

MASTER OF SCIENCE IN MATHEMATICS

Web Site: <https://twu.edu/mathematics/graduate-programs/>

Degree Requirements

Total Semester Credit Hours Required

This is a 30 semester credit hour (SCH) degree in which the student has the choice of three options below:

- **Thesis Option:** Take 24 SCH of coursework approved by a departmental advisor along with MATH 5983 and MATH 5993. An oral examination upon completion of the thesis is required.
- **Professional Paper Option:** Take 27 SCH of coursework approved by a departmental advisor along with MATH 5973. An oral examination upon completion of the professional paper is required.
- **Coursework Option:** Take 30 SCH of coursework approved by a departmental advisor. Three comprehensive exams will be required by the student.

Substitutions may be made with permission from a mathematics advisor.

General Master of Science in Mathematics (30 SCH)

Code	Title	SCHs
Electives		
Choose eight of the following		24
MATH 5033	Advanced Calculus	
MATH 5323	Euclidean Geometry	
MATH 5423	History of Mathematics	
MATH 5483	Theory of Probability and Statistics I	
MATH 5493	Theory of Probability and Statistics II	
MATH 5513	Matrix Algebra	
MATH 5523	Introduction to Number Theory	
MATH 5543	Symbolic Logic	
MATH 5573	Statistical Methods I	
MATH 5583	Statistical Methods II	
MATH 5593	Differential Equations	
MATH 5833	Computer-Aided Mathematical Modeling	
MATH 5863	Applied Statistics and Convex Optimization	
MATH 5873	Real Analysis and Topology	
CSCI 5663	Statistical Programming	
Culmination		6
Thesis Option		
MATH 5983	Thesis	
MATH 5993	Thesis	
Professional Paper Option		
MATH 5973	Professional Paper	
One additional Elective course from above		
Coursework Option		
Two additional Elective courses from above		
Comprehensive Exams		
Total SCHs		30

Thesis Option

24 semester credit hours of coursework and 6 semester credit hours for thesis.

Non-thesis Options

27 semester credit hours of coursework and 3 semester credit hours for professional paper.

30 semester credit hours of coursework and comprehensive exams.

Cooperative Education

In order for coursework in Cooperative Education to be counted as degree credit, department approval must be received during the semester in which the course is taken. This approval is in addition to approval to enroll in Cooperative Education coursework. Cooperative Education coursework, as with any coursework, must also be approved by the student's advisory committee in order to be included in the degree plan. Only three semester credit hours of Cooperative Education may be counted toward the Master's degree.

Final Examination

A comprehensive written examination upon completion of the coursework or an oral examination upon completion of the thesis or professional paper is required for all degrees.