The Mathematical Sciences Department at UTEP offers a program of instruction and research leading to MS degrees in the areas of pure and applied mathematics and in statistics and a MA degree in Teaching of Mathematics (MATM) with a major in mathematics. The department also houses the Professional Master degree in Bioinformatics and participates in the Master and PhD programs in Computational Sciences.

Requirements for Admission

1. Bachelor’s degree from an accredited institution in the United States or proof of equivalent education in a foreign institution
2. Undergraduate degree in mathematics
3. TOEFL score of 550 or higher for international applicants whose first language is not English or who have not completed a university degree in the U.S. or other English-Speaking institution
4. Two letters of reference.

Departmental Requirements for MS Degree

For the MS degree, both thesis and non-thesis options are available. The thesis option requires 24 semester hours of course work plus the completion of the six-semester hour thesis. The non-thesis option requires 36 semester hours of course work including MATH 5396 or STAT 5396. In either case, a maximum of nine semester hours of approved upper-division undergraduate courses are acceptable. Particular courses of study for the MS must be approved by the departmental committee on graduate studies. The passing of a comprehensive examination is required. All full-time MS students must enroll in MATH 5195 or STAT 5195 each semester in residence excluding summers and last semester of thesis.

Departmental Requirements for the MAT Degree

Prior to admission, students must have completed the calculus sequence together with 12 semester hours of advanced courses in Mathematics (3300 or 4300-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.) 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.) The Master of Arts in Teaching degree with a major in Mathematics is available in both a thesis (recommended) and a non-thesis option. The thesis option requires 24 hours of course work plus the completion of a six-semester hour thesis in Mathematics Education, while the non-thesis option requires 36 hours of course work. A maximum of nine of these hours may be taken from the 3300 and 4300-level courses listed below. 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.

Study Plan: At most, 9 hours of undergraduate courses are taken from the list below. At least 15 hours plus 6 hours of thesis work (or 27 hours for the non-thesis option) of Graduate courses: 6-9 hours must be taken from MATH 5360, MATH 5365, or appropriate courses in the College of Education. Other suggested courses: MATH 5311, MATH 5321, MATH 5325, MATH 5351, and STAT MATH 5380 5364.
For Undergraduate and Graduate Students

Mathematics (MATH)

3300  History of Mathematics*
3319  Elementary Number Theory
3320  Actuarial Mathematics
3327  Applied Algebra
3328  Foundations of Mathematics
3329  Geometry
3335  Applied Analysis I
3341  Introduction to Analysis
4199- 
4399  Individual Studies in Mathematics
4326  Linear Algebra
4329  Numerical Analysis
4336  Applied Analysis II
4370  Topics Seminar

Statistics (STAT)

3330  Probability
3380  Sampling Techniques
3381  Nonparametric Statistical Methods
4380  Statistics I

*Graduate credit only for MAT students.

Course Information

For descriptions of course offerings, please click here and select Mathematics (MATH) or Statistics (STAT).