

THE MATH MAJOR

Credit Hour Requirement: Each student is required to take Calculus I, Calculus II, plus 27 hours (with 21 credit hours numbered 3000 or above), with a grade of C- or better and with a 2.000 (C) average for all attempted work in mathematics¹. Each student is required to adhere to one of the four tracks as described below.

Courses Required of All Students

1. Calculus 1 (e.g., MATH 1300 or APPM 1350)
2. Calculus 2 (e.g., MATH 2300 or APPM 1360)
3. Calculus 3 (e.g. MATH 2400 or APPM 2350)
4. Introduction to Discrete Mathematics (MATH 2001)
5. Linear Algebra (MATH 3130 or MATH 3135)
6. Analysis I (MATH 3001)

The Four Tracks

(requirements in addition to those listed above)

Comprehensive Track

1. Abstract Algebra I (MATH 3140)
2. One of Abstract Algebra II (MATH 4140), or Analysis II (MATH 4001)
3. Plus three upper division MATH courses (at least one at the 4000-level²)

Applicable Track

1. Intro to Probability (MATH 4510)
2. Intro to Ordinary Differential Equations (MATH 3430 or 4430)
3. One of Mathematical Statistics (MATH 4520) or Partial Differential Equations (MATH 4470)
4. Plus two upper division MATH courses

Secondary Education Track³

1. Functions and Modeling (MATH 3120)
2. Introduction to Probability and Statistics (MATH 3510)
3. Euclidean and Non-Euclidean Geometry (MATH 3210)
4. History of Mathematical Ideas (MATH 4820)
5. One of Intro to the Theory of Numbers (MATH 3110) or Abstract Algebra I (MATH 3140)

Computational Track⁴

1. Computer Science 1: Programming (CSCI 1300)
2. Computer Science 2: Data Structures (CSCI 2270)
3. Algorithms (CSCI 3104)
4. Intermediate Numerical Analysis I (MATH/APPM 4650)
5. Plus three upper division MATH courses (at least one at the 4000-level²)

¹ The College of Arts & Sciences requires a minimum of 30 credit hours in the major area. For details see the University catalog.

² Students who declared the Math major prior to Fall 2014 may count MATH 3430 towards the 4000-level hours.

³ This track does not provide students with secondary teaching licensure. Students interested in obtaining such licensure should consult with the School of Education.

⁴ CSCI courses do not count towards hours in the major and are not part of the major GPA.