

APPLIED MATHEMATICS, MASTER OF SCIENCE (MS)

The Master of Science in Applied Mathematics is designed to meet a growing demand for graduates with advanced analytical skills. The degree is suitable for graduates seeking employment in the private sector, as community college math instructors or those pursuing doctoral studies in Applied Mathematics, Statistics, Operations Research and related fields.

Required Courses 60

MATH 600 THESIS (students may choose 5–15 credits)
or MATH 601 RESEARCH REPORT

Electives

Students may choose 45–55 credits from the following

Electives may include up to 15 credits of additional courses from outside the Mathematics Department subject to approval of a departmental advisor. Up to 10 credits of the electives may be at the 400 level.

MATH 530	APPLIED MATHEMATICS
MATH 531	APPLIED GROUP THEORY
MATH 534	METHODS OF DISCRETE MATHEMATICS
MATH 535	CRYPTOGRAPHY
MATH 544	NUMERICAL LINEAR ALGEBRA
MATH 545	METHODS OF COMPUTATIONAL MODELING
MATH 547	NON-LINEAR DYNAMICS
MATH 548	ADVANCED PARTIAL DIFFERENTIAL EQUATIONS
MATH 550	MATHEMATICAL BIOLOGY
MATH 561	CONTINUOUS OPTIMIZATION
MATH 573	TOPICS IN APPLIED MATHEMATICS
MATH 581	APPLIED COMPLEX ANALYSIS
MATH 585	APPLIED LINEAR STATISTICAL MODELING
MATH 586	ADVANCED TOPICS IN STATISTICS
MATH 696	APPLIED MATHEMATICS INTERNSHIP

Total Credits 60

Students who earn an MS in Applied Mathematics from EWU should be able to:

- use current mathematical ideas to analyze a variety of applications from science, technology, engineering, financial business, industry or government;
- use current mathematical ideas to create a model of a variety of applications from science, technology, engineering, financial business, industry, or government;
- effectively communicate applied mathematical concepts to a wide range of audiences;
- have the ability to work effectively with groups of people on applied mathematics problems.