

ACTUARIAL SCIENCE - BUSINESS MAJOR

Department: Economics and Finance (<https://catalog.bradley.edu/undergraduate/business/economics-finance/>)

A career in actuarial science is widely recognized as one of the most attractive professions available to college graduates. Actuaries apply a unique set of business and mathematical skills in solving financial and social problems. Examples of organizations employing actuaries include insurance companies, consulting firms, public utilities, and select regulatory agencies.

The actuarial science major is a cooperative effort between the Economics Department and the Department of Mathematics and is based on the premise that successful actuaries have mastered essential business and risk management and insurance knowledge along with specific actuarial mathematics skills.

The objective of Bradley's actuarial science-business program is to prepare majors for successful careers as actuaries. Several required courses will help students prepare for some of the standard actuarial exams administered by the Society of Actuaries (SOA) and the Casualty Actuarial Society (CAS).

A list of the program requirements is provided below, along with a recommended course sequence for actuarial science-business (ASB) majors.

Departmental Requirements for an Actuarial Science – Business Major

- Complete the business core, substituting MTH 325 Probability and Statistics I for Q M 262 Quantitative Analysis I and substituting MTH 326 Probability and Statistics II for the "Quantitative Skill Building" course, respectively.

Code	Title	Hours
Actuarial Science Business (ASB) Requirements		
MTH 121	Calculus I	4.0
MTH 122	Calculus II	4.0
MTH 223	Calculus III	4.0
MTH 207	Elementary Linear Algebra With Applications	3.0
MTH 325	Probability and Statistics I	3.0
MTH 326	Probability and Statistics II	3.0
MTH 335	Topics in Actuarial Science (repeated under different topics)	6.0
MTH 427	Applied Statistical Methods	3.0
Select one of the following programming courses:		3.0
MIS 175		
CS 100	Introduction to Programming Concepts and Languages	
CS 101	Introduction to Programming	
CIS 102	Introduction to Computer Information Systems With Basic	
Select one of the following "tools" courses:		3.0
Q M 426	Business Forecasting	
Q M 464	Decision Support Systems	

FIN 426	Financial Research & Modeling	
ECO 419	Introduction to Econometrics	
MTH 435	Stochastic Processes	
IME 313	Operations Research I	
Select three of the following:		9.0
ECO 301	Money and Banking	
FIN 325	Investment Analysis	
FIN 327	Derivative Securities	
FIN 328	Financial Institutions and Markets	
FIN 423		
FIN 425	Portfolio Theory and Management	
ASB 315		
All students must sit for at least one professional actuarial exam administered by the Society of Actuaries.		
Total Hours		45