Students must complete MATH 241, and at least one 400-level MATH course for admission into the minor. The Mathematics minor is designed to prepare students majoring in some other discipline with a background in mathematics that is both broad and deep. Students interested in pursuing the minor should have completed the calculus sequence through MATH 241, and one additional Math course at the 400-level demonstrating a strong record of success in college-level mathematics courses. Given the cumulative character of mathematics preparation, students earning grades of C or below in previous mathematics courses are advised not to pursue the minor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 241</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Completed in one of two ways:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 347</td>
<td>Fundamental Mathematics (and four courses chosen from at least two of the following lists of courses)</td>
</tr>
<tr>
<td>OR</td>
<td>five courses chosen from at least two of the following lists of courses.</td>
<td></td>
</tr>
</tbody>
</table>

### Algebra
- ASRM 406  Linear Algebra with Financial Applications (formerly MATH 410)
- MATH 415  Applied Linear Algebra
- MATH 416  Abstract Linear Algebra
- MATH 417  Intro to Abstract Algebra
- MATH 418  Intro to Abstract Algebra II
- MATH 427  Honors Abstract Algebra
- MATH 453  Number Theory

### Discrete Mathematics
- MATH 412  Graph Theory
- MATH 413  Intro to Combinatorics
- MATH 414  Mathematical Logic
- MATH 482  Linear Programming

### Analysis
- MATH 284  Intro Differential Systems
- MATH 285  Intro Differential Equations
- MATH 286  Intro to Differential Eq Plus
- MATH 424  Honors Real Analysis
- MATH 425  Honors Advanced Analysis
- MATH 441  Differential Equations
- MATH 442  Intro Partial Diff Equations
- MATH 444  Elementary Real Analysis
- MATH 446  Applied Complex Variables
- MATH 447  Real Variables
- MATH 448  Complex Variables
- CS 450  Numerical Analysis
- MATH 484  Nonlinear Programming
- MATH 487  Advanced Engineering Math
- MATH 489  Dynamics & Differential Eqns

### Geometry
- MATH 402  Non Euclidean Geometry
- MATH 403  Euclidean Geometry
- MATH 423  Differential Geometry
- MATH 428  Honors Topics in Mathematics
- MATH 432  Set Theory and Topology
- MATH 481  Vector and Tensor Analysis

### Probability and Statistics
- MATH 461  Probability Theory
- STAT 400  Statistics and Probability I
- STAT 410  Statistics and Probability II
- or STAT 420  Methods of Applied Statistics

Total Hours 19

1 Students may use STAT 410 or STAT 420, but not both toward the minor.

**Information listed in this catalog is current as of 06/2021**