

# Mathematics

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Mathematics Web Site (<http://www.tamuc.edu/academics/colleges/scienceEngineeringAgriculture/departments/mathematics/default.aspx>)

The graduate program in mathematics provides thorough training to the student in one or more areas of mathematics to stimulate independent thinking, and to provide an apprenticeship for the development of creative research. The program prepares the student for employment in a high school, junior college, or four-year college, for continued study of mathematics at the doctoral level, or in one of the many nonacademic areas in which mathematicians work. For example, our graduates are employed as actuaries, software engineers, college faculty members, school administrators, and by companies such as L3, Texas Instruments, and General Dynamics.

Graduate students in mathematics have access to powerful software packages, and many courses include computer applications.

## Programs of Graduate Work

### Master of Science in Mathematics

Graduate work leading to a Master of Science degree is offered in pure mathematics including analysis, biological mathematics, coding theory, combinatorics, complex analysis, differential equations, differential geometry, image analysis, and processing with learning, mathematics history and statistics (actuarial science). A new Master of Science degree with a mathematics education (<http://coursecatalog.tamuc.edu/grad/colleges-and-departments/science-engineering/mathematics/mathematics-ms/>) concentration is now offered. Emphases for secondary and middle school teachers are specially planned to meet their individual and particular objectives.

Students may also select courses leading to a minor (<http://coursecatalog.tamuc.edu/grad/colleges-and-departments/science-engineering/mathematics/applied-mathematics-minor/>) in applied mathematics.

### Admission

Admission to a graduate program is granted by the Dean of the Graduate School upon the recommendation of the department. Applicants must meet the following requirements for admission in addition to meeting the general university requirements in Mathematics.

Students entering the MS program for a career in higher education, professional work, or further advanced study in mathematics must meet the background requirements which include the calculus sequence, discrete mathematics, and at least two upper-level undergraduate mathematics courses from the areas of algebra, analysis, topology, statistics, and probability.

Secondary mathematics teachers and other students entering the master's degree program with goals other than work as a professional mathematician or advanced study in mathematics should have Calculus I, II, and at least two upper-level undergraduate mathematics courses from the areas of algebra, analysis, topology, statistics, and probability.

- Admission Requirements (<https://www.tamuc.edu/programs/mathematics-ms/#tamuc-section-55372>)

Successful completion of the Comprehensive Exam is required of all students.

**Note:** Individual departments may reserve the right to dismiss from their programs students who, in their judgment, would not meet the professional expectations of the field for which they are training.

Mathematics MS (<http://coursecatalog.tamuc.edu/grad/colleges-and-departments/science-engineering/mathematics/mathematics-ms/>)

Applied Mathematics Minor (<http://coursecatalog.tamuc.edu/grad/colleges-and-departments/science-engineering/mathematics/applied-mathematics-minor/>)