CHEMISTRY BA

The Bachelor of Arts in Chemistry includes courses in all major chemical subdisciplines: analytical, biochemistry, inorganic, organic, and physical chemistry, plus complementary courses in mathematics and physics. With 10 fewer upper-division units than the BS in chemistry (https://catalog.csuchico.edu/colleges-departments/college-natural-sciences/chemistry-biochemistry/chemistry-bs/), students have flexibility in their programs to take courses in other disciplines, including prerequisites for the credential program.

This degree is appropriate for students pursuing a teaching credential in science with a concentration in chemistry. This degree is also excellent preparation for students considering chemistry-related interdisciplinary fields.

Students who choose this program should consult with their major advisor.

Grading Requirement

All courses taken to fulfill program course requirements must be taken for a letter grade except those courses specified by the department as credit/no credit grading only.

Course Requirements for the Major: 60-64 units

Completion of the following courses, or their approved transfer equivalents, is required of all candidates for this degree. Courses in this program may complete more than one graduation requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 381</td>
<td>Integrated Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 401W</td>
<td>Communicating Chemistry (W)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 451</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 332</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 452</td>
<td>Biochemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 453MW</td>
<td>Biochemistry Laboratory (W)</td>
<td>2</td>
</tr>
</tbody>
</table>

Select two units from the following:

- Any upper-division courses (300- and 400-level courses) in Chemistry and Biochemistry (CHEM)

Total Units 60-64

1 One full sequence (PHYS 202A and PHYS 202B or PHYS 204A, PHYS 204B, and PHYS 204C) must be completed.

Electives Requirement

To complete the total units required for the bachelor's degree, select additional elective courses from the total University offerings. You should consult with an advisor regarding the selection of courses which will provide breadth to your University experience and possibly apply to a supportive second major or minor.

See Bachelor's Degree Requirements (https://catalog.csuchico.edu/undergraduate-requirements/bachelors-degree-requirements/) for complete details on general degree requirements. A minimum of 39 units, including those required for the major, must be upper division.

General Education Requirements: 48 units

See General Education (https://catalog.csuchico.edu/colleges-departments/undergraduate-education/general-education/) and the Class Schedule (http://www.csuchico.edu/schedule/) for the most current information on General Education Requirements and course offerings.

This major has approved GE modifications. See below for information on how to apply these modifications.

- CHEM 401W is an approved major course substitution for Upper-Division Scientific Inquiry and Quantitative Reasoning (UD-B).

Diversity Course Requirements: 6 units

You must complete a minimum of two courses that focus primarily on cultural diversity. At least one course must be in U.S. Diversity (USD) and at least one in Global Cultures (GC). See Diversity Requirements (https://catalog.csuchico.edu/undergraduate-requirements/diversity-requirements/) for a full list of courses. Most courses taken to satisfy these requirements may also apply to General Education (https://catalog.csuchico.edu/colleges-departments/undergraduate-education/general-education/).

Upper-Division Writing Requirement

Writing Across the Curriculum (EM 17-009 (http://www.csuchico.edu/prs/EMs/2017-17-009.shtml)) is a graduation requirement and may be demonstrated through satisfactory completion of four Writing (W) courses, two of which are designated by the major department. See Mathematics/Quantitative Reasoning and Writing Requirements (https://catalog.csuchico.edu/undergraduate-requirements/mathematicsquantitative-reasoning-writing-requirements/) for more
details on the four courses. The first of the major designated Writing (W) courses is listed below.

- Any upper-division Writing (W) course.

The second major-designated Writing course is the Graduation Writing Assessment Requirement (GW) (EO 665 (https://calstate.policystat.com/policy/9585618/latest/)). Students must earn a C- or higher to receive GW credit. The GE Written Communication (A2) (https://catalog.csuchico.edu/colleges-departments/undergraduate-education/general-education/#A2) requirement must be completed before a student is permitted to register for a GW course.