

MATHEMATICS (M.S.T.)

<https://ceps.unh.edu/mathematics-statistics/program/mst/mathematics>

Description

The Master of Science for Teachers program in Mathematics is designed to enable teachers to:

- deepen and broaden their mathematics background in core areas of geometry, algebra, and analysis
- explore new content areas of mathematics
- interact with supportive faculty and students in small classes
- share ideas and teaching approaches with teachers from different areas of the country and of the world
- consider perspectives which allow them to help their own students learn mathematics more effectively
- participate in workshops and seminars to extend their knowledge of mathematics and to promote innovative teaching

The program features a strong emphasis on mathematics content, while also providing opportunities for teachers to consider alternative approaches to pedagogy. The program is typically completed in three summers and is designed primarily for experienced teachers of secondary school mathematics.

Admission Requirement

Applicants for the degree of master of science for teachers (M.S.T.) in mathematics usually possess a background equivalent to at least a minor in mathematics and must have completed education courses sufficient for certification, or have three years teaching experience, or currently hold a full-time teaching position.

Applying

Please visit the [Graduate School website](#) for detailed instructions about applying to the MST program.

Requirements

M.S.T. Degree Requirements

The program requires **30 credit hours** of coursework, as outlined below:

Code	Title	Credits
MATH 900	Bridges from the Classroom to Mathematics	1
MATH 905	Euclidean and non-Euclidean Geometries from a Synthetic Perspective	3
MATH 906	Analytic and Transformational Geometry	3
MATH 909	Probability and Statistics for Teachers	3
MATH 913	Graph Theory and Topics in Discrete Mathematics	3
MATH 915	Algebraic Structures	3
MATH 918	Analysis of Real Numbers	3
MATH 925	Problem Solving Seminar	3
Select at least eight additional credit hours from courses numbered MATH 900- MATH 929		8
Total Credits		30

In addition, a concluding experience consisting of a mathematics portfolio and a comprehensive problem set is required.

Student Learning Outcomes

- Demonstrate a deep and broad understanding of graduate level mathematics appropriate for teachers in the core areas of geometry, algebra and analysis.
- Possess specialized breadth in additional areas of mathematics beyond the core areas.
- Demonstrate the ability to make connections between areas of mathematics and between the mathematics they are learning and the mathematics they are teaching.