

Department of Computer Science

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Kirksey Old Main 306

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The Department of Computer Science offers a full range of courses designed to prepare students who plan to enter computing careers in business, government, education, and industry as well as those who plan to enter graduate school. The department emphasizes a blend of theory, abstraction, and design needed to prepare students to meet their future goals.

Programs in the department lead to the Bachelor of Science degree with a major in Computer Science. Students may select a concentration in Professional Computer Science (ABET/CAC accredited) or a concentration in Business Applications. Only one minor is required for a Computer Science major. In addition, a minor in Computer Science is offered.

Curricular listings include General Education requirements in Communication, History, Humanities and/or Fine Arts, Mathematics, Natural Sciences, and Social/Behavioral Sciences categories as outlined on pages 64-67.

Major in Computer Science

All Computer Science majors are assigned to a faculty advisor through the Computer Science Department office (KOM 306). The student is responsible for seeking the assistance of the advisor. This catalog is not intended to provide the detail necessary for self-advising.

Core Requirements for all Computer Science Majors

A major in Computer Science consists of 44 semester hours of computer science courses, including

1. a 29-hour core of CSCI 1170, 2170, 3080, 3110, 3130, 3160, 3250, 3420, and 4700;
2. a mathematics core of MATH 1910, 1920, and 2050;
3. an additional math course (3 hours) that can be counted toward a math major;
4. COMM 2200;
5. additional courses as described below.

A maximum of 3 hours in the major may come from CSCI 3970, 4280, 4600, and 4910. Credit in secondary computer languages toward the major is limited to 3 hours. In order to take any computer science course having a prerequisite, the student must have earned a grade of C (2.00) or better in the

prerequisite. Each course counted for a major in Computer Science must be completed with a grade of C (2.00) or higher. CSCI 1000, 1150, and 3150 are considered service courses and do not count toward a major or minor.

Recommended Lower-Division Curriculum

FRESHMAN		SOPHOMORE	
CSCI 1170, 2170	8	CSCI 3080, 3110, 3130,	
MATH 1910 (Math)	4	3160	13
MATH 1920	4	Natural Sciences (2 prefixes)*	8
ENGL 1010, 1020 (Comm)	6	MATH 2050	3
COMM 2200 (Comm)	3	ENGL 2020 or 2030 or	
HIST 2010, 2020, or 2030	6	HUM 2610 (Hum/FA)	3
	31	Social/Behavioral Sciences	3
			30

**Professional Computer Science concentration students choose two with different prefixes from BIOL 1110/1111, CHEM 1010/1011, CHEM 1110/1111, PHYS 2010/2011, PHYS 2110/2111*

One course from Social/Behavioral Sciences and two courses from Humanities and/or Fine Arts must be taken during the junior and senior years to satisfy General Education requirements. Additional Computer Science and supporting courses are also required. Consult your advisor.

Concentration: Professional Computer Science

In addition to the core requirements, students must complete the following for the ABET/CAC-Accredited Computer Science major:

1. CSCI 3210 and 4160;
2. 2-3 hours in an approved high-level language;
3. upper-division computer science electives (6-7 hours);
4. minor to be selected with the approval of the computer science advisor;
5. a minimum of 15 hours of approved mathematics;
6. a two-semester sequence in a laboratory science for Science majors (8 hours);
7. additional hours in science for Science majors and/or courses with strong emphasis on quantitative methods to make a total of at least 12 hours including the 8-hour science sequence required above;
8. a minimum total of 30 hours of approved mathematics and science;
9. 30 semester hours of humanities, social sciences, and other disciplines (excluding science, mathematics, computer science, and physical education).

Concentration: Business Applications

In addition to the core requirements, students must complete the following for the Business Applications concentration under the Computer Science major:

1. CSCI 4410 and 4560;
2. 9 hours of computer science electives, at least 6 of which are upper division;
3. a minor in either Business Administration or Mathematics. If a minor in Mathematics is chosen, then the following additional business requirements must be taken: ACTG 2110, ECON 2420, FIN 3000, MGMT 3610, and one of ACTG 2120, BLAW 3400, MKT 3820, ACSI 4230, or MGMT 3620.

Minor in Computer Science

A minor in Computer Science consists of 17 semester hours including CSCI 1170, 2170, and additional courses including 6 hours selected from upper-division computer science with approval of the minor advisor. CSCI 1000, 1150, and 3150 are considered service courses and do not count toward a major or minor. CSCI 3420 does not count toward a Computer Science minor. Credit in secondary computer languages toward a minor is limited to three hours. A GPA of 2.00 is required in the Computer Science minor.

Class Attendance Policy

The instructor can at his/her own discretion drop a student after two class meetings if the student fails to attend the first two class meetings.

Cooperative Education

CSCI 2930, 2940, 3970, 3980. Cooperative Education Experience I, II, III, IV. Three credits each. Experiences must be taken in sequence. CSCI 3970 may count toward the Computer Science major. It may not be used in conjunction with CSCI 4600.

Courses in Computer Science [CSCI]

See back of catalog for course descriptions.

Graduate Study

The Master of Science is offered in Computer Science as is a graduate minor on the master's and doctoral levels. Requirements and a list of courses offered for graduate credit may be found in the Graduate Catalog.

