# MATHEMATICS, B.A.

## Requirements for a Major in Mathematics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thirty-three semester hours, six of which must be at the 4000-level, including the following:</td>
<td></td>
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<tr>
<td></td>
<td><strong>Required Courses</strong></td>
<td></td>
</tr>
<tr>
<td>MTH 1321</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 1322</td>
<td>Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 2311</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MTH 2321</td>
<td>Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>MTH 3300</td>
<td>Foundations of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MTH 3323</td>
<td>Introduction to Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or MTH 4326</td>
<td>Advanced Calculus I</td>
<td></td>
</tr>
<tr>
<td>MTH 3312</td>
<td>Foundations of Combinatorics and Algebra</td>
<td>3</td>
</tr>
<tr>
<td>or MTH 4314</td>
<td>Abstract Algebra</td>
<td></td>
</tr>
<tr>
<td>MTH 3325</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>or MTH 4312</td>
<td>Cryptology</td>
<td></td>
</tr>
<tr>
<td>or MTH 4322</td>
<td>Numerical Analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nine semester hours of 3000-4000 level MTH or STA courses (^1)</td>
<td>9</td>
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<tr>
<td></td>
<td>A grade of &quot;C&quot; or better in thirty-three hours of MTH and STA courses used for the major.</td>
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</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td>33</td>
</tr>
<tr>
<td></td>
<td><strong>Required Courses in Other Fields</strong></td>
<td></td>
</tr>
<tr>
<td>CSI 1401</td>
<td>Introduction to Programming I</td>
<td>4</td>
</tr>
<tr>
<td>or CSI 1430</td>
<td>Introduction to Computer Science I with Laboratory</td>
<td></td>
</tr>
<tr>
<td>or STA 2450</td>
<td>Introduction to Computing for the Mathematical and Statistical Sciences</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>37</td>
</tr>
</tbody>
</table>

\(^1\) Excluding: MTH 3318 Data and Chance, MTH 3340 Mathematics through Technology, and MTH 4343 Topics in Mathematics for Prospective Teachers