

# CHEMISTRY

This major provides students with core instruction and excellent research opportunities, including the opportunity to collaborate with scientists in the Chemistry department. Students may select a Bachelor of Arts degree or one of four Bachelor of Science degrees, giving them the chance to focus in the areas of Research, Chemical Nanoscience, or Chemical Biology.

## BACHELOR OF ARTS (BA) GENERAL OVERVIEW

Eight lower-division courses:

- Fundamentals of Physics I, II, & III
- General Chemistry for Chemistry Majors A & B
- Calculus I and II
- Calculus III  
or Linear Algebra and Linear Differential Equations

Seven upper-division courses:

- Analytical Chemistry
- Organic Chemistry for Chemistry Majors A & B
- Physical Chemistry: Thermodynamics and Kinetics
- Physical Chemistry: Quantum Mechanics
- Physical Chemical Measurements  
or Advanced Laboratory Techniques in Organic and Inorganic Chemistry  
or Advanced Inorganic Chemistry  
or Directed Research
- One additional upper-division science elective

Additional Bachelor of Science (BS) requirements:

- Advanced Inorganic Chemistry
- Advanced Organic Chemistry
- Molecular Principles of Biochemistry
- Physical Chemical Measurements
- One advanced chemistry laboratory course
- Directed Research

## ACADEMIC OPPORTUNITIES

**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.

**The Trojan Chemistry Club:** A very active student-run undergraduate organization, the Trojan Chemistry Club organizes student-faculty luncheons, hosts receptions for new students, and participates in on-campus events for visiting local high school students.

**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 on cosmetic chemistry and skin biology and by building connections with industry professionals.