BIOCHEMISTRY

This major allows students to call two departments home—the Department of Biological Sciences and the Department of Chemistry. This collaborative partnership offers an interdisciplinary program designed for students with broad scientific interests, those pursuing research careers in biomedical fields, or those preparing for clinical careers in health professions. It integrates core foundational knowledge from chemistry, biology, and molecular sciences to focus on the chemistry and molecular mechanisms that underlie biological processes.

BACHELOR OF SCIENCE (BS) GENERAL OVERVIEW

Six core courses:

- General Biology: Organismal Biology & Evolution
- General Biology: Cell Biology & Physiology
- General Chemistry for Chemistry Majors A & B
- Physics for the Life Sciences A & B *or* Fundamentals of Physics I & II

Three mathematics courses:

- Calculus I
- Calculus II
- Calculus III *or* Elementary Probability & Statistics *or* Statistics for Biological Sciences

Ten upper-division courses:

- Molecular Biology
- Advanced Molecular Biology
- Biochemistry
- Advanced Biochemistry
- Analytical Chemistry
- Physical Chemistry
- Organic Chemistry for Chemistry Majors A & B
- Two upper-division electives

ACADEMIC OPPORTUNITIES

Trojan Chemistry Club: This student-run organization sponsors faculty luncheons, hosts receptions for new students, and participates in on-campus events for visiting local high school students.

Dornsife Pre-Med Academy: The Dornsife Pre-Med Academy is a four-year program bringing together a small cohort of Dornsife students interested in medicine. Students engage in specialized labs and seminar courses that provide mentorship and an expanded view of healthcare.

Directed Research: By enrolling in an upper-level directed research course, students can delve further into their major by working with a faculty mentor.

Society of Cosmetic Chemists: This student-run organization aims to bridge the gap between undergraduate science education and cosmetic science through workshops and hands-on experiments in cosmetic chemistry and skin biology and by building connections with industry professionals.

Peer Cohort Courses: Exclusive to Biochemistry and Chemistry majors, this program fosters Chemistry community through a sequential peer cohort, smaller class size, low student/teacher ratio, enhanced access to Chemistry faculty, and exposure to Chemistry department resources (internships, events, and scholarships).

Supplemental Instruction: This academic support program provides regularly scheduled, peer-led study sessions for common Biology, Chemistry, Math, and Physics courses.