Statistics (B.S.)

Required course work includes the university requirements (see regulation J-3 (https://catalog.uidaho.edu/general-requirements-academic-procedures/j-general-requirements-baccalaureate-degrees)) and:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 170</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 175</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 275</td>
<td>Calculus III</td>
<td>3</td>
</tr>
<tr>
<td>MATH 330</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following options: 39-58

- General (p. 1)
- Actuarial Science and Finance (p. 1)

Total Hours 53-72

### A. General Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 301</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 407</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>STAT 422</td>
<td>Sample Survey Methods</td>
<td>3</td>
</tr>
<tr>
<td>STAT 431</td>
<td>Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 436</td>
<td>Applied Regression Modeling</td>
<td>3</td>
</tr>
<tr>
<td>STAT 451</td>
<td>Probability Theory</td>
<td>3</td>
</tr>
<tr>
<td>STAT 452</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following: 6

- CS 120 Computer Science I
- STAT 426 SAS Programming
- STAT 427 R Programming

Other approved courses

Select 12 credits from the following: 12

- CS 479 Data Science
- MATH 310 Ordinary Differential Equations
- MATH 428 Numerical Methods
- MATH 437 Mathematical Biology
- MATH 438 Mathematical Modeling
- MATH 471 Introduction to Analysis I
- MIS 455 Data Management for Big Data
- STAT 456 Quality Management
- STAT 514 Nonparametric Statistics
- STAT 517 Statistical Learning and Predictive Modeling
- STAT 535 Introduction to Bayesian Statistics

Total Hours 51-58

### B. Actuarial Science and Finance Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 310</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 451</td>
<td>Probability Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 452</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

400-Level Math Courses: 9

- Three additional courses chosen from Math courses numbered 400 and above. May include Stat 422.

### Supporting Courses 12

- ACCT 201 Introduction to Financial Accounting
- ACCT 202 Introduction to Managerial Accounting
- FIN 301 Financial Resources Management
- STAT 431 Statistical Analysis
- BUS 339 Spreadsheet Modeling 1-3
- or STAT 426 SAS Programming 3-4
- CS 112 Computational Thinking and Problem Solving
- or CS 120 Computer Science I 3
- STAT 251 Statistical Methods
- or STAT 301 Probability and Statistics
- STAT 433 Econometrics
- or STAT 550 Regression 3

Select one of the following: 4-6

- ECON 201 Principles of Macroeconomics
- & ECON 202 Principles of Microeconomics
- ECON 272 Foundations of Economic Analysis
- Select three courses selected from the following: 7-9
- ECON 351 Intermediate Macroeconomic Analysis
- ECON 352 Intermediate Microeconomic Analysis
- FIN 302 Intermediate Financial Management
- FIN 381 International Finance
- FIN 408 Security Analysis
- FIN 463 Portfolio Management
- FIN 464 Derivatives and Risk Management
- FIN 465 Introduction to Market Trading
- FIN 469 Risk and Insurance
- MATH 455 Applied Actuarial Science

Total Hours 51-58

Courses to total 120 credits for this degree