



UC Santa Cruz

Biochemistry

Biochemistry and Molecular Biology, B.S.

Major Description

The Biochemistry and Molecular Biology major constitutes an integrated curriculum of basic instruction in biology, chemistry, mathematics and physics, followed by the opportunity to pursue advanced study in specialized areas of interest. In modern, well-equipped laboratories, distinguished faculty are engaged in front-line research. The Departments of Chemistry and Biochemistry and Biological Sciences host a very active seminar series of national and international scholars in which advanced undergraduates are encouraged to participate.

Starting Your Degree

Lower-Division Major Requirements in Biochemistry

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 **Biochemistry and Molecular Biology, 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 Biochemistry.

- General Biology (full sequence for Biological Science majors)
- General Chemistry (full sequence)
- Organic Chemistry (full sequence)
- Calculus (full sequence)
- Multivariable Calculus
- Calculus-based Physics (full sequence)

!!! 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

Becoming Competitive for Admission to Biochemistry

Selection Requirements

Important information on selection requirements for admission to the major, including what this campus advises applicants to complete, and by when, is outlined below. 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.

- You are **strongly** advised to complete as many lower-division major-preparation courses as possible prior to transfer. Completion of all lower-division major-preparation courses is not an admissions requirement; however, completion, or near completion, of these courses will help you move more efficiently toward graduation.

Satisfying General Education in Biochemistry

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 Biochemistry and Molecular Biology major is listed below.

- Completion of lower-division major-preparation courses should take precedence over completion of GE requirements.
- You may satisfy GE requirements with either IGETC or UCSC’s GE requirements.

Related Majors

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

- Biology, B.A. and B.S.
- Chemistry, B.A. and B.S.
- Ecology and Evolution, B.S.
- Environmental Studies/Biology, B.A.
- Health Sciences, B.S.
- Marine Biology, B.S.
- Molecular, Cell and Developmental Biology, B.S.
- Neuroscience and Behavior, B.A. and B.S.
- Plant Sciences, B.S.