Computer Science, B.S.

DEPARTMENT

Department of Computer Science

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Science II Building, Room C255
559.278.4373
www.fresnostate.edu/csm/csci

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

Bachelor of Science Degree - Computer Science Major Requirements

Undergraduate Program

The bachelor's degree in computer science prepares students for careers in the computing industry or for graduate study. Combined with a minor in another field of study, the bachelor's degree allows students to utilize their computing expertise in a variety of specialized fields. The core and computer science theory courses are excellent preparation for students who intend to pursue an advanced degree in computer science.

For the computer science major, the department offers courses that represent both the core of study considered essential to all aspects of computing and advanced study sequences in particular fields of interest. The core classes introduce all majors to the spectrum of thought represented in computing. The advanced sequences allow the individual student to pursue concentrated work within such areas as computer architecture, artificial intelligence, databases, compilers, operating systems, computer science theory, computer graphics, software engineering, programming languages, networking, distributed systems, and parallel processing. The department also offers topics courses to keep students informed of current advances and methods in computing.

In addition to courses designed for majors, the department offers courses intended to introduce computing to nonmajors. These courses will benefit any major who wishes to include computing in their undergraduate study.

Grade Requirements

All courses taken to fulfill major course requirements must be taken for a letter grade. All courses required as prerequisites for a course must be completed with a grade of C or better before registration will be permitted.

Administrative Academic Probation

A minimum Grade Point Average (GPA) of 2.0 must be maintained in all courses taken in the College of Science and Mathematics. Students who fail to maintain a 2.0 GPA in courses within their major may be placed on administrative academic probation. Failure to eliminate the grade point deficiency could result in disqualification from the College of Science and Mathematics.

Bachelor of Science Degree Requirements

Computer Science Major

Major requirements (59 units)
CSCI 40, 41, 60, 112, 113, 115, 117, 119, 144 (35 units)

Select seven of the following, including one of the sequences (21 units)
CSCI 124, 126, 130, 134, 146, 148, 150, 152, 154, 156, 164, 166, 172, 173, 174, 176, 177, 186, 188, 191T (max total 6 units)

Approved sequences:
CSCI 124-126
CSCI 144-146 or 144-148
CSCI 150-152
CSCI 156-ECE 146
CSCI 164-166
CSCI 172-173
CSCI 176-177
CSCI 186-188

CSCI 198 or complete an additional second course in one of the sequences above (3 units)

Additional requirements (10 units)
MATH 75, 76; PHYS 2A and 2B or PHYS 4A, 4AL, 4B, 4BL

General Education requirements (51 units)*

Total (120 units)

* This total indicates that 6 units from MATH 75 and PHYS 2A or PHYS 4A are being used to satisfy the General Education requirement of 51 units.

Note: Pass the Upper-Division Writing Exam (recommended to satisfy the upper-division writing skills graduation requirement).

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

Name	Degree	Email	Phone
Liu, Shih-Hsi	Doctor of Philosophy	shliu@csufresno.edu	559.278.4789
Lowe, Prudence M	Master of Science	plowe@csufresno.edu	559.278.7074
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