

MS COMPUTER SCIENCE

2007-09 Cal Poly Catalog

[Computer Science Department](#)

**Computer Science Bldg. (14), Room 254
(805) 756-2824**

The MS program in Computer Science offers students the opportunity to prepare for careers in several areas of emphasis including software engineering, computer architecture, programming languages, theory of computing, operating systems, database systems, distributed computing, computer networks, artificial intelligence, computer graphics, and human-computer interaction. The program is designed for maximum flexibility to allow students to concentrate in one or more areas of study.

Admission to the program requires a baccalaureate degree from an accredited institution and good standing at the last college attended. During the last 90 quarter hours of study, the student must have earned a minimum grade point average of 3.0 if the undergraduate degree is in Computer Science, or 3.25 for other degrees. A satisfactory score on the Graduate Record Exam (GRE) is required. Foreign applicants must have a minimum TOEFL score of 550 (paper-based) or 213 (computer-based), plus a minimum TWE score of 4.5. Applicants must provide three letters of recommendation. Women and underrepresented minorities are strongly encouraged to apply for admission.

Qualified students who do not have an undergraduate degree in Computer Science may be admitted as unclassified students. Unclassified students must complete the necessary undergraduate coursework to be admitted to candidacy. While fulfilling the undergraduate requirements, unclassified students retain official status as graduate students in the University.

Unclassified students may advance to candidacy by completing each of the following undergraduate courses with a "B" or better. These courses do not count toward the graduate degree:

- CSC 103 Fundamentals of Computer Science III (4)
- CSC 307 Introduction to Software Engineering *or*
CSC 308 Software Engineering I (4)
- CSC 315 Computer Architecture (4)
- CSC 349 Design and Analysis of Algorithms (4)
- CSC 353 Systems Programming for Software Engineers (4)
- CSC 430 Programming Languages I (4)
- CSC 445 Theory of Computation (4)
- CSC 453 Introduction to Operating Systems (4)

The department offers several graduate teaching assistantships. Preference is given to continuing graduate students and experienced teachers. Other grant, fellowship, scholarship and loan information can be obtained from the Financial Aid office.

Degree Requirements

Students must file a formal study plan with the Computer Science Department office no later than the end of the quarter in which they complete the first unit of coursework to be counted toward the degree. The formal study plan identifies specific courses to be taken to fulfill requirements of the MS degree. The formal study plan may be amended with approval of the graduate coordinator.

The MS degree requires at least 45 units beyond the undergraduate degree. Courses must be chosen according to the following requirements:

Curriculum for MS Computer Science

Select five courses from the following:	20
CSC 508 Software Engineering I (4)	
CSC 509 Software Engineering II (4)	
CSC 520 Computer Architecture (4)	
CSC 530 Language and Translators (4)	
CSC 540 Theory of Computation II (4)	
CSC 550 Operating Systems (4)	
CSC 560 Database Systems (4)	
CSC 564 Computer Networks: Research Topics (4)	
CSC 568 Distributed Systems (4)	
CSC 569 Distributed Computing (4)	
CSC 570 Current Topics in Computer Science (2-4)	
CSC 580 Artificial Intelligence (4)	
CSC 581 Computer Support for Knowledge Management (4)	
Thesis/Project and Seminar	9
CSC 590 Graduate Seminar (3)	
CSC 599 Thesis (6)	
Electives to be selected with Graduate Advisor's approval	16
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For further information or advisement students should communicate with the Graduate Coordinator of the Computer Science Department.