MATHEMATICS: APPLIED MATHEMATICS (M.S.)

https://ceps.unh.edu/mathematics-statistics/program/ms/applied-mathematics

Description

The MS in Applied Mathematics provides a broad introduction to modern applied mathematics and the opportunity to apply the curriculum in a wide range of application areas.

Admission Requirements

Applicants must have completed significant coursework in pure or applied mathematics, preferably including numerical analysis, differential equations, real analysis, and complex analysis.

Applying

Please visit the Graduate School website for detailed instructions about applying to the master's program.

Requirements

APPLIED MATHEMATICS OPTION

This program requires 30 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 931</td>
<td>Mathematical Physics</td>
<td>3</td>
</tr>
<tr>
<td>IAM 933</td>
<td>Applied Functional Analysis</td>
<td>3</td>
</tr>
<tr>
<td>IAM 961</td>
<td>Numerical Analysis I: Numerical Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>&amp; IAM 962</td>
<td>Numerical Partial Differential Equations</td>
<td>3</td>
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Select one of the following: 18

- Thesis Option:
  - MATH 899 Master's Thesis (6 credits)

- Project Option:
  - MATH 898 Master's Project (3 credits)

Five elective courses, selected with your adviser

Total Credits 30

The elective courses need not be in mathematics, but must be at the 800 level or higher, and at least one must be a technical course in statistics or some other department. The broad elective flexibility allows the student's application interests to have a substantial role in the content of the program.

The student's full program plan must be proposed in writing to the applied mathematics faculty and approved prior to the student's second semester of study. There is no comprehensive examination in this option.

Student Learning Outcomes

- Students possess significant exposure to graduate level content in the broader mathematical sciences.
- Students possess significant depth of graduate-level knowledge in some area(s) of mathematics.

- Students possess advanced competence in three basic branches of mathematics – topology, algebra and analysis – comprising both content knowledge and the ability to reason with and communicate such knowledge.