# Bachelor of Science

## Mathematics with a Major in Applied Mathematics (BS)

### Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></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 211</td>
<td>Calculus I</td>
<td>4</td>
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<tr>
<td>Human Behavior</td>
<td>(ECON 202S required for the Actuarial Mathematics major)</td>
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<tr>
<td>Information Literacy and Research (CS 121G preferred. IT 150G is acceptable substitute for the Actuarial Mathematics major or the Big Data Analytics major)</td>
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<tr>
<td>Elective or Language &amp; Culture I (May be waived; See requirement details)</td>
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<tr>
<td><strong>Freshman</strong></td>
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<td>16</td>
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<tr>
<td>Spring</td>
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<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 212</td>
<td>Calculus II</td>
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<tr>
<td>Oral Communication</td>
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<tr>
<td>Impact of Technology (IT 360T suggested for Actuarial Mathematics major)</td>
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<tr>
<td>Elective or Language &amp; Culture II (May be waived; See requirement details)</td>
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<tr>
<td><strong>Freshman</strong></td>
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<td>16</td>
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<tr>
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<tr>
<td>MATH 307</td>
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<tr>
<td>Human Creativity</td>
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<tr>
<td>CS 151 or CS 153</td>
<td>Introduction to Programming with Java or Introduction to Programming with Python</td>
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<tr>
<td>Nature of Science I (Course depends on major chosen. See requirement details)</td>
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<tr>
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<tr>
<td>MATH 312</td>
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<td>Interpreting the Past</td>
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<td>Philosophy and Ethics (PHIL 120P recommended)</td>
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<tr>
<td><strong>Sophomore</strong></td>
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<tr>
<td><strong>Junior</strong></td>
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<tr>
<td>MATH 311W</td>
<td>Abstract Algebra (C or better required)</td>
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<td>MATH 316</td>
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<td>MATH 317</td>
<td>Calculus IV: Introductory Analysis</td>
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<td>Elective or Major Course if Big Data Analytics major</td>
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<td><strong>Total Credit Hours</strong></td>
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