

# ACTUARIAL SCIENCE

Advised electives	9
<b>Total Credits</b>	<b>120</b>

Actuaries use mathematics to analyze risk in insurance, pension, and other financial situations. It takes a combination of strong analytical skills, business knowledge and understanding of human behavior to design and manage programs that control risk. The actuarial profession has consistently been rated as one of the top five jobs in the United States according to Jobs Rated Almanac.

To become an actuary, a candidate must pass a series of exams in probability, economics, finance and actuarial modeling. Most actuaries begin their careers with one or more of these exams already completed, but will take many of the exams after they have been employed.

## Actuarial Science, B.S.

Code	Title	Credits
<b>General Education Requirement</b>		
VSJ 100	Vincentian Social Justice	3
Foundation Courses ( <a href="http://catalog.niagara.edu/undergraduate/curriculum/foundation-courses/">http://catalog.niagara.edu/undergraduate/curriculum/foundation-courses/</a> )		27
Select 33 credits of Distribution Courses, including the following for this major: ( <a href="http://catalog.niagara.edu/undergraduate/curriculum/general-education-distribution-courses/">http://catalog.niagara.edu/undergraduate/curriculum/general-education-distribution-courses/</a> )		30
ACC 111	Financial Accounting	
ECO 103	Principles of Macroeconomics	
MAT 111	Calculus I	
CIS 265	Visual Programming I	
<b>Major Requirement</b>		
MAT 112 & MAT 221	Calculus II and Calculus III	8
MAT 227	Foundat of Math	3
MAT 228	Linear Algebra	4
MAT 305	Math of Finance	3
MAT 335	Prob and Stat I	3
MAT 336	Probability and Statistics II	3
MAT 499	Senior Seminar	3
ACC 112	Management Accounting	3
ECO 102	Principles of Microeconomics	3
FIN 320	Corporate Finance I	3
FIN 340	Corporate Finance II	3
FIN 350	Fundamentals of Investments	3
FIN 360	International Financial Management	3
or LAW 205	Legal Env of Business	
MAT or FIN 300/600-level elective		
Select one of the following:		3
MAT 320	Math Modeling	
STA 301	Linear Models	
STA 305	Nonparametric Statistics	
Select one of the following:		3
ECO 305	Intermediate Microeconomics	
ECO 306	Intermediate Macroeconomics	
ECO 360	Money and Banking	