# Mathematics Program Planner

**Effective for students entering in Fall 2010**

## Core Requirements

<table>
<thead>
<tr>
<th>Core 090</th>
<th>Core 098</th>
<th>Core 099</th>
<th>Core 100</th>
<th>Core 110</th>
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<tbody>
<tr>
<td>Core 115/116</td>
<td>Core 131/133</td>
<td>Core 140 or 141-146</td>
<td>Core 15_*</td>
<td>Core 16_*</td>
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<td>Core 16_</td>
<td>Core 17_</td>
<td>Core 18_</td>
<td>Core 19_*</td>
<td>Core 25_</td>
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<td>Core 26_</td>
<td>Core 280</td>
<td>Core 28_</td>
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## Major Requirements

1) **All Mathematics Majors take the following courses:**

### Freshman Year:

**Fall 2010**

- Math 127 Logic and Axiomatics
- Math 129 Analytic Geometry and Calculus I
- CS/CIS 116 Fundamentals of Programming I

**Spring 2011**

- Math 130 Analytic Geometry and Calculus II
- CS 115 Introduction to Computing

OR

- CS/CIS 117 Fundamentals of Programming II

### Sophomore Year:

**Fall 2011**

- Math 231 Analytic Geometry and Calculus III

**Spring 2012**

- Math 250 Linear Algebra

### Junior Year:

**Fall 2012**

- Math 367 Real Analysis

**Spring 2013**

- Math 490 Junior Seminar

### Senior Year:

**Fall 2013**

- Math 425 Abstract Algebra

2) **In addition to the above, each Mathematics Major completes one of the following three tracks:**

**A) Graduate School** – Five (5) Mathematics Electives Numbered 361 or Higher, usually taken in the **junior and senior years**:

i) ________ ii) ________ iii) ________ iv) ________ v) ________

**B) Actuarial Science, Industry, and Government** - The following five Mathematics courses, usually taken in the **junior or senior years**:

- Math 301 Financial Mathematics
- Math 362 Statistics
- Math 365 Numerical Analysis
- Math 361 Probability and Statistics
- Math 363 Mathematical Modeling

**OR Math 416 Real Analysis II**

**One Additional Mathematics Elective Numbered Math 361 or higher**

**C) Secondary Teaching** – The following four mathematics courses and **specified Education courses in the Teacher Education Program**:

- Math 236 Geometry – Taken in Spring of the Sophomore Year, Spring 2012
- Math 361 Probability and Statistics – Taken in Fall of the Junior Year, Fall 2012
- Math 362 Statistics – Taken in Spring of the Junior Year, Spring 2013
- One additional Math Elective Numbered 363 or Higher

3) **Science Courses - Each Mathematics Major must take:**

- **Chem 113 General Chemistry I** AND **Chem 114 General Chemistry II**

**OR**

- **Phys 111 General Physics I** AND **Phys 112 General Physics II**

These courses are usually taken in the **sophomore or junior year**.