

# Master of Arts in Teaching Mathematics

Prior to admission, students must have completed the Calculus sequence together with 12 semester hours of advanced courses in Mathematics (3000- or 4000-level). The student's GPA for these 12 hours must be at least 3.0. (Students with a bachelor's degree who do not satisfy these requirements must first enroll in the post-baccalaureate program at UTEP.)

The Master of Arts in Teaching Mathematics (MATM) is available in both a thesis (recommended) and a non-thesis option. The thesis option requires 24 hours of coursework plus the completion of a six-semester-hour thesis in Mathematics Education, while the non-thesis option requires 36 hours of coursework. A maximum of nine (9) of these hours can be taken from approved upper division undergraduate courses. Each student must have his or her courses approved by the Graduate advisor in order to ensure adequate breadth of courses in the Mathematical Sciences. Any student in the non-thesis option is expected to conduct research and graduate with a research paper approved by the faculty with whom MATH 5396 is taken.

Since the degree is intended for current and future high school teachers of Mathematics, it is desirable that the student will have obtained a teaching certificate in Mathematics upon completion of the program. (Teaching certification courses are not part of the MAT program; students should consult the *College of Education* section for such information.)

## Admissions Requirements

- An official transcript, with the four-year baccalaureate degree posted, from the degree-granting institution and copies of transcripts for all other relevant upper-division and graduate work at accredited U.S. institutions or equivalent work and degrees at foreign institutions.
- Statement of Purpose
- 2 Letters of Recommendation
- Applicants from countries where English is not the first language are required to demonstrate English proficiency. Please consult the graduate school (<http://catalog.utep.edu/admissions/graduate/graduate-student/>) website for required scores

## Degree Plan

Required Credits: 30-36

Code	Title	Hours
<b>MAT in Mathematics (All courses require a grade of C or better)</b>		
Select one course from the following (or appropriate courses in the College of Education)		3
MATM 5360	Intro to Math Education	
MATM 5365	Tech in the Math Classroom	
Select one course from the following (or appropriate courses in the College of Education)		3
MATM 5361	Qualitative Res. in Math Ed	
MATM 5364	Quant. Research in Math Ed	
Select a thesis or non-thesis option:		6-12
<b>Thesis Option:</b>		
MATH 5398/5399	Thesis 1	
<b>Non-Thesis Option:</b>		
MATH 5396	Graduate Research	
plus 9 more hours from "Other Electives" below, or appropriate courses in the College of Education.		
Other Electives (thesis or non-thesis option):		
Select eighteen additional hours of graduate MATH, MATM, STAT, or appropriate courses in the College of Education: <sup>1</sup>		18
MATH 5311	Topics in Applied Mathematics	
MATH 5321	Principles of Analysis	
MATH 5325	Principles of Algebra	
MATH 5329	Numerical Analysis	
MATH 5330	Comp Methods of Linear Algebra	
MATH 5331	Real Variables	
MATH 5335	Techniques in Optimization	
MATH 5341	General Topology	
MATH 5343	Numer Solution Part Diff Equat	
MATH 5345	Numerical Optimization	
MATH 5351	Complex Variables	
MATH 5370	Special Topics	

MATH 6345	Topics in Optimization
MATM 5360	Intro to Math Education
MATM 5361	Qualitative Res. in Math Ed
MATM 5364	Quant. Research in Math Ed
MATM 5365	Tech in the Math Classroom
STAT 5329	Statistical Programming
STAT 5335	Applied Experimental Design
STAT 5336	Categorical Data Analysis
STAT 5354	Post-Genomic Analysis
STAT 5370	Special Topics
STAT 5380	Mathematical Statistics I
STAT 5381	Mathematical Statistics II
STAT 5385	Applied Regression Models
STAT 5386	Stochastic Processes
STAT 5388	Multivariate Data Analysis
STAT 5391	Time Series Analysis
STAT 5392	Statistical Computing
STAT 5428	Intro to Statistical Analysis
STAT 5474	Statistical Machine Learning I
STAT 5494	Statistical Machine Learn. II

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**Total Hours****30-36**