

Mathematics MS

College of Arts & Sciences - Mathematics

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All undergraduate degree programs at Tennessee Tech require at least one course in mathematics and many require several courses. The Department of Mathematics provides a variety of general education courses, introductory and advanced undergraduate courses in support of STEM majors, and graduate-level courses for the MS in mathematics and other graduate programs.

As a central part of a STEM-infused comprehensive institution, the Department of Mathematics strives to create successful learners of the subject of mathematics in the university community and in the community where we live. Learning opportunities are provided to students of all disciplines to advance their understanding of mathematical concepts and their effective use of analytic practices and critical thinking as useful in their studies and everyday life. The departmental faculty conduct research in mathematics and as part of interdisciplinary teams and provide service to the department, college, University, and mathematical community.

The mission of the TTU Department of Mathematics is to promote the learning of mathematics through effective teaching, research, and public service. Such learning opportunities are provided to students of all disciplines in support of the mission of the University.

PG 1: The MS in Mathematics degree program will average at least 5 graduates per year.

PG 2: Mathematics graduate students will participate in extracurricular activities related to mathematics.

SLO 1: All MS in Mathematics graduates will demonstrate knowledge of graduate-level Algebra and Analysis.

Mathematics MS graduates will demonstrate knowledge of graduate-level Algebra and Analysis by earning grades of B or better in Math 6110-Abs2.3 ((A)1a)-3 (I -3 (s)-1)C (s)-17(b)8p 4i0T -3 (s)-1s1-mathematic

A departmentally developed curriculum map can be found in Appendix 1 th
between courses and student learning outcomes.

PG 1:

PG 1: Average 5 graduates per year

The MS in MATH program graduated 5 students during the 2020-21 academic year which is on target of for our goal of graduating 5 students each academic year. For the most recent five academic years the program has an average of 4.6 graduates per year. Along with the undergraduate program, the department has already started discussing ways to increase enrollment.

Number of Degrees Awarded July 1-June 30

	2016-17	2017-18	2018-19	2019-20	2020-21
Male	2	1	2	3	5
Female	4	3	1	2	0
Total MS in MATH	6	4	3	5	5

PG 2: Participation in extracurricular activities

During Spring Semester 2021, four of the five graduates had presented in our graduate seminar series. The one who did not had graduated earlier and had presented the previous year. As for other activities, COVID protocols unfortunately kept students from presenting at conferences.

SLO 1: Demonstrate knowledge of graduate-level research (100%)

SLO 2: Demonstrate a depth of knowledge in an area of mathematics

Two graduate courses were created last year

MS in MATH Curriculum Map				
	Courses & Degree Requirements			
Student Learning Outcomes	MATH 6110 (3 cr hours of Algebra)	MATH 6410, 6310 or 6010 (3 cr hours of Analysis)	Minimum of 30 graduate credit hours in MATH	3 Required Sequences and passing 2 comprehensive exam or 2 Required Sequences & Thesis
Students will demonstrate breadth of mathematical knowledge	X	X	X	X
Students will demonstrate depth of mathematical knowledge			X	X

Student demonstrated knowledge of his or her mathematical area of emphasis

student explained the