M.S. in Statistics and Data Science

Overview

The Statistics and Data Science program accommodates students desiring an applied background for a career in government and industry as well as students desiring a more theoretical background for further graduate studies.

The Master of Science in Statistics and Data Science degree is available in both a thesis (recommended) and a non-thesis option. For students electing the thesis option, the program requires 24 hours of acceptable course work and 6 hours of credit for the thesis. For students not electing to write a thesis, 36 hours of acceptable coursework, including Statistics 5396, are required. Students must enroll in Statistics 5195 each semester of residence. Comprehensive written exams are required of all students. Students who write a thesis may have a portion of the comprehensive examination waived.

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: 31-37

Code	Title	Hours
MS in Statistics and Data Science (All courses require a grade of C or better)		
Required Courses:		
MATH 5321	Principles of Analysis	3
MATH 5322	Linear Algebra	3
or MATH 5330	Comp Methods of Linear Algebra	
STAT 5195	Graduate Seminar	1
STAT 5380	Mathematical Statistics I	3
or DS 5380	Math Found of DS I	
STAT 5381	Mathematical Statistics II	3
or DS 5381	Math Found of DS II	
STAT 5385	Applied Regression Models	3
STAT 5388	Multivariate Data Analysis	3
Select a thesis or non-thesis option:		12-18
Thesis Option		
STAT 5398	Thesis 1	
STAT 5399	Thesis 2	
Plus 6 more hours from Electives list below.		
Non-Thesis Option		
STAT 5396	Graduate Research	
Plus 15 additional hours from Electives list below.		
Electives:		
DS 5339	Data Visualization	
STAT 5329	Statistical Programming	
STAT 5335	Applied Experimental Design	
STAT 5336	Categorical Data Analysis	
STAT 5354	Post-Genomic Analysis	
STAT 5370	Special Topics	
STAT 5386	Stochastic Processes	
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	
Total Hours		**31-37**