STATISTICS MAJOR (B.S.)

https://ceps.unh.edu/mathematics-statistics/program/bs/statistics

Description

This program prepares students for employment and/or graduate study in a variety of fields and research specializations in which statistical analysis and its applications play a critical role. In addition to its degree programs, the department has an active interest in the actuarial profession. Those interested in actuarial science should seek the advice of departmental coordinator of the actuarial program, Professor Linyuan Li.

Graduation Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>MATH 425</td>
<td>Calculus I</td>
<td>4</td>
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<tr>
<td>MATH 426</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 445</td>
<td>Mathematics and Applications with MATLAB</td>
<td>4</td>
</tr>
<tr>
<td>or CS 410</td>
<td>Introduction to Scientific Programming</td>
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<tr>
<td>MATH 527</td>
<td>Differential Equations with Linear Algebra</td>
<td>4</td>
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<tr>
<td>MATH 528</td>
<td>Multidimensional Calculus</td>
<td>4</td>
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<tr>
<td>MATH 531</td>
<td>Mathematical Proof</td>
<td>4</td>
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<tr>
<td>MATH 539</td>
<td>Introduction to Statistical Analysis</td>
<td>4</td>
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<tr>
<td>MATH 645</td>
<td>Linear Algebra for Applications</td>
<td>4</td>
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<tr>
<td>MATH 739</td>
<td>Applied Regression Analysis</td>
<td>4</td>
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<tr>
<td>MATH 755</td>
<td>Probability with Applications</td>
<td>4</td>
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<tr>
<td>MATH 756</td>
<td>Principles of Statistical Inference</td>
<td>4</td>
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<td>TWO approved MATH electives, chosen in consultation with the major advisor, at least one is at the 700-level.</td>
<td>8</td>
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<td>Select THREE from the following:</td>
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<tr>
<td>MATH 736</td>
<td>Advanced Statistical Methods for Research</td>
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<tr>
<td>MATH 737</td>
<td>Statistical Methods for Quality Improvement and Design</td>
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<tr>
<td>MATH 740</td>
<td>Design of Experiments I</td>
<td></td>
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<tr>
<td>MATH 741</td>
<td>Survival Analysis</td>
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<td>MATH 743</td>
<td>Time Series Analysis</td>
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<tr>
<td>MATH #744</td>
<td>Design of Experiments II</td>
<td></td>
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<td>Capstone</td>
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<td>MATH 797</td>
<td>Senior Seminar</td>
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<td>or MATH 798</td>
<td>Senior Project</td>
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<td>or MATH 799</td>
<td>Senior Thesis</td>
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<td>Total Credits</td>
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1 MATH 525 - MATH 526, Linearity, may be substituted for: MATH 527, MATH 528, and MATH 645