**MASTER OF SCIENCE IN APPLIED MATHEMATICS, COMPUTATIONAL SCIENCE AND ENGINEERING OPTION**

### Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>MATH 550</td>
<td>Dynamical Systems I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 553</td>
<td>Partial Differential Equations</td>
<td></td>
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Select one of the following: 3-4

- MATH 418 Intro to Abstract Algebra II
- MATH 448 Complex Variables
- MATH 500 Abstract Algebra I
- MATH 540 Real Analysis
- MATH 542 Complex Variables I

12 hours from CSE courses (at least 4 in MATH, 4 not in MATH) 12

**Other Requirements**

Other requirements may overlap

A concentration is not required.

MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.

Minimum Hours Required Within the Unit: 20

Minimum 500-level Hours Required Overall: 12 (8 in MATH)

Minimum GPA: 3.0

### Non-Thesis Option

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Select one of the following: 3-4

- MATH 418 Intro to Abstract Algebra II
- MATH 448 Complex Variables
- MATH 500 Abstract Algebra I
- MATH 540 Real Analysis
- MATH 542 Complex Variables I

12 hours from CSE courses (at least 4 in MATH, 4 not in MATH) 12

**Total Hours** 32

For additional details and requirements refer to the department's Guide to Graduate Studies (http://www.math.illinois.edu/GraduateProgram) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook).