Biochemistry, B.S.

DEPARTMENT

MN in Chemistry, Minor
BA in Chemistry, B.A.
BS in Chemistry, B.S.
MS in Chemistry, M.S.
BS in Biochemistry, B.S.
CRED in Single Subject Credential - Chemistry

REQUIREMENTS

Department of Chemistry and Biochemistry

Bachelor of Science in Biochemistry Degree Requirements

The Bachelor of Science in Biochemistry is intended for students who plan to pursue a career in biochemical research, chemistry research, and suitable for a student pursuing health professions (medical, pharmaceutical, dental, and other clinical and health professions). The B.S. program is a comprehensive, multi-disciplinary program to prepare students for graduate study in pursuit of a Master of Science (M.S.) or Doctor of Philosophy (Ph.D.) in areas related to biochemistry.

Note: Biochemistry majors may not take courses listed in the major or additional requirements for CR/NC grades.

1. Major requirements (50-54 units)

Core Program
CHEM 1A, 1AL, 1B, 1BL, 102, 110A, 112, 128A, 128B, 129A, 129B, 155A, 155B, 156

Select two additional upper-division CHEM courses (4-7 units): CHEM 106, 106S, 111, 123, 124, or 190 or other approved courses.

Select two additional upper-division BIOL courses (6-7 units): BIOL 102, 103, 104, 120, or other approved courses.

Additional requirements (24-27 units)
BIOL 1A, 1B, 1BL
MATH 75, 76
PHYS 2A, 2B (or PHYS 4A, 4AL, 4B, 4BL, 4C strongly recommended)

2. General Education requirements (49 units)

3. Other requirements (9 units)
American Government and Institutions (PLSI 2), Multicultural and International (MI), and Upper-division writing.

4. Sufficient elective units to meet required total units (varies)

5. Total minimum (120 units)*

* The writing requirement may be met by taking the upper-division writing exam. Of the 49 required General Education units, 10 units will be satisfied by the following courses in the major and additional requirements: 4 units of CHEM 1A and 1AL or PHYS 2A (or PHYS 4A and 4AL) in G.E. Breadth B1; 3 units of BIOL 1A in G.E. Breadth B2; 3 units of MATH 75 in G.E. Foundation B4. See advisor for details.

FACULTY

Our faculty provide excellent research opportunities in analytical, biochemical, inorganic, organic, and physical chemistry. The broad interests within the faculty have resulted in interdisciplinary research projects in collaboration with scientists and professors in other science areas: agricultural chemistry, biotechnology, clinical chemistry, forensic chemistry, forensic biochemistry, chemical physics, enology, nutritional science, and molecular biology. Research projects have involved local facilities such as the California State Crime Laboratory, University Medical Center, UCSF Fresno Medical Education Program, USDA Research Station, U.S. Veteran's Administration Hospital, U.S. Forest Laboratory, and Valley Children's Hospital.
The graduate faculty are dedicated to providing students with a high-quality, rigorous M.S. program. Several of the faculty have received awards for the quality of their mentoring and teaching. They are widely respected in their field and regularly publish their work in leading scientific journals. The faculty have received funding to support their work from private foundations, and state and federal agencies, including the National Institutes of Health and the National Science Foundation. They also work with researchers at several National Laboratories and a number of top-tier research universities.

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.