ACTUARIAL SCIENCE SPECIALIZATION, BA AND BS

Student Learning Outcomes

- Students will solve a variety of problems in mathematics including calculus, probability and statistics, and linear algebra.
- Students will write mathematical proofs and solve challenging problems both pure and applied.
- Students will communicate mathematics and statistical results both orally and in writing.
- Students will identify and utilize the appropriate practices and tools, including the use of technology, to solve mathematics problems and perform statistical modeling and analysis of data.

Degree Requirements

In addition to the requirements stated below, students must complete 34-35 hours of General Education (https://catalog.washburn.edu/undergraduate/programs-degrees-graduation-requirements/general-education-requirements/), all requirements for a Bachelor of Arts (https://catalog.washburn.edu/undergraduate/college-arts-sciences/degrees/bachelor-arts/) or Bachelor of Science (https://catalog.washburn.edu/undergraduate/college-arts-sciences/degrees/bachelor-science/) degree, and any additional hours needed to reach the minimum 120 credit hours required for graduation. Some of the courses below may also fulfill general education or other degree requirements. Please see your advisor for more information.

Code	Title	Hours
Required Courses Inside Department		
MA 151	Calculus & Analytic Geometry I	5
MA 152	Calculus & Analytic Geometry II	5
MA 253	Calculus/Analytic Geometry III	3
MA 301	Linear Algebra	3
MA 340	ANOVA/Design of Experiments	3
or MA 341	Nonparametric Tests/Quality Control	
MA 344	Mathematical Statistics I	3
MA 345	Mathematical Statistics II	3
MA 346	Regression Analysis	3
MA 347	Stochastic Processes	3
MA 348	Time Series Analysis	3
MA 384	Theory of Interest	3
MA 385	Actuarial Mathematics	3
Required Courses Outside Department		
AC 224	Financial Accounting	3
AC 225	Managerial Accounting	3
BU 374	Principles of Risk and Insurance	3
BU 381	Business Finance	3
BU 483	Investments	3
EC 200	Principles of Microeconomics	3
EC 201	Principles of Macroeconomics	3
Total Hours		**61**