# Mathematics, MS

**Requirements for Students Matriculating in or before Academic Year 2019-2020.** Learn more about Graduate College Academic Regulation 7.0 ([http://catalog.okstate.edu/graduate-college](http://catalog.okstate.edu/graduate-college)).

## Thesis Option

**Total Hours:** 33 Hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>Core Courses</strong></td>
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</tr>
<tr>
<td>MATH 5043</td>
<td>Advanced Calculus I</td>
<td>3</td>
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<td>or MATH 5023</td>
<td>Advanced Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 5543</td>
<td>Numerical Analysis for Differential Equations</td>
<td>3</td>
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<td>or MATH 5553</td>
<td>Numerical Analysis for Linear Algebra</td>
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Select 12 hours from the following:

- MATH 4233 Intermediate Differential Equations
- MATH 4513 Numerical Analysis
- MATH 4553 Introduction to Optimization
- MATH 5213 Fourier Analysis and Wavelets
- MATH 5233 Partial Differential Equations
- MATH 5243 Ordinary Differential Equations
- MATH 5253 Advanced Ordinary Differential Equations
- MATH 5543 Numerical Analysis for Linear Algebra
- MATH 5563 Finite Element Methods for Partial Differential Equations
- MATH 5580 Case Studies in Applied Mathematics
- MATH 5593 Methods of Applied Mathematics

**Hours Subtotal:** 18

**Additional Graduate Courses**

**Electives**

Select 12 hours of electives (no more than 6 hours can be outside MATH, STAT or CS).

**Thesis/Report**

- MATH 5000 Master's Research and Thesis (3-6 hours in combination with electives)

**Hours Subtotal:** 15

**Total Hours:** 33

## Non-Thesis Option

**Total Hours:** 33 Hours

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Select 12 hours from the following:

- MATH 4233 Intermediate Differential Equations
- MATH 4513 Numerical Analysis

**Hours Subtotal:** 18

**Additional Graduate Courses**

**Electives**

Select 9 hours of electives (no more than 6 hours can be outside MATH, STAT or CS).

**Thesis/Report**

- MATH 5000 Master's Research and Thesis (3-6 hours in combination with electives)

**Hours Subtotal:** 15

**Total Hours:** 33

## General Graduate College Requirements

- A minimum Grade-Point-Average of 3.00 is required
- A minimum Grade of “C” is required in all degree applicable courses
- No courses utilizing the Pass-No Pass grading system are permitted
- GRAD 5082 or GRAD 5092 may not be used to meet degree requirements

## Additional Graduate College Masters Degree Requirements

**Plan I (coursework with thesis)**

- A minimum of 30 credit hours
  - A minimum of 24 coursework credit hours comprised of:
    - 6 research or creative component credit hours
    - 21 in-residence credit hours (maximum of 9 transfer hours with "B" or better)
  - 21 credit hours at 5000- or 6000-level

**Plan II (coursework without thesis)**

- A minimum of 32 credit hours
  - A maximum of 3 credit hours of research or creative component
  - A minimum of 23 in-residence credit hours (maximum of 9 transfer credit hours with "B" or better)
  - A minimum of 21 credit hours at the 5000- or 6000-level