Mathematical Sciences, M.S.

The M.S. in Mathematical Sciences offers students who hold a bachelor's in mathematics, statistics, or related fields an opportunity to broaden their knowledge in several fields of mathematics, statistics, and their applications. The M.S. program is designed for students seeking careers in science, business, industry, or government; for students who want to teach in high schools or at the community college level; or for students who plan to pursue doctoral studies. The M.S. program offered by the Department of Mathematics and Statistics permits students considerable flexibility in choosing courses. For example, students who are seeking careers in financial/investment industries, banks, insurance companies, or government may choose more statistics courses that emphasize the use, adoption, and development of statistical methods and state-of-the-art computer technology in the analysis of data from problems in all fields of study.

Attendance Requirement for Online Students

For distance students to succeed in our hybrid distance learning program, it is very important that distance students attend live each lecture during its scheduled time (Central time zone) via the University's online course portal. The strength of the online graduate program and students' success depends on the live interaction between students and lecturers.

Test Proctoring Requirements for Online Students

In order to ensure the security and integrity of our exams, students who do not live near the UWF Main or Emerald Coast campus will need to take exams with a proctor.

Proctored exams may only be administered from 12:00 PM to 7:00 PM (Central). If you live outside of the Central time zone, you must adjust your time to synchronize with this time frame (i.e.: 1:00 PM to 8:00 PM Eastern, etc.). For more details, please see our website for Exam Proctoring Information.

Admission Requirements

In addition to the University graduate admission requirements described in the Admissions section of the catalog, the applicant must meet the following minimum departmental admission requirements for regular admission:

- Must have a B.S. or B.A. degree in mathematical sciences or related area with at least a 3.0 GPA.

If an applicant does not meet the above requirements, they may be considered for conditional admission. Please contact the department for more information.

- The student will be eligible for admission if they have all required undergraduate proficiency courses.
- The student will be eligible for admission provisionally subject to completing the required undergraduate proficiency courses.

With the approval of the department, the student may transfer a maximum of six semester hours or two courses (whichever is greater in credit) of graduate work from another institution to apply to the degree. See the Transfer of Credit policy for more information.

In addition to general University requirements, students seeking the M.S. in Mathematical Sciences must meet the requirements listed below.

Foundational Proficiencies

Applicant transcripts will be reviewed for the following foundational proficiencies when determining acceptance to the program.

MAP 2302	Differential Equations	3
MAS 3105	Linear Algebra	3
STA 3162C	Applied Statistics	4
Choose one of the following:		3
MAA 4211	Advanced Calculus I	
MAD 4401	Numerical Analysis	
Total Hours		**13**

Degree Requirements

The M.S. is offered with or without a thesis. In addition to general University requirements, students seeking the Master's degree are required to maintain at least a 3.0 GPA in all University work undertaken in connection with the degree.

Each student must complete a minimum of 30 semester hours (sh) of approved coursework. For the degree with thesis, 6 sh of 6000-level credit will be awarded for the thesis. For the degree without thesis, a one-semester Capstone project (3 sh) or two-semester research courses (6 sh) are required, in which the candidate will investigate topics in mathematics or statistics.

All candidates will take and pass comprehensive examinations covering the graduate core requirements.

A grade of "C-" or better is required in all coursework with a minimum institutional GPA of 3.0.

Core Requirements

MAS 5145	Matrix Theory	3
STA 5326	Statistical Inference	3
All students will take and pass two comprehensive examinations covering these core courses.		0
Total Hours		**6**

Track Options

In addition to fulfilling core requirements, students will choose to pursue a thesis or non-thesis track.

Thesis Track

Department approved 5/6000-level electives. A maximum of 9 sh may be at the 5000-level.		18
Choose one of the following:		6
MAT 6971	Thesis	
STA 6971	Thesis	
Total Hours		**24**

Non-Thesis Track (choose one of the three options)

Department approved 5/6000-level electives. A maximum of 9 sh may be at the 5000-level.		18-21
Choose one of the following:		
Mathematics Research		6

MAT 6903	Mathematics Research 1	
MAT 6904	Mathematics Research 2	
OR		
Statistics Research		6
STA 6912	Statistics Research 1	
STA 6913	Statistics Research 2	
OR		
Capstone Project: choose one of the following		3
MAT 6910	Capstone Projects in Mathematics	
STA 6950	Capstone Projects in Statistics	
Total Hours		24