### Major Requirements (44 Hrs.)

<table>
<thead>
<tr>
<th>Hrs</th>
<th>Grade</th>
<th>Course Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td>CHEM 1230 General Chemistry I and CHEM 1240 General Chemistry I Lab OR CHEM 1350 General Chemistry</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>CHEM 1270 or 1370</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>CHEM 1280 or 1380</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>CHEM 2010 Quantitative Chemical Analysis</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>CHEM 3410 Organic Chemistry</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>CHEM 3440 Organic Chemistry</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>CHEM 3450 Organic Chemistry Lab</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>CHEM 4050 Physical Chemistry</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>CHEM 4060 Physical Chemistry</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>CHEM 4070 Integrated Lab</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>CHEM 4080 Integrated Lab</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>CHEM 4540 Instr. Meth. Of Analysis</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Additional hours of courses from CHEM 3080, 4130, 4160, 4420, 4450, 4460, 4470, 4630, 4660. A maximum of 3 hours of CHEM 4130 is allowed</td>
</tr>
</tbody>
</table>

### Additional Specific Requirements

<table>
<thead>
<tr>
<th>Hrs</th>
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</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td>PHYS 2010 or 2110 University Physics I</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>PHYS 2020 or 2120 University Physics II</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>MATH 2320 Calc. &amp; Analy. Geometry II</td>
</tr>
</tbody>
</table>

### Minor Requirements: A "general science" minor is offered to students in place of a conventional minor. Consult your Faculty Advisor (a conventional minor may also be chosen, usually 20 hours)

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<th>Course Details</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>CHEM 4450 or 3080</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>CHEM 4630 Advanced Inorganic Chemistry</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Three additional credit hours from the following: CHEM 4130, 4160, 4420, 4470, or 4660</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>One additional laboratory credit hour from the following: CHEM 3090, 4130, or 4460</td>
</tr>
</tbody>
</table>

### ACS Certification

By completing the degree requirements with the following options and additional courses the Chemistry BS degree is eligible for certification by the American Chemical Society.

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<tr>
<td>3</td>
<td></td>
<td>CHEM 4450 or 3080</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>CHEM 4630 Advanced Inorganic Chemistry</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Three additional credit hours from the following: CHEM 4130, 4160, 4420, 4470, or 4660</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>One additional laboratory credit hour from the following: CHEM 3090, 4130, or 4460</td>
</tr>
</tbody>
</table>

1,2CHEM 4130 hours can be used to count for both requirements.

The ACS strongly recommends completion of courses in calculus-based physics (two-semesters) and the study of multivariable calculus, linear algebra, and differential equations, as well as an undergraduate research experience such as CHEM 4130.
For Graduation You Will Need:

1. 122 credit hours minimum.
   
   **In Progress/Completed** ________  **Needed** ________

2. Minimum GPA 2.00.
   
   **Current GPA** ________

3. At least 30 credit hours of BGSU course work.
   
   **In Progress/Completed** ________  **Needed** ________

4. 40 credit hours at the 3000/4000 level.
   
   **In Progress/Completed** ________  **Needed** ________

5. Completion of all degree requirements, including the BG Perspective Core.
   
   **In Progress/Completed** ________  **Needed** ________

6. A major, and if required, a minor, specialization or emphasis.
   
   **Declared with the College Office**  ☐ Yes  ☐ No

Any substitution or waiver of courses required for your major or minor program must originate in the department/school offering the major or minor and must be approved by the College Office.

To ensure a timely graduation, see a College Advisor during the semester prior to your intended graduation.

Remember to complete an Application for Graduation by the end of the second week of classes during the fall semester or spring regular session, or by the end of the first week of the summer semester. For the specific dates, check your DARS. You may log onto MyBGSU to complete the online application. After the deadlines, you will need to complete an application in person in the College Office.