

Computer Science

A Bachelor of Science degree in Computer Science qualifies students for employment with local, state, regional, and federal agencies. Banks, accounting firms, manufacturing, and service agencies employ programmers to assist with computer systems. A system analyst's position is usually obtained after a few years of employment as a programmer. Some students go on to get their graduate degrees in Computer Science in preparation for a career in research or teaching. An internship or part-time work is recommended in order to establish a relationship with an employer before graduation.

The Department has set the following objectives for graduates of the Computer Science program:

- Be able to analyze a significant real-world problem and design and implement a computer-based solution.
- Be able to write technical documents, such as problem analyses, design plans, and users' manuals.
- Be able to work effectively as part of a technical software design team.
- Be able to orally report on results and present finished projects.
- Be prepared to enter the workforce or pursue graduate study in computer science.
- Develop an awareness of ethical issues facing technical professionals.
- Have an understanding of the underlying foundations of computer science.

A student graduating in computer science must have a grade of "C" or better in each of the core computer science courses before the subsequent core course is taken. The core courses are: CSC 135, 145, 242, 285, 315, 345, 346, 382, 405, 480, and 481.

COMPUTER SCIENCE			
Total Hours: 128			
<u>FRESHMAN YEAR</u>	<u>Sem. Hrs.</u>	<u>SOPHOMORE YEAR</u>	<u>Sem. Hrs.</u>
Computer Science 135, 145	6	Computer Science 145, 242, 285, 345	12
Mathematics 201, 221 ¹	7	Mathematics 222	4
English 105, 115	6	Laboratory Science Sequence ²	8
History	3	English (literature)	3
Communications 135	3	Social and Behavioral Sciences ^{3,6}	3
Electives	3	Electives	3
Economics 201, 202 or 205	3		33
	<u>31</u>		
<u>JUNIOR YEAR</u>	<u>Sem. Hrs.</u>	<u>SENIOR YEAR</u>	<u>Sem. Hrs.</u>
Computer Science 315, 346, 382, 405	9	Computer Science 480, 481	6
Mathematics 254, 260	6	Computer Science (400 level) ⁴	6
Computer Science (400 level) ⁴	3	Computer Sciences 485	1
Electives	6	Electives	12
English 325	3	Science Elective ^{5,6}	3
Social and Behavioral Sciences ^{3,6}	3	Fine Arts	3
Science Elective ^{5,6}	3		31
	<u>33</u>		

¹ Students not prepared to begin with Mathematics 221 should take Mathematics 121 and Mathematics 122 as electives.

² The student must elect an eight-hour sequence from among BIOS 120, 120L-BIOS 222, 222L; BIOS 120, 120L-BIOS 224, 224L; CHEM 121, 121L-CHEM 124, 124L; PHYS 251, 251L-PHYS 252, 252L; or PHYS 261, 261L-PHYS 262, 262L.

³ The 6 hours of social and behavioral sciences must be chosen from at least 2 of the following areas: Anthropology, Geography, Political Science, Psychology, or Sociology.

⁴ CSC courses numbered 410 to 470 or PHYS 420 or CSC 490 may be repeated for a maximum of six credit hours.

⁵ Students must elect two additional three-hour courses from Biology, Chemistry, or Physics, provided that every major completes at least one course in Biology and at least one Physics or Chemistry course, and that no courses labeled "for non-science students" be used to satisfy this requirement. Courses used to satisfy the science and laboratory science requirements may also be approved to satisfy the requirement outside the major, but may not be applied to the 43 term hours required in Computer Science.

⁶ See "General Education Course Requirements" under **DEGREE REQUIREMENTS** for restrictions.

Accredited by the Computing Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012.

Computer Science Minor: The student who chooses to minor in computer science must take 21 hours consisting of the following courses: 3 hours in CSC 111 or ED 202 or MADM 150; 12 hours of CSC 135, CSC 145, CSC 242, CSC 345; 6 hours of CSC electives at the 300 or 400 level.