

Master of Science in Mathematics for Educators is designed for individuals seeking to deepen and broaden mathematical knowledge that supports work as a mathematics instructor at all levels. The mathematics content is complemented by coursework that explores mathematics education research and theory. The program includes a blend of courses from pure and applied mathematics, statistics, mathematics education, and may also include coursework from the College of Education.

Prerequisites

1. A bachelor's degree in mathematics or mathematics education, or a bachelor's degree with at least 24 upper division units in mathematics from an accredited college or university.
2. The following course work, or equivalent, with grades of C or better:
 - x [MATH 247 Introduction to Linear Algebra](#)(3 units)
 - x [MATH 310 History of Early Mathematics](#)(3 units)
 - x [MATH 341 Number Theory](#)(3 units)
 - x [MATH 355 College Geometry](#)(3 units)

 - x [MATH 361A Introdu](#)

division coursework which includes the following:

A minimum of 9 graduate or approved upper division units of mathematics:

This coursework must include at least one 500-level mathematics course. If not previously taken, this coursework must also include:

x MATH 444 Introduction to Abstract Algebra (3 units)

or

x MATH 445 Abstract Algebra for Secondary Mathematics Teachers (3 units)

A minimum of 15 graduate units of mathematics education:

This coursework must include the following two courses:

x MTED 511 Mathematics Teaching and Learning (3 units)

x MTED 512 Curriculum and Assessment in Mathematics (3 units)

This coursework must also include at least 9 units from the following 6 courses:

x MTED 540 Algebra in the School Curriculum (3 units)

x MTED 550 Geometry and Measurement in the School Curriculum (3 units)

x MTED 560 Analysis in the Secondary Curriculum (3 units)

x MTED 570 Mathematical Modeling in the School Curriculum (3 units)

x MTED 580 Probability and Statistics in the School Curriculum (3 units)

x MTED 590 Special Topics in Mathematics Education (1-3 units)

A minimum of 6 units of approved upper division or graduate electives in mathematics

- x [MTED 560 Analysis in the Secondary Curriculum](#)(3 units)
- x [MTED 570 Mathematical Modeling in the School Curriculum](#)(3 units)
- x [MTED 580 Probability and Statistics in the School Curriculum](#)(3 units)

Option B.

Subject to the approval of the Mathematics Education Committee of the Department of Mathematics and Statistics, write a thesis in mathematics education and defend it orally. This option requires enrollment in at least 3 units and no more than 6 units of MTED 698.

- x [MTED 698 Thesis in Mathematics Education](#)(1-6 units)

Mathematics Education Thesis

Students choosing the thesis option must consult with the Mathematics Education Graduate Advisor to select a thesis advisor. A proposal is then