## 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).

### Thesis Option

**Total Hours: 33 Hours**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>MATH 5043</td>
<td>Advanced Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 5023</td>
<td>Advanced Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 5543</td>
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<td>3</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 5553 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

### 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

### Non-Thesis Option

**Total Hours: 33 Hours**

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- 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