

ACTUARIAL SCIENCE CONCENTRATION

CSUF DEPARTMENT OF MATHEMATICS



Who Are Actuaries?

Actuaries are highly sought-after professionals who develop and communicate solutions for complex financial issues.

Most actuaries work for insurance companies. Although most work full time in an office setting, some actuaries who work as consultants may travel to meet with clients.

What Actuaries Do

Actuaries analyze the financial costs of risk and uncertainty. They use mathematics, statistics, and financial theory to assess the risk of potential events, and they help businesses and clients develop policies that minimize the cost of that risk. Actuaries' work is essential to the insurance industry.

Why Become An Actuary?

According to Bureau of Labor Statistics, the median salary for an actuary was \$100,610 per year (2016) or \$48.37 per hour.

Employment of actuaries is projected to grow 22 percent from 2016 to 2026, much faster than the average for all occupations.



PREPARE FOR SOA EXAMS

...and become an actuary!

- Exam P (Math 335)
- Exam FM (Finance 415)
- Exam MFE/IFM (Finance 444 & 542)
- Exam C (Math 460)

Why Cal State Fullerton?

Currently, there are only three programs in California recognized as Universities and Colleges with Actuarial Programs - Advanced Curriculum (UCAP - AC) by the Society of Actuaries, and CSUF proudly represents one of them.

CSUF's Center for Insurance Studies (CIS) attracts and educates talented individuals who are committed to professional careers in insurance and risk management. CIS, in partnership with the Department of Mathematics, offers an undergraduate Actuarial Science Concentration as well as graduate actuarial science courses. The Center also provides actuarial workshops and exam study materials. In 2017, CIS was given the prestigious Global Center of Insurance Excellency (GCIE) award, presented by the International Insurance Society and selected by the Best's Review as one of the top 20 RMI programs nationwide.



In the past two years, there have been more than 20 CSUF students who have passed at least one SOA exam. Many of these students have obtained internships and entry-level positions shortly thereafter.

EDUCATION

REQUIRED COURSES:

- **Math 335** Mathematical Probability
- **Math 338** Applied Statistics
- **Math 435** Mathematical Statistics
- **Math 460** Actuarial Models
- **Fin 415** Quantitative Theory of Interest
- **Fin 444** Options and Futures
- One of the following classes:
 - **Math 437** Modern Approaches to Data Analysis
 - **Math 438** Introduction to Stochastic Processes
 - **Math 439** Intermediate Data Analysis

FINANCE COGNATE:

- **Fin 320** Financial Management I
- **Fin 340** Introduction to Investments
- **Fin 360** Principles of Insurance

VALIDATION FOR EDUCATIONAL EXPERIENCE (VEE):

- **Fin 320** for Corporate Finance & Accounting
- **Math 435** for Mathematical Statistics
- **Econ 201 & Econ 202** for Economics



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