



### Major Description

The undergraduate major in Computer Science and Engineering is designed to provide students with both breadth and depth in the exciting and rapidly expanding fields of computer science and computer engineering.

A degree in Computer Science and Engineering from UC Merced will prepare students to assume leadership roles in designing, building and implementing a vast array of powerful new technologies that will continue to advance humankind. As new foundations for innovation in areas ranging from robotics and automation to informatics and personal computation, careers in computer science and engineering are among the most satisfying and rewarding of any.

### Starting Your Computer Science Degree

#### Lower-Division Major Requirements in Computer Science and Engineering

From UC's perspective, community college is where you begin working on the first two years of your bachelor's degree. This includes taking lower-division coursework specifically related to your field of study that may be applied toward graduation in your major.

Listed below are the lower-division requirements for **Computer Science and Engineering, B.S.** that may be satisfied with approved community college courses unless otherwise noted. To find out which of these requirements are shared by other UC campuses, see the UC Statewide Transfer Preparation Path in Computer Science.

- Calculus (full sequence)
- Multivariable Calculus
- Either of the following: Linear Algebra (one term) and Differential Equations (one term); or a one-term UCM-approved course that includes the study of Linear Algebra and Differential Equations if offered at your community college
- Contemporary Biology (one term)
- General Chemistry (one term)
- Calculus-based Statistics
- Calculus-based Physics (full sequence)
- Introduction to Computing (two terms)
- Introduction to Computer Science and Engineering (two terms)

**!!! IMPORTANT!!!**  
All of these requirements do not necessarily have to be completed **before** you transfer. See the next section of this path for what you must do to be competitive for admission.

**FIND YOUR COURSES**  
Every course at your community college that can be used to meet any of the lower-division major requirements is listed at [www.assist.org](http://www.assist.org)

## Becoming Competitive for Admission to Computer Science

### Selection Requirements

Below are the lower-division requirements that this campus advises applicants to complete—and by when and with what GPA—to be competitive for admission to the major. It is important to note that meeting these requirements does not necessarily guarantee admission to the campus or major. The stronger your major preparation, the more competitive you will be. As a new campus, UCM is in growth mode and can accommodate students who are eligible to transfer to UC.

- For the most current information related to transfer admission, please visit [www.transfer.ucmerced.edu](http://www.transfer.ucmerced.edu).
- You **must** complete all lower-division courses with a grade of C or better.
- You are **strongly** advised to complete the following lower-division major-preparation courses, at the minimum, prior to transfer: General Chemistry (one term), Calculus (full sequence) and Multivariable Calculus (one term).

## Satisfying General Education in Computer Science

### General Education Requirements

While all UC campuses urge you to focus on your lower-division major requirements while in community college, it is important to remember that general education (GE), or “breadth,” requirements for your bachelor’s degree may also be met with approved community college courses. In fact, some majors require completion of lower-division GE coursework as part of your preparation prior to transfer. The good news is you may be able to double-count some of your lower-division major coursework for related GE requirements.

The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses at California community colleges that students complete to satisfy the GE requirements. Certain students, however, may not be well served by following this GE option. Specific information about satisfying GE requirements as a Computer Science and Engineering major is listed below.

- IGETC is not recommended but is accepted.