

MATHEMATICS: ACTUARIAL SCIENCES

University of Northern Iowa College of Humanities, Arts & Sciences

<https://uni.edu/math/>

ABOUT THE MAJOR

Actuarial science is a discipline that applies mathematical and statistical methods to assess risk in insurance, finance and other industries. A career as an actuary can best be described as a “business” career with a mathematical basis rather than a “technical” mathematical career. Actuaries use mathematical and statistical concepts in order to determine the likelihood of a certain events occurring in the future (and when they’ll occur), as well as the expected financial impact of those events.

SAMPLE COURSEWORK

Intro to Statistical Methods	Calculus I, II, III
Intro to Information Systems	Intro to Financial Engineering
Mathematics of Finance	Regression Analysis
Linear Algebra for Applications	Actuarial Mathematics

POSSIBLE CAREERS *some titles may require further education

Actuary	Cost Estimator	Mathematician
Accountant	Economist	Statistician
Auditor	Financial Analyst	Personal Financial Advisor
Budget Analyst	Insurance Underwriter	Professor

UNI GRADUATES: WHERE ARE THEY NOW?

- Principal Financial Group
- Transamerica
- Athene USA
- Nationwide
- CUNA Mutual Group
- Allstate
- Global Atlantic Financial Group
- John Deere
- Farm Bureau Financial Services
- American Family Insurance
- Coaching Actuaries
- IMT Insurance
- Arity
- Sammons Financial Group
- Grinnell Mutual
- Hause Actuarial Solutions, Inc.



SKILLS NEEDED

- Analytical skills
- Communication
- Computer skills
- Interpersonal skills
- Math skills
- Problem-solving
- Time-management
- Critical thinking skills
- Organization

HOLLAND CODES

ISE