



UC Riverside

Computer Science

Computer Science, B.S.

Major Description

The Computer Science major stresses the study of core and advanced computer science topics. It prepares students for a large variety of careers in computing, including software engineering, networks, databases, graphics, algorithms, security, system analysis and embedded systems.

Starting Your Computer Science Degree

Lower-Division Major Requirements in Computer Science

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, 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
- Discrete Mathematics
- Calculus-based Physics (full sequence)
- Computer Programming (two courses)
- Data Structures
- Machine Organization and Assembly Language

!!! 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

UC Riverside Computer Science

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.

- A selective major
- You **must** earn a minimum GPA of 2.8 in all UC-transferable coursework.
- You **must** earn a minimum GPA of 2.5 in Calculus (full sequence) and in at least one additional sequence required for the major.
- Prior to transfer, you must complete: Calculus (full sequence), two computer science programming courses, first term of Calculus-based Physics, and an additional term from Calculus-based Physics, computer science or mathematics (see www.assist.org for details).

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 may complete to satisfy 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 major is listed below.

- You are advised to focus on lower-division major-preparation coursework, such as mathematics, science and other technical preparatory coursework, rather than on IGETC completion. IGETC satisfies the majority of the Bourns School of Engineering breadth requirements at UCR. Some additional breadth coursework may be required after transfer. (See www.engr.ucr.edu/studentaffairs/policies/breadth.shtml for details.).

Related Majors

Preparation for the following majors may be similar to the Computer Science major described above (consult the campus catalog and www.assist.org).

- Computer Engineering, B.A.
- Electrical Engineering, B.S.