

The Actuarial Profession

Presented By



Overview

- What is an actuary?
- What do actuaries do?
- What skills are needed to become an actuary?
- How do I become an actuary?
- What is the current and future career outlook for actuaries?
- Website Resources

Top 10 Reasons to Consider being an Actuary

10. You enjoy continually learning.
9. You want a professional title, but don't want to be a doctor, lawyer, or accountant.
8. You want a career that is dynamic and challenging.
7. You want a career that you control because advancement is merit-based.
6. You want a career with many opportunities that will provide you with skills that are transferable across multiple industries.
5. You want a career with superior job security through economic cycles.
4. You would like to "earn while you learn."
3. You want to be able to choose among several job offers.
2. You are self-motivated, goal oriented, and have superior math aptitude and communication skills.
1. You want a highly competitive salary and excellent benefits.

What is an Actuary?

An Actuary is a person who:

- Analyzes, manages, and measures the financial implications of future risk
- Develops financial models to guide decision making



What do Actuaries do?

- Estimate money to be set aside for incurred but not reported and development on existing claims
- Participate in corporate planning (Mergers & Acquisitions)
- Calculate rates for new insurance products
- Forecast potential impact of catastrophes
- Evaluate investment programs
- Forecasting and interpretation of underwriting results
- Maintenance of a data base uniquely suited to the analysis of pricing issues

BeAnActuary Web Site

What Skills are Needed to Become an Actuary?

- Keen analytical, project management, and problem solving skills
- Good business sense
- Solid communication skills (oral and written)
- Strong computer skills (Microsoft Office)
- Knowledge of Math and Finance
- Motivation
- Creativity
- Independence
- Ability to work with others



How to Become an Actuary

- Professional designation is achieved by passing a series of examinations.
- Actuarial examinations are administered by the Casualty Actuarial Society (CAS) and the Society of Actuaries (SOA).
- Examinations are held multiple times a year.
- Two levels of membership in each organization:
 - Associate (ACAS or ASA)
 - Fellow (FCAS or FSA)
- You work and take exams



Actuarial Programs – Exam Support

To prepare you for success in completing the series of professional exams, most companies offer the following benefits:

- **100 to 140 paid study hours** per exam sitting
- **Reimbursement** for exam registration fees, study materials, and exam review seminar
- **Time off** on exam days and the day prior to each exam.

Receive rewards for each exam you pass!

Salary Information

- Starting salaries of \$46,000-\$61,000 (passed one exam, 0 - 0.5 years experience)
- Merit Increases
- Examination Increases
- Increases upon achievement of professional designations



D.W. Simpson & Company Website

Current Career Outlook for Actuaries

Actuaries are largely employed by Insurance Companies and Consulting Firms, specializing in the following areas:

- Life, Annuities, and Mutual Funds
- Health
- Pension
- Property & Casualty

Life, Annuities, and Mutual Funds

1) Life Insurance

Offers several term and permanent insurance products to provide death benefit protection to its customers.

2) Annuities

Fixed and variable annuity products allow customers to make a lump-sum payment or series of payments today in return for periodic payments beginning immediately or in the future.

3) Mutual Funds

A mutual fund pools the assets of multiple investors and purchases securities to achieve a common, pre-defined goal. With its pooled assets, mutual funds provide advantages that an individual investor would not be able to receive.

Health

1) Individual

Offering Medicare and other health products to individuals, families, and sole proprietors.

2) Employers

Offers administration services, Health Benefit and Health Insurance Plans incorporating managed medical, pharmacy and dental care services and other valuable resources and products based on the number of employees an employer has. An example of this is as follows:

- Small Group – 2 to 50 employees
- Middle market – 51 to 3000 employees
- National Accounts – 3001+ employees

Pension

- Provide steady income, typically in the form of a guaranteed annuity, to a retired or disabled employee under pre-determined legal and/or contractual terms.
- Plans can be divided into two broad types:
 - 1) **Defined benefit plans** - incorporates the employee's pay, years of employment, age at retirement, and other factors in calculating the benefit.
 - 2) **Defined contribution plans** - such as a 401(k) plan or 403(b) plan, in which the employee elects to defer some amount of his/her salary into the plan and bears the investment risk.

Property & Casualty

1) Business Insurance

Offers a broad array of property and casualty insurance and insurance-related services to its clients, which range from small “main street” businesses to Fortune 100 corporations.

2) Personal Insurance

Offers a broad array of property casualty insurance products to individual customers such as Auto, Homeowners, etc...

3) Financial, Professional & International Insurance

Includes surety and financial liability coverages, as well as property and casualty products that are primarily marketed on an international basis.

Salary Survey

- General range and average of various compensation levels
- These figures are base salaries only, do not figure in bonuses or annual incentives
- Updated: 2/21/07 by –
http://www.scinternational.com/salary_surveys.asp

Life / Health Actuary

	W/1 Course	W/2 Courses	W/3 Courses	W/4 Courses	W/5 Courses	ASA	FSA
Entry Level/College Grad	42-50K	45-52K	48-54K				
1 - 2 Years	44-57K	48-60K	50-63K	52-65K	55-72K	60-75K	
2 - 4 Years	46-60K	50-65K	53-68K	55-70K	60-75K	65-85K	
4 - 6 Years	50-70K	55-73K	60-77K	62-80K	65-85K	70-95K	82-110K
6 - 10 Years	55-80K	58-85K	60-90K	62-93K	68-95K	75-110K	89-155K
10 - 15 Years	62-90K	65-93K	68-95K	70-105K	75-110K	85-145K	107-165K
15+ Years						110-200+K	130-290+K

Pension Actuary

	W/1 Course	W/2 Courses	W/3 Courses	W/4 Courses	W/5 Courses	ASA	FSA	EA
Entry Level/College Grad	45-50K	45-55K	48-58K					Add 5 to 10% on average across the board
1 - 2 Years	48-55K	50-58K	53-62K	55-65K	60-75K	60-80K		
2-4 Years	52-65K	55-68K	58-70K	61-75K	64-80K	67-90K		
4 - 6 Years	55-68K	60-72K	64-80K	68-85K	72-90K	75-95K	85-105K	
6-10 Years	58-75K	62-80K	66-85K	70-90K	75-95K	80-110K	90-125K	
10-15 Years	65-80K	68-90K	72-90K	75-95K	82-115K	90-120K	110-170K	
15+ Years						100-180K	125-225K	

Property & Casualty Actuary

	W/1 Course	W/2 Courses	W/3 Courses	W/4 Courses	W/5 Courses	W/6 Courses	ACAS	FCAS
Entry Level/College Grad	44-52K	46-54K	48-58K					
1 - 2 Years	48-56K	50-63K	54-66K	55-70K	60-75K	62-80K	65-90K	
2 - 4 Years	50-60K	53-65K	56-72K	59-75K	63-80K	65-85K	70-95K	
4 - 6 Years	55-73K	58-75K	60-80K	63-84K	65-87K	70-105K	80-117K	95-145K
6 - 10 Years	56-82K	60-85K	62-87K	65-90K	67-95K	73-115K	80-130K	100-170K
10 - 15 Years	65-85K	68-90K	72-105K	75-110K	82-117K	87-125K	110-165K	120-205K
15+ Years							135-220K	145-300K

Career Outlook for Actuaries

- **Specific Areas of Growth**

- Insurance Industry

actuarial positions expected to grow 3-9% through 2010

- Management Consulting

expected growth greater than 36% through 2010

- Financial Management

expected growth greater than 36% through 2010

- **Other Areas of Growth**

- Enterprise Risk Management

- Health Services



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Advice to High School Students Who Want to be Actuaries

- Follow a college preparatory curriculum
- Take Math classes every year.
- Take advantage of advanced courses, such as calculus.
- Enroll in computer science courses to develop your
- computer skills.
- Explore colleges and universities that offer Actuarial Science curriculum.
- Participate in Math based competitions such as Mathletes

Advice to College Students Who Want to be Actuaries

- Develop disciplined study habits
- Take a well-rounded curriculum
- There are people in the Actuarial Profession who majored in Music, Biology, etc..., and were able to attain Associate and Fellowship designations. However, the majors that would better prepare you for this profession are as follows:
 - ~ Actuarial Science
 - ~ Mathematics
 - ~ Economics
 - ~ Statistics
 - ~ Finance
- Enhance your general business knowledge
- Sharpen your communication and presentation skills
- Take actuarial exams while you are in school – the sooner you start, the sooner you will finish

Questions & Comments

- To learn more, visit
 - www.blackactuaries.org
 - www.beanactuary.org
 - www.casact.org
 - www.soa.org