

ACTUARIAL SCIENCE MINOR

Bowers College of Computing and Information Science

Program Website (<https://stat.cornell.edu/academics/undergraduate/actuarial-science-minor/>)

Program Description

An actuary is a business professional who analyzes the financial consequences of risk. In the Actuarial Science minor, students will learn mathematics, statistics, and financial theory essential to study uncertain future events, especially those of concern to insurance in health, life, and properties, as well as how to mitigate them.

Questions about the minor should be directed to: Julia Aquadro (jra269@cornell.edu), Assistant Director of Undergraduate Advising.

Minor Requirements

Five courses are required in total to complete the minor. This includes two foundational required courses and three electives.

Code	Title	Hours
Required Courses		
Select one of the following:		4
BTRY 3080	Probability Models and Inference	
MATH 4710	Basic Probability	
ECON 3110	Applied Probability and Statistics	
ECON 3130	Probability and Statistics	
ORIE 3500	Eng Probability and Statistics: Modeling and Data Science II	
STSCI 3090	Financial Math for Actuarial Science ¹	4
Electives ¹		
Select at least three electives from the following list:		12
STSCI 3040	R Programming for Data Science	
BTRY 4090	Theory of Statistics	
STSCI 4270	Introduction to Survival Analysis and Loss Models	
STSCI 4550	Applied Time Series Analysis	
STSCI 4600		
ORIE 4741		
STSCI 4740		
STSCI 4750	Understanding Machine Learning	
CS 3780	Introduction to Machine Learning	
CS 4786		
ORIE 4630	Operations Research Tools for Financial Engineering	
AEM 4210	Futures, Options and Financial Derivatives	
or ECON 424		
or HADM 32	Introduction to Investments	

¹ Biometry and Statistics or Statistical Science majors, graduating in or after December 2025, cannot overlap their three minor electives and STSCI 3090 Financial Math for Actuarial Science with major requirements. Probability courses can be double counted.