STATISTICS - MINOR

Statistics is the science of collecting and analyzing data for the purpose of making decisions in the presence of uncertainty. Multidisciplinary application areas vary widely and include health and medicine, business, engineering, physical sciences, environmental studies, and government. The statistics minor provides training in theoretical, applied and computational statistics with a two-semester sequence in statistical methods and a broad selection of upper-level elective classes. Depending on the electives selected, a student completing this program will be prepared to conduct statistical analysis in their professional work or to continue graduate study in fields involving statistical analysis.

For additional information, see the Department of Statistics website (http://www.stat.tamu.edu).

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Lower Division Courses</strong></td>
<td></td>
</tr>
<tr>
<td>STAT 211</td>
<td>Principles of Statistics I</td>
<td>3</td>
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<tr>
<td>STAT 212</td>
<td>Principles of Statistics II</td>
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<td></td>
<td><strong>Directed Upper Division Electives</strong></td>
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<tr>
<td>Select three of the following:</td>
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<tr>
<td>STAT 335/CSCE 320</td>
<td>Principles of Data Science</td>
<td></td>
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<tr>
<td>STAT 404</td>
<td>Statistical Computing</td>
<td></td>
</tr>
<tr>
<td>STAT 406</td>
<td>Design and Analysis of Experiments</td>
<td></td>
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<tr>
<td>STAT 407</td>
<td>Principles of Sample Surveys</td>
<td></td>
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<tr>
<td>STAT 408</td>
<td>Introduction to Linear Models</td>
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<tr>
<td>STAT 414</td>
<td>Mathematical Statistics I</td>
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<tr>
<td>STAT 415</td>
<td>Mathematical Statistics II</td>
<td></td>
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<tr>
<td>STAT 421/CSCE 421</td>
<td>Machine Learning</td>
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<tr>
<td>STAT 436</td>
<td>Multivariate Analysis and Statistical Learning</td>
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<tr>
<td>STAT 438</td>
<td>Bayesian Statistics</td>
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<tr>
<td>STAT 445</td>
<td>Applied Biostatistics and Data Analysis</td>
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</tr>
<tr>
<td>STAT 446</td>
<td>Statistical Bioinformatics</td>
<td></td>
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<td>STAT 459</td>
<td>Categorical Data Analysis</td>
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<tr>
<td>STAT 485</td>
<td>Directed Studies</td>
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<td>STAT 489</td>
<td>Special Topics in...</td>
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<td><strong>Total Semester Credit Hours</strong></td>
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</table>

1 STAT 485 or STAT 489 must be approved by the Statistics Department.

Additional Requirements:

Students must make a grade of C or better in all courses.

Substitutions for the minor must be approved by the Statistics Department.