

# MATHEMATICS, M.S.

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**Credits:** 30

**CIP Code:** 270101

**Concentrations:**

- Applied Mathematics (<http://catalog.cau.edu/graduate/programs-study/arts-sciences/natural-sciences-mathematics/mathematical-sciences/mathematics-ms/applied-mathematics-concentration/>)
- Pure Mathematics (<http://catalog.cau.edu/graduate/programs-study/arts-sciences/natural-sciences-mathematics/mathematical-sciences/mathematics-ms/pure-mathematics/>)

## Admission Requirements

The admission requirement is a bachelor's degree with a strong undergraduate background in mathematics. Applicants with deficiencies in mathematics may be accepted subject to taking specified undergraduate courses in addition to the graduate program requirements. Applicants for the Master of Science Degree in Mathematics must also meet the General Admissions Requirements as published in the Graduate Catalog. The GRE is required.

## Program Objectives

1. Prepare students to demonstrate in-depth knowledge and mastery of mathematics, its methods and mathematics.
2. Prepare students to conduct in-depth research and produce innovative approaches to solve problems in mathematics.
3. Prepare students to communicate effectively both in written and oral form, on contemporary and traditional topics in mathematics.
4. Prepare and motivate students for advanced graduate studies, or careers in industry, government, or education or in fields related to mathematics.

## Degree Requirements

In addition to the General Degree Requirements as published in this Catalog, students pursuing the Master of Science Degree in Mathematics with concentrations in **Pure Mathematics** or **Applied Mathematics** must complete a minimum of thirty (30) graduate credits.

For thesis option, students are required to complete at least twenty-four (24) graduate mathematics credits and six (6) thesis related credits.

For the non-thesis option **Applied Mathematics concentration track**, at least 24 credits of the 30 credits must be in mathematics. Up to 6 credits of areas of special applications courses are determined jointly by the interest of the graduate student in consultation with the graduate mathematics advisor and members of other departments who are formally designated as graduate faculty.

For the non-thesis **Pure Mathematics concentration track**, at least 24 credits of the 30 credits must be in mathematics. Up to 6 credits of areas of special theoretical concentration courses are determined jointly by the interest of the graduate student, the graduate mathematics advisor and members of other departments who are formally designated as graduate faculty.

In either pure or applied concentration tracks, students must maintain a minimum cumulative grade point average of 3.0 to continue in the program.