BACHELOR OF SCIENCE | MAJOR IN CHEMISTRY

FORENSIC CHEMISTRY CONCENTRATION
CHEM-FCHZ-BS

**Graduation Requirements:** 120 total credits
- Overall GPA 2.00 or better; AUCC GPA 2.00 or better; C or better in major courses; 42 upper-division credits (30 at CSU);
- last 15 credits must be taken at CSU.

**Major Requirements/Other Requirements**
- six foundational courses (30 credits); in-depth chemistry courses (12 credits, 5 credits must have lab); advanced electives (17 credits);
- 400 lab hours (beyond CHEM121 or CHEM114); foundational science courses (e.g., math, physics, etc.); electives

**All University Core-Curriculum Credit Requirement:**
- intermediate (AUCC1A, 3 credits) and advanced composition (AUCC2, 3 credits); mathematics (AUCC1B, 3 credits); diversity, equity, inclusion (AUCC1C, 3 credits); arts and humanities (AUCC3B, 6 credits); social and behavioral sciences (AUCC3C, 3 credits); historical perspectives (AUCC3D, 3 credits)

**Student Success Markers (to be completed within the first 30 credits):**
- CHEM 192; CO 150; 3 credits of math; 3 credits of diversity, equity, and inclusion (AUCC1C)

### FIRST YEAR

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>Total Year Credits: 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course No.</td>
</tr>
<tr>
<td>CHEM192</td>
<td>Introductory Seminar</td>
</tr>
<tr>
<td>CHEM120*</td>
<td>Modern Chemistry</td>
</tr>
<tr>
<td>CHEM121*</td>
<td>Modern Chemistry Lab</td>
</tr>
<tr>
<td>AUCC3B</td>
<td>Arts &amp; Humanities</td>
</tr>
<tr>
<td>AUCC1C</td>
<td>Diversity, Equity, Inclusion</td>
</tr>
<tr>
<td>CO150</td>
<td>College Composition</td>
</tr>
<tr>
<td>MATH 117-118-124-125-126 or 127 (if needed)</td>
<td></td>
</tr>
</tbody>
</table>

### SECOND YEAR

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>Total Year Credits: 32</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course No.</td>
</tr>
<tr>
<td>CHEM231</td>
<td>Analytical Chem</td>
</tr>
<tr>
<td>CHEM232</td>
<td>Analytical Chem Lab</td>
</tr>
<tr>
<td>LIFE102</td>
<td>Attributes of Life Systems</td>
</tr>
<tr>
<td>MATH271 or 161</td>
<td>Applied Math / Calculus 2</td>
</tr>
<tr>
<td>PH141 or 121</td>
<td>Physics 1</td>
</tr>
</tbody>
</table>

### THIRD YEAR

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>Total Year Credits: 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course No.</td>
</tr>
<tr>
<td>CHEM301 or CO300 or JTC300 Advanced Writing</td>
<td>3</td>
</tr>
<tr>
<td>CHEM371</td>
<td>Physical Chemistry</td>
</tr>
<tr>
<td>CHEM372</td>
<td>Physical Chemistry Lab</td>
</tr>
<tr>
<td>AUCC3D</td>
<td>History</td>
</tr>
<tr>
<td>SOC275 or ANTH275</td>
<td>Forensic Anthropology</td>
</tr>
</tbody>
</table>

### FOURTH YEAR

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>Total Year Credits: 28</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course No.</td>
</tr>
<tr>
<td>CHEM333</td>
<td>Forensic Chemistry</td>
</tr>
<tr>
<td>BZ350 or LIFE201B</td>
<td>Molecular Genetics</td>
</tr>
<tr>
<td>STAT301 or 307</td>
<td>Statistical Methods</td>
</tr>
<tr>
<td>ELECTIVE</td>
<td>any level</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term Credit Hours</th>
<th>Total Year Credits: 15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course No.</td>
</tr>
<tr>
<td>CHEM493 or 499</td>
<td>Seminar or Thesis</td>
</tr>
<tr>
<td></td>
<td>In-depth Chem***</td>
</tr>
<tr>
<td></td>
<td>Advanced Elective**</td>
</tr>
<tr>
<td></td>
<td>ELECTIVE</td>
</tr>
</tbody>
</table>

**TOTAL DEGREE CREDITS:** 120
All University Core Curriculum Courses (AUCC)
For a complete list of courses, visit the university catalog at https://catalog.colostate.edu. Honors students may have other requirements in these categories; talk to your Honors Advisor.

*Foundational Courses Requirement Options (Choose One)
Foundational Courses: GENERAL / ANALYTICAL
GROUP A  GROUP B
CHEM 120/121  CHEM 111/112
CHEM 231/232  CHEM 113/114
CHEM 231/232

Foundational Courses: ORGANIC
GROUP A  GROUP B  GROUP C
CHEM 241/242  CHEM 245/246  CHEM 341
CHEM 343/344  CHEM 343/344

**Advanced Electives
CHEM 384-Supervised College Teaching
CHEM 487-Internship
CHEM 495-Independent Study
CHEM 498-Research
Any other course from the in-depth chemistry courses list.
Any course at the 300-, 400-, or 500-level.
(If the student is pursuing a pre-health profession, please refer to https://hp.colostate.edu for more information on prerequisites or declare concentration in Health Sciences. Courses may satisfy the advanced elective requirements.)

Revised: 8/31/2023 CJO

***In-depth Chemistry Courses (12 credits minimum)
At least 3 credits from lab* courses and at least 5 credits from AUCC4B.
Any of these courses may also be used to satisfy the advanced electives, except when required for a concentration.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 311-Introduction to Nanoscale Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 315-Foundations of Polymer Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 320-Chemistry of Addictions</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 333-Forensic Chemistry (AUCC4B)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 338-Environmental Chemistry (AUCC4B)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 355-Sustainable Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 431-Instrumental Analysis* (AUCC4B)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 433-Clinical Chemistry*</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 440-Advanced Organic Chemistry Lab* (AUCC4B)</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 421-Chemistry of Cannabis and Hemp</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 445-Synthetic Organic Chemistry (AUCC4B)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 448-Medicinal Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 451-Catalysis</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 461-Advanced Inorganic Chemistry (AUCC4B)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 462-Advanced Inorganic Chemistry Lab*</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 465-Chemistry of Sustainable E-Waste Management</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 476-Physical Chemistry II (AUCC4B)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 477-Physical Chemistry II Lab*</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 498-Research*</td>
<td>1-3 per term</td>
</tr>
</tbody>
</table>

Any of these courses may also be used to satisfy the advanced electives, except when required for a concentration.

Any other course from the in-depth chemistry courses list.
Any course at the 300-, 400-, or 500-level.

Any of these courses may also be used to satisfy the advanced electives, except when required for a concentration.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Advising Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress to Degree</td>
<td>Earned:</td>
</tr>
<tr>
<td>GPA-CUM</td>
<td>In Progress:</td>
</tr>
<tr>
<td>GPA-AUCC</td>
<td>Needs:</td>
</tr>
<tr>
<td>Standing</td>
<td>GS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration</th>
<th>Date:</th>
<th>Time: PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>PharmD</td>
<td>MD</td>
<td>DMD</td>
</tr>
</tbody>
</table>