CHEMISTRY (CH25)

Requirements for the CHEMISTRY B.S. Degree

The Chemistry major provides a broad introduction for the biochemistry, organic, physical, or inorganic student as well as those who prefer not to specialize. This major will enable a student to pursue further studies in chemistry or in related fields of science, medicine, or engineering.

The following courses must be taken for a letter grade, unless that is not permitted:

**Lower-Division Requirements**

1. General Chemistry: 6A, 6B & 6C or 6AH, 6BH & 6CH
2. General Chemistry Laboratory: 7L or CHEM 7LM
3. Physics: 2A, 2B & 2C or 2D
4. Physics Laboratory: 2CL or 2DL
5. Calculus: 20A, 20B, 20C & 20D, or equivalent
6. Organic Chemistry: 40A, 40B & 40C or 40AH, 40BH & 40CH
7. Organic Chemistry Laboratory: 43A or 43AM

**Upper-Division Requirements**

1. Physical Chemistry (CHEM 130-132)
2. Inorganic Chemistry (CHEM120A & B)
3. Biochemical Structure and Function (CHEM 114A)
4. Required Laboratory Courses (must take all 3):
   a. Analytical Chemistry Laboratory (CHEM100A)
   b. Organic Chemistry Laboratory II (CHEM143B)
   c. Physical Chemistry Laboratory (CHEM105A)
5. Laboratory Elective (Select 2 of the following courses):
   o Instrumental Chemistry Laboratory (CHEM 100B)
   o Advanced Physical Chemistry Laboratory (CHEM 105B)
   o Protein Biochemistry Laboratory (CHEM 108)
   o Recombinant DNA Laboratory (CHEM 109)
   o Advanced Inorganic Chemistry Laboratory (CHEM 123)
   o Organic Chemistry Laboratory III (CHEM 143C)
   o Molecular Design and Synthesis (CHEM 143D)
   o Reading and Research (CHEM 199): 8 units with of research with the same instructor may be petitioned to fulfill one elective lab.
6. Additional Electives (Select 3 electives that match the following description): These electives are defined as a four-unit (minimum) upper division or graduate courses offered by the Department of Chemistry and Biochemistry and taken for a letter grade. 4 units of a non-letter graded courses such as CHEM 195 and CHEM 199, may be petitioned to fulfill one elective.
# Suggested Program for Chemistry B.S. Major

(Talk to your college for planning general education courses)

Many courses have enforced prerequisites or are offered once per year.

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<tr>
<th>FALL</th>
<th>WINTER</th>
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<tbody>
<tr>
<td><strong>FRESHMAN YEAR</strong></td>
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<td>CHEM 6A</td>
<td>CHEM 6B</td>
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<td>MATH 20A</td>
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<td>MATH 20C</td>
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<td><strong>SOPHOMORE YEAR</strong></td>
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<td>CHEM 100A</td>
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<td>CHEM 40C</td>
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<td>CHEM 40A</td>
<td>CHEM 43A</td>
<td>CHEM 143B</td>
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<td>MATH 20D</td>
<td>PHYS 2A</td>
<td>PHYS 2B</td>
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<td><strong>JUNIOR YEAR</strong></td>
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<td>CHEM 120A</td>
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<td>CHEM 105A</td>
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<td>CHEM 130</td>
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<td>CHEM 114A</td>
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Best time to study abroad is Fall quarter of Sophomore or Junior Year. Education Abroad Program deadlines for upcoming year vary by country. See EAP website. See the Chemistry & Biochemistry Undergraduate Advisor for assistance in planning to study abroad.

## RESOURCES

To be successful in your academic career, you will need to make the most of the services available to you at UCSD. Get connected to the services available to you as soon as possible to make the most of your education!

American Chemical Society-Student Affiliates (ACSSA):
ucsdacssa@gmail.com, acssa.ucsd.edu

UCSD Web Site: www.ucsd.edu
UCSD General Catalog: www.ucsd.edu/catalog
UCSD Career Services Center: 858-534-3750, career.ucsd.edu
UCSD Undergraduate Admissions: 858-534-4831, admissions.ucsd.edu
Campus Walking Tours: 858-822-1455, admissions.ucsd.edu/tours
Education Abroad Program: 858-534-1123, programsabroad.ucsd.edu

Undergraduate Colleges

The colleges determine the general education requirements that you must complete in addition to your major requirements. Be sure to meet with a college advisor.

Thurgood Marshall: 858-534-4110, marshall.ucsd.edu
John Muir: 858-534-3580, muir.ucsd.edu
Revelle: 858-534-3490, revelle.ucsd.edu
Eleanor Roosevelt: 858-534-9864, roosevelt.ucsd.edu
Earl Warren: 858-534-4350, warren.ucsd.edu
Sixth College: 858-822-5955, sixth.ucsd.edu