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	SPECTRAL THEORY	
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 successfully earn an MS in Applied Mathematics from EWU should be able to do the following:

- 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.