Computer Science, M.S.

DEPARTMENT

Department of Computer Science

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BS in Computer Science, B.S.
MS in Computer Science, M.S.
MN in Computer Science, Minor
Computer science is applied reasoning using both art and science: It requires the ability to communicate ideas through a combination of language and powerful technology. It is concerned with the interaction of humans and computers, as well as the application of computers to a myriad of specialized problems.

Program Description

The goal of the Department of Computer Science is to offer programs to a diverse audience: (1) students interested primarily in computing, (2) students interested primarily in applying computing to some other field of study, and (3) students who wish to include computing as part of their general education.

Facilities

Students and faculty have access to a networked environment of UNIX workstations (Sun Microsystems and Linux systems) and microcomputer laboratories of PCs. These systems are connected to campus and international networks.

REQUIREMENTS

Computer Science Master of Science Requirements

Graduate Program

The Master of Science degree program in Computer Science is designed to offer the advanced principles, applications, and current topics in computer science. Students who obtain the M.S. will be ready to do significant developmental work in the computer industry or in an important application area and will also be well qualified to pursue a Ph.D.

Applicants may hold an acceptable bachelor's degree in any field of study and must submit Graduate Record Examination (GRE) scores.

To attain classified standing at the time of admission, an applicant must:

1. have a minimum grade point average of 2.75 in the last 60 units and
2. have completed the following undergraduate prerequisite courses or equivalents with a minimum grade point average of 3.0: CSCI 40, 41, 60, 112, 113, 115, 117, 119, 144, MATH 75, 76.

Applicants who do not meet the requirements 1 and 2 above may be admitted to conditionally classified standing to complete the remaining prerequisites at California State University, Fresno. Approved coursework up to a maximum of 10 units of the 30 units required for the M.S. can be taken concurrently with prerequisite courses by a student with conditionally classified standing.

To attain classified standing from conditionally classified standing, a student must complete the remaining prerequisite courses with a minimum grade point average of 3.0 and have earned a minimum grade point average of 3.0 in all coursework taken toward the M.S. in Computer Science.

(See also the Graduate Studies section in this catalog.)

Master of Science Degree Requirements

The Master of Science degree requires a minimum of 30 units after the completion of the baccalaure ate degree according to the criteria below. At least 21 units of the total must be taken in 200-level courses in computer science. The undergraduate courses used toward the bachelor's degree or toward fully classified status may not be used toward the master's degree.

Required courses (12 units)
CSCI 174 or 188, 200, 201, 213* or 246, 217

Electives (9 units)
Three of the following: CSCI 226, 230, 244, 246, 250, 252, 253, 256, 264, 272, 274, 282, 284

Approved electives (5-8 units)

Culminating experience (3-6 units)
CSCI 298, or
CSCI 299, or
or Comprehensive Exam, concurrent with CSCI 297

Total (30 units)

* CSCI 246 is an elective for students who have taken CSCI 213 as a required course.

In order to be eligible for advancement to candidacy in the M.S. in Computer Science program, all students must pass CSCI 200 with a grade of B or better. In addition, all students must demonstrate competence in graduate-level writing prior to being advanced to candidacy. Students may fulfill this requirement by passing the writing component of CSCI 200. Please see the graduate program coordinator for further information.

FACULTY

The faculty comes from a variety of areas including computer systems and architecture, theoretical computer science, programming languages, software engineering, computer graphics, distributed systems and parallel processing, neural networks, image processing, computer vision, pattern recognition, wireless communication and mobile computing, robot swarm communication, evolutionary computation, domain-specific languages, and real-time and embedded systems. They have in common a desire to provide a program that will give the student a broad range of experience in computer science as well as the depth of education that will be needed in the student's later career, whether professional or academic.

For faculty phone numbers and e-mail, see the campus directory.

For more on the faculty, see the faculty pages.
The faculty pages are updated by the department or program.

Name	Degree	Email	Phone
Amarasinghe, Dhanyu E	Doctor of Philosophy	dhanyu@csufresno.edu	
Auernheimer, Brent J	Doctor of Philosophy	brent@csufresno.edu	559.278.2573
Banerjee, Santanu	Master of Arts	santanub@csufresno.edu	
Cecotti, Hubert	Doctor of Philosophy	hcecotti@csufresno.edu	
Li, Ming	Doctor of Philosophy	mingli@csufresno.edu	559.278.4792
Liu, Shih-Hsi	Doctor of Philosophy	shliu@csufresno.edu	559.278.4789
Lowe, Prudence M	Master of Science	plowe@csufresno.edu	559.278.7074
Moreno, Carlos I	Master of Science	mmxzbnl@mail.fresnostate.edu	

Name	Degree	Email	Phone
Park, Jin H	Doctor of Philosophy	jpark@csufresno.edu	559.278.4307
Ruby, David C	Doctor of Philosophy	druby@csufresno.edu	
Wilson, J T	Doctor of Philosophy	twilson@csufresno.edu	559.278.9138