1. Background Requirements

Students are required to make up background courses if they do not have sufficient undergraduate mathematics. The minimum undergraduate requirements are:
- MATH 3380 Analysis I
- MATH 4307 Modern Algebra
- MATH 4315 Analysis II
- MATH 4330 General Topology

And 18 Advanced Mathematics Elective Hours

In general, these requirements may be reduced if evidence is presented which shows that the applicant has taken equivalent courses elsewhere prior to enrollment at SWT. Background work must be completed before enrolling in graduate courses.

2. Curriculum

Core Courses 9 hours
All students are required to take the following 9 hours of courses:
- MATH 5307 Modern Algebra
- MATH 5373 Theory of Functions of Real Variables
- And MATH 5329 General Topology or MATH 5331 Metric Spaces

Minor

The minor should be selected from the list of approved minors in the Graduate Catalog.

Elective Courses

All students are required to choose one of the following options:

<table>
<thead>
<tr>
<th>OPTION</th>
<th>MATH ELECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Thesis and No Minor</td>
<td>27 Hours</td>
</tr>
<tr>
<td>No Thesis and A Minor</td>
<td>18 Hours</td>
</tr>
<tr>
<td>Thesis and No Minor</td>
<td>15 Hours</td>
</tr>
<tr>
<td>Thesis and A Minor</td>
<td>9 Hours</td>
</tr>
</tbody>
</table>

Comprehensive Exam

All students are required to take a written comprehensive exam.