



# CHEMISTRY MAJOR

## Transfer Requirements

The following requirements for the major are subject to change without notice. To assure that this information is current, you should consult with a Chemistry counselor, or review articulation agreements via the Internet at

[WWW.ASSIST.ORG](http://WWW.ASSIST.ORG).

**CAREER OPPORTUNITIES:** Government and industry offer opportunities for research development and quality control related to chemistry--extending scientific knowledge and creating new products (plastics, synthetic fibers, drugs, fertilizers). Chemists work as marketing and sales representatives, professors in colleges and universities, high school teachers and consultants in private industry and government agencies. Chemistry can be the basis for professional fields such as dentistry, laboratory technology, medicine and pharmacy. Specialists in biochemistry may find opportunities for careers related to food, pharmaceutical research and marketing, nutrition, pesticide formulation and residue analysis.

**NOTE:** Students who have a strong chemistry background, or have taken high school chemistry may take the chemistry placement exam to waive Chemistry 4, Beginning Chemistry. Although organic chemistry is generally an upper division course, some universities allow students to take it at a community college. Our chemistry 7A-7B is transferable, but the university may require a proficiency examination and additional upper division chemistry units.

### CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS

Bachelor of Arts in Chemistry: Chemistry 1A, 1B; Math 190, 191; Physics 1A, 1B, 1C & 1D

Bachelor of Arts in Biochemistry: Chemistry 1A, 1B; Math 190, 191; Physics 2A, 2B or 1A, 1B, 1C, & 1D

Bachelor of Science in Chemistry: Chemistry 1A, 1B; Math 190, 191, 220; Physics 1A, 1B, 1C & 1D

### CALIFORNIA STATE UNIVERSITY, FULLERTON

Bachelor of Arts in Chemistry: Chemistry 1A & 1B; Chemistry 7A & 7B\*; Physics 2A & 2B or 3A-3B; Math 190 & 191

Bachelor of Science in Chemistry: Chemistry 1A & 1B; Chemistry 7A & 7B\*; Physics 1A, 1B, 1C & 1D; Math 190 & 191

\* Note: no upper division credit will be given for Chemistry 7A-7B, subject credit only

### CALIFORNIA STATE UNIVERSITY, LONG BEACH

Bachelor of Arts in Chemistry: Chemistry 1A & 1B; Physics 2A-2B or 3A-3B or 1A, 1B, and 1C; Math 190 & 191

Bachelor of Science in Chemistry: Chemistry 1A & 1B; Math 190, 191, 220; Physics 1A, 1B, 1C, 1D; Biology 10 or Biology 101 and 102 or Anatomy 30 and Physiology 31 or Biology 8 and 11

Bachelor of Science in Biochemistry: Chemistry 1A & 1B; Biology 101-102; Math 190, 191; Physics 2A-2B or 3A-3B or 1A, 1B, & 1C

### CALIFORNIA STATE UNIVERSITY, LOS ANGELES

Bachelor of Arts in Chemistry: Required: English 1C. Chemistry 1A-1B, 7A-7B\*; Physics 2A & 2B or 1A-1B-1C-1D; Math 190, 191 & 220

Bachelor of Science in Chemistry: Required: English 1C. Chemistry 1A-1B, 7A-7B\*; Math 190, 191, 220, 270; Physics 1A, 1B, 1C, 1D

\*Note: Students who have taken organic chemistry at the community college will have earned credit for CSULA's Chemistry 301A and 301B. Transfer students will have to take Chemistry 301C at CSULA as this course introduces biological molecules.

### CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

Bachelor of Arts in Chemistry: Chemistry 1A, 1B; Math 190, 191; Physics 2A & 2B

Bachelor of Science in Chemistry: Chemistry 1A, 1B; Math 190, 191, 220, 270; Physics 1A, 1B, 1C, 1D

### **UNIVERSITY OF CALIFORNIA, BERKELEY**

**B.A. Chemistry:** (offered by the College of Letters and Science) and **B.S. Chemistry:** (offered by the College of Chemistry). You must complete either: **1)** The Requirements in Reading and Composition, Quantitative Reasoning, and Foreign Language, or **2)** IGETC by the end of the spring term that precedes fall enrollment at Berkeley. You must also prepare to do upper division work in your major.

The following courses must be completed by the end of the spring term which precedes fall enrollment at Berkeley: English 1A & 1B or entire IGETC pattern; Chemistry 1A & 1B; Chemistry 7A & 7B\* (highly recommended); Math 190, 191, 220 & 270; Physics 1A, 1B, 1C, 1D (must complete entire series). Transfer students should have grades of B or better to be prepared for junior level course work at Berkeley.

**\*Note:** Transfer students should take the organic chemistry sequence at El Camino College. Since completion of the sequence combined with a score in the 75<sup>th</sup> percentile on the ACS Organic Chemistry Exam will constitute satisfactory completion of the requirement. Transfer applicants need at least a 3.0 cumulative grade point average in all transferable course work and B's or better in math and science courses to be adequately prepared to continue with the courses of the junior year.

### **UNIVERSITY OF CALIFORNIA, DAVIS**

**A.B. Chemistry:** Chemistry 1A & 1B; Chemistry 7A & 7B; Math 160-161 or 190-191; Physics 2A & 2B or 3A & 3B

**B.S. Chemistry:** Chemistry 1A & 1B; Physics 1A, 1B, 1C, 1D; Math 190, 191, 220, 270; Chemistry 7A & 7B

### **UNIVERSITY OF CALIFORNIA, IRVINE**

**B.S. Chemistry:** Chemistry 1A & 1B; Chemistry 7A & 7B; Math 190, 191, 220; Physics 1A & 1C

**\*Note:** Admission to the Chemistry major is highly selective. Applicants with the strongest academic performance will be the most competitive for admission.

### **UNIVERSITY OF CALIFORNIA, LOS ANGELES**

**Bachelor of Science in Chemistry:** Chemistry 1A & 1B; Math 190, 191, 220, & 270; Physics 1A, 1C & 1D; Chemistry 7A & 7B

**Bachelor of Science in Biochemistry:** Chemistry 1A & 1B; Math 190, 191, 220; Physics 1A & 1C & 1D or Physics 3A & 3B; Biology 101-102; Chemistry 7A & 7B

### **UNIVERSITY OF CALIFORNIA, RIVERSIDE**

**\*Open fall quarter only, students should have a minimum cumulative GPA of 2.70 to be considered for admission.**

**Bachelor of Arts in Chemistry:** Chemistry 1A & 1B; Chemistry 7A & 7B; Math 190, 191, 220; Physics 3A & 3B or Physics 1A, 1B, 1C

**Bachelor of Science in Chemistry:** Chemistry 1A & 1B; Physics 1A, 1B, 1C, 1D; Math 190, 191, 220, 270; Chemistry 7A & 7B

**\*Note:** Lower division organic chemistry courses completed with "B" grades or better are accepted in lieu of UCR'S upper division organic chemistry. Students who earn less than "B" grades may be required to repeat the series at UCR. IGETC is not accepted for majors in the College of Natural and Agricultural Sciences. Courses taken for IGETC will be applied to the College's breadth pattern as appropriate. Transfer students are encouraged to follow the CNAS breadth pattern outlined in ASSIST major titled "GE/Breadth: College of Natural and Agricultural Sciences".

### **UNIVERSITY OF CALIFORNIA, SAN DIEGO**

**Bachelor of Science in Chemistry and Biochemistry:** Chemistry 1A & 1B; Chemistry 7A & 7B; Math 190, 191, 220 & 270; Physics 1A, 1C, 1D

Options: Chemistry/Earth Science, Environmental Chemistry, Molecular Synthesis, Pharmacological Chemistry

### **LOYOLA MARYMOUNT UNIVERSITY**

Chemistry 1A & 1B; Chemistry 7A & 7B; Math 190, 191, 220; Physics 1A & 1C

### **UNIVERSITY OF SOUTHERN CALIFORNIA**

Chemistry 1A & 1B; Math 190 & 191, 220 & 270; Physics 1A, 1B, 1C, 1D

Chemistry