# AMERICAN CHEMICAL SOCIETY CERTIFICATION REQUIREMENTS

The Professional Chemists Comprehensive degree and Chemistry Comprehensive:Biochemistry emphasis meet these requirements. All others require additional coursework.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 160</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 160L</td>
<td>General Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 161</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 161L</td>
<td>General Chemistry Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

## Introductory Chemistry Sequence

- CHEM 169 Chemistry Foundations and Careers 1
- CHEM 301 Analytical Chemistry 3
- CHEM 301L Analytical Chemistry Lab 1
- CHEM 310 Safety in Chemistry 1
- CHEM 351 Biochemistry I 4
- CHEM 360 Organic Chemistry 4
- CHEM 360L Organic Chemistry Laboratory 1
- CHEM 430 Inorganic Chemistry 3
- CHEM 469 Advanced Seminar in Chemistry 1
- CHEM 480 Physical Chemistry 3
- CHEM 490L Advanced Chemistry Laboratory I 2
- CHEM 499L Research in Chemistry 1-3

## Core Curriculum Sequence

Advanced Chemistry Requirements

Select 4 lecture courses (11 credit hours) of the following:

- CHEM 300-CHEM 499

Select 4 lab credit hours of the following:

- CHEM 300-CHEM 499L

## Supporting Courses

- MATH 115 Calculus I with Analytic Geometry 2
- MATH 202 Calculus II with Analytic Geometry 5
- PHYS 275 General Physics I (Calculus) 4
- PHYS 275L General Physics I (Calculus) Laboratory 1
- PHYS 276 General Physics II (Calculus) 4
- PHYS 276L General Physics II (Calculus) Laboratory 1

1. Except CHEM 399
2. Students without sufficient preparation will also need to take the following courses, increasing the total credit hours needed:
   - MATH 102
   - MATH 103