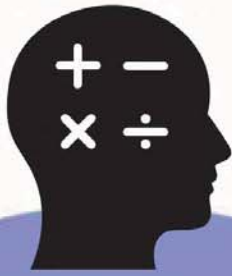


ACTUARY



JOB DESCRIPTION

Actuaries assess the probability of a particular event occurring and then calculate the possible financial risks to a company. Many actuaries work for insurance companies, at which they calculate the likelihood of a loss, such as the chances of a ship sinking at sea, and set the amount to be paid by the ship's owners. Others work in banks, monitoring the levels of risk when buying and selling investments.



SALARY

Actuary ★★★★★
Senior director ★★★★★

INDUSTRY PROFILE

Jobs available worldwide, although competition for places is strong • Opportunities within a wide range of businesses and organizations • High salary

AT A GLANCE



YOUR INTERESTS Mathematics • Statistics • Economics • Risk management • Business studies • Information Technology (IT) • Science



ENTRY QUALIFICATIONS A degree in a numerate subject—such as mathematics, statistics, or actuarial science—is required.



LIFESTYLE Actuaries usually work regular hours, although evening or weekend working may be required to meet deadlines.



LOCATION Actuarial work is office-based and firms are mostly found in large cities. Business travel to visit clients is occasionally required.



THE REALITIES This mathematical, intellectually challenging field requires a determined mindset. The exams to achieve accreditation can be grueling.

RELATED CAREERS

- ▶ **INVESTMENT ANALYST** *see pp. 100–101*
- ▶ **ACCOUNTANT** *see pp. 102–103*
- ▶ **AUDITOR** Checks the financial accounts of companies and organizations to ensure that they are accurate and follow legal guidelines. Auditors also assess the health of clients' businesses and advise on ways to avoid risk.
- ▶ **INSURANCE UNDERWRITER** Works for an insurance company assessing applications for the insurance cover of individuals and businesses. Underwriters decide if insurance cover should be given and set the terms and price of the insurance policy.

In 2013, actuary was rated the best job in the country based on salary, prospects, stress levels, and work environment.

CAREER PATHS

Graduates with a degree in a numerate subject can apply to train as an actuary. Training involves several years of on-the-job study, during which time trainees need to take a series of exams to gain professional accreditation.






GRADUATE To be taken on as a trainee, you will need a degree in mathematics, statistics, or a similar subject, and will then have to pass a series of selection tests.

POSTGRADUATE You can increase your chances of being taken on by studying actuarial science at the graduate level, which may also count toward your future accreditation.



ACTUARY Traditionally employed by insurance firms, actuaries now work for a range of organizations, from consulting firms and health authorities to government departments. After qualifying, you can specialize in a particular sector or work toward senior roles.

SKILLS GUIDE

- 
Strong communication and presentation skills for explaining complex findings.
- 
A logical and analytical approach to make sense of complex information.
- 
Advanced numerical skills to analyze and interpret large amounts of data.
- 
A thorough knowledge of issues affecting financial markets when pricing products and services.
- 
Precision and attention to detail to ensure mathematical calculations are correct.



CHIEF RISK OFFICER
Coordinates a team of actuaries and other professionals who assess and take action to avoid potential risks. This is a senior position in a large company.



INVESTMENT BANK ACTUARY Conducts research to identify the financial costs and potential risks of investment decisions, such as investing in a new business.



CONSULTANT ACTUARY
Advises on business activities, such as large companies' pension or health plans, complying with legal requirements.



LIFE INSURANCE ACTUARY Analyzes statistical information on risk factors—such as existing health conditions—to set the prices that customers pay for their life insurance policies.



ENTERPRISE RISK MANAGER Identifies risks that may affect the operation of a business, and then assesses the impact these risks might have. Also devises strategies to avoid these risks or to minimize their effects on the business.