, CHEM 108, or CHEM 111.

While WTSN 103/111/104/112 is preferred, in rare cases, under advisement from the Watson Advising Office, a freshman composition course and an introduction to computer programming course may be required to meet the WTSN 103/111/104/112 requirement.

**Computer Engineering**

**Undergraduate Programs**

The Bachelor of Science degree in computer engineering is accredited by the Engineering Accreditation Commission of ABET, [http://www.abet.org](http://www.abet.org).

Computer engineering encompasses primarily the design of computers and other digital systems, emerging as a bridge between electrical engineering and computer science. Driven by technological advancements that have made computing technology inexpensive and small enough to incorporate into a wide-range of products and systems, computer engineering is now one of the core engineering disciplines. The scope of products and systems containing computer technology is ever-expanding, ranging from small embedded computers in consumer electronics, appliances, and automobiles to complex computer-based systems controlling power generation, manufacturing, and telecommunications systems. The role of the computer engineer includes the design, analysis and implementation of computing technology as well as its integration into devices and systems that use computers as components or tools. As a result, computer engineers work in many industries, including aerospace, automobile, computer, defense, electronics, information technology, networking, and telecommunications.

A computer engineer draws upon knowledge of electrical engineering, computer science, and a foundation in mathematics and science. The computer engineering curriculum builds upon the base of the one-year core provided by the Engineering Design Division of the Watson School. This common one-year core, required of all engineering students in the school, provides students with a broad foundation in engineering fundamentals, natural sciences, mathematics, communication skills, and laboratory experience. The second year of the program covers basic computer and electrical engineering topics. Depth in computer engineering is obtained by a series of required courses and technical electives in the final two years of the program.

Program educational objectives describe what graduates of the program are expected to accomplish within five years of graduation. Graduates of the Computer Engineering program are expected to demonstrate progress in four areas:

- **Leadership**: Graduates will be known for leadership, innovation, entrepreneurship or responsibility as appropriate for their career stage.

- **Education**: Graduates will continue their education through a combination of independent learning, continuing education and advanced degrees.

- **Adaptability**: Graduates will demonstrate flexibility in a career that utilizes skills and knowledge gained in their undergraduate engineering program.

- **Participation**: Graduates will be known as active participants in a wide variety of both professional and non-professional activities, including jobs, professional societies, community activities or government service.

**Bachelor of Science in Computer Engineering**
To receive the BSCoE degree, students must complete a minimum of 127 credit hours in the courses outlined below, with a minimum grade-point average of at least 2.0 (C) in core computer engineering courses and a minimum 2.0 cumulative grade-point average. All Binghamton University students must also meet the General Education requirements; for more details, refer to the general education section of this publication or consult with the Watson School Advising Office or the Department of Electrical and Computer Engineering Undergraduate Handbook.

In the table below, the courses listed in the Freshmen Year/Fall Semester and Freshmen Year/Spring Semester constitute the Watson School’s common first-year program for engineering students. The common first year is administered by the Engineering Design Division, as described in the Engineering Design Division section of the Bulletin.

<table>
<thead>
<tr>
<th>Freshman Year/Fall Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 224/225. Differential Calculus/Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111. Chemical Principles</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 111. Intro to Engineering Design</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 103. Engineering Communications I</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N, H)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Freshman Year/Spring Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 226/227. Integration Technique and Application/Infinite Series</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 131. General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 112. Intro to Engineering Analysis</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 104. Engineering Communications II</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N, H)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17</td>
</tr>
</tbody>
</table>

* It is advised that students take one of the required General Education courses in both the fall and spring semesters.

<table>
<thead>
<tr>
<th>Sophomore Year/Fall</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 324. ODE’s for Scientists/Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 132. General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CS 211. Programming I for Engineers</td>
<td>4</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>EECE 251. Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECE 281. ECE Seminar I</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sophomore Year/Spring</strong></td>
<td></td>
</tr>
<tr>
<td>ISE 261. Probabilistic Systems I</td>
<td>4</td>
</tr>
<tr>
<td>EECE 287. Sophomore Design</td>
<td>4</td>
</tr>
<tr>
<td>EECE 260. Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>EECE 212. Linear Algebra &amp; Eng Programming</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Junior Year/Fall</strong></td>
<td></td>
</tr>
<tr>
<td>EECE 301. Signals and Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECE 315. Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>EECE 351. Digital Systems Design</td>
<td>4</td>
</tr>
<tr>
<td>EECE 382. EECE Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 314. Discrete Mathematics</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Junior Year/Spring</strong></td>
<td></td>
</tr>
<tr>
<td>CS 212. Programming II for Engineers</td>
<td>4</td>
</tr>
<tr>
<td>EECE 359. Computer Comm and Networking</td>
<td>4</td>
</tr>
<tr>
<td>EECE 387. Design Lab</td>
<td>4</td>
</tr>
<tr>
<td>General Education Elective *</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Senior Year/Fall</strong></td>
<td></td>
</tr>
<tr>
<td>EECE 487. Senior Project I</td>
<td>3</td>
</tr>
<tr>
<td>Technical Elective I **</td>
<td>3</td>
</tr>
<tr>
<td>CS 311. Operating Systems Concepts</td>
<td>4</td>
</tr>
</tbody>
</table>
General Education Elective *  
4

TOTAL  
14

<table>
<thead>
<tr>
<th>Senior Year/Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECE 488. Senior Project II</td>
<td>3</td>
</tr>
<tr>
<td>Professional Elective I ***</td>
<td>3</td>
</tr>
<tr>
<td>Technical Elective II **</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective *</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

**TOTAL credits over 4 years**  
127

* General Education electives must be selected to satisfy the Binghamton University general education requirements.

** Technical electives allow CoE students to focus on a chosen specialization within computer engineering and must be selected from a list of approved upper-level EECE or CS courses.

*** Professional electives allow CoE students to pursue areas that are relevant to the profession of computer engineering; suggested choices include but are not limited to (i) additional technical elective courses, (ii) courses in business-related areas, (iii) additional math or science courses, (iv) engineering courses outside of CoE (e.g., a mechanical engineering course to prepare for professional engineering license exams).

**Required Course Prerequisites**

The following courses, or their equivalent(s), are required prerequisites for the major:

If students do not place into MATH 224, then MATH 223 (or its equivalent) and, if needed, MATH 108 (or its equivalent) and, if needed, MATH 107 (or its equivalent) and, if needed, MATH 106 (or its equivalent) are required prerequisites for completion of the major.

While CHEM 111 is preferred, in rare cases, under advisement from the Watson Advising Office, CHEM 107 may be used to meet the CHEM 111 requirement. Students who have not had adequate course preparation may need to take CHEM 101 prior to taking CHEM 107 or CHEM 111.

While WTSN 103/111/104/112 is preferred, in rare cases, under advisement from the Watson Advising Office, a freshman composition course and an introduction to computer programming course may be required to meet the WTSN 103/111/104/112 requirement.

**Accelerated Master’s Degree Programs for Students Pursuing the BS in Computer Engineering**

A combined BS and MSECE degree program is available for motivated students working toward the BS in computer engineering. The MS degree is an excellent professional credential, which usually commands a substantially higher starting salary. The combined program offers the advantage of less time to degree completion, finishing the MS while...
a full-time student rather than an extended part-time program, and the ability to start employment at the master’s level. To be eligible, undergraduate students must have a GPA of 3.5 or higher after five semesters (fall semester, junior year); students with a GPA above 3.2 (but below 3.5) can be admitted with two signatures of support from ECE faculty (submitted to the ECE graduate program director); students with a GPA above 3.0 (but below 3.2) may be admitted at the discretion of the graduate program director with two signatures of support from ECE faculty (submitted to the ECE graduate program director). Students apply for admission to the combined-degree program during their junior year by completing a short application available in the Electrical and Computer Engineering front office. Once admitted to the program, students begin taking graduate courses during their senior year. Up to three graduate courses taken in the student’s senior year can count both toward their MS degree requirements and their senior elective requirements (students may not take more than three graduate classes as undergraduates). Students in this program must be registered for a total of 21 graduate credits during their fifth (graduate) year (a total of 7 courses). By January 15 of the senior year, a formal application for Graduate School admission must be completed, which, assuming continued good performance, is only a formality.

After admission to the graduate program, students are encouraged to seek employment as a graduate research assistant in one of the department’s research projects. Research experience gained in the summer after finishing the BS degree provides an excellent experience and a start on an MS thesis project. Typically this start on the MS thesis allows the completion of the MS thesis option in one academic year beyond the BS degree. The expectation is that students in the program will complete the BS and MS degrees in five years. Students in the combined-degree program receive their BS degree after completing their undergraduate requirements. They must then continue as a full-time student in order for the graduate courses taken as an undergraduate to count toward the MS degree requirements.

Watson Fast-Track MBA Combined Degree Program

Program Objective

Over the past several years, engineering industries have undergone considerable change. Economic and managerial issues that were previously addressed outside the engineer's domain have been integrated into the engineer's responsibilities. In recognition of the increasing need for the integration of technology and business administration, the Watson School and the School of Management have joined together to offer a program that combines an engineering undergraduate degree with a master’s in business administration (MBA). This program provides a dynamic combination, allowing students the opportunity to explore immediate interests while building a solid, long-term career foundation.

A combined bachelor of science (BS) and master of business administration (MBA) degree program provides Watson undergraduate students with the opportunity to complete their BS degree and MBA degree within five years. In order to complete this program, students will be required to apply during their junior year and take four MBA courses during the senior year. Additional information can be found on the School of Management website. Advising for the MBA program and courses is provided by the School of Management.

Computer Science

Undergraduate Programs

Bachelor of Science in Computer Science

The Bachelor of Science degree in computer science is accredited by the Computing Accreditation Commission of ABET, http://www.abet.org. In keeping with the mission statement of the Watson School, the program strives to provide its graduates with a firm grounding in the fundamentals of computer science, elements of practical
application and an appreciation for liberal learning.

At its core, the degree program aims to provide all graduates with an understanding of the theory and practice of automating the representation, storage and processing of information. With the understanding that CS graduates will pursue a wide variety of career paths upon graduation, it is the program’s goal to also provide students with the opportunity to pursue specific interests within computer science and/or interests in other disciplines.

Program Educational Objectives

Graduates of our program will be:

- Successful in their profession in leadership or supporting positions, in which they exercise and apply their technical computer science background. These positions will use their skills in problem-solving and software or systems development.
- Capable of working well in teams, communicating effectively and meeting the social and ethical responsibilities of their profession.
- Engaged in lifelong learning relevant to their profession, including earning advanced degrees based on their computer science background or completing professional training.

The department encourages students to earn an international studies certificate in parallel with the BS in computer science. Students interested in this program should seek advice from the Watson School Advising Office prior to initial registration.

Requirements

To receive the BSCS degree students must earn a minimum of 126 credit hours, including transfer credits, with a minimum cumulative grade-point average of 2.0 (C) and a minimum grade-point average of 2.0 in the core computer science courses. All courses must be taken for the normal letter grade, unless a course is only offered Pass/Fail; an exception is made for a maximum of four free-elective credits in Harpur. A grade of C- or better in required computer science courses is needed to satisfy prerequisites for computer science courses. All Binghamton University students must also meet the general education requirements; for more details, refer to the General Education section of this publication or consult with the Watson School Advising Office.

Credit Requirements:

A minimum of 126 semester credits, of which:

1. a minimum of 60 credits must be in liberal arts and sciences courses;
2. a minimum of 40 credits must be earned in Computer Science courses taught in the Watson School.

Area Requirements

<table>
<thead>
<tr>
<th>Area Requirements</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Communications:</strong> One course that meets the Binghamton University general education composition requirement.</td>
<td>4</td>
</tr>
<tr>
<td>CS 301. Ethical, Social and Global Issues in Computing (included in the CS credits below)</td>
<td></td>
</tr>
<tr>
<td><strong>2. Humanities/social science electives</strong></td>
<td>20</td>
</tr>
</tbody>
</table>
3. **Science:** One of the following two-course sequences:
PHYS 131 and 132, BIOL 117 and 118, CHEM 107 and 108

One science elective, chosen from courses that meet the Binghamton University general education laboratory science requirement.

<table>
<thead>
<tr>
<th>4. <strong>Mathematics</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 224. Differential Calculus</td>
</tr>
<tr>
<td>MATH 225. Integral Calculus</td>
</tr>
<tr>
<td>MATH 226. Integration Techniques and Applications</td>
</tr>
<tr>
<td>MATH 227. Infinite Series</td>
</tr>
<tr>
<td>MATH 314. Discrete Mathematics</td>
</tr>
<tr>
<td>or MATH 330. Number Systems</td>
</tr>
<tr>
<td>MATH 327. Probability with Statistical Methods</td>
</tr>
<tr>
<td>or MATH 448. Introduction to Probability and Statistics II</td>
</tr>
</tbody>
</table>

One elective chosen from:
MATH 304. Linear Algebra
MATH 371. Ordinary Differential Equations
MATH 381. Graph Theory
MATH 386. Combinatorics
MATH 407. Introduction to the Theory of Numbers

5. **Free Electives:** At least four credits must be in liberal arts and science. At most, one free elective in liberal arts and science may be taken pass/fail instead of a letter grade. At most, 2 credits of activity/wellness may be used as free elective credit.
6. Computer Science
CS 101. Professional Skills, Ethics, and CS Trends
CS 120. Computer Systems I: Machine Organization
CS 140. Programming with Objects
CS 220. Computer Systems II: Architecture and Programming
CS 240. Data Structures and Algorithms
CS 350. Operating Systems
CS 373. Automata Theory and Formal Languages
CS 375. Design and Analysis of Algorithms
CS 471. Programming Languages

Four Computer Science electives chosen from A, B, C and D below. At least one must be chosen from A and at least one from B. At most one can be taken from D:

A.
CS 428. Computer Networks
CS 451. Systems Programming
CS 457. Introduction to Distributed Systems
CS 476. Programming Models for Emerging Platforms

B.
CS 440. Advanced Topics in Object-Oriented Programming
CS 442. Design Patterns
CS 445. Software Engineering
CS 472. Compiler Design

C.
CS 338. Introduction to Multimedia Systems
CS 402. Software and Engineering Project Management
CS 424. Microcontrollers and Robotics
CS 426. Wireless Sensor Networks
CS 432. Database Systems
CS 433. Information Retrieval
CS 435. Introduction to Data Mining
CS 436. Introduction to Machine Learning
CS 441. Game Development for Mobile Platforms
CS 443. Mobile Systems and Applications
CS 455. Introduction to Visual Information Processing
CS 458. Introduction to Computer Security
CS 459. Science of Cyber Security
CS 460. Computer Graphics

All CS 480 topics courses and CS 400-level courses approved for future catalog years

D. To count as a CS elective, must be taken for 4 credits
CS 395. Computer Science Internship
CS 396. Computer Science Co-op
CS 499. Undergraduate Research

TOTAL

* 57 credits includes CS 301.

General Education Requirements
Students must fulfill the general education requirements for Computer Science. Please consult the University Bulletin, the Watson School Advising Office or your faculty advisor for information about these requirements. Students normally complete these requirements within the 126-credit program described above.
Required Course Prerequisites

The following courses, or their equivalent(s), are required prerequisites for courses in the major:

If a student does not have sufficient programming experience to place into CS 120 and CS 140, then CS 110 is required.

If students do not place into MATH 224, then MATH 223 (or its equivalent) and, if needed, MATH 108 (or its equivalent) and, if needed, MATH 107 (or its equivalent) and, if needed, MATH 106 (or its equivalent) are required prerequisites for completion of the major.

Students who have not had adequate course preparation may need to take CHEM 101 prior to taking CHEM 107 and CHEM 108.

Students who have not had adequate course preparation may need to take BIOL 100 prior to taking BIOL 117 and BIOL 118.

Combined Bachelor’s/Master’s Degree Program

This program allows exceptionally capable and motivated students currently enrolled in the undergraduate program, who are interested in pursuing research in the field of computer science to earn both a BS in computer science and an MS in computer science degree in a period of five years. Senior CS majors who have an overall GPA of 3.5 or higher and a CS GPA of 3.5 or higher and who have completed the five junior-level required CS courses and at least four mathematical sciences courses are eligible to apply. Students may take up to three graduate elective courses in their senior year, which replace at most two of their BS electives and also count toward their MS degree.

Computer Science Minor

The computer science minor consists of seven courses, all taken at Binghamton (CS 120, CS 140, CS 220, CS 240, MATH 314 or MATH 330 and two CS courses at the 300 level or above, not including CS 395, CS 396, CS 397, CS 499). Before students apply, they must have completed the four specified CS courses and the MATH course with at least a 2.7 GPA in those courses. More information is available from the Department of Computer Science.

Dual-Diploma in Information Systems

Binghamton University, in partnership with Istanbul Technical University, the oldest and one of the most prestigious universities in Turkey, offers a dual-diploma bachelor’s degree in Information Systems. This innovative program prepares students from ITU with high-level substantive knowledge and analytical skills for careers in high-technology areas that require global perspectives. This four-year program includes full-time enrollment for the sophomore year and the senior year at Binghamton University. Dual-diploma students take computer science, general education, management and other courses alongside Binghamton students. Students must earn a C- or better in any required CS course used as a prerequisite. Graduates of the program receive two diplomas, a bachelor of science degree from the Thomas J. Watson School of Engineering and Applied Science and a Lisans in Information Systems from Istanbul Technical University.

Information concerning the courses taken in the freshman and junior years at Istanbul Technical University can be found at the following website http://www.uolp.itu.edu.tr. Students also do 12 weeks of summer practice after completing the coursework.
Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 120. Computer Systems I: Machine Organization</td>
<td></td>
</tr>
<tr>
<td>CS 140. Programming with Objects</td>
<td></td>
</tr>
<tr>
<td>CS 220. Computer Systems II: Architecture and Programming</td>
<td></td>
</tr>
<tr>
<td>CS 240. Data Structures and Algorithms</td>
<td></td>
</tr>
<tr>
<td>MATH 327. Probability with Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>MIS 311. Information Systems and Application</td>
<td></td>
</tr>
<tr>
<td>OPM 311. Operations Management</td>
<td></td>
</tr>
<tr>
<td>WRIT 111. Research and Writing (Rhetorically) (Gen Ed J)</td>
<td></td>
</tr>
<tr>
<td>General Education Activity and Wellness (Gen Ed B)</td>
<td></td>
</tr>
<tr>
<td>General Education Elective*</td>
<td></td>
</tr>
<tr>
<td><strong>Total Sophomore Year</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 342. Design Patterns</td>
<td></td>
</tr>
<tr>
<td>CS 360. GUI And Windows Programming</td>
<td></td>
</tr>
<tr>
<td>CS 402. Software and Engineering Project Management</td>
<td></td>
</tr>
<tr>
<td>CS 431. Enterprise Network Security</td>
<td></td>
</tr>
<tr>
<td>CS 485/486. Senior Project I/II</td>
<td></td>
</tr>
<tr>
<td>CS Technical Elective</td>
<td></td>
</tr>
<tr>
<td>CS Technical Elective</td>
<td></td>
</tr>
<tr>
<td>General Education Elective*</td>
<td></td>
</tr>
<tr>
<td>General Education Elective*</td>
<td></td>
</tr>
<tr>
<td><strong>Total Senior Year</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

*Must take one each of Gen Ed A, G, and P.

Electrical Engineering

Undergraduate Programs

The Bachelor of Science degree in electrical engineering is accredited by the Engineering Accreditation Commission of ABET (http://www.abet.org).
Electrical engineering is one of the broadest and largest engineering disciplines. Electrical engineers work in the areas of design, analysis and application of electrical and electronic components, circuits, and systems. Electrical engineers work in areas focused on the analysis, design, and application of information processing systems such as communication systems, medical imaging systems and sensors; others are focused on power and energy, such as power transmission and design of electric drives. The areas in which electrical engineers work span the spectrum from the atomic level to systems level design. An electrical engineer may focus on the physical operation of micro-electronic devices, integrated circuits, electronic circuits, or systems that process and transmit signals, information, and electrical power.

The electrical engineering curriculum builds upon the base of the one-year core provided by the Engineering Design Division of the Watson School. The one-year core, required of all engineering students in the school, provides students with a broad foundation in engineering fundamentals, natural sciences, mathematics, communication skills and laboratory experience. The second year of the program covers basic electrical and computer engineering topics. Breadth in the major areas of electrical engineering is obtained by a series of required courses in the third year; depth in a specialization area within electrical engineering is obtained by a series of technical electives in the fourth year.

Program Educational Objectives describe what graduates of the program are expected to accomplish within five years of graduation. Graduates of the electrical engineering program are expected to demonstrate progress in four areas:

- **Leadership**: Graduates will be known for leadership, innovation, entrepreneurship or responsibility as appropriate for their career stage.

- **Education**: Graduates will continue their education through a combination of independent learning, continuing education and advanced degrees.

- **Adaptability**: Graduates will demonstrate flexibility in a career that utilizes skills and knowledge gained in their undergraduate engineering program.

- **Participation**: Graduates will be known as active participants in a wide variety of both professional and non-professional activities, including jobs, professional societies, community activities or government service.

**Bachelor of Science in Electrical Engineering**

To receive the BSEE degree, students must complete a minimum of 127 credit hours in the courses outlined below, with a minimum grade-point average of 2.0(C) in core electrical engineering courses and a minimum 2.0 cumulative grade-point average. All Binghamton University students must also meet the General Education requirements; for more details, refer to the General Education section of this publication or consult with the Watson School Advising Office or the Department of Electrical and Computer Engineering Undergraduate Handbook.

In the table below, the courses listed in the Freshmen Year/Fall Semester and Freshmen Year/Spring Semester constitute the Watson School’s common first-year program for engineering students. The common first year is administered by the Engineering Design Division, as described in the Engineering Design Division section of the Bulletin.

<table>
<thead>
<tr>
<th>Freshman Year/Fall Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 224/225. Differential Calculus/Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111. Chemical Principles</td>
<td>4</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>WTSN 111. Intro to Engineering Design</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 103. Engineering Communications I</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N, H)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Freshman Year/Spring Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 226/227. Integration Technique and Application/Infinite Series</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 131. General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 112. Intro to Engineering Analysis</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 104. Engineering Communications II</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N, H)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

* It is advised that students take one of the required General Education courses in both the fall and spring semesters.

** Sophomore Year/Fall Semester **

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 324. ODE's for Scientists/Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 132. General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CS 211. Programming I for Engineers</td>
<td>4</td>
</tr>
<tr>
<td>EECE 251. Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECE 281. EECE Seminar I</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

** Sophomore Year/Spring Semester **

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISE 261. Probabilistic Systems I</td>
<td>4</td>
</tr>
<tr>
<td>EECE 287. Sophomore Design</td>
<td>4</td>
</tr>
<tr>
<td>EECE 260. Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>EECE 212. Linear Algebra &amp; Eng Programming</td>
<td>4</td>
</tr>
<tr>
<td>Semester</td>
<td>Course Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td><strong>Junior Year/Fall Semester</strong></td>
<td><strong>EECE 301. Signals and Systems</strong></td>
</tr>
<tr>
<td></td>
<td><strong>EECE 315. Electronics I</strong></td>
</tr>
<tr>
<td></td>
<td><strong>EECE 332. Semiconductor Devices</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MATH 323. Calculus III</strong></td>
</tr>
<tr>
<td></td>
<td><strong>EECE 382. EECE Seminar II</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Junior Year/Spring Semester</strong></td>
<td><strong>EECE 323. Electromagnetics</strong></td>
</tr>
<tr>
<td></td>
<td><strong>EECE 361. Control Systems</strong></td>
</tr>
<tr>
<td></td>
<td><strong>EECE 377. Communications Systems</strong></td>
</tr>
<tr>
<td></td>
<td><strong>EECE 387. Design Lab</strong></td>
</tr>
<tr>
<td></td>
<td>**Professional Elective I *****</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Senior Year/Fall Semester</strong></td>
<td><strong>EECE 487. Senior Project I</strong></td>
</tr>
<tr>
<td></td>
<td>**Technical Elective 1 ****</td>
</tr>
<tr>
<td></td>
<td>**General Education Elective * **</td>
</tr>
<tr>
<td></td>
<td>**General Education Elective * **</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Senior Year/Spring Semester</strong></td>
<td><strong>EECE 488. Senior Project II</strong></td>
</tr>
<tr>
<td></td>
<td>**Technical Elective II **</td>
</tr>
<tr>
<td></td>
<td>**Professional Elective II *** **</td>
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<tr>
<td></td>
<td>**General Education Elective * **</td>
</tr>
</tbody>
</table>
* General Education electives must be selected to satisfy the Binghamton University General Education requirements.

** Technical electives allow EE students to focus on a chosen specialization within electrical engineering and must be selected from a list of approved upper-level EECE courses.

*** Professional electives allow EE students to pursue areas that are relevant to the profession of electrical engineering; suggested choices include but are not limited to (i) additional technical elective courses, (ii) courses in business-related areas, (iii) additional math or science courses, (iv) engineering courses outside of EE (e.g., a mechanical engineering course to prepare for professional engineering license exams).

**Required Course Prerequisites**

The following courses, or their equivalent(s), are required prerequisites for the major:

If students do not place into MATH 224, then MATH 223 (or its equivalent) and, if needed, MATH 108 (or its equivalent) and, if needed, MATH 107 (or its equivalent) and, if needed, MATH 106 (or its equivalent) are required prerequisites for completion of the major.

While CHEM 111 is preferred, in rare cases, under advisement from the Watson Advising Office, CHEM 107 may be used to meet the CHEM 111 requirement. Students who have not had adequate course preparation may need to take CHEM 101 prior to taking CHEM 107 or CHEM 111.

While WTSN 103/111/104/112 is preferred, in rare cases, under advisement from the Watson Advising Office, a freshman composition course and an introduction to computer programming course may be required to meet the WTSN 103/111/104/112 requirement.

**Accelerated Master’s Degree Programs for Students Pursuing the BS in Electrical Engineering**

A combined BS and MSECE degree program is available for motivated students working toward the BS in electrical engineering. The MS degree is an excellent professional credential, which usually commands a substantially higher starting salary. The combined program offers the advantage of less time to degree completion, finishing the MS while a full-time student rather than an extended part-time program, and the ability to start employment at the master's level. To be eligible, undergraduate students must have a GPA of 3.5 or higher after five semesters (fall semester, junior year); students with a GPA above 3.2 (but below 3.5) can be admitted with two signatures of support from ECE faculty (submitted to the ECE graduate program director); students with a GPA above 3.0 (but below 3.2) may be admitted at the discretion of the graduate program director with two signatures of support from ECE faculty (submitted to the ECE graduate program director). Students apply for admission to the combined-degree program during their junior year by completing a short application available in the Electrical and Computer Engineering front office. Once admitted to the program, students begin taking graduate courses during their senior year. Up to three graduate courses taken in the student’s senior year can count both toward their MS degree requirements and their senior elective requirements (students may not take more than three graduate classes as undergraduates). Students in this program must be registered for a total of 21 graduate credits during their fifth (graduate) year (a total of 7
By January 15 of the senior year, a formal application for Graduate School admission must be completed, which, assuming continued good performance, is only a formality.

After admission to the graduate program, students are encouraged to seek employment as a graduate research assistant in one of the department's research projects. Research experience gained in the summer after finishing the BS degree provides an excellent experience and a start on an MS thesis project. Typically, this start on the MS thesis allows the completion of the MS thesis option in one academic year beyond the BS degree. The expectation is that students in the program will complete the BS and MS degrees in five years. Students in the combined-degree program receive their BS degree after completing their undergraduate requirements. They must then continue as a full-time student in order for the graduate courses taken as an undergraduate to count toward the MS degree requirements.

**Watson Fast-Track MBA Combined Degree Program**

**Program Objective**

Over the past several years, engineering industries have undergone considerable change. Economic and managerial issues that were previously addressed outside the engineer's domain have been integrated into the engineer's responsibilities. In recognition of the increasing need for the integration of technology and business administration, the Watson School and the School of Management have joined together to offer a program that combines an engineering undergraduate degree with a master's in business administration (MBA). This program provides a dynamic combination, allowing students the opportunity to explore immediate interests while building a solid, long-term career foundation.

A combined bachelor of science (BS) and master of business administration (MBA) degree program provides Watson undergraduate students with the opportunity to complete their BS degree and MBA degree within five years. In order to complete this program, students will be required to apply during their junior year and take four MBA courses during the senior year. Additional information can be found on the School of Management website. Advising for the MBA program and courses is provided by the School of Management.

**Engineering Design Division (EDD)**

**Undergraduate Programs**

The Engineering Design Division (EDD) is the first-year engineering program. EDD provides a unique learning experience for first-year engineering students through its two-semester integrated course sequence, which is comprised of Introduction to Engineering Design (WTSN 111) and Engineering Communications I (WTSN 103) in the fall semester, and Introduction to Engineering Analysis (WTSN 112) and Engineering Communications II (WTSN 104) in the spring semester. In this integrated course format, students attend: WTSN 111/112 lab for two hours per week, WTSN 103/104 discussion section for two hours per week, and lecture for one or two hours per week. The same format is repeated in the spring semester. The introduction to Engineering and Engineering Communications courses are tightly integrated by means of engineering projects common to each.

In the fall semester, Introduction to Engineering Design students are introduced to the engineering design process and engineering problem-solving techniques, which they apply in two engineering projects. Activities include an introduction to machine shop use, basic electrical circuits, and computer-aided design. Additionally, students have a first exposure to the engineering profession and the different Watson engineering disciplines. The two engineering projects are managed in Engineering Communications I, where the focus is on developing presentation, technical
writing, and teamwork skills in an engineering context.

In the spring semester, Introduction to Engineering Analysis focuses on analytical techniques in engineering with an emphasis on the application of mathematics to engineering problem solving. These techniques are applied in a semester-long systems engineering design team project. Students have a more in-depth exposure to the different Watson engineering disciplines, culminating in the declaration of their engineering majors in the spring semester. The semester-long project is managed in Engineering Communications II, where research and writing are the focus within the context of the project, and teamwork and presentation skills are developed further.

**Requirements**

To meet the requirements for admission into the departmental programs, engineering majors complete the courses listed below with a minimum grade-point average of 2.0. In addition, all Watson School students are subject to the University’s General Education requirements. For further information, refer to the General Education section of this publication, or see the *General Education and Your Watson School Major* handout available in the Watson School Advising Office.

### Freshman Year/Fall Semester

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 224/225. Differential Calculus/Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111. Chemical Principles</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 111. Introduction to Engineering Design</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 103. Engineering Communications I</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N, H)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Freshman Year/Spring Semester

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 226/227. Integration Technique and Application/Infinite Series</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 131. General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 112. Introduction to Engineering Analysis (J)</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 104. Engineering Communications II</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N, H)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

* It is advised that students take one of the required General Education courses in both the fall and spring semesters.

### Required Course Prerequisites

616/669
The following courses, or their equivalent(s), are required prerequisites for courses in the EDD program:

If students do not place into MATH 224, then MATH 223 (or its equivalent) and, if needed, MATH 108 (or its equivalent) and, if needed, MATH 107 (or its equivalent) and, if needed, MATH 106 (or its equivalent) are required prerequisites for completion of the major.

While CHEM 111 is preferred, in rare cases, under advisement from the Watson Advising Office, the combination of CHEM 107 and CHEM 108 may be used to meet the CHEM 111 requirement. Students who have not had adequate course preparation may need to take CHEM 101 prior to taking CHEM 107, CHEM 108, or CHEM 111.

**Minor in General Engineering**

This curriculum is intended as a general engineering minor for students outside of engineering. Declaring the minor is by application only; minimum of five courses required. Students must complete the three prerequisite courses (see below) for the minor and achieve at least a 2.7 GPA in those three courses before applying to the program. In order to complete the minor, students must earn a GPA of at least 2.0 in the prerequisite and required courses. Courses can be used to fulfill Gen Ed requirements. Courses (excluding prerequisites) used to fulfill requirements for the major cannot be used as courses satisfying requirements for a minor. Students will be advised by the Director of the Engineering Design Division.

**Prerequisite Courses:**

**Math: (4 credit hrs.)**
- Differential Calculus/Integral Calculus (MATH 224/225) - Can be satisfied by AP Calculus

**Science: (8 credit hrs.)**
- General Physics I, (PHYS 131 recommended — calculus-based), (pre-requisite MATH 224/225) — Can be satisfied by AP Physics

And either:
- General Physics II (PHYS 132 recommended — calculus-based), (pre-requisite PHYS 131, co-requisite MATH 226/227 Integration Techniques and Applications/Infinite Series)

or
- PHYS 122 — General Physics II (algebra-based)

**Required engineering courses: (minimum of five courses)**
- A listing of all approved elective courses for the Minor in General Engineering may be found on the Engineering Design Division website at [http://www.binghamton.edu/engineering-design/general-minor.html](http://www.binghamton.edu/engineering-design/general-minor.html)

**Engineering Elective courses: (minimum three courses)**
- Participants must take a minimum of nine hours of engineering, with at least one course from Advanced Engineering. Note: Individual courses may have prerequisites in addition to courses in the engineering minor.

**Integrated Engineering and Design Projects: (two courses — must have senior standing)**
- Participants must complete two semesters of an integrated engineering and design project (capstone design courses). Students may elect to participate in this capstone experience on a team with biomedical engineering, systems science and industrial engineering, or electrical, computer, and mechanical engineering
**Minor in Sustainability Engineering (minimum of 21 credit hours, not including prerequisites)**

- This engineering minor curriculum is only for students majoring in an engineering discipline.
- All students must complete the four prerequisite courses listed below before declaring the minor.
- The Director of the Engineering Design Division must approve the declaration of this minor.
- In order to complete this minor, students must earn a GPA of at least 2.0 in all required courses of the minor.
- The courses may be used to fulfill Gen Ed requirements.

**Prerequisite Courses**

- Math (8 credit hours) — Differential Calculus/Integral Calculus (MATH 224/225), Integration Techniques and Applications/infinite Series (Math 226/227)
- Chemistry (4 credit hours) — Chemistry I (CHEM 111), or (CHEM 107 and CHEM 108)
- Physics (4 credit hours) — General Physics I (PHYS 131)

**Required Courses (21 credit hours)**

**Required core sustainability engineering courses (9 credit hours)**

- WTSN 305. Introduction to Sustainable Engineering and Design (3 credit hours)
- WTSN 306. Engineering Sustainable Energy (3 credit hours)
- WTSN 307. Ecology for Engineers (3 credit hours)

**Required elective courses (12 credit hours)**

- A listing of all approved elective courses for the Minor in Sustainability Engineering may be found on the Engineering Design Division website at [http://www.binghamton.edu/engineering-design/sustainability-minor.html](http://www.binghamton.edu/engineering-design/sustainability-minor.html)

*All elective courses with approval of department and instructor. Departments may add or remove courses in the future. Please note that a degree audit exception might be required for certain courses to count for any major.*

**Mechanical Engineering**

**Undergraduate Programs**

The bachelor's degree program in mechanical engineering is accredited by the Engineering Accreditation Commission of ABET, [http://www.abet.org](http://www.abet.org).

*Program Educational Objectives:* Graduates from our program, within the first few years of their career, will either achieve professional employment in the broad field of mechanical engineering or related disciplines, or enroll in programs of advanced study in engineering, science and other professions, including business and law.

The curriculum has been designed to provide strong technical preparation in the broad field of mechanical engineering. Students enter the BSME program as sophomores from the Engineering Design Division, as junior
transfers from other schools such as community colleges, or as internal transfers from Harpur College of Arts and Sciences. The program emphasizes the application of engineering fundamentals rather than specialization within areas of mechanical engineering. Care has been taken to ensure a balanced integration of theory, design and laboratory practice through the selection and sequencing of courses within the curriculum. Computer applications are an integral part of the total education program.

Some degree of specialization is permitted in the curriculum through the selection of elective courses, but the primary goal is to prepare the mechanical engineering bachelor of science graduate for a creative, lifelong engineering career, based on a thorough grounding in the fundamentals and skills used by the mechanical engineer, as well as motivation for continued self-education.

Combined degrees in mechanical engineering and various disciplines such as computer science are available to qualified students. Minor programs in sustainability engineering, computer science and other disciplines are also possible.

**Bachelor of Science in Mechanical Engineering**

To receive the BSME degree, students must complete a minimum of 128 credit hours in the courses outlined below with a minimum 2.0 (C) grade-point average in mechanical engineering courses, and a minimum cumulative grade-point average of 2.0. The three sophomore courses ME 273, ME 274, and ME 211 must be completed with a grade of C- or above in order to satisfy the prerequisite requirements.

All entering Binghamton University freshmen and transfer students must complete the General Education requirements. For more details, refer to the General Education section of this publication or consult with a faculty adviser or the Watson School Advising Office.

In the table below, the courses listed in the Freshmen Year/Fall Semester and Freshmen Year/Spring Semester constitute the Watson School’s Common First-year program for engineering students. The common first year is administered by the Engineering Design Division, as described in the Engineering Design Division section of the Bulletin.

<table>
<thead>
<tr>
<th>Freshman Year/Fall</th>
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<tbody>
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<tr>
<td>CHEM 111. Chemical Principles</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 111. Intro to Engineering Design</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 103. Engineering Communications I</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective (G, P, A, N, H)*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Freshman Year/Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 226/227. Integration Technique and Application/Infinite Series</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 131. General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 112. Intro to Engineering Analysis</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 104. Engineering Communications II</td>
<td>2</td>
</tr>
</tbody>
</table>
**General Education Elective (G, P, A, N, H)** 4

**Physical Activity/Wellness (Y, S, B)** 1

**TOTAL** 17

* It is advised that students take one of the required General Education courses in both the fall and spring semesters.

### Sophomore Year/Fall

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 323. Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 132. General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>ME 212. Mechanical Engineering Programming</td>
<td>2</td>
</tr>
<tr>
<td>ME 273. Statics**</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective * (G, P, A, N, H)</td>
<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
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</table>

### Sophomore Year/Spring

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 324. ODE's for Scientists/Engineers</td>
<td>4</td>
</tr>
<tr>
<td>EECE 260. Electric Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ME 211. Introduction to Solid Mechanics**</td>
<td>3</td>
</tr>
<tr>
<td>ME 274. Dynamics**</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14</strong></td>
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</table>

### Junior Year/Fall

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 302. Engineering Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ME 331. Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ME 363. Engineering Materials Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ME 381. Computer-Aided Engineering</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective * (G, P, A, N, H)</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Junior Year/Spring

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

620/669
### ME 303. Engineering Computational Methods
3

### ME 351. Fluid Mechanics
3

### ME 391. Measurement and Instrumentation Laboratory
3

### ME 392. Mechanical Engineering Design
4

### Elective
2

**TOTAL**
15

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**Senior Year/Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 421. Mechanical Vibrations</td>
<td>3</td>
</tr>
<tr>
<td>ME 441. Heat Transfer</td>
<td>3</td>
</tr>
<tr>
<td>ME 493. Senior Project I</td>
<td>2</td>
</tr>
<tr>
<td>ME 498. Senior Project Lab I</td>
<td>1</td>
</tr>
<tr>
<td>Engineering Elective***</td>
<td>3</td>
</tr>
<tr>
<td>Technical Elective***</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL**
15

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**Senior Year/Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 424. Control Systems in Mechanical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ME 494. Senior Project II</td>
<td>2</td>
</tr>
<tr>
<td>ME 499. Senior Project Lab II</td>
<td>1</td>
</tr>
<tr>
<td>Mechanical Engineering Elective***</td>
<td>3</td>
</tr>
<tr>
<td>Technical Elective***</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective* (G, P, A, N, H)</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL**
16

* General Education electives must meet certain General Education guidelines. Please consult the University Bulletin, the Watson School Advising Office or your faculty advisor for information about the General Education requirements.

** Must be completed with a grade of C- or above in order to satisfy the prerequisite requirements.

*** Technical Electives and the Engineering Elective must be chosen from a pre-approved list of courses available in the Watson School Advising Office or in consultation with your faculty advisor. The Mechanical Engineering Elective must be a 300 level or above mechanical engineering course (excluding required courses, internship and...
independent study courses).

**Required Course Prerequisites**

The following courses, or their equivalent(s), are required prerequisites for the major:

If students do not place into MATH 224, then MATH 223 (or its equivalent) and, if needed, MATH 108 (or its equivalent) and, if needed, MATH 107 (or its equivalent) and, if needed, MATH 106 (or its equivalent) are required prerequisites for completion of the major.

While CHEM 111 is preferred, in rare cases, under advisement from the Watson Advising Office, the combination of CHEM 107 and CHEM 108 may be used to meet the CHEM 111 requirement. Students who have not had adequate course preparation may need to take CHEM 101 prior to taking CHEM 107, CHEM 108, or CHEM 111.

While WTSN 103/111/104/112 is preferred, in rare cases, under advisement from the Watson Advising Office, a freshman composition course and an introduction to computer programming course may be required to meet the WTSN 103/111/104/112 requirement.

**Accelerated Master’s Degree Program for Bachelor of Science Students: 4+1 (BSME/MSME)**

A combined BSME and MSME (Non-Thesis Option) degree program enables mechanical engineering students to complete both degrees in a five-year period. Acceptance into the program requires a GPA of 3.3 or higher. Students interested in the program should begin by applying to the 4+1 program during their junior year. An application form is available in the Watson School Advising Office or in the ME Department Office. Applicants are required to meet with the Director of Graduate Studies as part of the application process. In addition, students must apply for formal admission to the Graduate School during their senior year. For more information about the MS degree Core and Area of Concentration (AOC) courses, refer to the mechanical engineering graduate program section of this document.

In the 4+1 program, students may take up to three graduate-level courses as technical electives in the senior year. These three courses also count towards the MS degree requirements. For technical electives that are co-listed as 400/500 level, students in the 4+1 program should register for the graduate level course. It is recommended that at least two graduate courses be taken during the senior year and that the courses selected satisfy the core requirements for the MSME. Please refer to the graduate section of the Bulletin that describes the requirements for the Master of Science in Mechanical Engineering, Non-Thesis Option.

**4+1 (BS/MS) Mechanical Engineering Program — Typical Course Sequence**

**YEAR 4**

<table>
<thead>
<tr>
<th>FALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 421. Mechanical Vibrations</td>
</tr>
<tr>
<td>ME 441. Heat Transfer</td>
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<tr>
<td>ME 493. Senior Project I</td>
</tr>
<tr>
<td>ME 498. Senior Project Lab I</td>
</tr>
<tr>
<td>Technical Elective</td>
</tr>
</tbody>
</table>

| 622/669 |
FALL

* ME 535. Analytical Methods (Core Grad Course)

SPRING

ME 424. Control Systems in ME
ME 494. Senior Project II
ME 499. Senior Project Lab II
General Education Elective

* Grad Course (Computational or Continuum Mechanics Core)
* Grad Course or Technical Elective

BSME Awarded
*Counted for credit in both BS and MS. Technical electives in undergraduate curriculum.

Watson Fast-Track MBA Combined Degree Program

Program Objective

Over the past several years, engineering industries have undergone considerable change. Economic and managerial issues that were previously addressed outside the engineer's domain have been integrated into the engineer's responsibilities. In recognition of the increasing need for the integration of technology and business administration, the Watson School and the School of Management have joined together to offer a program that combines an engineering undergraduate degree with a master's in business administration (MBA). This program provides a dynamic combination, allowing students the opportunity to explore immediate interests while building a solid, long-term career foundation.

A combined bachelor of science (BS) and master of business administration (MBA) degree program provides Watson undergraduate students with the opportunity to complete their BS degree and MBA degree within five years. In order to complete this program, students will be required to apply during their junior year and take four MBA courses during the senior year. Additional information can be found on the School of Management website. Advising for the MBA program and courses is provided by the School of Management.

Systems Science and Industrial Engineering

Undergraduate Program

The Systems Science and Industrial Engineering (SSIE) Department offers a Bachelor of Science degree in Industrial and Systems Engineering (ISE) that is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

The Bachelor of Science in Industrial and Systems Engineering (BS ISE) is a degree designed to combine engineering skills, systems thinking and business/information processing. The curriculum focus is on designing systems and processes which normally include the human element. The mathematical skills range from discrete techniques to stochastic techniques with a significant focus on variability.
Binghamton University students typically enter our program in their sophomore year, after they complete their first-year experience in the Watson School's Engineering Design Division. The curriculum is also specially structured to enable transfer students to complete the program from any of the Two-Year Engineering Science Association (TYESA) community colleges in New York.

The Program Educational Objectives (PEOs) for the Program are the following:

Within a few years of graduation, graduates will accomplish the following objectives of:

- designing, developing and managing both deterministic and nondeterministic complex processes and systems involving people, information, equipment and financial and material assets, with special emphasis on using probabilistic methods, design of experiments and simulation;
- joining and contributing to industrial, government, and service organizations, and to operate effectively with a high level of professional and ethical standards;
- independent learning, acquiring professional certifications and/or advanced degrees in reputable graduate schools in manufacturing, service, and enterprise systems;
- communicating and contributing effectively in a diverse team environment.

The emphasis is on the application of engineering fundamentals with a balanced treatment of theory, design and experience. Computer applications are integrated throughout the curriculum. During the senior year the primary focus is upon design. A two-course design sequence covers the concepts and terminates in a capstone design experience that is normally shared with industry. The curriculum combines a solid set of core courses with technical electives (three) to give students a wide range of choices in meeting their individual educational objectives.

NOTE: Any undergraduate student taking an undergraduate course that is cross-listed with a graduate course will earn the credit for the undergraduate course only. Please note that the student will not be eligible to earn graduate-level credit for the cross-listed graduate course at a later date. Please refer to the sections below for students interested in the 4+1 programs.

**Requirements for BS Degree in Industrial and Systems Engineering**

To receive the BSISE degree, students must complete a minimum of 127 credit hours in the courses outlined below with a minimum grade-point average of 2.0(C) in the core industrial and systems engineering courses and a minimum cumulative grade-point average of 2.0. All Binghamton University students must also meet the General Education requirements; for more details, refer to the General Education section of this publication or consult with the Watson School Advising Office.

In the table below, the courses listed in the Freshmen Year/Fall Semester and Freshmen Year/Spring Semester constitute the Watson School’s common first-year program for engineering students. The common first year is administered by the Engineering Design Division, as described in the Engineering Design Division section of the Bulletin.

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<tr>
<td>CHEM 111. Chemical Principles</td>
<td>4</td>
</tr>
<tr>
<td>WTSN 111. Intro to Engineering Design</td>
<td>2</td>
</tr>
<tr>
<td>WTSN 103. Engineering Communications I</td>
<td>2</td>
</tr>
</tbody>
</table>
General Education Elective (G, P, A, N, H)*  4
Physical Activity/Wellness (Y, S, B)  1
TOTAL  17

**Freshman Year/Spring Semester**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>2</td>
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</tr>
<tr>
<td>Physical Activity/Wellness (Y, S, B)</td>
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**Sophomore Year/Semester I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Math 324. Ordinary Diff Equations for Engineers</td>
<td>4</td>
</tr>
<tr>
<td>or Math 323. Calculus III</td>
<td></td>
</tr>
<tr>
<td>PHYS 132. General Physics II</td>
<td>4</td>
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<tr>
<td>ME 273. Statics</td>
<td>3</td>
</tr>
<tr>
<td>ISE 211. Engineering Economics</td>
<td>4</td>
</tr>
<tr>
<td>ISE 295. Seminar Course</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
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</table>

**Sophomore Year/Semester II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISE 212. Engineering Computing</td>
<td>4</td>
</tr>
<tr>
<td>ISE 261. Probabilistic Systems I</td>
<td>4</td>
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<tr>
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<td>Junior Year/Semester I</td>
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<tr>
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<tr>
<td>MAT 304. Linear Algebra</td>
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<tr>
<td>ISE 311. Enterprise Systems</td>
<td>4</td>
</tr>
<tr>
<td>ISE 314. Computer Programming for Engineers</td>
<td>4</td>
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<tr>
<td>ISE 362. Probabilistic Systems II and DOE</td>
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<tr>
<th>Junior Year/Semester II</th>
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<tr>
<td>SE 231. Human Factors</td>
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<tr>
<td>ISE 320. Optimization and Operations Research I</td>
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</tr>
<tr>
<td>ISE 363. Quality Engineering</td>
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<td>General Education Elective (G, P, A, N, H)</td>
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<table>
<thead>
<tr>
<th>Senior Year/Semester I</th>
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</thead>
<tbody>
<tr>
<td>ISE 421. Modeling and Simulation</td>
<td>4</td>
</tr>
<tr>
<td>ISE 420. Optimization and Operations Research II</td>
<td>4</td>
</tr>
<tr>
<td>ISE 491 Systems Design Project</td>
<td>4</td>
</tr>
<tr>
<td>ISE 370. Industrial Automation</td>
<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Senior Year/Semester II</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISE 492. Systems Design Project</td>
<td>4</td>
</tr>
<tr>
<td>Technical Elective</td>
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<tr>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Note: For transfer students, please consult your college/university, the Undergraduate Admissions Office or the
Required Course Prerequisites

The following courses, or their equivalent(s), are required prerequisites for the major:

If students do not place into MATH 224, then MATH 223 (or its equivalent) and, if needed, MATH 108 (or its equivalent) and, if needed, MATH 107 (or its equivalent) and, if needed, MATH 106 (or its equivalent) are required prerequisites for completion of the major.

While CHEM 111 is preferred, in rare cases, under advisement from the Watson Advising Office, CHEM 107 or a college biology course may be used to meet the CHEM 111 requirement. Students who have not had adequate course preparation may need to take CHEM 101 prior to taking CHEM 107 or CHEM 111.

While WTSN 103/111/104/112 is preferred, in rare cases, under advisement from the Watson Advising Office and subject to department approval, a freshman composition course and an introduction to computer programming course may be required to meet the WTSN 103/111/104/112 requirement.

Minor in Computer Science

A minor in Computer Science is available for BS ISE majors. Students may also apply for an extended program leading to dual degrees in Industrial and Systems Engineering and Computer Science. For details, students should contact the Watson School Advising Office prior to registration.

Minor in Sustainability Engineering

A minor in Sustainability Engineering is available for BS ISE majors. For details, students should contact the Watson School Advising Office prior to registration.

Combined BS and MS in Industrial and Systems Engineering (4 + 1 Program)

The combined BS and MS degree program is available for students working toward their BS ISE who have a GPA of 3.5 after five semesters (i.e., at the end of the fall semester in their junior year) and a B+ or better in both ISE 261 and ISE 362. An application, which must be approved by the Department Chair and/or Graduate Director, is available from the Department. Students begin the combined program at the start of their senior year and take three graduate courses that count both toward their senior technical-elective requirements and toward their MS degree requirements. In the fifth (graduate) year, students in this program must register for 12 or more credits in each of the two semesters. This program typically allows the completion of the MS degree in one year beyond the BS degree. Students in the combined BS and MS program receive their BS degree after completing their undergraduate requirements. The MS degree is an excellent professional credential, which usually commands a substantially increased starting salary.

Requirements for the Combined BS ISE and MS ISE Degrees

<table>
<thead>
<tr>
<th>Senior Year/Fall Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISE 492. Systems Design Project</td>
<td>4</td>
</tr>
<tr>
<td>SSIE 510. Enterprise System Engineering</td>
<td>3</td>
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<tr>
<td>ISE 420. Optimization and Operations Research II</td>
<td>4</td>
</tr>
<tr>
<td>Course Description</td>
<td>Credits</td>
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<td>----------------------------------------------------------------------------------</td>
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<td><strong>TOTAL</strong></td>
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<tr>
<td><strong>Senior Year/Spring Semester</strong></td>
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<tr>
<td>SSIE 5XX. Approved Elective 1</td>
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<td>SSIE 5XX. Approved Elective 2</td>
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<tr>
<td><strong>Graduate Year/Fall Semester</strong></td>
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<tr>
<td>Approved Graduate Elective 3</td>
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<tr>
<td>Approved Graduate Elective 4</td>
<td>3</td>
</tr>
<tr>
<td>Approved Graduate Elective 5</td>
<td>3</td>
</tr>
<tr>
<td>Approved Graduate Elective 6 for non-thesis or SSIE 599 for thesis</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>Graduate Year/Spring Semester</strong></td>
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<tr>
<td>Approved SSIE 600-level Graduate Elective 7</td>
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<td>Approved Graduate Elective 8 for non-thesis</td>
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<tr>
<td>SSIE 520. Modeling and Simulation</td>
<td>3</td>
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<tr>
<td>SSIE 598. MS ISE Project or SSIE 599 Thesis</td>
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<td><strong>TOTAL</strong></td>
<td><strong>12 - 15</strong></td>
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**Combined BS in ISE and MS in Systems Science (4 + 1 Program)**

The combined BS and MS degree program is available for students working toward their BS ISE who have a GPA of 3.5 after five semesters (i.e., at the end of the fall semester in their junior year) and a B+ or better in both ISE 261 and ISE 362. An application, which must be approved, is available from the Department. Students begin the combined program at the start of their senior year, and take three graduate courses that count both toward their senior technical elective requirements and toward their MS degree requirements. In the fifth (graduate) year, students in this program must register for 12 or more credits in each of the two semesters. This program typically allows the completion of the MS degree in one academic year beyond the BS degree. Students in the combined BS and MS program receive their BS degree after completing their undergraduate requirements. The MS degree is an excellent professional credential, which usually commands a substantially increased starting salary.
## Requirements for the Combined BS ISE and MS

### Systems Science Degrees

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Description</th>
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<tbody>
<tr>
<td><strong>Senior Year/Fall Semester</strong></td>
<td></td>
<td></td>
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<tr>
<td>ISE 492. Systems Design Project</td>
<td>4</td>
<td></td>
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<tr>
<td>SSIE 501. Introduction to Systems Science</td>
<td>3</td>
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<tr>
<td>ISE 420. Optimization and Operations Research II</td>
<td>4</td>
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<tr>
<td>SSIE 500. Computational Tools</td>
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<tr>
<td>Approved 500 level SSIE Course Elective 1</td>
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<td></td>
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<tr>
<td>Approved Graduate Elective 2</td>
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<tr>
<td>Approved Graduate Elective 4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Approved Graduate Elective 5 for non-thesis or SSIE 599 for thesis</td>
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<td></td>
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<tr>
<td><strong>TOTAL</strong></td>
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<th>Semester</th>
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<tbody>
<tr>
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<tr>
<td>Approved SSIE 600-level Graduate Elective 6</td>
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</tr>
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<td>Approved Graduate Elective 7 for non-thesis</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SSIE 520. Modeling and Simulation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SSIE 595. MS SS Project / SSIE 599 Thesis</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>12 - 15</strong></td>
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</tbody>
</table>
Watson Fast-Track MBA Combined Degree Program

Program Objective

Over the past several years, engineering industries have undergone considerable change. Economic and managerial issues that were previously addressed outside the engineer's domain have been integrated into the engineer's responsibilities. In recognition of the increasing need for the integration of technology and business administration, the Watson School and the School of Management have joined together to offer a program that combines an engineering undergraduate degree with a master's in business administration (MBA). This program provides a dynamic combination, allowing students the opportunity to explore immediate interests while building a solid, long-term career foundation.

A combined bachelor of science (BS) and master of business administration (MBA) degree program provides Watson undergraduate students with the opportunity to complete their BS degree and MBA degree within five years. In order to complete this program, students will be required to apply during their junior year and take four MBA courses during the senior year. Additional information can be found on the School of Management website. Advising for the MBA program and courses is provided by the School of Management.

Thomas J. Watson School of Engineering and Applied Science — Graduate Programs

Graduate Information

Submit inquiries to:

Coordinator of Graduate Programs
Thomas J. Watson School of Engineering and Applied Science
Binghamton University
PO Box 6000
Binghamton, New York 13902-6000
E-mail: wtsngrad@binghamton.edu

The Watson School offers the following Master of Science degrees:

- Master of Science (MS) - Biomedical Engineering
- Master of Science (MS) - Computer Science
- Master of Science (MS) - Electrical and Computer Engineering
- Master of Science (MS) - Industrial and Systems Engineering
- Master of Science (MS) - Mechanical Engineering
- Master of Science (MS) - Systems Science

The Department of Systems Science and Industrial Engineering also offers a 12-month Executive Master of Science (MS) degree in Health Systems. This program is designed to provide individuals with a bachelor's degree the opportunity to gain sufficient knowledge and skills for modeling, analyzing, and/or designing health care delivery systems and processes. Classes are held once a week (typically on Saturdays) at the SUNY Global Center in New York, NY. The Executive program leads to a Master of Science (MS) degree in Industrial Engineering - Health Systems or a Master of Science (MS) degree in Systems Science - Health Systems.
The Watson School offers a Master of Engineering (MEng) degree, with specializations in the following areas:

- Master of Engineering (MEng) - Industrial Engineering
- Master of Engineering (MEng) - Mechanical Engineering
- Master of Engineering (MEng) - Systems Engineering

In addition, the Watson School offers the following doctoral programs:

- PhD - Biomedical Engineering
- PhD - Computer Science
- PhD - Electrical and Computer Engineering
- PhD - Industrial and Systems Engineering
- PhD - Mechanical Engineering
- PhD - Systems Science (with optional specializations in biosystems, intelligent systems, and manufacturing systems)

Graduate degrees in Materials Science and Engineering are also available. Please see the Graduate School section of the University Bulletin or select 'Materials Science and Engineering' from the 'Graduate Programs by Department' pull-down menu.

In addition, the Watson School offers an advanced graduate certificate program in complex systems science and engineering, which is available for graduate students in any major.

Watson School graduate programs offer a wide array of academic and research opportunities. Specific program requirements and areas of program concentration are more fully described in subsequent sections of the University Bulletin, as well as on the departmental websites.

Current Watson School undergraduates may wish to consider one of the various accelerated (4+1) BS/MS programs offered by the Watson School. Those majoring in Biomedical Engineering, Electrical and Computer Engineering, Mechanical Engineering, or Industrial and Systems Engineering may apply to a concurrent bachelor's/master's degree program in their major during the second semester of the junior year. This is done in their department of major. Additionally, any Watson School junior may apply to the combined BS/MBA program with the School of Management. Both programs allow for completion of the master's degree in an additional year of study after graduation. Further information is available in the appropriate department listings.

**Admission to the Graduate Programs**

Prospective students should visit the Graduate School website (http://www.binghamton.edu/grad-school/) to review admission requirements, deadlines, and to apply online.

**Funding for Graduate Students**

The Watson School provides a variety of Fellowships and Teaching, Graduate, and Research Assistantships for outstanding applicants. These awards may include full tuition as well as a graduate stipend. Applicants will automatically be considered for these awards as part of the admission process. Assistantships are awarded on the basis of merit and required skills.

**Academic Policies and Procedures**

Watson School graduate students are expected to follow the academic policies and procedures set forth by the
Graduate School, as well as their academic department. For Graduate School academic policies and procedures, please refer to the Graduate School Manual (http://www.binghamton.edu/grad-school/manual/) or to the University Bulletin section titled, "Academic Policies and Procedures for Graduate Students." Graduate students must also be familiar with the policies and procedures established by their academic department.

Research

Research in the Watson School is cutting-edge and spans all academic departments. Areas of specialization are multidisciplinary and reflect the interests of Watson School faculty members. For more information regarding Watson School research areas, research labs, equipment, opportunities, faculty publications, and awards, please refer to the Watson School Research webpage (http://www.binghamton.edu/watson/research/), as well as the individual Watson School departmental webpages.

Biomedical Engineering — Graduate

The mission of the Biomedical Engineering (BME) Department is to advance human health and aid in the economic development of the region, state, and country by providing state-of-the-art, accessible, and affordable education and professional training in biomedical science and engineering. Our faculty is composed of exceptional professors and internationally renowned researchers that are accessible and supportive of students' learning needs. Specifically, the department strives to train the next generation of biomedical scientists and engineers, cultivate leaders, and foster entrepreneurship to advance human health in a new era of medicine through the integration of engineering principles, physical sciences, computer sciences, medical science, and biology toward an improved understanding of biophysical phenomena, healthcare systems, disease prevention, diagnostics, treatment, and data management. Recognizing that our students come to us from all over the world, faculty and staff are devoted to maintaining a diverse and culturally aware learning atmosphere.

We offer various financial assistance options to both master's and graduate students that include graduate fellowships, along with research and teaching assistantships. The BME Department offers two graduate degree options:

- Doctor of Philosophy (PhD)
- Master of Science (MS)

Biomedical Engineering

The goal of the BME graduate program is to prepare students for careers in industry, business, academia, or research lab environments by offering a flexible program of coursework and mentoring that enables students to engage in creative and independent research on a cutting-edge research topic. The program is designed to prepare students for leadership positions in biomedical research, education, and entrepreneurship and for success in a global environment.

Typically, a master's degree is completed in 1.5 to 2.5 years. Students complete the core curriculum and electives, and undertake thesis research or a termination project. Doctoral students additionally conduct in-depth research where they demonstrate a contribution to the advancement of knowledge in their field of study. The typical time to earn a doctoral degree is 3 to 5 years.

The program provides the student with access to considerable resources, including:

i. Laboratory facilities equipped with state-of-the-art equipment for 3D tissue and organ bioprinting, advanced biomanufacturing, stem cell and regenerative medicine, point-of-care testing and diagnosis, implantable biosensors, biomaterials, biomechanics, nanomedicine, nanobiotechnology, and organ-on-a-chip technology.

ii. Computing clusters for high-speed data analysis, modeling and simulation.
iii. The Small Scale Systems Integration and Packaging (S3IP) Center, which includes the Analytical and Diagnostics Laboratory for materials testing and micro- and nano-systems engineering.

iv. The Center of Biomanufacturing for Regenerative Medicine.

v. The Health Science Core Facilities.

Students enrolled in the program also have the opportunity to collaborate with clinicians practicing at nearby medical centers, such as UHS Wilson Medical Center, UHS Binghamton General Hospital, Upstate Medical Center, Bassett Healthcare Center, and Guthrie Health Center. Students may also have opportunities to work on industry-funded projects and gain valuable experience with industrial-academic collaborative research that could lead to internship and full-time positions.

Requirements for Admission

The BME program accepts students at both the BS and MS levels. The main criteria for admission includes an academic record of excellence, the appropriate knowledge base to permit enrollment in the core courses, and an interest in contributing to the field. All admitted students should complete the core coursework, although students entering the program with a master's degree may substitute equivalent courses if appropriately justified; permission will be granted by the Director of Graduate Studies on a case-by-case basis. Prospective graduate students should visit the Graduate School website to apply online.

The application package for graduate admission includes a resume, transcripts, test scores from the Graduate Record Examination (GRE), at least two letters of recommendation, and a one-page statement indicating why the applicant wishes to pursue a graduate degree in biomedical engineering at Binghamton University. International students should also provide proof of English proficiency (such as TOEFL, IELTS, or PTE Academic scores) and immigration and financial documentation. See the Graduate School website for more information about the additional requirements for international students.

Core Courses

The core courses are designed to provide graduate students with a common knowledge base. This includes principles of biomedical engineering, physiological and cellular systems, mathematical analysis, statistics, and experimental design.

BME 526. Bioimaging (3 credits)

BME 533. Human Physiology (3 credits)

BME 572. Experimental Design and Statistical Analysis (3 credits)

BME 590. Graduate Seminar (1 credit)

BME 690. Advanced Graduate Seminar & Writing in BME (2 credits)

A core course can be substituted by a BME elective if appropriately justified by the student’s academic background. Such requests will be evaluated by the student's guidance committee and the Director of Graduate Studies.

Research

In the BME graduate program, students often register for one or more credit hours of research each semester.

BME 599. Thesis Research
Elective Courses

Elective courses are aimed at preparing the students for careers in research, industry, or government, and at providing students with an introduction to the broader aspects of biomedical engineering. Students can take elective courses from either BME or other disciplines in engineering or science, if approved by the student's guidance committee and the Director of Graduate Studies. The BME Director of Graduate Studies generates a list of approved electives every semester and this list is voted on and approved by the BME faculty. Up to two of the electives, or 8 out of the 30 required credits, can be outside of engineering.

Evaluation

The program has been designed to be relatively flexible, allowing students to orient their research in an area of interest as they progress in their training. Students may select elective coursework from a wide variety of courses available in the BME or other graduate programs, and take these courses at the appropriate time. To provide such flexibility and at the same time ensure adequate monitoring of progress, students go through a sequence of evaluations. For the MS thesis students, this involves identification of a primary research advisor early in the program to help guide them up to and through the MS thesis defense. For the PhD students, this includes the identification of a primary research advisor and guidance committee, fulfillment of a learning contract, completion of a comprehensive exam, submission and defense of a dissertation proposal in an open colloquium and submission and oral defense of a dissertation. Timing and content of each of these evaluations are described in the departmental Graduate Program Handbook. The minimum requirements are summarized below.

Minimum Requirements for Graduation

A student must maintain at least a B average in all graduate coursework and, depending upon the degree sought, minimum requirements include coursework, fulfillment of a learning contract, demonstrating an ability to teach, passing a comprehensive examination, and preparing a master's thesis and/or a doctoral dissertation with oral defense.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Minimum Requirements</th>
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<tbody>
<tr>
<td>Master's degree</td>
<td>Complete 30 credits of graduate study, including 12 credits of core coursework, 12 or more credits of electives, and 6 or more thesis or project credits.</td>
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<tr>
<td></td>
<td>Submit a termination project or master's thesis with oral defense.</td>
</tr>
</tbody>
</table>
Doctoral degree

Complete 54 credits of graduate study, including 12 credits of core coursework with the remaining credits being distributed between electives and research. The PhD student's graduate committee approves the coursework plan as part of the learning contract.

- Fulfill a Learning Contract.
- Optionally submit a master's thesis, with oral defense.
- Pass a comprehensive examination.
- Demonstrate an ability to teach.
- Submit and defend a dissertation proposal.
- Submit and defend a dissertation.

Computer Science — Graduate

The Department of Computer Science offers two graduate degree options:

- Master of Science (MS)
- Doctor of Philosophy (PhD)

Master of Science (MS)

The Master of Science in computer science degree focuses on the design and application of computing systems, including the design of hardware and software components, hardware-software tradeoffs and the diverse applications of computing.

Requirements

Holders of a baccalaureate degree in computer science or a related field are invited to apply for admission to the MSCS program. Students whose undergraduate degrees are not in computer science may be required to complete some preparatory work in addition to fulfilling the requirements listed below.

1. Complete the following four core courses:
   - CS 520. Computer Architecture and Organization
   - CS 550. Operating Systems
   - CS 571. Programming Languages
   - CS 575. Design and Analysis of Computer Algorithms

2. Complete at least one of the following courses that involves the design and implementation of large programs:
   - CS 527. Mobile Computing and Networking
   - CS 528. Computer Networks and Data Communications
   - CS 529. High-Performance Computer Networks
   - CS 540. Advanced Topics in Object-Oriented Programming
   - CS 542. Design Patterns
   - CS 551. Systems Programming
Before each semester, a list of other courses (if any) meeting this requirement is published.

3. Complete one of the following options:

- five additional courses approved by the student’s faculty advisor (making a total of 10 courses) and a comprehensive examination covering the four core areas;
- four additional courses approved by the student’s faculty advisor (making a total of nine courses) and a project the student develops and presents;
- three additional courses approved by the student’s faculty advisor (making a total of eight courses) and a thesis the student writes and defends.

4. Maintain a B average in all graduate coursework.

With faculty advisor approval, at most two courses may be taken from other departments in the Watson School or from other schools within the University.

**Doctor of Philosophy (PhD)**

The doctoral program leads to a PhD degree in computer science. Students admitted into the program typically have a master’s degree in computer science or a closely related discipline. All PhD students take the four required courses in Algorithms, Computer Architecture, Operating Systems, and Programming Languages. For students with exceptional academic background and research experience, it is possible to pursue a direct-BS-to-PhD (without earning an MS along the way). In such cases, the PhD program requires a minimum of 6 credits beyond the 24-credit residence requirement, including two courses closely related to their research area in addition to the four required courses. All PhD students are required to have a minimum of 24 credit hours in residence.

Students in the PhD program must, at an early stage, identify a dissertation advisor from one of the full-time computer science faculty who shares their research interests. Students must pass qualifying examinations as determined by the student’s PhD guidance committee. In addition, the student’s guidance committee administers a research proficiency examination related to the topic of research.

PhD students are required to complete a teaching requirement. The PhD student is also required to present and defend a prospectus that describes the intended research topic. Finally, the PhD dissertation must be successfully defended.

A more detailed description of the requirements follows. Beyond these program specific requirements, the Academic Policies of the Graduate School Manual for doctoral degrees must be satisfied.

**Admission to the Program**
For admission to the doctoral program, current students in the computer science master’s program should arrange for the Director of Graduate Studies to receive recommendations from two Watson School faculty and a statement of the area of research in which they plan to do their dissertation. Students from other institutions should apply through the Graduate School application process. Because of the wide range of potential research topics and the limited enrollment in the PhD program, preliminary discussions with the applicant are expected before the student’s acceptance. Applicants must submit GRE scores. International students must also submit proof of English proficiency (such as TOEFL, IELTS or PTE Academic scores) and immigration and financial documentation. See the Graduate School website for more information about the additional requirements for international students.

In order to make decisions on student funding, application materials should be received before Feb. 28 for fall admission and before Nov. 15 for spring admission.

**Guidance Committee**

In the first semester of study in the PhD program, students must form an approved guidance committee. The guidance committee consists of at least three members from the Computer Science Department; however, students may propose members from other schools at Binghamton University, and with Graduate School approval, faculty from other universities or professionals from outside academia may also be included. The guidance committee advises the student and evaluates and certifies the student’s performance throughout the program of study and research.

**Learning Contract**

In consultation with the guidance committee, the student prepares a Learning Contract in which a program of study is specified, including the major area of research, additional course requirements, teaching requirement, evaluation procedures and the form of the comprehensive examination and research proficiency examination. Although the Learning Contract may be modified as the research interests of the student develop, to ensure competence and depth in the major area and breadth in relevant disciplines, each modification must be approved by the guidance committee and properly documented. A copy of the Learning Contract is placed on file with the Coordinator of Graduate Programs in the Watson School Dean’s Office.

**Comprehensive Qualifying Requirement**

On admission to a PhD program, the student must prepare to demonstrate mastery of fundamental skills to the guidance committee. All PhD students take the four required courses in Algorithms, Computer Architecture, Operating Systems, and Programming Languages. Students must pass qualifying examinations as determined by the student’s PhD committee. In addition, the student must pass the research proficiency examination (RPE) related to the topic of research administered by the student’s guidance committee.

**Candidacy**

When the comprehensive requirements are accepted by the guidance committee, the student is recommended for admission to candidacy. Within a year of the RPE and no later than 6 months before the expected graduation date, the student should give an open presentation of his/her prospectus.

**Colloquium and Prospectus**

The primary purpose of the prospectus is to assess the student's progress towards completing the PhD dissertation and specific plans for achieving the research objectives. Additionally, the PhD guidance committee will also assess the student’s familiarity with background (beyond that in the RPE exam) and the research competence of the student at PhD level.
The prospectus should describe the motivation and justification for the selected research topic, background material and current status of the intended research area with references, specific research objectives to be achieved for the completion of the dissertation, concrete plans toward completion, and evidence of progress toward the objectives. The prospectus must be written in the format of a conference or a journal paper and presented at an open colloquium to an audience that includes the guidance committee. A copy of the final prospectus needs to be submitted to the Director of Graduate Studies.

Proficiency in Teaching

In addition to the coursework and research, doctoral candidates must demonstrate proficiency in teaching. Doctoral students must meet a teaching requirement in one of the following ways:

- Teach a CS course at Binghamton University as an instructor on record or under the supervision of a faculty member.
- Make at least 6 public presentations with at least one of them being a colloquium in the Department of Computer Science colloquium series. The following presentations are other acceptable public presentations:
  - RPE presentation
  - Prospectus presentation
  - Dissertation defense presentation
  - Any public presentation that is announced at least one week in advance
  - Lecture (including guest lecture) given to students in a normal class
  - Paper presentation at a technical conference/symposium/workshop

Residence Requirement

All PhD students are required to have a minimum of 24 credit hours in residence.

Language Requirement

There is no formal language requirement, however, individual students may have a language requirement specified in the Learning Contract.

Dissertation

With the guidance of the dissertation advisor, the student completes research and preparation of the dissertation, an original written contribution demonstrating originality and competence in the chosen field of research. The guidance committee has direct charge of all matters pertaining to the dissertation, which must have the committee’s unanimous approval before arrangements are made for the final examination for the degree. The dissertation is to comply with the format and filing requirements set forth in the Graduate School Student Handbook.

In defense of the dissertation, the student is required to pass an oral examination, open to the University community. The evaluation of the student’s performance in this oral examination is made by an examination committee consisting of members of the student’s guidance committee, augmented by an outside examiner appointed by the vice provost and dean of the Graduate School. The decision to recommend the candidate for the doctoral degree is made by unanimous vote of the examining committee.

Electrical and Computer Engineering — Graduate
The Electrical and Computer Engineering Department offers two graduate degree options:

- Master of Science (MS)
- Doctor of Philosophy (PhD)

The **MS program** prepares students for development-oriented engineering careers and/or continuation onto doctoral studies by providing:

- Increased depth in an area of specialization
- Expanded breadth in supporting areas
- Focused study of recent advances in the area of specialization

The MS program provides a balance of advanced theory and practical engineering knowledge necessary to prepare its graduates for professional practice and/or for continuation into a PhD program. The program culminates with either a thesis or a project report through which students develop their ability to perform independent investigation of recent advances and present the results in a written document. The typical time for completion is 18–24 months of full-time study.

The **PhD program** is a research-focused program that prepares students for research and development careers in corporate, academic and research lab environments by providing:

- A flexible program of course work to support the research area
- Extensive independent research on a cutting-edge research topic

Detailed degree requirements for these programs are given below.

Full-time graduate students are encouraged to apply for part-time work as teaching assistants, research assistants or technical assistants to gain practical experience, as well as financial aid and tuition scholarship.

**Specialization Areas**

- Digital Signal Processing (DSP) and Communication: EECE 513, 520, 521, 522, 523, 527, 542, 545, 549, 621, 629, 642, or any 580 or 680 topics course that fit in this category
- Control Systems: EECE 503, 504, 509X, 510, 513, 515, 517, 518, 616, 619, or any 580 or 680 topics course that fit in this category
- Computer Architecture and Networks: EECE 552, 553, 560, 570, 573, 575, 657, or any 580 or 680 topics course that fit in this category
- Information Assurance: EECE 527, 560, 562, 566, 567, 568, or any 580 or 680 topics course that fit in this category
- Power and Energy: EECE 502, 503, 504, 508, 509X, 511X, 512X, 513, 516, or any 580 or 680 topics course that fit in this category
- VLSI: EECE 570, 573, 574, 575
- Physical Electronics and Electro-Optics: EECE 501, 504, 505, 508, 516, 530, 532, 549, 578X, or any 580 or 680 course that fit in this category

Note: In any given semester, special topics courses are offered that may be used toward your degree requirements. See the published schedule of courses on BU Brain.
Note: With approval of the ECE Director of Graduate Studies, it is possible to form an ad hoc focus area (e.g., power systems, solar cells, etc.). MS students wishing to form such an area should first consult with the professor who would oversee their thesis or project in the ad hoc area of interest and prepare a proposed ad hoc area; after that, approval from the ECE Director of Graduate Studies should be obtained.

Courses Cross-Listed with Undergraduate Courses

For graduate credit, students in these courses must complete an additional project. The following restrictions apply to cross-listed courses:

- They may not be counted if the student has taken a similar course as an undergraduate;
- They may not be counted after taking a course that has the cross-listed course as a prerequisite.

Admission Requirements

To be admitted, a student is required to have earned a Bachelor of Science degree in electrical engineering (EE), computer engineering (CoE), or a related field. All students are expected to have the equivalent of the courses listed in the following content areas: calculus through differential equations, computer programming, electrical circuits (EECE 260), electronics (EECE 315), digital logic design (EECE 251) and laboratory experience.

Qualified students with non-electrical and computer (ECE) backgrounds are admitted on a conditional basis until the undergraduate ECE course(s) needed to fulfill this requirement are taken.

Required courses for both EE and CoE:

- EECE 260. Electrical Circuits
- EECE 301. Signals and Systems

Students specializing in EE need:

Choose 2 out of the 6 listed below:

- EECE 212. Linear Algebra and Matlab
- EECE 315. Electronics
- EECE 332. Semiconductor Devices
- PHYS 331/332. Electromagnetic Theory I/II
- EECE 361. Control Systems
- EECE 377. Communication Systems

Students specializing in CoE need:

Choose 2 out of the 6 listed below (note: taking one of the programming courses, CS 211 or EECE 212, is highly recommended if the incoming student does not have any programming experience):

- CS 211. Programming for Engineers
- EECE 212. Linear Algebra and Matlab
- EECE 251. Digital Logic Design
- EECE 287. Computer Organization and Microprocessors
- EECE 351. Digital Systems
The GRE is required but applicants with strong credentials may petition the Director of Graduate Studies to be evaluated without supplying GRE scores. GRE Quantitative scores must be generally 155 or above. An applicant's transcript is also heavily weighted.

An acceptable TOEFL, IELTS, or PTE Academic score is required from international students unless the student meets the eligibility criteria for waiving TOEFL/IELTS/PTE Academic scores as established by the Graduate School. An internet-based TOEFL score of 80 or above is required for admission, while a score of 100 or above is preferred for students seeking teaching assistantships. Paper-based TOEFL minimum is 550. IELTS minimum score is 6.5 with no band below 5.0. PTE Academic minimum score is 53. International students must also submit immigration and financial documentation. See the Graduate School website for more information about the additional requirements for international students.

Master of Science in Electrical and Computer Engineering

Degree Requirements

The student must maintain at least a B average in all graduate coursework:

- Specialization Courses:
  - 3 courses in a single area of specialization (see list of areas above);
  - Only in very special circumstances can EECE 597. Independent Study be used.

- Breadth Courses:
  - 2 ECE Courses in two areas other than specialization;

- Math Methods Course:
  - EECE 506. Mathematical Methods in Electrical Engineering; or
  - EECE 507. Mathematical Methods in Computer Engineering; or
  - Another approved relevant mathematical methods course.

- Electives:
  - Thesis option, 2 courses
  - Project option, 3 courses
  - May be either ECE courses or from other departments, including:
    - Any regular ECE Graduate Course not used above;
    - EECE 597. Independent Study (can be used for both electives);
    - Certain Graduate Courses (see the ECE Graduate Handbook):
      - Other Engineering, Math and Science Departments;
The School of Management Courses

Thesis Option or Project Option:

- EECE 599 (6 credits), or EECE 599 (3 credits) and EECE 598 (3 credits); and successful defense of MS Thesis, or
- EECE 598 (3 credits), or EECE 599 (3 credits); and acceptance of MS Project Report.

PhD in Electrical and Computer Engineering

General Academic Program Requirements

The PhD program meets the need of each student through an individualized learning program. The program is structured within general guidelines set by the department that establish the scope of the educational experience to be achieved by each student. For students who already hold an MS degree in an appropriate field, the PhD program requires a minimum of eight courses beyond the MS degree, with limitations on the number and kind of independent study course permitted spelled out in the ECE Graduate Handbook. For students who wish to pursue a direct-BS-to-PhD (without earning an MS along the way), the PhD program requires a minimum of 14 graduate courses, including no more than four independent study courses. To meet the residency requirement, students must complete a minimum of 24 credits at Binghamton University. At most, 12 credits of independent study with any one faculty member can be counted towards the residency requirement.

Admission

Applications received for the PhD program are administratively divided into three categories. The categories are:

1) students who are about to complete an MS degree in the department;
2) students who have completed or are about to complete an MS degree elsewhere; and
3) exceptional students completing their BSEE degree with a cumulative GPA above 3.7.

Students in the first category — i.e., in their last semester of the MSECE program — may apply for the PhD program by indicating their intent to continue for the PhD on the Recommendation for Award of Master’s Degree Form that is submitted at the completion of the MS degree.

Students who have completed an appropriate master’s degree elsewhere can apply for the PhD program.

Exceptional baccalaureate students with a GPA above 3.7 are eligible for direct admission to the PhD program.

Students apply to the PhD program by submitting a completed application and application fee to the Graduate School. Application forms are available at [http://www.binghamton.edu/grad-school/admissions/apply/index.html](http://www.binghamton.edu/grad-school/admissions/apply/index.html). The application must include all transcripts, GRE scores, two letters of recommendation, a statement of research interests, and a current résumé. International students must also submit proof of English proficiency and immigration and financial documentation. See the Graduate School website for more information about the additional requirements for international students.

PhD Advisor and Guidance Committee

The PhD student’s research advisor is central in directing the student’s development. Upon admission to the doctoral program, new students have as their advisor the ECE Director of Graduate Studies until an advisor is

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identified on the PhD Principal Advisor/Guidance Committee Form. A Guidance Committee Form should be completed during the first semester in residence.

The guidance committee must have a minimum of three members, two of whom must be from the ECE department (including the principal advisor). Each of these members is expected to take an active role in supervising the student’s development. Members, in addition to those mentioned above, may be added to enhance the committee. An outside examiner will be appointed by the vice provost and dean of the Graduate School.

When a proposed committee has been identified, the names and signatures are submitted on a Principal Advisor/Guidance Committee Form to the ECE Director of Graduate Studies. Once approved by the ECE Director of Graduate Studies, the form is forwarded to the Watson School Graduate Coordinator’s office. When the guidance committee is approved, the form is placed on file in the Graduate Coordinator’s office. Any subsequent changes made to the membership of this committee must be documented in a new copy of the Principal Advisor/Guidance Committee Form.

Learning Contract

The new doctoral student should start to work immediately with his or her advisor to develop a Learning Contract. The purpose of the Learning Contract is to define the knowledge and skills required in order to pass the comprehensive examination. The Learning Contract should identify core courses and concepts that must be mastered in order to provide breadth of background, as well as specialized courses and concepts germane to the proposed area of research. The Learning Contract may be modified later if additional knowledge is required or if the field of research is changed. A model for the Learning Contract is available from the Graduate Coordinator.

A copy of the Learning Contract, with signatures indicating approval of the guidance committee, is placed in the student's file in the Graduate Coordinator’s office.

Qualifying Examination

After the completion of one semester or nine credits, the student is required to take a department-wide qualifying written examination. Only the student’s principal advisor may give an extension to this date. Students are encouraged to attempt this examination as early in their program as possible. On the qualifying examination, students must demonstrate quantitative skills and subject knowledge in two core areas within ECE. A description of the qualifying examination is given in the Graduate Handbook on the ECE graduate webpage.

Comprehensive Examination and Admission to Candidacy

After completion of the required courses, and before completion of a significant portion of the dissertation research, the student must complete the comprehensive examination. This is an individual examination, with responsibility for the content given to the student’s guidance committee. The ECE Director of Graduate Studies is an ex officio member of the comprehensive examination committee to ensure uniformity in the level of examinations within the department. Once the guidance committee and Director of Graduate Studies have agreed on the examination content and format, it is clearly explained to the student and the examination date set. After successfully completing the comprehensive examination and any additional requirements such as the development of communication skills, the student is admitted to candidacy for the doctorate. The Graduate School is notified of the satisfactory completion of the comprehensive examination and the student’s admission to candidacy on the Recommendation for Admission to Candidacy for Doctoral Degree Form. Note that the candidate is required to defend the dissertation within five years of admission to candidacy.

Dissertation Prospectus

Upon completion of the comprehensive examination, the candidate prepares a prospectus, describing the proposed research. This prospectus is presented and defended in an open colloquium. Upon acceptance of the prospectus by
Evidence of Proficiency in Teaching

The candidate is required to meet the teaching proficiency requirement in one of the following ways:

1. be an instructor of record in an undergraduate course;
2. complete practicum in teaching course and teach one or more seminars or a portion of a course; or
3. show evidence of past teaching experience comparable to the first and second choices above, which must be verified and approved by the guidance committee.

Dissertation Defense

If an external examiner was not chosen at the time the Recommendation for Admission to Candidacy for Doctoral Degree Form was submitted to the Graduate School, then the chair of the guidance committee makes a recommendation to the ECE Director of Graduate Studies, who upon approval of the recommendation forwards it to the vice provost and dean of the Graduate School. The vice provost and dean makes a formal appointment of the external examiner. The external examiner reviews and participates in the dissertation defense with the guidance committee. After distribution of the dissertation for review, an oral defense of the PhD dissertation is scheduled. The PhD candidate is required to present an oral defense of his or her dissertation in an open colloquium. Upon the candidate’s satisfactory defense of the dissertation, the ECE Director of Graduate Studies submits a signed copy of the Recommendation for Award of Doctoral Degree form to the Graduate Coordinator’s office. After verification of completion of the program of study, the Graduate Coordinator forwards the recommendation form to the Graduate School.

All forms are available in the Watson School Graduate Coordinator’s office. All forms must be signed by the ECE Director of Graduate Studies and submitted to the Watson School Graduate Coordinator’s office.

Mechanical Engineering — Graduate

The Mechanical Engineering Department offers graduate programs in the broad fields of mechanical engineering and materials science and engineering. The program leading to the Master of Science degree provides a balance of advanced theory and practical knowledge necessary for either practice within the profession or for advancement to a doctoral program. Within the broad field of mechanical engineering, students may specialize in one of the following five departmental areas of concentration (AOCs): 1) Applied Mechanics and Design — mechanics and design with emphasis on solid mechanics/stress analysis, biomechanics, vibrations, additive manufacturing; 2) Transport Phenomena — heat and mass transfer in biological/environmental/industrial applications, microfluidics/nanofluidics, complex fluids, interfacial phenomena/wetting, additive manufacturing; 3) Materials Science and Engineering — materials characterization, microstructure/property relationships, thin films, computational materials, interfacial phenomena, functional materials, materials processing; (4) Dynamic Systems and Acoustics — multiphysics phenomena, microstructural vibrations, MEMS/NEMS, novel acoustic measurement techniques, noise control, microscale vibrations and acoustics; (5) Energy — storage, small-scale harvesting, flexible devices. Specialization is achieved by selecting a set of courses from one of the areas of concentration. Electronics packaging is an informal area of research concentration in the department.

Master of Science in Mechanical Engineering

Protocol

Each student in the MS program must select and obtain the consent of a full-time ME faculty member to serve as his or her advisor. Students pursuing the MS Non-Thesis Option should decide their AOC and vet their course selection
periodically with the Director of Graduate Studies who serves as their de facto advisor. Students pursuing the MS Thesis Option should work with their advisor to form a research committee to supervise their work. The research committee is composed of the advisor as chair and two other appropriate members, at least one of whom must be a full-time ME faculty member. An up-to-date biographical sketch must be provided to the Director of Graduate Studies for any proposed committee member who is not a full-time ME faculty member. The process of advisor selection, study plan creation and research committee formation should be completed by the end of the student's first semester of full-time study. Part-time students should complete the process of advisor selection, study plan creation and research committee formation before the student has completed three graduate courses.

All MS students should prepare an MS Proposed Course of Study Form in conjunction with their advisor.

A copy of the MS Proposed Course of Study form must be filed with the Director of Graduate Studies (for department files) and the Watson School graduate coordinator (for Watson School files).

**Degree Requirements — Non-Thesis Option**

The student must complete a minimum of 10 advisor-approved graduate courses. Seven of the 10 courses must be ME courses, as follows:

1. Student selects from ME offerings to satisfy a three-course core curriculum consisting of:
   i. an advanced mathematics course (ME 535);
   ii. a numerical analysis, computational mechanics or computational materials science course (e.g., ME 517, ME 541, ME 618, ME 641);
   iii. a continuum mechanics course (e.g., ME 511, ME 514, ME 520, ME 550).

2. Four of the remaining seven required courses must be ME courses, selected from one of the areas of concentration (AOC).

3. Student completes three advisor-approved technical electives (these courses may be taken outside the Department of Mechanical Engineering).

A maximum of two independent study courses may be applied to the degree requirements. The student must have advisor approval of each element in his or her course of study. The student must maintain at least an overall B average (GPA 3.0/4.0) for his or her graduate coursework to be eligible for the MS degree.

**Degree Requirements — Thesis Option**

The student must complete a minimum of eight advisor-approved graduate courses and 6 credits of thesis (ME 599). Six of the eight courses must be mechanical engineering courses, as follows:

1. Student selects from the mechanical engineering (ME) offerings to satisfy a three-course core curriculum of:
   i. an advanced mathematics course (ME 535);
   ii. a numerical analysis, computational mathematics or computational materials science course (e.g., ME 517, ME 541, ME 618, ME 641);
   iii. a continuum mechanics course (e.g., ME 511, ME 514, ME 520, ME 550).

2. Three of the remaining five required courses must be ME courses, selected from one of the areas of concentration (AOC).
3. Student completes two advisor-approved technical electives (these courses may be taken outside the Department of Mechanical Engineering).

A maximum of two independent study courses may be used for either the AOC or technical elective requirements. The student must have advisor approval of each element in his or her course of study. The student must maintain at least an overall B average (GPA 3.0/4.0) for his or her graduate coursework to be eligible for the MS degree.

**Master of Engineering with Specialization in Mechanical Engineering**

**Protocol**

All MEng students must complete the Master of Engineering Proposed Course of Study Form and obtain the approval of the Director of Graduate Studies. This should be completed when the student registers for his or her first semester of full-time study (part-time MEng students should complete this form before completing their first graduate course).

**Degree Requirements**

The requirements for the degree include the completion of ten graduate courses as follows:

- Five graduate mechanical engineering courses in any of the department's areas of concentration (AOC);
- Five approved elective graduate courses. These courses must be approved by the Director of Graduate Studies.

A maximum of two independent study courses may be applied to the degree requirements. The student must maintain at least an overall B average (GPA 3.0/4.0) for his or her graduate coursework to be eligible for the MEng degree.

**Doctoral Programs in Mechanical Engineering**

*The PhD program in materials science and engineering is described under Materials Science and Engineering in the Graduate School section of the Bulletin or under Materials Science and Engineering in the Graduate Programs by Department pull-down menu.

**Obtaining an Advisor**

Upon admission to the doctoral program, new students will be advised by the Director of Graduate Studies, who is responsible for:

1. Explaining the department requirements for the PhD degree;
2. Assisting the student in establishing a preliminary course of study;
3. Informing the student of selecting an advisor.

The above actions should be completed during the first semester in residence.

It is the responsibility of the student to select an advisor, select a guidance committee (in consultation with his or her advisor), and prepare a Learning Contract by the end of the Fall semester (Year II).

**Guidance Committee**

The student, upon selecting an advisor, should identify faculty to serve on the guidance committee. The committee must have a minimum of four members (including the student’s advisor), three from the ME department and one
from outside the department;

The student should submit the first page of the Learning Contract listing the names of the proposed committee members to the ME Graduate Studies Committee (GSC) for approval. Review of the proposed guidance committee is very thorough, because the guidance committee acts on behalf of the department in monitoring the student’s academic progress. When the guidance committee is accepted by the ME GSC, the signed Learning Contract will be placed in the student’s file in the department office as an active document. Any subsequent proposed changes made to the approved guidance committee must be made in writing to the Director of Graduate Studies for approval. The student, upon approval, must submit an amended Learning Contract to the Director of Graduate Studies.

**Learning Contract**

i. Preparation — Every new PhD student should work immediately with his/her advisor to develop a Learning Contract. The purpose of the Learning Contract is to define the knowledge and skills appropriate for the student’s intended area of research; this document will guide the student’s preparation for the comprehensive examination. The Learning Contract should identify courses and concepts that must be mastered in order to provide breadth of background, as well as specialized courses and concepts which are germane to the proposed area of research. The Learning Contract will remain an active document in the student’s file that charts his/her progress through the various milestones of the PhD process. It is the responsibility of the student to update the Learning Contract and obtain the appropriate signatures confirming the successful completion of each PhD milestone.

ii. Registering the Learning Contract — A copy of the Learning Contract will be placed in the student’s file and maintained by the Secretary to the Director of Graduate Studies.

**Course Requirements**

Students must complete ME 635 and courses listed in their Learning Contracts in order to fulfill their degree requirements.

**PhD Qualifying Examination**

Every PhD student shall take the qualifying exam at the end of the Spring Semester (Year I). The student must pass all three areas of this exam (basic courses from ME undergraduate curriculum; graduate-level math; and student’s chosen area of concentration). Failure to pass in all three areas is considered sufficient reason for dismissal from the PhD program.

**PhD Comprehensive Examination**

The comprehensive examination is structured by the guidance committee to cover topics described in the Learning Contract. Before taking the comprehensive examination, the student must complete a minimum of 24 credit hours in residence on the Binghamton campus. The comprehensive exam must be taken by the end of Summer (Year II).

**Preparation and Approval of Prospectus**

Upon completion of the comprehensive examination, the candidate must write a prospectus, describing the proposed dissertation research in detail. This prospectus is presented and defended in an open colloquium. After successfully defending the prospectus, the final revised prospectus will be placed in the student’s file. The prospectus must be completed by the end of the Fall semester (Year III).

**Admission to Candidacy**

Upon passing the comprehensive examination, the student is admitted to candidacy for the PhD degree.
Evidence of Proficiency in Teaching

PhD students must meet the teaching proficiency requirement in one of the following ways:

i. (Preferred) Being the instructor of record in an undergraduate course;

ii. Teaching one or more lectures of a course.

Oral Defense of PhD Dissertation

The PhD candidate will be required to orally present his/her dissertation research in an open colloquium. The Guidance Committee, as well as an outside examiner appointed by the Graduate School, will be present at this colloquium and will also conduct the defense of the dissertation immediately following the oral presentation.

Summary of Minimum Requirements

1. Submission of Learning Contract;

2. Satisfaction of qualifying exam requirement;

3. Satisfaction of comprehensive exam requirement;

4. Submission of prospectus and presentation of proposed research in an open colloquium;

5. Acceptance of prospectus by the guidance committee;


PhD Timeline

<table>
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<tr>
<th>Milestone</th>
<th>Deadline</th>
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<tr>
<td>Admission</td>
<td>Fall (Spring admissions revert to the previous Fall time</td>
</tr>
<tr>
<td>Qualifying Exam</td>
<td>End of Spring Semester (Year I)</td>
</tr>
<tr>
<td>Learning Contract Distributed to Dissertation Committee</td>
<td>End of Fall Semester (Year II)</td>
</tr>
<tr>
<td>Comprehensive Exam *</td>
<td>End of Summer (Year II)</td>
</tr>
<tr>
<td>Prospectus</td>
<td>End of Fall Semester (Year III)</td>
</tr>
<tr>
<td>Dissertation</td>
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* Upon successfully completing the comprehensive exam, student will be assigned ABD (All But Dissertation) status

Satisfactory Academic Progress

All rules of the Graduate School apply regarding probation and academic jeopardy, except probation may not last more than two semesters. You can also find general information on MS degrees listed under "Graduate Information" at the beginning of the Watson School section of this publication.
Research

Students pursuing the MS Thesis Option or PhD in mechanical engineering must complete a research thesis. The written thesis and an oral presentation defending the thesis must be approved by the student's research committee before he or she is eligible for the degree. Publication of the student's research in an archival journal is expected.

Financial Support

MS or PhD students receiving financial support in the form of a teaching assistantship or a research assistantship are normally eligible to apply for a tuition scholarship. This is arranged by the student's advisor and the Watson School Dean's Office. All those receiving financial support must be registered as full-time students, and must complete and defend their MS thesis or PhD dissertation to receive their degree.

Systems Science and Industrial Engineering — Graduate

Students can choose from multiple graduate-level degrees and certificates. The flexibility offered by the variety of programs helps students follow their individual career paths. The programs are as follows:

1. Two Master of Science (MS) Programs:
   - MS in Systems Science (MS SS)
   - MS in Industrial and Systems Engineering (MS ISE)

A Health Systems Concentration in either Master's Program is also available.

2. Two Master of Engineering (MEng) Programs:
   - MEng in Industrial Engineering
   - MEng in Systems Engineering

3. Two PhD Programs:
   - PhD in Systems Science
   - PhD in Industrial and Systems Engineering

4. Two Executive Master of Science (MS) Programs in Health Systems — Manhattan:
   - MS in Systems Science (MS SS) — Health Systems Concentration
   - MS in Industrial and Systems Engineering (MS ISE) — Health Systems Concentration

5. One Certificate Program
   - Advanced Graduate Certificate in Complex Systems Science and Engineering

Requirements for admission are different for each degree/certificate program, as each serves students with different backgrounds.

IMPORTANT INFORMATION:
1. Graduate courses are also offered through EngiNet (Watson School Distance Learning Program).

2. Any graduate student who may have taken an undergraduate course that is cross-listed with a graduate course will already have earned the credit for the undergraduate course. Please note that the student will not be eligible to earn graduate-level credit for the cross-listed graduate course at a later date and will not be eligible to take the course again at the graduate level.

Applicants

Applications are considered for both spring and fall semesters and are reviewed on a rolling basis. Recommended submission dates for fall semester admission: Apply before February 1 for funding consideration or April 1 for regular admission. Recommended submission dates for spring semester admission: Apply before October 15 for funding consideration or November 15 for regular admission.

Graduate students who are well qualified may receive assistantships, such as Teaching Assistantships (TA), Research Project Assistantships (RPA) or Graduate Assistantships (GA). Funding decisions are decided among the admitted pool of applicants sometime during the spring semester for fall admissions, and as needed for spring admissions.

Applications to degree programs should include:

- Official transcript(s), although unofficial transcripts are acceptable for initial application
- Two letters of recommendation
- A personal statement including mention of interests
- Official Graduate Record Examination (GRE) scores
- International applicants should also include:
  - Proof of English proficiency (such as Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or PTE Academic scores)
  - Immigration and financial documentation (e.g., the International Student Financial Statement and statement of financial support/bank statement)

The application procedure of the certificate program can be found at [http://binghamton.edu/cx/apply.html](http://binghamton.edu/cx/apply.html).

For more information and to apply, visit the Prospective Students section of the Graduate School admissions website.

Master of Science in Systems Science (MS SS)

The Master of Science in Systems Science provides the student with concepts, principles and methods for understanding, modeling, analyzing, optimizing and improving various forms of complex systems. Such systems thinking and problem solving skills will be an invaluable asset when the student blazes a new trail in any scientific, engineering, business, or management profession, with today’s increasingly complex world.

MS SS Requirements

Students with a baccalaureate degree in any field may apply for admission to this program. The Graduate Record Examination (GRE) is required. The student must maintain at least a B average in all graduate coursework. Plan of study:

- SSIE 500. Computational Tools
- SSIE 501. Introduction to Systems Science
- SSIE 505. Applied Probability and Statistics *
- SSIE 520. Modeling and Simulation or SSIE 523. Collective Dynamics of Complex Systems
- Four additional graduate-level approved electives, at least one of which must be at the 600-level

*or similar course approved by the Director of Graduate Studies

Either of the following termination requirements:

- Thesis: Oral presentation and defense of the thesis are required (at least 6 credits — SSIE 599)
- Non-Thesis: With department approval, the thesis requirement may be replaced by 1 approved elective course and a Termination Project of at least 3 credits (SSIE 595).

Note: In special cases, a student may request an individualized program. If the individualized program deviates from the above requirements, it must be approved by the student's advisor and the Director of Graduate Studies.

Students needing preparatory work may be advised to take appropriate undergraduate courses that do not count towards the graduate degree.

Health Systems Concentration

*Health Systems Concentration:* This option is aimed to prepare students for professional or leadership roles in healthcare, including hospital operations management, health systems engineering, health information technology, and consulting.

In addition to the required courses of all students in the MS SS program,

- The student must take an additional required "core" course, i.e., SSIE 537. Industrial and Systems Engineering in Health Care (Note: This reduces the number of electives by one course),
- The thesis or project must be healthcare-related, chosen in consultation with the advisor, and
- The student must take at least one of the approved healthcare-related courses (see below) in consultation with either the advisor or the Director of Graduate Studies.

  - SSIE 530. Healthcare Policy Analysis
  - SSIE 534. Fundamentals of Health Systems
  - SSIE 538. Healthcare Finance & Accounting
  - SSIE 539. Human Factors Engineering in Healthcare
  - SSIE 637. Advanced Topics in Health Systems
  - NURS 532. Nursing and Community Healthcare Systems
  - NURS 540. Essentials of Bio-Statistics and Epidemiology
  - NURS 615. Information Systems and Technology in Health Care
  - NURS 633. Advanced Health Systems and Public Policy

Doctoral Program in Systems Science

The doctoral program in Systems Science offers a unique, internationally recognized, highly transdisciplinary learning and research experience. Doctoral students can work on a wide variety of research topics, such as:
mathematical modeling of systems, computer simulation, agent-based modeling, system dynamics, intelligent control and optimization, soft computing, machine learning, statistical modeling, data analytics, decision making and management, nonlinear dynamics, information theory, game theory, complex networks, computational social science, health systems, sustainability and other transdisciplinary research.

Minimum Requirements

- Satisfaction of a Learning Contract (described below), including proficiency in teaching and residency requirements (i.e., coursework).
- Satisfaction of comprehensive qualifying requirement.
- Presentation of colloquium on proposed research.
- Acceptance of prospectus outlining dissertation research.
- Submission of dissertation.

Guidance Committee

Upon acceptance into a program, students must form an approved guidance committee. The guidance committee consists of three to five members, normally full-time Watson School faculty; however, students may propose members from other schools at Binghamton University, faculty from other universities or professionals from outside academia. The guidance committee must be approved by the Graduate School. The guidance committee advises the student and evaluates and certifies the student’s performance throughout the program of study and research.

Learning Contract

In consultation with the guidance committee, the student prepares a Learning Contract in which a program of study is specified, including the major area of research, additional course requirements (3-5 courses of which should be at the 600-level), teaching requirement, evaluation procedures and the form of the comprehensive examination. Although the Learning Contract may be modified as the research interests of the student develop, to ensure competence and depth in the major area and breadth in relevant disciplines, each modification must be approved by the guidance committee and properly documented. A copy of the Learning Contract is placed on file within the department.

Additional information concerning doctoral students can be found on the websites of the Graduate School and the Thomas J. Watson School of Engineering and Applied Science.

Master of Science in Industrial and Systems Engineering (MS ISE)

The Master of Science in Industrial and Systems Engineering provides a balance of theory and practical knowledge for the practice of the profession or for advancement to a doctoral program. In recognition of the high concentration of industry in the Binghamton area, this program has been structured to serve both full- and part-time graduate students. Taking advantage of this industrial resource allows the program to develop a realistic approach to integrating both engineering and non-engineering systems, such as those found in manufacturing, healthcare, supply chain management, and transportation, using a wide variety of industrial and systems engineering tools, such as modeling and simulation, statistical process control, data science, reliability modeling, scheduling, human factors, and optimization, among others.

The academic environment of the department may be enriched by the appointment of adjunct faculty members employed in local industry. Under appropriate circumstances, thesis and/or project activity may be carried out in
industrial laboratories.

**MS ISE Requirements**

Applicants that have already earned a BS degree in engineering or a related field are invited to apply for admission to this program. The Graduate Record Examination (GRE) is required. In addition to the requirements listed below, a student whose undergraduate degree is not in engineering may be required to complete some preparatory study, to be defined by the graduate director based on the candidate's background. The preparatory study does not count toward the graduate degree. The student must maintain at least a B average in all graduate coursework. Plan of study:

- Four required courses:
  - SSIE 505. Applied Probability and Statistics
  - SSIE 510. Enterprise Systems Engineering
  - SSIE 520. Modeling and Simulation
  - SSIE 553. Operations Research or SSIE 561. Quality Assurance for Engineers

- Four additional graduate-level courses from the department, at least one of which must be at the 600 level. Subject to the Director of Graduate Studies approval, the student may elect to substitute up to two graduate-level courses from a non-SSIE department, including those graduate-level courses the candidate may wish to transfer, pending approval, from another institution.

- Either of the following termination requirements:
  - Thesis: Oral presentation and defense of the thesis are required (at least 6 credits — SSIE 599).
  - Non-Thesis: With departmental approval, the thesis requirement may be replaced by one approved elective course and a termination project of at least 3 credits — (SSIE 599).

For students with adequate backgrounds, electives may be substituted for these courses with consent from the advisor and the Director of Graduate Studies.

**Health Systems Concentration**

*Health Systems Concentration:* It is geared to prepare professional or leadership roles in the healthcare areas including hospital operations management, health systems engineering, health information technology and consulting.

In addition to the required courses of all students in the MS ISE program,

- The student must take an additional required "core" course, i.e., SSIE 537 — Industrial and Systems Engineering in Health Care (Note: This reduces the number of electives by one course),
- The thesis or project must be healthcare-related, chosen in consultation with the advisor, and
- The student must take at least one of the approved healthcare-related courses (see below) in consultation with either the advisor or the Director of Graduate Studies.

- SSIE 530. Healthcare Policy Analysis
SSIE 534. Fundamentals of Health Systems
SSIE 538. Healthcare Finance & Accounting
SSIE 539. Human Factors Engineering in Healthcare
SSIE 637. Advanced Topics in Health Systems
NURS 532. Nursing and Community Healthcare Systems
NURS 540. Essentials of Bio-Statistics and Epidemiology
NURS 615. Information Systems and Technology in Health Care
NURS 633. Advanced Health Systems and Public Policy

Doctoral Program in Industrial and Systems Engineering

The Doctoral Program in Industrial and Systems Engineering offers a wide variety of research topics such as: optimization, human factors/ergonomics, supply chain management, healthcare systems, enterprise systems, intelligent systems, electronics manufacturing processes, particularly in the areas of printed circuit-board production and automated assembly.

Minimum Requirements

- Satisfaction of a Learning Contract (described below), including proficiency in teaching and residency requirements (i.e., coursework)
- Satisfaction of comprehensive qualifying requirement
- Presentation of colloquium on proposed research
- Acceptance of prospectus outlining dissertation research
- Submission of dissertation
- Defense of dissertation at oral examination

Guidance Committee

Upon acceptance into a program, students must form an approved guidance committee. The guidance committee consists of three to five members, normally full-time Watson School faculty; however, students may propose members from other schools at Binghamton University, faculty from other universities or professionals from outside academia. The guidance committee must be approved by the Graduate School. The guidance committee advises the student and evaluates and certifies the student's performance throughout the program of study and research.

Learning Contract

In consultation with the guidance committee, the student prepares a Learning Contract in which a program of study is specified, including the major area of research, additional course requirements (3-5 courses of which should be at the 600-level), teaching requirement, evaluation procedures and the form of the comprehensive examination. Although the Learning Contract may be modified as the research interests of the student develop, to ensure competence and depth in the major area and breadth in relevant disciplines, each modification must be approved by the guidance committee and properly documented. A copy of the Learning Contract is placed on file within the department.

Additional information concerning doctoral students can be found on the websites of the Graduate School and Thomas J. Watson School of Engineering and Applied Science.
Master of Engineering in Industrial Engineering

The Master of Engineering in Industrial Engineering (MEngIE) equips graduates with the skills needed to be effective in industry and provides a balance of theory and practical knowledge for the practice of the profession. Taking advantage of the industrial resources in the Binghamton area allows the program to develop a realistic approach to integrating both engineering and non-engineering systems, such as those found in manufacturing, healthcare, and transportation, using a wide variety of industrial and systems engineering tools, such as modeling and simulation, statistical process control, scheduling, human factors, and supply chain management, among others. The MEngIE degree is a practice-oriented degree that culminates in a sequence of two courses that focus on engineering projects.

MEngIE Requirements

Applicants that have already earned a BS in any engineering or a related field are invited to apply for admission to this program. The Graduate Record Examination (GRE) is required. In addition to the requirements listed below, a student whose undergraduate degree is not in engineering may be required to complete some preparatory study, to be defined by the graduate director as based on candidate's background. The preparatory study does not count toward the graduate degree. The student must maintain at least a B average in all graduate coursework. Plan of study:

• Four required courses:
  o SSIE 505. Applied Probability and Statistics
  o SSIE 510. Enterprise Systems Engineering
  o SSIE 520. Modeling and Simulation
  o SSIE 553. Operations Research or SSIE 561. Quality Assurance for Engineers
• Six additional graduate-level courses from the department. Subject to the Director of Graduate Studies approval, the student may elect to substitute up to two graduate-level courses from a non-SSIE department.
• Master’s project — at least 3 credits (SSIE 598).

For students with adequate backgrounds, electives may be substituted for these courses with consent from the advisor and the Director of Graduate Studies.

Master of Engineering in Systems Engineering

The Master of Engineering in Systems Engineering (MEngSE) is intended for individuals who are working full-time and attending graduate school part-time. Systems Engineering is an interdisciplinary approach and means to enable the realization of successful systems. This degree equips graduates with the skills needed to be effective in industry and provides a balance of theory and practical knowledge for the practice of the profession. Taking advantage of the industrial resources in the Binghamton area allows the program to develop a realistic approach to integrating both engineering and non-engineering systems, such as those found in manufacturing, healthcare, and transportation, among others, using a wide variety of industrial and systems engineering tools, such as modeling and simulation, statistical process control, scheduling, human factors, and supply chain management, and others. The MEngSE degree is a practice-oriented degree that culminates in a sequence of two courses that focus on engineering projects.

MEngSE Requirements
Applicants that have already earned a BS in any engineering or a related field are invited to apply for admission to this program. The Graduate Record Examination (GRE) is required. In addition to the requirements listed below, a student whose undergraduate degree is not in engineering may be required to complete some preparatory study, to be defined by the Director of Graduate Studies as based on candidate’s background. The preparatory study does not count toward the graduate degree. The student must maintain at least a B average in all graduate coursework. Plan of study:

• Four required courses:
  o SSIE 500. Computational Tools
  o SSIE 501. Introduction to Systems Science
  o SSIE 505. Applied Probability and Statistics
  o SSIE 520. Modeling and Simulation or SSIE 523. Collective Dynamics of Complex Systems

• Six additional graduate-level courses — three department elective courses and three technical elective courses. One of the aforementioned electives must be a 3-credit practicum or internship in concert with the employer and overseen by the Director of Graduate Studies. In addition, a project with a faculty member for 3 credits is required. The 3-credit practicum and the 3-credit project sum to 6 credits of course application to practice.

• Master’s project — at least 3 credits (SSIE 598).

For students with adequate backgrounds, electives may be substituted for these courses with consent from the advisor and the Director of Graduate Studies.

Executive Master of Science in Health Systems (EMS-HS) — Manhattan

This twelve (12) month program is designed to provide working professionals who already have a bachelor’s degree an opportunity to gain sufficient knowledge and skills for modeling, analyzing and/or designing healthcare delivery systems and processes. The Industrial and Systems Engineering and Systems Science disciplines play a significant role in improving the efficiency and effectiveness of healthcare systems. Over the years, they have helped healthcare facilities improve total quality management, scheduling and sequencing in outpatient clinics, and operational control, such as medical records and patient turnaround time in emergency rooms to name a few. With the ultimate goal being continuous process improvement, the research methodology looks at current work flow, identifies bottlenecks, and finally proposes solutions and recommendations, using a number of tools, such as modeling and simulation, problem solving, statistical analysis, operations research, human factors engineering and data mining.

EMS-HS Program Requirements

Based on the student’s educational background and interests, the Systems Science and Industrial Engineering (SSIE) Department will determine if the degree program will be a Master of Science in Systems Science or a Master of Science in Industrial and Systems Engineering — with a health systems concentration.

Master of Science in Systems Science — Health Systems Concentration: Candidates with a bachelor’s degree in any field may apply for admission to this program.

Master of Science in Industrial and Systems Engineering — Health Systems Concentration: Candidates with a bachelor's degree in industrial and systems engineering or a related field may apply for admission to this program.

Classes are scheduled on weekends with hours generally every Saturday between 8:00 a.m. and 5:00 p.m. with intermittent days off, at a convenient Midtown Manhattan location. During each class, the student experiences
lectures, group activities, projects and open discussions with a great deal of class participation. At the onset of the program there is a required orientation weekend at Binghamton University’s main campus.

The student must maintain at least a B average in all graduate coursework. Plan of study:*

- SSIE 597. Health Systems Orientation
- SSIE 510. Enterprise Systems Engineering
- SSIE 537. Industrial & Systems Engineering in Health Care
- SSIE 505. Applied Probability & Statistics
- SSIE 520. Modeling and Simulation
- SSIE 501. Introduction to Systems Science
- SSIE 561. Quality Assurance for Engineers
- SSIE 539. Human Factors Engineering in Healthcare
- SSIE 538. Healthcare Finance & Accounting
- SSIE 637. Advanced Topics in Health Systems
- SSIE 595 or 598. Health Systems Project

Alternate courses may be applied in select cases with the approval of the Program Director.

**Advanced Graduate Certificate in Complex Systems Science and Engineering (CX Certificate)**

The Advanced Graduate Certificate program in Complex Systems Science and Engineering (CX Certificate) offers students an opportunity to acquire knowledge and research skills in the emerging field of Complex Systems Science and Engineering, which connects several related research areas. Its educational goals are for students to:

1. Become familiar with basic concepts and terms developed and used in Complex Systems Science and Engineering
2. Learn basic literacy of quantitative methods used in Complex Systems Science and Engineering (e.g., mathematical modeling, simulation, nonlinear statistics)
3. Acquire advanced knowledge and research skills in some areas of Complex Systems Science and Engineering that are relevant to their own research
4. Develop a broader research interest and intellectual openness/flexibility that go beyond their own areas of expertise

**CX Certificate Requirements**

The CX Certificate Program is open to graduate students in any major at Binghamton University (as an add-on certificate program), as well as non-matriculated students who seeks continuing education (as a stand-alone certificate program). Applicants must have a minimum of 3.0 GPA in the discipline at the time of application, regardless of the program (either at Binghamton or at the previous/current institution).

Plan of study:

- SSIE/BME 524. Graduate Seminar in Complex Systems Science (1 credit x 2 semesters; students must take it twice)
- SSIE 523. Collective Dynamics of Complex Systems (3 credits), or ECON 696H: Agent-based Policy
Modeling (4 credits)

- Two elective courses — one from Group A and the other from Group B (list of approved elective courses available at [http://binghamton.edu/cx/curriculum.html](http://binghamton.edu/cx/curriculum.html))

With permission, an Independent Study may substitute for one of the elective requirements.

### Graduate School - Graduate Information

The Graduate School works closely with the deans, graduate directors and faculty of Binghamton University’s schools, colleges and academic departments to support student success and provide administrative coordination for graduate recruitment, admissions, funding and academic affairs. In addition, the Graduate School hosts several interdisciplinary academic programs, where coursework spans across individual college boundaries and curriculum is a shared responsibility.

The Graduate School is committed to providing graduate students with professional development opportunities. As part of this mission, the Graduate School offers certification in Professional Science Management, a program that is part of a national initiative dedicated to creating professionals who are knowledgeable about both scientific inquiry and the business skills required to manage science projects.

For more information on graduate policies and procedures, please see the “Academic Policies and Procedures – Graduate” section of the University Bulletin.

### Applied Liberal Studies

#### Why MAALS?

The Master of Arts in Applied Liberal Studies (MAALS) at Binghamton University is one of the first programs of its kind in the United States. Students will complete the degree in sixteen (16) months, incorporating one summer term and two separate internships.

The transdisciplinary degree bridges traditional liberal arts disciplines and advanced professional practices, enabling students to transition from a broad liberal arts undergraduate education to superior performance as professionals in a variety of fields and careers. MAALS graduates strengthen and refine their analytical, critical, research and communication skills, acquiring solid preparation for various professional positions. The program deepens research and communication skills while it broadens knowledge of ethical practices, information technologies, budgets and finance, and cultural differences impacting professional lives, while internship experiences help students advance in applied skills and move into challenging careers.

The program’s educational objectives include providing graduates in each cohort with competencies and knowledge to navigate the global economy, cultural differences, financial literacy and the contemporary challenges facing professionals. The program’s career objectives include preparing job-ready graduates with advanced professional, communication, research and leadership skills and placing all graduates within three months after graduation.

#### Outcomes of the Program

Student learning objectives for the Applied Liberal Arts graduate program include the following:

- Students will create complex professional documents including summaries and reports that require them to find and evaluate information. They will make professional presentations using advanced technologies.
Students will evaluate and use professional practices, including strategic thinking and planning, ethical leadership and teamwork, in creating solutions to problems.

Students will draw on advanced research skills to locate, analyze, evaluate and synthesize information and create recommendations from their research.

Students will understand, analyze and evaluate budgets and financial decision-making.

Students will gain and use advanced knowledge of information technologies to find, evaluate, summarize, synthesize and present reliable data.

Students will gain advanced competency in navigating contemporary global cultures of widely different natures.

Students will analyze their work experiences in both university and non-university settings and evaluate their strengths, opportunities for growth and best choices for careers as professionals.

**Admission Requirements**

**Application Materials**

All students must submit their online applications through the Graduate School.

**Required Application Materials**

- Online graduate degree application with graduate degree application fee
- Transcripts from each college or university you have attended
- Personal statement
- Résumé or curriculum vitae
- Two letters of recommendation
- Writing sample: a paper of 500 - 800 words (minimum) submitted for an advanced undergraduate or graduate course
- GRE scores

For general guidelines for these materials, see the Admission Requirements webpage of the Graduate School website.

**Additional Required Application Materials for International Students**

- Immigration and financial documentation
- Proof of English proficiency, such as:
  - Test of English as a Foreign Language (TOEFL) with a minimum score of 100 OR
  - International English Language Testing System (IELTS) with a minimum overall band score of 7.0 OR
  - PTE Academic with a minimum score of 68 OR
  - College or university degree from an institution in the United States or in another English-speaking country listed on the Graduate School website

For more information about these materials, see the International Students section of the Admission Requirements webpage of the Graduate School website.

**Curriculum**
Each cohort will follow the same curricular path throughout their time in the program, culminating in a capstone project to complete the program.

**Fall Semester 1**
- BP 502: Advanced Communication
- BP 504: Professional Practices
- BP 506: Research Methods

**Spring Semester 1**
- BP 507: Financial Practices
- BP 509: Information Technology, Professionals
- BP 511: Navigating Cultural Differences

**Summer Semester 1**
- BP 520: Internship 1

**Fall Semester 2**
- BP 525: Internship 2
- BP 596: Capstone Project & Colloquium

**Capstone Project**

Students will demonstrate their competence in the outcomes of the program through their capstone project. Through this exit assignment, students will work with a faculty advisor to research and develop a thesis on specific issues in each student’s area of professional interest. This will take place through an online colloquium (synchronous, via Skype or WebEx, etc.) in which cohort members share challenges, observations and solutions to problems. Students will use this project as a way to articulate what they learned during the program in a manner that is attractive to future employers.

**Advising/Mentoring**

Students’ progress will be monitored each semester by the faculty program director as well as each of the faculty teaching the core courses of the program. For other forms of advising, the faculty program director will be assisted by the administrative director, who will aid with general and program advising for students as well as ensure the academic merit of the experiential work. A career counselor based in the Fleishman Center for Career and Professional Development will oversee internship placements.

**Materials Science and Engineering**

All applicants are required to submit scores for the Graduate Record Examination aptitude tests and to have a bachelor’s degree in one of the physical sciences or engineering. Students may be admitted directly into the PhD program if they have a strong background, or if they have completed a master’s degree.

Students will normally be admitted into the materials science and engineering program and also be affiliated with a home department, selected from Chemistry, Electrical and Computer Engineering, Geological Sciences, Mechanical Engineering, Physics, Applied Physics and Astronomy, or Systems Science and Industrial Engineering.

Potential applicants are encouraged to contact one of the co-directors for further information, or for answers to specific questions about admission procedures.

**Course Placement**
On entering the graduate programs, students are expected to have a general competence equivalent to the baccalaureate degree with a major in a physical science or engineering. They are expected to be familiar with basic thermodynamics and with the material in a beginning materials science course. If deficient in these areas, they should be prepared to make up these deficiencies by taking appropriate courses or examinations. Proficiency is determined in meetings between the student and the graduate program committee, taking into account the undergraduate transcript and any job experience.

Selection of Advisor

Each student in the materials science and engineering program must select and obtain the consent of a full-time participating faculty member to serve as his or her advisor. Prior to selection of an advisor, the Chair of the MSE Graduate Program Committee will serve as an interim advisor. The student works with the advisor to create a study plan and fill out a Proposed Course of Study Form. This is contained in the Learning Contract, and is used to guide the student in course selection. The original of the Learning Contract is kept in the student files. With the cooperation of the advisor, the student forms a research committee to supervise his or her work. The research committee is composed of the advisor, a committee chair, and two other technically qualified members selected from faculty participating in the materials science and engineering program; where the advisor and the committee chair are the same person, then a fourth member from outside the MSE program is added. The student then submits a Research Committee Registration Form (also in the learning contract booklet) and obtains the signed approval from the materials science and engineering director. For PhD students, an external examiner is also added to the committee for the defense of the dissertation. For MS students, a committee of three is sufficient (one member can be outside of the MSE faculty).

The processes of advisor selection, study plan creation and research committee formation should be completed by the end of the student’s first semester of full-time study. (For part-time students the process of advisor selection, study plan creation and research committee formation should be completed before the student has completed three graduate courses.).

Satisfactory Academic Progress

All rules of the Graduate School apply regarding probation and academic jeopardy. Students must maintain a B average in all courses.

Financial Support

Materials science and engineering students receiving financial support in the form of a teaching assistantship or a research assistantship are normally eligible to receive a tuition scholarship. Any teaching duties will normally be in the student’s home department. All of those receiving financial support must be registered as full-time students.

Expectations of Graduates from the MSE Programs

On graduating, all students have:

- understanding of materials structure, processes and phenomena at the atomic or the macro level;
- familiarity with modern experimental techniques for characterizing materials or with the mechanical behavior and modeling of materials;
- familiarity with thermodynamics, phase equilibria and reactivity of materials;
- understanding of the influence of synthesis and structure on materials properties;
• familiarity with the applications of materials;
• familiarity with modern materials through attendance at symposia and professional meetings;
• ability to clearly analyze a problem and devise possible solutions;
• ability to clearly communicate both in written form and orally to the layperson as well as to the technical manager.
• for PhD students: shown proficiency in teaching;
• for PhD students: completed an original piece of research.

Graduate Programs

Materials science and engineering allows for the student to place an emphasis on either the science or engineering aspects of materials. MSE offers interdisciplinary programs leading to the degrees of master of science and doctor of philosophy. These programs train the student broadly in materials with a foundation in one of the traditional disciplines of chemistry, geology, physics, or engineering and they also require investigation in a specialized area. The PhD places major emphasis on training in depth, with the expectation of a significant original contribution in the specialized area.

Master of Science Program

The requirements for the degree include a total of 30 credits, typically 24 credits of courses plus six credits of thesis. For students opting not to write a thesis, 30 credits of courses must be taken. A majority of these courses must be MSE courses. The student must maintain at least an overall B average (GPA 3.0/4.0 or better) for his or her graduate work to be eligible for the MS degree.

Course requirements include:

1. At least one course in materials structure and properties (MSE 544, MSE 562 or MSE 572)
2. At least one course in the thermodynamics, phase equilibria and reactivity of materials (MSE 560 or MSE 566)
3. One general course in characterization techniques in materials science (MSE 511)
4. One specialized course in experimental techniques in materials science (MSE 565, MSE 569, or MSE 570)
4. One semester of Materials Communications and Seminar (MSE 590)
5. One semester of Frontiers in Materials (MSE 593)
6. Two or more elective courses, half of which must be MSE courses. Highly recommended are MSE 560, MSE 562, (if not used to fulfill above requirements), ME 535 or courses covering specific materials (like polymers), materials applications, or theory/modeling of materials.
7. Either a) an acceptable research project and report (at least four credits of courses 597 and/or 598), or b) an acceptable research project and thesis (at least six credits of 598 and/or 599). (The research report will typically be 30-40 pages; the thesis will typically be 60-80 pages. Paper copies of the research report will reside with the program and the research advisor. Paper and electronic copies of the thesis will be published as for a PhD dissertation.) Public presentation of a seminar on the subject of the research project or thesis, and its oral defense. Students may by petition request an all-course option (30 credits) for the MS degree.

The examining committee for each candidate consists of three to five members appointed from the MSE faculty by
the graduate program committee and will include faculty members from at least two departments. The student’s advisor and committee chair will normally come from different departments.

**Five-Year Program in Chemistry and Materials Science and Engineering**

The five-year program leading to a BS in chemistry and an MS in materials science and engineering in five years is planned to give all students a strong research background combined with a strong foundation in chemistry and materials science. It requires completion of all components of the BS in chemistry, with emphasis in materials. Participation in three semesters of laboratory/research work from CHEM 397, 445, 497 or 598 must be included within the existing BS requirements. In order to complete the five-year option, students are also required to complete all requirements of the MS degree in materials science, including a thesis. Twelve credits taken in the fourth year at the graduate level may be applied to both degree programs. Students in the combined program receive their BS degree after completing their undergraduate requirements.

Students are admitted to the combined program at any time up to the beginning of their senior year. Admission to the combined program is limited to students who have a cumulative grade-point average of at least 3.0 in both the major and in all subjects. Students need to maintain this GPA to stay in the program. In order to complete this program within five years, three courses for the BS in chemistry (with materials emphasis) are replaced by the more rigorous graduate course equivalents — e.g., CHEM 411, 444 and 498 are replaced by CHEM 511, 544 and 598 and count toward both degree requirements.

**Five-Year Program in Physics and Materials Science and Engineering**

The five-year program leading to a BS in physics and an MS in materials science and engineering is planned to give all students a strong research background combined with a strong foundation in physics and materials science. It requires completion of all components of the BS in physics. In order to complete the five-year option, students are also required to complete all requirements of the MS degree in materials science, including a thesis. Twelve credits taken in the fourth year at the graduate level may be applied to both degree programs. Students in the combined program receive their BS degree after completing their undergraduate requirements.

Students are admitted to the combined program at any time up to the beginning of their senior year. Admission to the combined program is limited to students who have a cumulative grade-point average of at least 3.0 in both the major and in all subjects. Students need to maintain this GPA to stay in the program. In order to complete this program within five years, three courses for the BS in physics are replaced by the more rigorous graduate course equivalents — e.g., PHYS 411, 472 and 498 by 511, 572 and 598 and count toward both degree requirements.

**Doctor of Philosophy Program**

The PhD is awarded for original investigation leading to a significant advance of knowledge in a specialized area. Courses and seminars provide necessary background in the knowledge, basic principles, methods and theories of materials. The specific course requirements are determined in consultation with the student’s guidance committee, must be approved by the graduate program committee and normally include those expected for the MS degree. In the course of their training, students are expected to demonstrate by appropriate examinations a breadth of knowledge in materials science and engineering, a perspective of the special relation of materials to other fields of knowledge, particularly the fields of chemistry, engineering, geology, physics and biology; and competence in depth in a specialized area of materials. At the earliest date consistent with their general progress, students select a research topic and begin research.

**Learning Contract**

The new PhD student, along with their advisor, should immediately begin to develop a Learning Contract. The
The purpose of the Learning Contract is to define the knowledge and skills required to pass the Comprehensive Examination and to provide the background to perform PhD level research. The Learning Contract should identify courses and concepts that must be mastered in order to provide breadth of background, as well as specialized courses and concepts, which are relevant to the proposed area of research. The original signed copy of the Learning Contract is kept in the student’s file.

Courses

A student is expected to take those courses defined in their Learning Contract, which typically includes those required for the MS degree. Each student must take three credits of MSE 590 and one credit of 593. In MSE 590 the student will generate a proposal for their PhD research and learn the tools of teaching. Most of the basic graduate courses in a student’s program should be taken during the first year of residence.

PhD Comprehensive Examinations for Advancement to Candidacy

To advance to candidacy, students must pass both a written/oral examination and a prospectus examination; the oral and prospectus examinations may be combined into one. (These are the qualifying examinations for admittance to the PhD program.) Following passing both of these the student is admitted to candidacy.

Written Examination: Each student is required to show competency in three core areas:

- materials structure, processes and phenomena;
- thermodynamics, phase transformation and reactivity;
- experimental characterization techniques for materials.

This competency is established by a set of three examinations given at the end of his/her first year (in May). Students must pass all three areas of this exam. A second attempt is permitted during August of the student’s first year. Failure to pass all three area examinations after two attempts is considered sufficient reason for dismissal from the PhD program.

Oral Examination: Following the completion of the written examination, students may be required to take an oral examination within six months to be tested for the selected topics among the above three core areas that are relevant to the students’ research areas. In cases where the student has done well in the written exam and coursework, this exam may be combined with the Prospectus/Colloquium exam.

Prospectus/Colloquium: Following the successful completion of the written/oral examination, students are required normally within six months to orally defend a written research proposal/prospectus. This latter is normally prepared in the course MSE 590. This prospectus is presented and defended in an open colloquium. After defense, the final revised and approved prospectus is placed in the student’s file.

The membership of the examining committee will be drawn from at least two faculties, with the committee chair normally coming from a department other than that of the student’s principal advisor. When the advisor and the committee chair are the same person, another member from outside the MSE program is added. This committee will normally continue as the student’s dissertation committee. This committee is documented in the Learning Contract.

Research and Dissertation

Since the PhD is earned primarily on the basis of original investigative work, students begin research early in their training. The graduate program committee reviews each student’s progress in writing at frequent intervals, at least after each semester of residence. The selection of a problem and the advisor is made with the advice and approval of the program committee, at the earliest date consistent with the student’s progress in satisfying the general
requirements of the program, and normally not later than the beginning of the second year. The advisor of a student is normally from the student's home department.

To show satisfactory progress the student is required to make a 30-minute presentation of their work before their peers and faculty, normally during their fifth semester. This presentation may be made in course MSE 593.

The investigation is described in a written dissertation, prepared and submitted in accordance with the prescribed regulations of the graduate program committee. The student is required to pass an oral examination in defense of the thesis. The examination committee comprises the student's dissertation committee with the addition of an external examiner; substitutions and additions may be made in the committee.

**Evidence of Proficiency in Teaching**

PhD students must meet the teaching proficiency requirement in one of the following ways.

i) The first preference would be as a teaching assistant instructor or instructor of record in an undergraduate course.

ii) If that is not practical, the completion of MSE 590 (Materials Communications) and the teaching of one or more seminars or a portion of a course - verified and approved by the guidance committee.

**Summary of Minimum Requirements**

1. Satisfaction of learning contract, including proficiency in teaching and meeting of residence requirements.
2. Satisfaction of comprehensive exam requirement.
3. Submission of proposal/prospectus and presentation of colloquium on proposed research.
5. Presentation of research before peers in fifth semester.
6. The completion of an original piece of work in a specialized area of materials.
7. Submission of dissertation.

**Professional Science Management - Graduate Certificate**

**Professional Science Management Certificate**

The Professional Science Management Certificate is for students in the STEM (Science, Technology, Mathematics, and Engineering) disciplines who wish to develop their professional skills to ensure greater success in the workplace.

A total of 13 credits are required for the completion of the certificate. The courses emphasize leadership skills, business and project management, ethics and legal principles, communication skills, and team-building skills. Students will develop these skills through coursework and workshops, as well as internships and group projects in employer-based settings.

**Professional Science Master's Certificate in Biomedical Anthropology**
This Professional Science Master's Certificate is designed for graduate students pursuing master’s degrees in Biomedical Anthropology. Through applied and interdisciplinary work, the professional skills of students are strengthened to ensure greater success in the workplace.

A total of 43 credits are required to complete the master’s degree in biomedical anthropology, plus 13 credits in professional skills courses to receive the certificate. This “plus” component moves beyond the traditional master’s degree in biomedical anthropology to include leadership skills, business and project management, ethics and legal principles, communication skills, and team-building skills. Students will develop these skills through coursework and workshops, as well as internships and group projects in employer-based settings.

### Professional Science Master's Certificate in Materials Science and Engineering

This Professional Science Master's Certificate is designed for graduate students pursuing master’s degrees in Materials Science and Engineering. Through applied and interdisciplinary coursework, these students are expected to strengthen their professional skills to better position themselves for success in the workplace.

A total of 30 credits are required to complete the master’s degree in Materials Science and Engineering, plus an additional 13 credits in professional skills courses. This “plus” component moves beyond the training of a traditional master’s degree in materials science and engineering. It emphasizes leadership skills, business and project management, ethics and legal principles, communication skills, and team-building skills. Students will acquire these professional skills through coursework and workshops, as well as internships and group projects in employer-based settings.

### Professional Science Master's Certificate in Cartography and Geographical Information Systems (GIS)

This Professional Science Master's Certificate is designed for graduate students pursuing master’s degrees in geography (with a specialization in cartography and Geographical Information Systems [GIS]). Through applied and interdisciplinary coursework, these students are expected to strengthen their professional skills to better position themselves for success in the workplace.

A total of 40 credits are required to complete the master’s degree in Geography (from the cartography and GIS track), plus an additional 13 credits in professional skills courses. This "plus" component moves beyond the training of a traditional master's degree in geography. It emphasizes leadership skills, business and project management, ethics and legal principles, communication skills, and team-building skills. Students will acquire these professional skills through coursework and workshops, as well as internships and group projects in employer-based settings.

### Sustainable Communities

#### Why Sustainable Communities?

The master’s program in Sustainable Communities at Binghamton University is one of the first sustainability-focused graduate degrees offered by the State University of New York (SUNY) system and one of the only master’s programs of its kind in the United States. Through this two-year program, students can pursue a Master of Arts (MA) or a Master of Science (MS) in Sustainable Communities.

Graduates will acquire the knowledge and experience to become skilled problem solvers and policy makers who champion more sustainable futures. The program aims to develop inspired advisors, analysts, consultants, planners and leaders who can think broadly and act collaboratively and who will rise to the forefront of the emerging and growing field of sustainability.
The degree integrates the three pillars of sustainability – environmental protection, economic vitality and social equity – to provide a balanced, holistic perspective on sustainability. Collaboration is at the heart of the Sustainable Communities program, which draws upon several academic disciplines, including anthropology, economics, environmental science, geography, geology, philosophy, political science, public administration and sociology.

The flexibility of the program allows students to discover the areas of sustainability that interest them most and to create a pathway to job opportunities in different sectors and in different kinds of organizations. Students are encouraged to work with faculty across disciplines to research and create projects that are applicable in their own contexts.

The master’s program examines new ways to promote sustainability from local to global levels and envisions sustainable communities as places that enhance the quality of life for all people, while simultaneously looking after our resources and our planet.

Outcomes of the Program

The goal of the master’s program in Sustainable Communities is to provide professionally oriented students with the skills, knowledge, experiences and networks necessary to meet their career goals. Graduates should be able to:

- demonstrate an intellectual and experiential understanding of sustainability;
- communicate effectively about sustainability to different audiences and for different purposes;
- conceptualize the origins and definitions of sustainability and interconnectedness of environmental, social and economic frameworks;
- understand the ethical implications of decisions and actions across diverse cultural, political and social perspectives;
- develop analytical skills for applying and assessing sustainability policies in various settings;
- collaborate with and lead others to translate the needs of sustainable communities into policy solutions and public/private action.

Admission Requirements

Eligibility

Applicants for graduate studies must have earned a bachelor’s degree or higher from an accredited institution.

Required application materials

All students must submit their online applications through the Graduate School.

- Online graduate degree application with graduate degree application fee
- Transcripts from each college or university attended
- Personal statement
- Professional writing sample or essay of 500-800 words on a relevant sustainability topic
- Résumé or curriculum vitae
- Two letters of recommendation
- GRE scores (optional)

Additional required application materials for international students
Immigration and financial documentation

Proof of English proficiency, such as:

- Test of English as a Foreign Language (TOEFL) with a minimum score of 100 OR
- International English Language Testing System (IELTS) with a minimum overall band score of 7.0 OR
- PTE Academic with a minimum score of 68 OR
- College or university degree from an institution in the United States or in another English-speaking country listed on the Graduate School website

Curriculum

The Sustainable Communities program draws its expertise and its classes from departments across the university. This provides students with a holistic perspective that better prepares graduates for real world challenges. A minimum of 38 credits is required to receive a Master of Arts in Sustainable Communities (culminating with a capstone project) or a Master of Science in Sustainable Communities (culminating with a thesis).

Requirements and electives

- Core courses (13-16 credits)
- Required courses (12-16 credits)
- Sustainability electives (6-8 credits)
- Thesis or capstone project (4 credits)

Core courses (13-16 credits)

- SUST 500: Sustainable Communities I (4 credits)
- SUST 510: Sustainable Communities II (4 credits)
- SUST 520: Research Methods (4 credits)
- SUST 530: Sustainability Colloquium (1 credit, must be repeated each semester the student is enrolled in the program)

Required courses (12-16 credits)

- One from Environmental Policy course list (3-4 credits)
- One from Economic Development course list (3-4 credits)
- One from Social Equity course list (3-4 credits)
- One from Advanced Methods course list (3-4 credits)

Sustainability electives (6-8 credits)

- At least two courses as electives related to area(s) of interest

Thesis or capstone project (4 credits)

- SUST 601: required thesis for a Master of Science in Sustainable Communities
- SUST 602: required capstone project for a Master of Arts in Sustainable Communities

Thesis/Capstone Project
Students will demonstrate their competence through their theses and capstone projects. Through this exit assignment, students will engage in guided research of their choosing, as well as communicate and interact with diverse stakeholders in professional settings. Students will work with their advisor and a second reader over the course of the program to develop their master’s thesis or capstone project, which must be presented and defended in their fourth semester.

**Advising/Mentoring**

One-on-one advising from affiliated program faculty is integral to achieving academic and professional goals. Students will be guided by a faculty advisor through course selection as well as through research and the production of the final thesis or capstone project. MA and MS students will draw on faculty advisors from all appropriate departments to arrange a research question that engages a professional or policy project. Faculty advisors will collaborate in shaping the goals of the project, helping students establish professional contacts with the broader community and assisting students in leading their projects toward valuable outcomes.