This major incorporates many mathematical theoreticians as well as specialists in applications of engineering, computer science, finance, economics, physics, and computational genomics. This combination of theoretical and practical education gives the department a unique energy. Students use electives to prepare themselves for a specific field, whether in industry, teaching, or advanced graduate research.

**BACHELOR OF SCIENCE (BS) REQUIREMENTS OVERVIEW**

**Four Prerequisite Courses**
- Calculus I, II, and III
- Linear Algebra and Linear Differential Equations

**Five Core Courses**
- Fundamental Concepts of Modern Algebra
- Fundamental Concepts of Analysis A & B
- Topics in Linear Algebra
- Fundamentals of Physics I — Mechanics and Thermodynamics

**Four upper division math electives, see examples below:**
- Foundations of Discrete Mathematics
- Probability Theory
- Topology
- Introduction to Theory of Complex Variables

**Four additional courses in natural sciences or computer science (non-mathematics)**

Please visit the USC Course Catalogue for an overview of the or Bachelor of Arts (BA) requirements

**EXPERIENTIAL OPPORTUNITIES**

- **Pi Mu Epsilon:** This undergraduate math honors society focuses on contest problem solving, as well as mathematical games and puzzles. Students have participated in the William Lowell Putnam competition and the National Science Foundation-funded Research Experience for Undergraduates.

- **USC Women in Math:** This group of current and former USC students and faculty seeks to enhance mentorship and networking possibilities.

- **Honors Program:** Math majors wishing to graduate with honors can apply to the department for admission to this special program. A minimum grade point average of 3.5 is required in the first two years of university work as well as in a number of lower division mathematics courses.

For additional information, including all major requirements, please consult the USC Catalogue or [http://dornsife.usc.edu/mathematics/degree-requirements/](http://dornsife.usc.edu/mathematics/degree-requirements/)