Major in Mathematics, General Mathematics Concentration

General Mathematics is a Liberal Arts program designed to provide a solid foundation in mathematics with the flexibility to explore and develop expertise in other academic fields. Because of its flexibility, this concentration is well suited for students who want to combine mathematics with such fields as business, law, computer science, or statistics.

Requirements
Effective Fall 2014

View Major Completion Map (http://wsnet.colostate.edu/CWIS608/Home/MajorCompletionMap)

A minimum grade of C is required in all mathematics, statistics, and computer science courses which are required for graduation.

Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>AUCC</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CO 150</td>
<td>1A</td>
<td>3</td>
</tr>
<tr>
<td>MATH 160</td>
<td>1B</td>
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</tr>
<tr>
<td>MATH 161</td>
<td>1B</td>
<td>4</td>
</tr>
<tr>
<td>MATH 192</td>
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Arts and Humanities: 3B
Global and Cultural Awareness: 3E
Historical Perspectives: 3D
Social and Behavioral Sciences: 3C
Elective: 2-3

Total Credits: 30-31

Sophomore

Select one group from the following: 4

Group A:
- CS 160 Foundations in Programming

Group B:
- CS 155 Introduction to Unix
- CS 156 Introduction to C Programming I

In addition, to complete Group B, select at least two of the following:
- CS 157 Introduction to C Programming II
- CS 158/ MATH 158 Mathematical Algorithms in C
- MATH 151 Mathematical Algorithms in Matlab I
- MATH 152 Mathematical Algorithms in Maple
- MATH 235 Introduction to Mathematical Reasoning

Freshman

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<tr>
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<tbody>
<tr>
<td>MATH 261</td>
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</tr>
<tr>
<td>MATH 369</td>
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<td>3</td>
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<td>PH 141</td>
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<tr>
<td>PH 142</td>
<td>3A</td>
<td>5</td>
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<tr>
<td>STAT 303 or 315</td>
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Advanced Writing: 2

Total Credits: 29

Junior

Select one from the following: 3-4
- MATH 317 Advanced Calculus of One Variable 4B
- MATH 417 Advanced Calculus I 4B,4C
- MATH 340 or 345 Introduction to Ordinary Differential Equations
- MATH 366 1 Mathematics of Information Security
- MATH 466 1 Introduction to Abstract Algebra
- MATH 466 2 Abstract Algebra I 4C
- Biological and Physical Sciences: 3A
- Mathematical Sciences Electives: 6
- Electives: 11

Total Credits: 30-31

Senior

Select one from the following: 3
- MATH 417 Advanced Calculus I
- MATH 418 Advanced Calculus II
- MATH 466 Abstract Algebra I 4C
- MATH 467 Abstract Algebra II
- Mathematical Sciences Electives: 12
- Electives: 14-16

Total Credits: 29-31

Program Total Credits: 120

1. At least 12 credits of ALL upper division MATH courses must be at the 400-level or above.
2. These courses are in addition to the 18 credits of Mathematical Sciences Electives required in footnote 1, and may not be used to fulfill the Mathematical Sciences Electives requirement.
3. Select a non-physics course from category 3A in the AUCC.
4. Select 18 credits from upper division (300-400 level) MATH, CS, or STAT courses, except those courses ending in -80 to -99. At least 9 of the 18 credits must be from upper division MATH courses.
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Select enough elective credits to bring the program total to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400-level).