# Bachelor of Science

## Biochemistry with a Major in Secondary Chemistry Education (6-12) (BS)

### Degree Program Guide

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
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<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>ENGL 110C</td>
<td>English Composition (Grade of C or better required)</td>
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<tr>
<td>MATH 163</td>
<td>Precalculus II</td>
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</tr>
<tr>
<td>CHEM 121N and CHEM 122N</td>
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<tr>
<td>BIOL 121N and BIOL 122N</td>
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<tr>
<td>STEM 101</td>
<td>Step 1 – Inquiry Approaches to Teaching STEM</td>
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<tr>
<td>CHEM 160G</td>
<td>Introduction to Chemistry and Biochemistry Research and Careers</td>
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<tr>
<td><strong>Spring</strong></td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ENGL 211C</td>
<td>Writing, Rhetoric, and Research</td>
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<tr>
<td>ENGL 231C</td>
<td>Writing, Rhetoric, and Research: Special Topics</td>
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<tr>
<td>MATH 211</td>
<td>Calculus I</td>
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<tr>
<td>CHEM 123N and CHEM 124N or CHEM 125</td>
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<tr>
<td>BIOL 122N and BIOL 122N</td>
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<tr>
<td>STEM 102</td>
<td>Step 2 - Inquiry Based STEM Lesson Design</td>
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<tr>
<td><strong>Sophomore</strong></td>
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<td><strong>Fall</strong></td>
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<tr>
<td>CHEM 211 and CHEM 212</td>
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<tr>
<td>MATH 212</td>
<td>Calculus II</td>
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<td>COMM 101R</td>
<td>Public Speaking</td>
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<td>STEM 201</td>
<td>Knowing and Learning in STEM Education</td>
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<td>Human Creativity</td>
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<td><strong>Spring</strong></td>
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<tr>
<td>CHEM 213 AND CHEM 214 or CHEM 216</td>
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<tr>
<td>STEM 202</td>
<td>Classroom Interactions in STEM Education</td>
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<td>Literature</td>
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<td>Philosophy and Ethics</td>
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<td><strong>Junior</strong></td>
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<td><strong>Fall</strong></td>
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<tr>
<td>CHEM 321 and CHEM 322</td>
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<td>PHYS 231N</td>
<td>University Physics I</td>
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<td>BIOL 293</td>
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<td>STEM 401</td>
<td>Project Based Instruction in STEM Education</td>
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<tr>
<td>Interpreting the Past</td>
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<tr>
<td>CHEM 441</td>
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<td>PHYS 232N</td>
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<tr>
<td>CHEM 331</td>
<td>Physical Chemistry Lecture I</td>
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<td>CHEM 443</td>
<td>Intermediate Biochemistry</td>
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<td>BIOL 294</td>
<td>Genetics</td>
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<td>Research Methods in Mathematics and Science</td>
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<td>STEM 485</td>
<td>Apprentice Teaching</td>
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<td>CHEM 455</td>
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<tr>
<td><strong>Total Credit Hours</strong></td>
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Language and Culture I & II may be met in high school and are not included in this 4-year plan. Please see requirement details.