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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MATH 4326</td>
<td>Linear Algebra</td>
<td>3</td>
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<tr>
<td>MATH 5321</td>
<td>Principles of Analysis</td>
<td>3</td>
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<tr>
<td>STAT 5195</td>
<td>Graduate Seminar</td>
<td>1</td>
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<td>STAT 5380</td>
<td>Mathematical Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 5381</td>
<td>Mathematical Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>STAT 5385</td>
<td>Statistics in Research</td>
<td>3</td>
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<tr>
<td>STAT 5388</td>
<td>Multivariate Data Analysis</td>
<td>3</td>
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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:
- 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  Introduction to Data Mining
<table>
<thead>
<tr>
<th>STAT 5494</th>
<th>Statistical Data Mining</th>
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<tbody>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>31-37</strong></td>
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