School-Wide Graduate Program

MASTER OF ENGINEERING

The master of engineering (MEng) degree has specializations in mechanical engineering, electrical engineering, computer engineering and industrial engineering. This is a nonthesis, practice-oriented degree. The MEng program is designed for the student who wishes to pursue the career path of a practicing engineer in industry. The MEng has been designed for both industrial employees whose primary concern is career development, as well as for new baccalaureate graduates who want to continue to study in order to be able to enter the job market with well-defined professional skills. Students wishing to pursue a graduate degree through EngiNet, the distance learning component of SUNY Engineering, are also encouraged to apply.

The MEng degree consists of eight courses plus a two-course (six-credit) sequence, Elements of Engineering Practice. Among the eight courses, four must be in the student's area of specialization. The other four courses are technical electives of an appropriate level in engineering, mathematics, computer science, physics, chemistry or biology. These courses are used to develop the student's proficiency toward specific professional objectives. Degree requirements may also be satisfied by no more than two electives of a professional broadening nature (e.g. courses in business, law or accounting). An extremely important aspect of the MEng degree is the two-course sequence in a practice-oriented project. The courses, Elements of Engineering Practice and Engineering Project, WTSN 573 and 574, are designed to teach students how to do projects, from conception to completion, in an industrial setting. During the second course the student completes such a project.

The four specialization courses in the various disciplines are chosen by the student in concert with a faculty adviser from that discipline. The adviser and student also work together to choose the remaining elective courses for the degree. These elective courses are chosen with a specific practice-oriented career goal in mind. The two project courses are completed over two consecutive semesters.

Students who pursue the MEng degree via the EngiNet program and who are not employed as engineers in industry are expected to come to Binghamton during the project phase of their studies. The visits to campus are appropriately spaced, but likely come at the beginning, middle, and end of the project phase of the program.

The MEng degree is designed to give the graduate a competitive advantage. The practice-oriented graduate degree develops a higher skill level than is possible with a bachelor's degree. Graduates of the MEng program are prepared to make significant contributions to industrial employers.