

## What we offer for Pre-Actuaries

The Hope College Department of

Mathematics and Statistics offers

- Actuarial exam preparation courses
- Internship opportunities
- All of the Society of Actuaries certified Validation by Educational Experience (VEE) courses



### Recommended Courses

#### *Strongly Recommended*

- Math 365 – Introduction to Probability
- Math 366 – Probability for Actuaries
- Math 362 – Mathematical Statistics
- Acct 221 – Financial Accounting
- Econ 211/212 – Macro- and Micro-Economics
- Bus 371 – Financial Management
- Econ 306 – Econometrics

#### *Recommended*

- Math 215 or 219 – Statistical Methods
- Math 233 – Multivariable Calculus
- Math 245 – Linear Algebra
- Math 270 – Differential Equations

### More questions?

Talk with Professors Airat Bekmetjev or Yew-Meng Koh of the Hope College Department of Mathematics and Statistics.

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*Hope College  
Department  
of  
Mathematics  
and  
Statistics*

*Pre-Actuary  
Information*

Hope College  
Department of  
Mathematics and Statistics

*Recommendations for the Pre-Actuary*

## What is Actuarial Science?

Actuarial science is a field of study that uses mathematical models to put a present dollar value on future risky events. Historically, most actuaries have



worked in the insurance and pensions industries.

Today, actuaries are also involved in financial decision making for both individuals and companies. *CareerCast* recently rated actuary as the top profession based on work environment, income, outlook, job security, stress and other factors. In particular, the actuarial profession is often called the “zero-unemployment” profession because typically the demand for actuaries has outpaced supply. Visit [www.beanactuary.org](http://www.beanactuary.org) for more information about the actuarial profession.

## Who becomes an actuary?

Actuaries are people who have very strong quantitative abilities, enjoy working in the business world, and who want to start their careers immediately after they attain their undergraduate degree (no post-graduate degree required). Again, visit [www.beanactuary.org](http://www.beanactuary.org) for more information

## Recommendations

Students must have passed the first of a series of certification exams before graduating in order to be competitive for jobs after graduation. Additionally, students who have completed Society of Actuaries certified Validation by Educational Experience (VEE) college courses, have had an internship in the actuarial field, and/or have completed subsequent actuarial certification exams are even more competitive for actuarial positions upon graduation.

## First Exam

Students should take Probability (Math 365) and Probability for Actuaries (Math 366) after taking at least the first two semesters of calculus. At the end of the courses, students are ready to take the first actuarial certification examination.



## VEE Courses

Through our department and the Department of Economics and Business, we offer all of the Society of Actuaries VEE courses. These include Mathematical Statistics (Math 362), Macroeconomics (Econ 211), Microeconomics (Econ 212), Financial Management (Bus 371), and Econometrics (Econ 306).

## Internships

The Career Services Office offers connections to summer internships with firms in Grand Rapids, Chicago, Detroit and beyond. Students may also obtain semester long internships as part of the Chicago or Philadelphia semester programs. Students that pass their first exam will be competitive for most summer internships.

## Preparation for Subsequent Exams

The Hope College Mathematics and Statistics Department offers independent study opportunities for students who have completed the first exam and are preparing for the second, third or fourth exams.

## Further Mathematics Study

While not required, pre-actuary students should also take courses in statistics (Math 215 or 219) and multivariate calculus/linear algebra (Math 233/245/270).