### B.S./M.S., MATHEMATICS

#### Overview

##### Accelerated B.S./M.S. Degrees

The combined B.S./M.S. degree allows dedicated mathematics students to complete two degrees in a compressed time frame (typically, five years instead of six), while still maintaining the rigor and content of both degrees. Students will receive a B.S. in mathematics with a concentration in mathematics and an M.S. in mathematics.

Minimum Requirements for Accelerated Mathematics B.S./M.S. Degrees: 138 credits

College of Natural Science and Mathematics  
Department of Mathematics and Statistics (http://www.uaf.edu/dms/)  
907-474-7332

#### Admission Requirements

Complete the following admission requirements:

- Current admission into a baccalaureate degree program  
- At least a 3.0 cumulative GPA  
- Completion of 24 credits in the undergraduate major program requirements  
- Junior standing

#### Program Requirements

Minimum Requirements for Mathematics B.S./M.S.: 138 credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH F252X</td>
<td>Calculus II</td>
<td>4</td>
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</tbody>
</table>

##### B.S. Degree Requirements

Complete the B.S. degree requirements. (http://catalog.uaf.edu/bachelors/summary-of-bachelors-degree-reqs/#bachelorofsciencetext)

As part of the B.S. requirements, complete:

- MATH F253X | Calculus III  
- PHYS F123X and PHYS F124X | College Physics I and College Physics II  
  or PHYS F211X and PHYS F212X | General Physics I and General Physics II

##### Undergraduate Mathematics Program Requirements

- MATH F265 | Introduction to Mathematical Proofs  
- MATH F314 | Linear Algebra  
- MATH F401 | Introduction to Real Analysis  
- MATH F405 | Abstract Algebra  
- MATH F410 | Introduction to Complex Analysis  
- MATH F490 | Senior Seminar

### Graduate Mathematics Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH F404</td>
<td>Introduction to Topology</td>
<td>3</td>
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<tr>
<td>MATH F631</td>
<td>Algebra I</td>
<td>4</td>
</tr>
<tr>
<td>MATH F641</td>
<td>Real Analysis</td>
<td>4</td>
</tr>
<tr>
<td>MATH F645</td>
<td>Complex Analysis</td>
<td>4</td>
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<tr>
<td>MATH F651</td>
<td>Topology</td>
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<tr>
<td>MATH F692</td>
<td>Seminar</td>
<td>1</td>
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<tr>
<td>MATH F698</td>
<td>Non-thesis Research/Project</td>
<td>6</td>
</tr>
</tbody>
</table>
  or MATH F699 | Thesis                        | 6       |

#### Total Credits

- 40

Note:

- All mathematics majors must have an advisor from the Department of Mathematics and Statistics.
- At least 12 approved mathematics credits at the F300 level or above must be taken while in residence on the Fairbanks campus.