# MINOR IN APPLIED MATHEMATICS

The minor in Applied Mathematics requires 20 semester credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2471</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2472</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>Choose 12 hours from the following:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

### Required Courses

- MATH 2471: Calculus I
- MATH 2472: Calculus II

### Prescribed Electives

- CS 3378: Theory of Automata ¹
- ENGR 2301: Statics ¹
- IE 3320: Engineering Statistics ¹, ²
- MATH 2393: Calculus III
- MATH 3305: Introduction to Probability and Statistics ²
- MATH 3323: Differential Equations
- MATH 3348: Deterministic Operations Research
- MATH 3376: Applied Linear Algebra ³
- MATH 3377: Linear Algebra ³
- MATH 3383: Numerical Analysis I
- MATH 3398: Discrete Mathematics II
- MATH 4305: Probability and Statistics
- MATH 4306: Fourier Series and Boundary Value Problems
- MATH 4337A: Topological Data Analysis
- MATH 4337B: Research in Discrete Mathematics
- MATH 4337C: Numerical Methods for Ordinary Differential Equations
- MATH 4350: Introduction to Combinatorics
- MATH 4383: Numerical Analysis II
- MATH 4393: Introduction to Finite Element Methods
- PHYS 3320: Introduction to Mathematical Physics ¹

Total Hours: 20

¹ Students can take only one of: PHYS 3320, CS 3378, IE 3320, or ENGR 2301.
² Students may not receive credit for both MATH 3305 and IE 3320.
³ Students may not receive credit for both MATH 3376 and MATH 3377. Students with this minor are encouraged to take MATH 3376.