Bachelor of Science in Actuarial Science

The actuarial profession has been rated as one of the top four jobs in America. — Job Rated Almanac

A relatively new field, Actuarial Science is the study of mathematics and financial theory to determine the financial effect that uncertain future events such as birth, death, retirement, fire, accident, and sickness have on insurance and benefit plans. The competitive actuarial profession requires college graduates to have analytic, statistical, and computational skills, which allow them to solve industrial problems, predict the financial effects of uncertain future events, and carry out decision-making analyses.

Careers in Actuarial Science

Actuaries work for large businesses such as insurance firms, employee benefits companies, consulting firms, financial institutions, and government agencies. Similar to accountants, actuaries are required to pass professional exams that test their professional knowledge and skills. The actuarial sciences program at IU South Bend prepares students for early exams. Later exams are taken after a course of self-study. Graduates have the opportunity to be employed as actuaries while continuing to study for later exams.

Through the variety of coursework needed in the major, actuarial science graduates also are prepared for other business fields, such as quality control, computational analysis, information management, forecasting, risk analysis, simulation, and finance. The major also prepares students for graduate studies in either mathematics or business.

Actuaries have tremendous earning potential — the typical starting salary is over $40,000, and those who have passed all the professional exams can earn six figure incomes.

General Information

What is an Actuary?

Actuaries provide expert advice and relevant solutions for business and societal problems that involve economic risk. For example, an actuary can suggest investment strategies based on risk and potential return for a company. An actuary will determine potential gains when a new international market opens or forecast the return on investment in the development of a new product.
\[ P(X = x) = \Pr \{ X \leq x \} = \int_{-\infty}^{x} f(t) \, dt \]

**Fast Facts**

**Bachelor of Science in Actuarial Science**

**Degree Awarded**
IU South Bend graduates earn IU degrees

**Students**
7,501

**Student-Faculty Ratio**
14:1

**Tuition**
- Resident: $144.95 per credit hour
- Non-resident: $380.65 per credit hour

**Financial Aid**
$25 million is distributed to 60% of students

**Technology**
- 436 computers in 13 computer labs

**Programs of Study**
- More than 100 undergraduate degree and certificate programs
- 17 graduate programs

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