



Institute
and Faculty
of Actuaries

MORE THAN MATHS

Become an actuary | www.actuaries.org.uk

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WHAT IS AN ACTUARY?

Actuaries are problem solvers and strategic thinkers who use their skills to help measure the probability and risk of future events.

Business and industry increasingly depend on the skills of actuaries and analysts to help them to model and plan for the future. As the world is changing at an increasingly rapid pace, risk management expertise can help businesses navigate this changing landscape.

Every area of business is subject to risk, which is why you'll find actuaries working within the public and private sector, in a number of fields in finance, government departments, health care and much more.



Solving real-world problems

A career as an actuary or actuarial analyst gives you the chance to apply your skills in maths and statistics to real-world challenges. These could include:

- ▶ New technologies
- ▶ Climate change
- ▶ Population growth
- ▶ The impact of artificial intelligence (AI) and big data
- ▶ Risks associated with cryptocurrencies
- ▶ Uncertainties related to national economies

Valued by employers

Employers understand just how valuable actuaries and analysts are to their business, which is why you'll find actuaries working across a number of areas including:

- ▶ General insurance
- ▶ Health and care
- ▶ Investments
- ▶ Life insurance
- ▶ Pensions
- ▶ Risk management
- ▶ Data science

You might work for a bank, insurance company, consultancy firm or government but one thing is guaranteed – each day will bring a variety of challenges that you'll have the satisfaction of solving.

“Becoming an actuary helps me put the world into perspective. In an actuary's world, a model exists everywhere and one model links to another. Then all together, all of them unify to draw the big picture.”

**Thuy Linh Nguyen,
MB Ageas Life (Vietnam)**

WHAT OUR

MEMBERS

HAVE TO SAY



CHRIS LIM SHEN

AM Best, Singapore

“Don’t believe the numbers. Or maybe, don’t believe anything at all. Very often, the information that is most valuable is the one that is not there. Many actuaries are not satisfied with accepting things at face value. Instead, armed with inquisitive minds and quantitative skills, actuaries exercise their professional curiosities to challenge the underlying assumptions and bases of the information they deal with.

The rather topical matter of the coronavirus (COVID-19) was one area in which actuaries have quickly applied their knowledge to. Instead of readily accepting the statistics of the fatality rates that were published early on, actuaries have engaged in active debates to discuss the validity of published statistics and their underlying assumptions, and with experience adopted from prior infectious disease outbreaks, articulated their opinions on the eventual fatality rates.

Analytics is becoming increasingly central to the insurance business both to drive bottom-line growth and to limit downside risks. By thinking critically about the world around them, actuaries are well-equipped to deliver insightful and well-structured analyses, which is more important than ever in a world where we encounter so much data each day.”



VELDA TAN

AXA XL, Singapore

“After picking up statistics in high school, I realised I enjoyed using mathematics to solve real life problems. Upon graduation, I decided to pursue my interest in the actuarial field and at the same time spread awareness that insurance is more than just the advisors you see on the streets - protecting people’s belongings, livelihoods and even lives.

Being in the pricing team allows me to have first-hand experience of how statistical distributions are used in real life situations.

I am currently in the general insurance industry and I love how dynamic it is. News flashes across the papers have indirect impacts on the business on a daily basis. The broad range across APAC and industry: liability (lawyers, doctors, etc.), agriculture, marine, airlines, finance (credit and surety), and property, keeps it interesting and am constantly still learning everyday.”

If there’s one thing that all actuaries have in common it’s that they’re bright and engaged. It’s a young, energetic and dynamic profession. Here’s what they say about their professional choice.



E-LYNN TAN

Zurich Shared Services, Malaysia

“I’ve always had a passion for numbers, and the stories that a simple set of figures might be able to tell. Being an actuary gives me an opportunity to have a clearer understanding of different industries and how the various elements within them are interrelated.

In this role, there has never been a dull day as there are various projects that I have been placed on. From these experiences, I have been able to learn a variety of new skills as well as further develop knowledge I already had. Besides that, being able to meet different people, be it clients or even colleagues, is another perk of this job. ”



ALBERTUS TEDDY SETIADI

Reinsurance Group of America, Singapore

“As a young high school graduate who loved mathematics, the idea intrigued me and led me to pursue an actuarial course in university.

I enjoy getting exposure to the strategic overview of running both reinsurance and insurance businesses. This comes from various sales meetings with both senior internal and external stakeholders. It gives me insight on dynamic challenges in managing and running a successful company. Something I hope will be a handy skill one day in running my very own business.

I personally enjoy developing positive working relationships with my clients. It gives me positive motivation when I am able to solve their problem and as a result, become their “go-to” contact. This makes my work feel more meaningful.

I also enjoy the opportunity to apply my technical actuarial skills to creatively deliver innovative solutions for my client whilst ensuring robust risk management practice. I feel a sense of personal pride when I see this solution being applied and delivering meaningful value to clients, distribution channels and policyholders. Of course, in doing so, I enjoy being supported by and working alongside my helpful colleagues in actuarial pricing, product development and underwriting.”

WHY YOU SHOULD BECOME AN ACTUARY

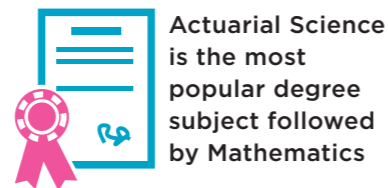
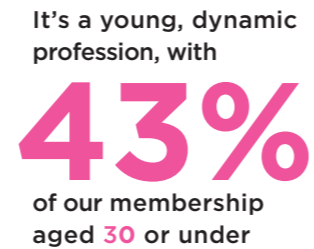
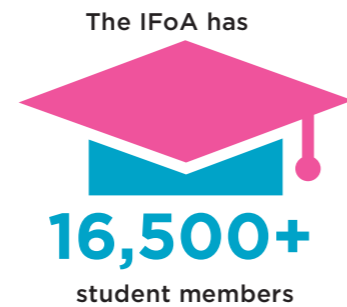
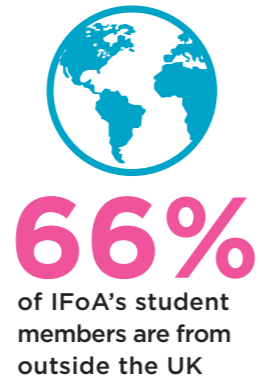
The actuarial profession attracts academic and ambitious people with skills that are in high demand.

The IFoA qualification is globally recognised as equipping its members with the numerical and business skills needed to work anywhere in the world.

Opportunities for career progression, nationally and internationally, are huge. In a globalised economy, becoming an actuary or actuarial analyst makes you part of a truly international network. The interconnectedness of finance and business means you'll be able to work anywhere in the world.

In addition, we have links with partners around the world, ensuring no matter where you are based, you can get started on your actuarial journey.

Providing careers advice to you is something that we pride ourselves on here at the IFoA. We know that no matter where you are in the world, making a decision about your career is going to be important to you, not just now, but for the rest of your life.



MORE REASONS TO CHOOSE THE ACTUARIAL PROFESSION



Do you have a good maths based degree?

Secure a graduate role as a student actuary.

Begin studying/ completing IFoA exams.

Become an IFoA Associate

Become a Fellow & develop advanced actuarial skills

Don't have a maths based degree but really love maths?

Take one of our non-member entry exams.

Are you looking for a gateway into the financial services?

Secure a position as a Trainee Actuarial Analyst.

Study/ Complete the Certified Actuarial Analyst (CAA) exams.

Qualify as an Actuarial Analyst.

Join the IFoA as an Analyst member

SO WHERE DO YOU START?

The good news is, there's more than one way to achieve your goal and you can choose a route that best suits your situation now and your long term ambitions. We're here to support you in making the right choice and you can contact us for free, expert advice at careers@actuaries.org.uk

To get things started, take a look at our route map and see which path looks most appropriate for you. You're right at the start of a hugely exciting career journey and it's up to you how far you travel.

BECOME AN ACTUARY

A successful career starts with a strong foundation.

Your university course

When deciding on your university course, there is a lot to consider.

Choose a course that is going to fulfil you, that will help you gain a degree that employers will require from you, and consider the following:

- ▶ Are the modules interesting and going to add value to your career?
- ▶ Do you want a course that offers a work placement?
- ▶ If you're set on becoming an actuary, have you considered looking at universities that hold accreditations with us?

Picking your degree course can be challenging. For the actuarial profession you can consider courses like actuarial science or maths, but really anything numerical is ideal.

Also remember that there's more to university than preparing yourself for the first job. It's about preparing yourself for the rest of your life. So it's important to choose a subject which you'll enjoy and that you feel will be personally enriching.

Universities in South-East Asia

If you've already decided you want to study actuarial science at university, you may want to consider studying with the below universities who hold exemptions with some of our professional exams.

Asia Pacific University, Malaysia

Heriot-Watt University, Malaysia

Mahidol University, Thailand

Nanyang Technological University, Singapore

Sunway University, Malaysia

UCSI University, Malaysia

University of Malaya, Malaysia

Universiti Teknologi MARA, Malaysia

Finding your graduate role

There are many ways that you can increase your chances of gaining a graduate role, from general work experience while you're studying to joining a society or club at university. Your experience doesn't have to be related to the actuarial profession, any experience you gain will give you valuable transferable skills that employers look for.

Once you graduate, securing your first role is an important step on the road to an actuarial career. You can find more information about actuarial roles in our Actuarial Careers Guide or online at www.theactuaryjobs.com

EXAMS

Our exams may seem complex, but there's plenty of expert support and guidance available to you. Whether you're at the beginning of your educational journey, looking for your first job or have already started an actuarial role, we're here to help.

Depending on the modules you study, the grades you achieve and whether your degree programme is IFoA accredited, you can apply for exemptions from IFoA exams. This will help reduce the number of exams you will need to take to become an actuary.

Find out more about our accredited programmes and other recognised qualifications at www.actuaries.org.uk/exemptions

You will also need to meet our Personal and Professional Development (PPD) requirement to qualify as an actuary. PPD is a record of your work-based learning and it demonstrates your ability to work effectively as an actuary by applying your knowledge and skills. PPD will also help you to understand:

- ▶ Working within a professional and ethical framework
- ▶ The impact your work has on the wider business
- ▶ The importance of reflecting on the quality of your work and identify areas of improvement through Continuing Professional Development (CPD) activities

The minimum PPD requirement is two years for an Associate and three years for a Fellow.

The IFoA CPD scheme for members builds on this foundation and helps members meet their obligation to maintain their professionalism set out in the Actuaries' Code. The Actuaries' Code sets the standards and ethics all actuaries need to abide by.

You can find more details about PPD at www.actuaries.org.uk/PPD

If you would like to find out more about the exam process, visit www.actuaries.org.uk/actuaralexams

Congratulations!

You are now a Fellow.

Upon completion of 3 years of PPD; one further year after the 2 years at Associate level.

SA1 Health and Care
SA2 Life Insurance
SA3 General Insurance
SA4 Pensions and Other Benefits
SA7 Investment and Finance Advanced

You'll choose 1 specialist advanced subject - the final subject needed to reach fellowship

SP1 Health and Care
SP2 Life Insurance
SP4 Pensions and Other Benefits
SP5 Investment and Finance
SP6 Financial Derivatives

SP7 General Insurance Reserving and Capital Modelling
SP8 General Insurance Pricing
SP9 Enterprise Risk Management

You'll choose 2 specialist principle subjects to determine your career direction

CP1 - Actuarial Practice
CP2 - Modelling Practice
CP3 - Communication Practice

Take these core practice exams to broaden your overall knowledge

CS1 - Actuarial Statistics 1
CS2 - Actuarial Statistics 2
CM1 - Actuarial Mathematics 1
CM2 - Actuarial Mathematics 2
CB1 - Business Finance
CB2 - Business Economics
CB3 - Business Management

Take these actuarial and business exams to gain the skills and techniques needed to progress in your career

You must complete the Professional Skills Stage 1 course before you can apply to sit the CB3 exam.

Well done!
You are now an Associate.

Upon completion of 2 years of Personal and Professional Development (PPD) and Professional Skills Stage 1 & 2

BECOME AN ANALYST

Analysts are highly numerate and logical. They work in finance, data analysis, coding and modelling.

CAA Global

The Certified Actuarial Analyst (CAA) is an internationally recognised professional qualification offered by CAA Global. It is a joint venture between two of the largest global actuarial societies, the IFoA and the US Society of Actuaries (SOA).

Once you've qualified, you will be certified and recognised as a professional analyst. This will give you the edge in the job market and the skills to add value once you're hired.

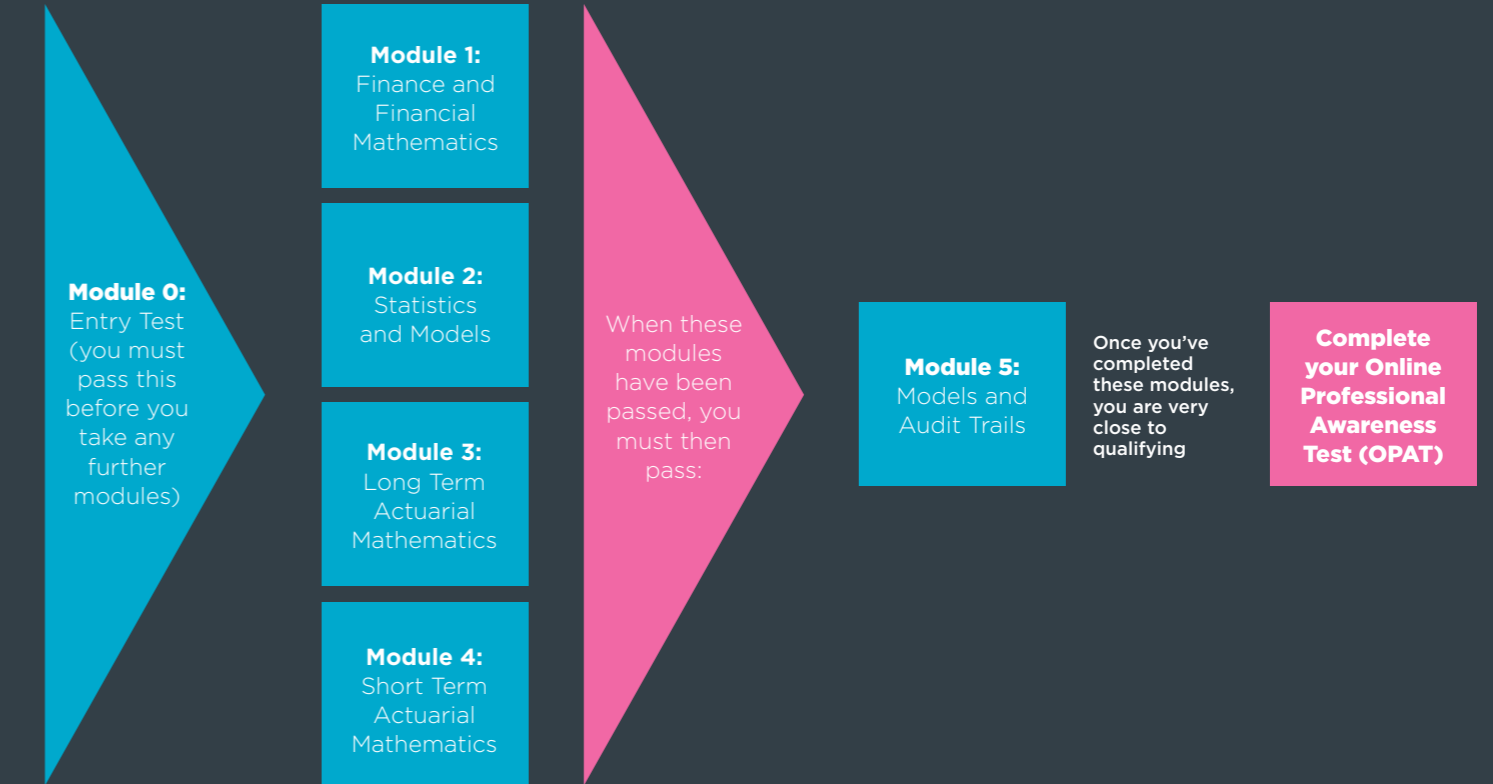
The CAA exam route (on the right) shows you all the exams and steps you'll need to take in order to earn your qualification.

You can find out more at www.caa-global.org



The CAA exam process: your milestones to achievement

Designed to fit around full-time work, the exams can be taken at your own pace at exam centres around the world.



MORE FROM THE IFoA

The IFoA is one of the largest and most prestigious professional bodies globally. We are dedicated to educating, developing and regulating actuaries across the world.

We have the resources, expertise and commitment to support you at every stage of your career. We'll work hard to help you to realise your professional goals and to continue to develop our industry to ensure a breadth of opportunity. Join us and you'll be one of 32,500+ members worldwide. 43% of our members are under 30 – and we have a truly global reach.

As a member you'll benefit from:

- ▶ Professional recognition of your achievements nationally and internationally
- ▶ Education and career development
- ▶ Influence through your involvement with matters of public interest
- ▶ A highly influential professional body worldwide
- ▶ Networking as you build a community of your peers to share best practice and offer support
- ▶ Extensive library resources online and hardcopy support for your studies and research



MAKE A DIFFERENCE WITH MATHS

Have you considered how you can use your love of maths to really make a difference? You might not realise it, but actuaries and actuarial analysts help to solve real world problems, not just in pensions and insurance, but in climate change, cyber security, population growth and so much more.

Actuaries are risk experts - applying maths and statistics to help individuals and society manage the risks we all face. We simplify complex problems, communicate them effectively, and translate the outcomes into meaningful actions. It's a varied, demanding and fulfilling career that really puts your numerical skills to the test.

As an actuary or actuarial analyst, you'll be part of a global community of problem-solvers and strategic thinkers, helping businesses and governments navigate complex issues in a rapidly changing world and prepare for the challenges of the future.

The technical skills and commercial acumen you'll develop as an actuary or actuarial analyst, combined with advances in technology will open up opportunities in exciting new fields like AI and data science.

If you're interested in a career that can make a real impact, that is challenging but hugely rewarding, then I very much hope you will join us.

Find out more about the IFoA at
www.actuaries.org.uk



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**Visit our South-East Asia
webpage for more information:**

