# Actuarial Mathematics and Statistics Minor

## Minor Requirements (18 Hours)

### Prerequisites

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 141</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 142</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 241</td>
<td>Vector Calculus</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

### Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 511</td>
<td>Probability</td>
<td>3</td>
</tr>
<tr>
<td>STAT 512</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 513</td>
<td>Theory of Statistical Inference</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select three of the following:</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>MATH 344</td>
<td>Applied Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 514</td>
<td>Financial Mathematics I</td>
<td></td>
</tr>
<tr>
<td>STAT 520</td>
<td>Forecasting and Time Series</td>
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</tr>
<tr>
<td>MATH 515</td>
<td>Financial Mathematics II</td>
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</tr>
<tr>
<td>MATH 520</td>
<td>Ordinary Differential Equations</td>
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</tr>
<tr>
<td>MATH 521</td>
<td>Applied Stochastic Processes</td>
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</tr>
<tr>
<td>MATH 570</td>
<td>Discrete Optimization</td>
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</tr>
<tr>
<td>MATH 574</td>
<td>Discrete Mathematics I</td>
<td></td>
</tr>
<tr>
<td>STAT 587</td>
<td>Big Data Analytics</td>
<td></td>
</tr>
<tr>
<td>CSCE 587</td>
<td>Big Data Analytics</td>
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<tr>
<td><strong>Total Credit Hours</strong></td>
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<td><strong>18</strong></td>
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</tbody>
</table>

Note: Only one of MATH 344/MATH 544 may be counted for the minor.