

**SAMPLE SCHEDULE* OF OUR FLEXIBLE FOUR YEAR PROGRAM (ENTERING IN 2015)
UNDERGRADUATE COMPUTER SCIENCE PROGRAM**

Freshman Year

Fall Semester

CS 101 Professional Skills, Ethics and CS Trends	1 credit
CS 120 Computer Systems I: Machine Organization **	4 credits
MATH 224/225 Calculus I Topics	4 credits
WRIT 111 Coming to Voice	4 credits
Social Science/Humanities Elective***	<u>4 credits</u>
TOTAL	17 credits

Spring Semester

CS 140 Programming with Objects **	4 credits
MATH 226/227 Calculus II Topics	4 credits
Social Sciences/Humanities Elective***	4 credits
Science ****	<u>4 credits</u>
TOTAL	16 credits

Sophomore Year

Fall Semester

CS 220 Computer Systems II: Arch and Programming	4 credits
Social Sciences/Humanities Elective***	4 credits
MATH 304 or 371 or 381	4 credits
Science ****	<u>4 credits</u>
TOTAL	16 credits

Spring Semester

CS 240 Data Structures and Algorithms	4 credits
CS 301 Ethical, Social and Global Issues in Computing	4 credits
MATH 314 Discrete Mathematics (or MATH 330)	4 credits
Science ****	<u>4 credits</u>
TOTAL	16 credits

Junior Year

Fall Semester

CS 375 Design and Analysis of Algorithms	4 credits
MATH 327 Probability with Stat Methods	4 credits
CS 320 Computer Systems III: Adv. Comp. Arch.	4 credits
Social Sciences/Humanities Elective***	<u>4 credits</u>
TOTAL	16 credits

Spring Semester

CS 350 Operating Systems	4 credits
CS 373 Automata Theory & Formal Language	4 credits
Social Sciences/Humanities Elective***	4 credits
Free Elective	<u>4 credits</u>
TOTAL	16 credits

Senior Year

Fall Semester

CS 471 Programming Languages	4 credits
Computer Science Elective	4 credits
Computer Science Elective	4 credits
Free Elective	<u>3 credits</u>
TOTAL	15 credits

Spring Semester

Computer Science Elective	4 credits
Computer Science Elective	4 credits
Free Elective	4 credits
Free Elective*** (Physical Activity/Wellness)	<u>2 credits</u>
TOTAL	14 credits

* Your schedule over four years may vary considerably from this sample but you must observe course prerequisites. The flowchart for required courses in CS shows which courses must precede others. Students are encouraged to vary this schedule depending on their interests and the CS advisor will be happy to discuss alternatives.
 ** Students with AP credit for Gened courses and a strong CS background may take CS 120 and CS 140 in the first semester. Students without prior programming experience should take CS 110 in Fall and either CS 120 or CS 140 in the Spring. Please consult a CS advisor before attempting CS 120 and CS 140 together.
 *** These courses should be selected to fulfill the General Education Composition (C), Global Interdependencies (G), Pluralism (P), Aesthetics (A), Humanities (H), Social Science (N) and Physical Activity/Wellness (Y, S or B) requirements. Students who have not earned an 85 or higher in a NYS foreign language Regents exam must complete one semester of a foreign language. One Free Elective must be in Liberal Arts & Science. At most 2 credits of Physical Activity/Wellness can be counted as free elective credit.
 **** Must have a science sequence and one other L course, see Bulletin for details.
 (02/15)

Programming Experience and Calculus Ready

**SAMPLE SCHEDULE* OF OUR FLEXIBLE FOUR YEAR PROGRAM (ENTERING IN 2015)
UNDERGRADUATE COMPUTER SCIENCE PROGRAM (with CS 110)**

Freshman Year

Fall Semester

CS 101 Professional Skills, Ethics and CS Trends	1 credit
CS 110 Programming Concepts and Applications**	4 credits
MATH 223/224 Pre Calc & Calc I Topics	4 credits
WRIT 111 Coming to Voice	4 credits
Social Science/Humanities Elective***	<u>4 credits</u>
TOTAL	17 credits

Spring Semester

CS 120 Computer Systems I: Machine Organization**	4 credits
MATH 225/226 Calc I & Calc II Topics	4 credits
Social Sciences/Humanities Elective***	4 credits
Science ****	<u>4 credits</u>
TOTAL	16 credits

Sophomore Year

Fall Semester

CS 140 Programming with Objects**	4 credits
MATH 227 Calculus II Topics	2 credits
MATH 304 or 371 or 381	4 credits
Social Sciences/Humanities Elective***	4 credits
Free Elective*** (Physical Activity/Wellness)	<u>2 credits</u>
TOTAL	16 credits

Spring Semester

CS 220 Computer Systems II: Arch and Programming	4 credits
CS 301 Ethical, Social and Global Issues in Computing	4 credits
MATH 314 Discrete Mathematics	4 credits
Science ****	<u>4 credits</u>
TOTAL	16 credits

Junior Year

Fall Semester

CS 240 Data Structures and Algorithms	4 credits
CS 373 Automata Theory & Formal Language	4 credits
MATH 327 Probability with Stat Methods	4 credits
Science ****	<u>4 credits</u>
TOTAL	16 credits

Spring Semester

CS 320 Computer Systems III: Adv. Comp. Arch.	4 credits
CS 350 Operating Systems	4 credits
CS 375 Design and Analysis of Algorithms	4 credits
Social Sciences/Humanities Elective***	<u>4 credits</u>
TOTAL	16 credits

Senior Year

Fall Semester

CS 471 Programming Languages	4 credits
Computer Science Elective	4 credits
Computer Science Elective	4 credits
Free Elective	<u>1 credit</u>
TOTAL	13 credits

Spring Semester

Computer Science Elective	4 credits
Computer Science Elective	4 credits
Free Elective	4 credits
Social Science/Humanities Elective***	<u>4 credits</u>
TOTAL	16 credits

* Your schedule over four years may vary considerably from this sample but you must observe course prerequisites. The flowchart for required courses in CS shows which courses must precede others. Students are encouraged to vary this schedule depending on their interests and the CS advisor will be happy to discuss alternatives.
 ** Students without prior programming experience should take CS 110 in Fall and either CS 120 or CS 140 in the Spring—visit the CS advisor before attempting CS 120 and CS 140 together. (CS 110 counts as a free elective)
 *** These courses should be selected to fulfill the General Education Composition (C), Global Interdependencies (G), Pluralism (P), Aesthetics (A), Humanities (H), Social Science (N) and Physical Activity/Wellness (Y, S or B) requirements. Students who have not earned an 85 or higher in a NYS foreign language Regents exam must complete one semester of a foreign language. One Free Elective must be in Liberal Arts & Science. At most 2 credits of Physical Activity/Wellness can be counted as free elective credit.
 **** Must have a science sequence and one other L course, see Bulletin for details.
 (03/05)

Limited Programming Experience & need Preparation for Calculus