

# Major in Mathematics

## Check Sheet - Effective Fall, 2007

Mathematics majors must earn a minimum of 36 credits in mathematics subject to the restrictions outlined below.

(NOTE: A grade of "C" or better is required in all mathematics courses counted toward degree requirements).

**Mathematics Core Requirement (all of the following):**

- Math 2640      Calculus and Analytic Geometry I (4 credits)
- Math 2740      Calculus and Analytic Geometry II (4)
- Math 2840      Calculus and Analytic Geometry III (4)
- Math 3230      Linear Algebra (3)
- Math 3330      Modern Algebra (3)
- Math 4030      Statistical Methods with Applications (3)
- Math 4430      Advanced Calculus (3)
- Math 4810      Senior Seminar (1)

**In-Depth Experience Requirement (at least one of the following):**

- Math 3830      Differential Equations II (3)
- Math 4040      Statistics and Probability (3)
- Math 4530      Complex Variables (3)

**Mathematics Electives Requirement:**

All mathematics majors must complete at least 8 additional credits in mathematics. Courses numbered below 2640 or between 3000 and 3100 may **not** be counted toward this requirement. Courses that will fulfill this requirement are listed on the back of this page.

Courses:      Math \_\_\_\_\_      Math \_\_\_\_\_      Math \_\_\_\_\_      Math \_\_\_\_\_

For engineering majors, up to 6 credits of mathematics electives may be selected from the following list to count for the mathematics major:

- |                                   |                                  |                                  |                                  |                                  |
|-----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> CEE 3100 | <input type="checkbox"/> EE 3140 | <input type="checkbox"/> EP 3240 | <input type="checkbox"/> IE 3530 | <input type="checkbox"/> ME 3030 |
| <input type="checkbox"/> CEE 3300 | <input type="checkbox"/> EE 4310 | <input type="checkbox"/> EP 3640 | <input type="checkbox"/> ME 3300 | <input type="checkbox"/> ME 3640 |

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### Required Courses Not Included in the 36 Credit Minimum

**Computer Science Requirement (one of the following):**

- CoSc 1130      Introduction to Programming
- CoSc 1430      Programming in C++

*or*              Demonstrate proficiency in a high level computer language such as FORTRAN, Pascal, C, or C++

**Natural Science Requirement (one of the following):**

- Chem 1140 (or 1450)      General Chemistry
- Phys 2510/2530              General Physics I

**Mathematics courses, other than the Core, that can be  
used to fulfill the 8 credit Elective Requirement**

(If courses are not 3 credits, the number of credits is in parentheses after the course name.)

Math 2730	Discrete Mathematics
Math 3130	College Geometry
Math 3630	Differential Equations I
Math 3730	Numerical Analysis
Math 3830	Differential Equations II
Math 4040	Statistics and Probability
Math 4320	History and Development of Mathematical Concepts
Math 4330	Theory of Numbers
Math 4530	Complex Variables
Math 4620	Topics in Modern Mathematics (1-3)
Math 4660	Cooperative Field Experience (1-8)
Math 4920	Independent Study in Mathematics (1-3)