# Integrated Studies - Mathematical Sciences Emphasis, BA/BS

## Mathematical Sciences Emphasis Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1050</td>
<td>College Algebra / Pre-Calculus (MA)¹</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1060</td>
<td>Trigonometry (MA)</td>
<td>3</td>
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<td>MATH 1210</td>
<td>Calculus I (MA)</td>
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<td>Calculus II (MA)</td>
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<tr>
<td>MATH 2200</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete the following through coursework or credit by examination:

- MATH 1050 College Algebra / Pre-Calculus (MA)¹
- MATH 1060 Trigonometry (MA)¹
- MATH 1210 Calculus I (MA)
- MATH 1220 Calculus II (MA)
- MATH 2200 Discrete Mathematics

Complete 15 credits from the following courses:

- MATH 3000 History of Mathematics
- MATH 3100 Euclidean / Non-Euclidean Geom
- MATH 3150 Introduction to Partial Differential Equations
- MATH 3200 Introduction to Analysis I
- MATH 3210 Introduction to Analysis II
- MATH 3400 Probability & Statistics
- MATH 3500 Numerical Analysis
- MATH 3900 Number Theory
- MATH 4000 Foundations of Algebra
- MATH 4010 Abstract Algebra
- MATH 4100 Introduction to Topology
- MATH 4200 Introduction to Complex Analysis

¹ MATH 1080 will meet both the MATH 1050 and MATH 1060 requirements.

## Notes:

1. Students must select and complete two emphases and Core Requirements.
2. Grade C or higher in each Emphasis Area course required.