

# Chemistry Major

## *ACS certified*

**C**hemistry is the central science that encompasses the study of matter in all its forms. This branch of science describes the fundamental structures, composition, and characteristics of atoms and molecules which leads to an understanding of chemical reactivity. This chemical insight provides a broad foundation to apply to both the physical and biological sciences, opening up a variety of academic and professional pursuits. Studying chemistry requires a multidisciplinary approach that incorporates other areas of study such as biology, computer science, mathematics and physics. The diverse interests of chemists are reflected in the sub-disciplines of the field such as analytical, biological, inorganic, organic, and physical chemistry.

### Careers

American Chemical Society (ACS) accredited B.S. chemists can choose from a great variety of careers. The solid foundation in all physical sciences together with a nationally recognized degree provide great flexibility both in type and location of employment. This is also reflected in annual top placement for starting salaries for B.S. chemists.

Many graduates move on to graduate school in chemistry or chemistry related fields as well as professional schools in medicine, dentistry, veterinary medicine, pharmacology, chiropractic, and physical therapy.

Small class sizes and individual attention are additional benefits that chemistry students enjoy while attending CSUB.

Interested students are encouraged to contact the Department of Chemistry for

further information or to make an appointment with a faculty advisor.

### Recommended Courses

This program meets the requirements set forth by the American Chemical Society (ACS) for completing the B.S. degree in Chemistry.

#### 1. A minimum of 68 units in Chemistry.

CHEM 211 Chemistry Principles I  
CHEM 212 Chemistry Principles II  
CHEM 213 Chemistry Principles III  
CHEM 331 Organic Chemistry I  
CHEM 332 Organic Chemistry II  
CHEM 333 Organic Chemistry III  
CHEM 340 Biochemistry  
CHEM 350 Quantitative Analysis  
CHEM 351 Physical Chemistry I  
CHEM 352 Physical Chemistry II  
CHEM 390 Chemical Literature  
CHEM 400 Inorganic Chemistry  
CHEM 450 Instrumental Analysis  
CHEM 490 Senior Seminar

2. **Additional 5 units (one course) of upper division course work selected with the pre-approval of the academic advisor.**

#### 3. The following Physics courses:

PHYS 201 Newtonian Physics  
PHYS 202 Maxwellian Physics  
PHYS 203 Contemporary Physics

#### OR

PHYS 221 Classical Physics I  
PHYS 222 Classical Physics II  
PHYS 223 Optics & Modern Physics

#### 4. The following Mathematics courses:

MATH 201 Calculus I  
MATH 202 Calculus II  
MATH 203 Calculus III

For more information, please contact:

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