

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:

Code	Title	Hours
MATH 170	Calculus I	4
MATH 175	Calculus II	4
MATH 275	Calculus III	3
MATH 330	Linear Algebra	3
Select one of the following options:		39-58
General (p. 1)		
Actuarial Science and Finance (p. 1)		
Total Hours		53-72

A. General Option

Code	Title	Hours
STAT 301	Probability and Statistics	3
STAT 407	Experimental Design	3
STAT 422	Sample Survey Methods	3
STAT 431	Statistical Analysis	3
STAT 436	Applied Regression Modeling	3
STAT 451	Probability Theory	3
STAT 452	Mathematical Statistics	3
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		39

Courses to total 120 Credits for this degree

B. Actuarial Science and Finance Option

Code	Title	Hours
Math Courses		
MATH 310	Ordinary Differential Equations	3
MATH 451	Probability Theory	3
MATH 452	Mathematical Statistics	3

400-level MATH courses: Three additional courses chosen from MATH course numbered 400 and above. May include STAT 422. 9

Supporting Courses		
ACCT 201	Introduction to Financial Accounting	3
ACCT 202	Introduction to Managerial Accounting	3
CS 112	Computational Thinking and Problem Solving	3-4
or CS 120	Computer Science I	
FIN 301	Financial Resources Management	3
STAT 251	Statistical Methods	3
or STAT 301	Probability and Statistics	
STAT 426	SAS Programming	3
STAT 431	Statistical Analysis	3
STAT 433	Econometrics	3
or STAT 436	Applied Regression Modeling	
Select one of the following:		4-6
ECON 201 & ECON 202	Principles of Macroeconomics and Principles of Microeconomics	
ECON 272	Foundations of Economic Analysis	
Select three courses 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	
STAT 419	Introduction to SAS/R Programming	
or STAT 426	SAS Programming	
or STAT 427	R Programming	
Total Hours		53-58

Courses to total 120 credits for this degree

General Option

1. The student can apply fundamental theory in probability and statistical inference.
2. The student can apply and evaluate statistical models.
3. The student can apply statistical computing skills for data analysis and data science.
4. The student can demonstrate effective communication skills.

Actuarial Science and Finance Option

1. The student can apply statistical computing skills for data analysis and data science.