

## 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 mathematics<sup>1</sup>. Each student is required to adhere to one of the three tracks as described below.

### Courses Required of All Students

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

### The Three Tracks

*(requirements in addition to those listed above)*

#### Comprehensive Track

1. Calculus III (e.g., MATH 2400 or APPM 2350)
2. Abstract Algebra I (MATH 3140)
3. One of Abstract Algebra II (MATH 4140), or Analysis II (MATH 4001)
4. Plus three upper division MATH courses (at least one at the 4000-level).

#### Applicable Track

1. Calculus III (e.g., MATH 2400 or APPM 2350)
2. Introduction to Probability (MATH 4510)
3. Introduction to Ordinary Differential Equations (MATH 4430)
4. One of Mathematical Statistics (MATH 4520), or Partial Differential Equations (MATH 4470)
5. Plus two upper division MATH courses.

#### Secondary Education Track<sup>2 3</sup>

1. Functions and Modeling (MATH 3120)
2. Introduction to Probability and Statistics (MATH 3510)
3. Abstract Algebra I (MATH 3140)
4. Introduction to the Theory of Numbers (MATH 3110)
5. Euclidean and Non-Euclidean Geometry I (MATH 3210)
6. Euclidean and Non-Euclidean Geometry II (MATH 4210)

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

<sup>2</sup> While Calculus III is not required for the Secondary Education track, students are strongly encouraged to take a Calculus III course.

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