APPLIED MATHEMATICS, MS

Admission Requirements
In addition to the graduate application and official transcripts applicants must submit three letters of recommendation and a statement of purpose. Applications are accepted on a rolling basis.

Goals
This program is designed to train students in the formulation, analysis, and solution of mathematical models in a variety of application areas.

Administration
Upon admission to the program, each student will undergo a review process to determine competency in undergraduate core mathematical areas and background in at least one junior-level or higher course in engineering or physics. If necessary, the appropriate course(s) will be added to the required course list for the student.

Program Requirements
A minimum of 30 graduate credits, after the completion of deficiency courses, is required.

Core Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3450:621</td>
<td>Real Analysis</td>
<td>3</td>
</tr>
<tr>
<td>3450:627</td>
<td>Advanced Numerical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>3450:633</td>
<td>Methods of Applied Mathematics I</td>
<td>3</td>
</tr>
</tbody>
</table>

Group 1
Select at least one of the following: 3

- 3450:625 Analytic Function Theory
- 3450:628 Advanced Numerical Analysis II
- 3450:632 Advanced Partial Differential Equations

Group 2
Select at least two of the following: 6

- 3450:634 Methods of Applied Mathematics II
- 3450:635 Optimization
- 3450:730 Advanced Numerical Solution of Partial Differential Equations

Thesis/Nonthesis Option
Complete Thesis Option or Nonthesis Option 12

Total Hours 30

Thesis Option
In addition to the placement review and core requirements, at least six credits of electives approved by the graduate adviser, three credits of 3450:692 Seminar in Mathematics, and three credits of 3450:699 Master’s Thesis must be completed.

Nonthesis Option
In addition to the placement review and core requirements, at least twelve credits of electives approved by the graduate adviser must be completed.