BBA in Insurance, Financial and Actuarial Analysis
Insurance, Financial and Actuarial Analysis (IFAA)

Novel investment and insurance products make stability vital in the modern financial security system. The ever-progressing field of actuarial science is a major contributor to this stability. Insurance experts today are skilled mathematicians who apply their knowledge to business in new ways, effectively managing the risk of products related to mortality, morbidity, casualty, pensions and investments. The IFAA Programme at CUHK has a stellar record of preparing students for bright careers as actuaries, financial analysts, risk managers and insurance professionals.

Overview

Offered by the Department of Finance and unique in Hong Kong, the progressive BBA Programme in Insurance, Financial and Actuarial Analysis provides comprehensive training in all aspects of actuarial science and insurance company management. The IFAA curriculum goes beyond the study of theory to address broad practical business needs.

With structured curriculum patterns and internship opportunities, IFAA facilitates essential business exposure to enhance your career preparedness. Through our courses, you will become familiar with the material for professional examinations administered by the Society of Actuaries (SOA) in the United States. IFAA is recognised by SOA as a Centre of Actuarial Excellence, the highest level of recognition offered to universities.

While rooted in Hong Kong’s institutional environment, the programme will give you frequent exposure to broader international issues and practices. IFAA has an outstanding reputation and strong network amongst well-known insurance companies in the region, who actively offer training and internships to IFAA students. The programme also boasts a strong employment record, with more than half of our alumni earning actuarial credentials and more than 60% of our graduates successfully securing actuarial positions in multinational insurance companies. Other graduates go on to work in banks, business consulting firms, and other financial institutions.

Your Development

By the time you complete the IFAA Programme, you should be familiar with the purpose, design and application of insurance products, finance and investment tools, as well as accounting, economics, management, mathematics, statistics and actuarial science. You can also expect to possess the following:

- Solid business communication skills;
- Effective analytical and problem-solving insight;
- Ability to apply learned business knowledge in a corporate environment;
- Confidence to propose innovative strategies in a global context;
- Awareness of current ethical issues in today’s business world; and
- Specific knowledge of actuarial science and insurance, including life and non-life insurance product design, pricing, and risk management.
IFAA elementary courses focus on fundamental business, economics, mathematics and statistics, laying the necessary groundwork for the advanced courses. Subsequent insurance and finance courses introduce you to insurance products, financial markets, derivative securities and the basic principles of financial risk management.

The specialised actuarial science courses in the programme cover the mathematics of pricing, valuation and hedging of a variety of products. Material included in professional actuarial exams are covered in our syllabi, giving you a confident start to your career as an actuary.

Credits required for successful completion of major:

78-81 credits including compulsory courses, elective courses and capstone course

Besides major requirements, students are also required to satisfy all requirements prescribed by the University.
Growth Opportunities

Internships

IFAA offers two internship programmes:

1. Actuarial Training Programme

IFAA pioneered the Actuarial Training Programme to place students in the actuarial departments of insurance companies and related business entities for more than five months. Almost all of our students complete a six-month internship during their third or fourth year, augmenting their classroom learning by working in a real business environment. Companies that have participated in our training programme include:

- AIA Company Limited
- AXA China Region Insurance Company Limited
- BOC Group Life Assurance Company Limited
- Chubb Life Insurance Company Limited
- Deloitte Advisory (Hong Kong) Limited
- EY
- FT Life Insurance Company Limited
- FWD Life Insurance Company (Bermuda) Limited
- HSBC Insurance (Asia) Limited
- Manulife International Limited
- Milliman Limited
- Munich Reinsurance Hong Kong Branch
- Prudential Hong Kong Limited
- RGA Reinsurance Company, Hong Kong Branch
- Sun Life Hong Kong Limited
- Swiss Reinsurance Company

2. Summer Internship Programme

IFAA students also pursue internship opportunities in various business fields, such as business consulting, insurance management, marketing and accounting. The potential to explore a different side of the business allows you to experience the insurance industry from different angles, expanding your knowledge and future career options. Our students have completed internships with a number of leading companies, some of which exclusively offer IFAA internships, including:

- Assicurazioni Generali S.p.A
- AIA Company Limited
- AXA China Region Insurance Company Limited
- BOC Group Life Assurance Company Limited
- China Life Insurance (Overseas) Company Limited
- CIGNA Worldwide
- Deloitte Advisory (Hong Kong) Limited
- EY
- FT Life Insurance Company Limited
- FWD Life Insurance Company (Bermuda) Limited
- HSBC Insurance (Asia) Limited
- Manulife International Limited
- Milliman Limited
- Munich Reinsurance Hong Kong Branch
- Prudential Hong Kong Limited
- RGA Reinsurance Company, Hong Kong Branch
- Sun Life Hong Kong Limited
- Swiss Reinsurance Company

James CHU

Life & Health Business Management, Reinsurance
Swiss Reinsurance Company in 2022

"For half a year, I was working in the Business Management division and mainly assisted in quarterly financial reporting and reinsurance treaty management. At school, there was only a small portion of lesson time dedicated to reinsurance. Reinsurance is also a topic that typical households do not touch on. Swiss Re has given me a precious opportunity to gain exposure to reinsurance treaties and their real-life operations. I believe it would be an asset to my future career.

I had the chance to work with colleagues who also graduated from the IFAA programme a few years ago. They were generous in sharing their experience, from being a university student like me to becoming an independent and capable actuary. From career planning to work-life-study balance, I gained a lot of insights about my future career from them which would be impossible to gain in lectures.

The company also has an international composition. I have worked with colleagues from India, Japan, Korea, China, etc. This strengthened my communication skills and allowed me to immerse myself in the workplace cultures of different countries. For instance, most colleagues, no matter the position, would call each other by their first names, while Japanese colleagues would refer to others and be referred to by their family name and ‘san’, such as ‘Yamada-san’.

This precious and fruitful working experience definitely enrich my university life and become the first career milestone to work toward."

Myron TSE

Consulting Department
EY in 2022

"I have learnt a lot while working in EY as an actuarial intern. It was surely a fruitful and unforgettable experience.'

I completed my half-year actuarial internship at Ernst & Young Advisory Services Limited (EY). My main duty is to assist with different projects to ensure smooth operations, such as performing actuarial audits, spot-checking and compliance under HKRBC and IFRS17 Standards. Not only did the challenges I faced equipped me with technical knowledge, but also rationalized in actuarial decision-making, which is essential to my future career. Having worked on multiple projects simultaneously enhanced my organizational skills. Also, by working with audit teams and clients, effective communication and data analysis skills were enhanced.

I am truly grateful for the sincere support and guidance from my managers and colleagues, especially when I was given the valuable opportunity to share my experience on the bi-yearly Company Update. I believe that there is no end to the learning curve of an actuary, and this internship acts as a good start by giving me a glimpse of the industry."
Connect with the World

International Exposure
As the world becomes increasingly interconnected, professionals with a keen global business perspective will be best positioned for success. IFAA provides rich opportunities for you to develop world-wide connections and learn about different cultures, communication styles and unique business practices.

- More than 60% of our students go on exchange for at least one term.
- CUHK offers more than 280 student exchange programmes including university-wide, college, faculty and departmental exchanges.

IFAA students have gone on summer exchange to a number of renowned international universities, including:
- Copenhagen Business School, Denmark
- Erasmus University Rotterdam, Netherlands
- Georgetown University, USA
- Harvard University, USA
- Korea University, Korea
- La Trobe University, Australia
- Lund University, Sweden
- Maastricht University, Netherlands
- McGill University, Canada
- Osaka University, Japan
- Queen’s University, Canada
- TELECOM Ecole De Management, France
- University of California, Berkeley, USA
- University of Economics, Prague, Czech Republic
- University of Manchester, United Kingdom
- University of St. Gallen, Switzerland
- University of Toronto, Canada
- Vienna University of Economics and Business, Austria
- Washington University in St. Louis, USA

Nobel CHAN
Exchange student in Queen’s University (2022)

“The exchange journey is the most memorable trip that I have been. During these four months, I have met a lot of different people and learned a range of different cultures overseas.

Learning in Queen’s University, Canada is inspiring. The learning environment is highly interactive. While professor will encourage us to ask questions that will be directly discussed in class, students are also very helpful and passionate in helping one another. I remember the first time participating a group discussion, my classmates are willing to share a lot of different cultures and knowledge there to help me adapt to the environment, and they even invited me to a school activity after that! It is really joyful and relaxing studying there.

Other than that, I have also become more independent living outside Hong Kong. I have better planning and am very goal-oriented throughout these four months. I have achieved most of the goals I set for this exchange, including travelling around Canada and to the United States. I have also learnt more life skills here in order to live and learn under a completely unfamiliar environment.

Looking back these four months, I have become a lot more mature and I am now more ready to face different challenges in the future. Overall, the exchange is really a life-changing experience and I encourage all of you to participate in it!”

Josephine POON
Exchange student in University of Navarra (2022)

“It has always been my dream to study abroad in Europe, and the University of Navarra made this comes true. My exchange in Spain has been an eye-opening and inspiring journey. It is far more than an experience of different styles of education, but also an opportunity for me to mingle with students from different nationalities, assimilate into other cultures and push myself out of my comfort zone to become more independent.

I experienced a different method of teaching in the University of Navarra. I highly appreciated the interactive teaching style in money, banking and digital finance course that I took. The case discussion sessions were highly informative and stimulating which students were eager to raise questions and share the thoughts. I was inspired by their insightful conversation and encouraged me to become more proactive.

In addition to studying, travelling was one of the best part of the exchange experience. I had a great time exploring different cities in Europe which broadened my international insights and raised my global awareness.

The experience has been extremely fruitful and rewarding. I am honoured to have such a precious opportunity to embark on this once-in-a-lifetime adventure.”
Imagine Your Future

Career Prospects

As an IFAA graduate you will be a competitive candidate for a number of business careers, and be most ideally suited for careers in banks, consulting firms, insurance firms and a number of key fields within the financial services industry.

Actuaries

Graduates who aspire to become actuaries will be well-equipped for work at insurance companies, consulting firms, government agencies, banks, investment firms, the employee benefits department of large corporation or any business that has substantial financial risk to manage.

Insurance Professionals

IFAA graduates can pursue professional careers in insurance as underwriters, insurance adjusters, examiners and risk managers.

Financial Analysts

As an IFAA student, you will receive training in financial markets, modelling and investments, and will be well-positioned for a career as a financial analyst in an investment firm.

Employers

AIA Company Limited
AXA China Region Insurance Company Limited
Bank of China (Hong Kong) Limited
Bloomberg
BNP Paribas Hong Kong Branch
BOC Group Life Assurance Company Limited
Cubb Insurance Hong Kong Limited
Coherent Capital Advisors Limited
Deloitte Advisory (Hong Kong) Limited
Deutsche Bank
EY
FTLife Insurance Company Limited
FWD Life Insurance Company (Bermuda) Limited
Hang Seng Bank
HSBC
HSBC Insurance (Asia) Limited
KPMG Advisory
Manulife (International) Limited
Nomura International Inc.
Prudential Hong Kong Limited
RGA Reinsurance Company, Hong Kong Branch
Sun Life Hong Kong Limited
Swiss Reinsurance Company
UBS AG

Distribution of 846 graduates by industry (2005-2023)

- Actuarial: 68%
- Insurance Management/Regulatory: 4.9%
- Investment/Commercial Banking: 8.8%
- Accounting/Auditing: 1.5%
- Education: 1.9%
- Further Studies: 4.1%
- Business: 2.1%
- Others: 8.7%

Christy LAM
2014 Graduate

“My four years of undergraduate study in the IFAA programme were fulfilling and rewarding. During my learning journey, this developed my professional knowledge in the actuarial sciences, and strengthened the ability to think critically, write logically and speak persuasively. Having served in actuarial departments in several renowned insurance and reinsurance companies after graduation, I am so grateful to have met genuine and proactive advisors and colleagues (some of them are also the CUHK graduates of IFAA programme)! No doubt it is challenging and energy consuming to work as an actuary; but this is fruitful and enjoyable to make a breakthrough in this dynamic and ever-changing industry.

I strongly believe that progress is a perpetual process and the path is more important than the goal itself. I am thankful to have so many good teammates and friends that had provided guidance and support to me over the past years – it’s always an amazing and valuable journey.”

Jimmy TSONG
2016 Graduate

“Looking back, my four years of undergraduate studies in IFAA were quite intense (in a good way) as it was a combination of staying up late studying, internship and exchange studies. I still can recall when I was a freshman I received a colourful flow chart with the code of the courses and how to map them with actuarial exams. By completing the courses in sequential order, we were able to tackle the preliminary exams one by one. Personally, I benefited from this, as I was able to clear all the preliminary exams by year three and this ultimately grants me an advantage in my job search.

If I look up the term actuary in Wikipedia, it describes an actuary as a business professional with advanced statistical skills who deals with the measurement and management of risk and uncertainty. To me it seems to be missing one of our daily tasks - to explain the result and analysis to both actuaries and non-actuaries. Effective communication is essential and is something being advocated by both SOA and IFoA. IFAA programme gives us substantial opportunities to practice business case studies and presentations which is beneficial for our career development.

The mathematical language is universal and it is always interesting to talk to other actuaries overseas, as we shared a common language despite different cultural backgrounds. The actuarial profession provides me with unique opportunities to make friends worldwide and establishes meaningful connections beyond geographical borders.”

Patrick CHAN
2022 Graduate

“Looking back to my five years of university life, I really miss the joyful days at CUHK, especially the laughter that I had with my peers and friends. I have learnt a lot from lectures, like digging into the world of actuarial mathematics, studying hard for Society of Actuaries (SOA) examinations, and getting to know the current development of the actuarial industry in Hong Kong. The internships I had were very useful to make myself well-prepared for my full-time job, thanks to the guidance and patience from my seniors.

Upon my graduation from IFAA, I commenced my career path as an Actuarial Analyst in a reporting team at a traditional life insurance company. I also push myself to study hard and keep on taking SOA examinations to pursue actuary qualifications. To be honest, it is quite exhausting to keep up my study schedule while having my full-time job, but I believe it is a learning and growth opportunity, as well as a challenging task to sharpen my time management skills.

Overall, I feel grateful for all the experiences of highs and lows during my university life. The memories and takeaways from IFAA and this welcoming campus will surely be retained in my mind.”

"Looking back, my four years of undergraduate studies in IFAA were quite intense (in a good way) as it was a combination of staying up late studying, internship and exchange studies. I still can recall when I was a freshman I received a colourful flow chart with the code of the courses and how to map them with actuarial exams. By completing the courses in sequential order, we were able to tackle the preliminary exams one by one. Personally, I benefited from this, as I was able to clear all the preliminary exams by year three and this ultimately grants me an advantage in my job search.

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Accreditation

The IFAA Programme has been recognised by the Society of Actuaries (SOA) in the United States as a Centre of Actuarial Excellence since 2011. We are one of only 38 universities in the world with this recognition, the highest award bestowed upon an actuarial programme. The SOA recognises IFAA’s excellence in a wide range of areas including curriculum design, faculty qualifications, connection with the insurance industry and graduate prospects:

“Fully integrated business courses, close to 100% participation in its internship and co-op programme and a strong connection to the industry are among the exceptional qualities of the CUHK actuarial science programme, and are instrumental in positioning students for success.”

CAE Evaluation Committee (CEC), Society of Actuaries

The Chinese University of Hong Kong is a participant in the inaugural group of 13 universities recognized by the Society of Actuaries for the University-Earned Credit (UEC) programme in August 2022. IFAA students taking approved courses will be eligible for specific SOA exam credit after obtaining the required score.

Professional Examinations

To become an actuary, you must follow an educational pathway designed by one of the professional actuarial bodies. Most employers in Hong Kong require graduates to at least partially complete the pathway and have relevant internship or work experience in an actuarial role.

The educational pathway leading to a Fellow of the Society of Actuaries (SOA) begins with two components: associate examinations and Validation by Educational Experience (VEE). These are followed by e-Learning modules, projects, fellow examinations and professionalism courses. The IFAA courses below are relevant to the current SOA associate examinations. IFAA graduates typically pass most, if not all SOA required associate examinations, and are considered highly marketable to employers.

<table>
<thead>
<tr>
<th>SOA Associate Exam</th>
<th>Relevant Course(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability</td>
<td>FINA 2220</td>
</tr>
<tr>
<td>Financial Mathematics</td>
<td>FINA 2200</td>
</tr>
<tr>
<td>Statistics for Risk Modelling</td>
<td>FINA 3290, FINA 3295</td>
</tr>
<tr>
<td>Fundamentals of Actuarial Mathematics</td>
<td>FINA 3221, FINA 3222</td>
</tr>
<tr>
<td>Advanced Long-term Actuarial Mathematics</td>
<td>FINA 4211</td>
</tr>
<tr>
<td>Advanced Short-term Actuarial Mathematics</td>
<td>FINA 4221</td>
</tr>
</tbody>
</table>

Required knowledge of economics, accounting, finance and mathematical statistics in the VEE component is fulfilled by good performance in relevant validated courses taken at qualified universities. CUHK offers such SOA validated courses, giving IFAA students an advantage over graduates from other programmes.

<table>
<thead>
<tr>
<th>SOA VEE Area</th>
<th>Courses offered for Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting and Finance</td>
<td>ACCT 1111, FINA 2010</td>
</tr>
<tr>
<td>Economics</td>
<td>DOTE 1030, DOTE 1040</td>
</tr>
<tr>
<td>Mathematical Statistics</td>
<td>FINA 2230</td>
</tr>
</tbody>
</table>
Student Life

IFAA students hail from various countries around the globe. Your fellow classmates bring with them a wealth of unique knowledge and expertise that will enrich your shared experience in the programme.

<table>
<thead>
<tr>
<th>Current students</th>
<th>226</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current alumni</td>
<td>846</td>
</tr>
</tbody>
</table>

Society of Insurance, Financial and Actuarial Analysis (SIFA)

SIFA, the official student organisation of the IFAA programme, aims to unite IFAA students and strengthen their professional image. SIFA promotes the IFAA Programme within and outside of CUHK, sponsoring activities and gatherings that expose students to a broad array of dynamic business and communication skills.
Admissions Requirements

JUPAS Students
Local students applying on the strength of their Hong Kong Diploma of Secondary Education (HKDSE) Examination should apply through JUPAS.

JUPAS code: JS4238

Minimum Entrance Requirements
Level 3 or above in Chinese Language
Level 3 or above in English Language
Level 5 or above in Mathematics*  
A (Attained) in Citizenship and Social Development
Level 3 or above in any one New Senior Secondary elective subject 1
Level 3 or above in any one New Senior Secondary elective subject 2 or Mathematics (Extended Part) Module I or Module II*.
* Mathematics (Extended Part) Module I or II at Level 5 is required if Mathematics (Compulsory Part) at Level 3 or 4 is obtained.
Admissions will be based on the ‘Best 5 Principle’ with the inclusion of (1) English Language and (2) at least one best subject of Mathematics (Compulsory Part), Mathematics (Extended Part) Module I or II.

Non-JUPAS & International Students
For details regarding admission requirements for non-JUPAS and international students, including students from Mainland China, please contact CUHK Office of Admissions and Financial Aid or visit http://www.oafa.cuhk.edu.hk/.

We consider applicants on a case-by-case basis, taking into account extra-curricular activities and community service. Applicants should be aware that due to the intense quantitative nature of our programme, we expect students to have strong mathematics skills.

Scholarship Opportunities
Since 2004, the Hong Kong Federation of Insurers Educational Trust has provided scholarships to CUHK undergraduate students majoring in Insurance, Financial and Actuarial Analysis, as a way to support tertiary insurance education in the city.

Besides, IFA Academic Excellence Award was launched in 2021 with a recognition to the Insurance, Financial and Actuarial Analysis students for their outstanding academic performance and encourage them to make continued progress in their studies.

CUHK also provides university-wide scholarships and college scholarships to Business School students. The following are examples of some of the scholarships our students have received:

- Cheung Chuk Shan Scholarship
- Chung Chi Admission Scholarship
- CUHK Golden Jubilee Scholarship for Outgoing Exchange Students
- CW Chu Foundation Scholarship, CW Chu College
- HKSAR Government Scholarship
- Kunkle and Pommerenke Grand Admission Scholarship
- Morningside College Scholarship
- Shaw Admission Scholarship
- Talent Development Scholarship
- Wu Yee Sun College Academic Scholarship
IFAA Advisory Committee

IFAA’s curriculum development and intended learning outcomes are guided and regularly reviewed by the IFAA Advisory Committee, comprised of prominent insurance and business executives. The Committee provides high-level steering for the programme and advice on the quality and relevance of course content. A list of our current advisory committee members and their associations can be found on the following page.

Chairman
Mr. Kevin LEE
CEO
I-BriB Holdings Limited

Members
Mr. Roddy Anderson
Chief Executive and Local Controller
Hong Kong Branch
Scottish Widows Ltd. (part of Lloyds Banking Group)

Mr. Paul CARRETT
Head of APAC, Reinsurance
Brookfield Asset Management

Mr. Sai-Cheong FOONG
Group Head of Technical Assistance
Advisory Team
AIA Group Limited

Ms. Cathy HWANG
Principal & Consulting Actuary
Milliman Limited

Mr. Lawrence LAI
Appointed Actuary
HKMC Annuity Limited

Mr. Kelton LAM
Executive Director, Business Development Actuary
RGA Reinsurance Company Hong Kong Branch

Mr. Stuart LECKIE, OBE, JP
Chairman
Stirling Finance Ltd.

Ms. Christie LEE
Senior Director, Head of Analytics
A.M. Best Asia-Pacific Limited

Mr. Tak LEE
General Manager, Structured Solutions, Life & Health Greater China, Munich Re, Hong Kong.

Ms. YN LEE
Chief Financial Officer
FuSure Reinsurance Company Limited

Dr. Sim Kheng NG
Chief Financial Officer
Prudential Assurance Malaysia Berhad

Mr. Jeremy PORTER
Chief Risk Officer
FWD Group Holdings Limited

Mr. Ellick TSUI
Deputy Chief Executive Officer & Chief Financial Officer
FTLife Insurance Company Limited

Mr. Billy WONG
Executive Director
Gain Miles Group

Mr. Jonathan ZHAO
Managing Partner, Asia-Pacific Financial Services Strategy and Transaction Services
EY

Ex Officio Member
Prof. Tao SHU
Chairman
Department of Finance
The Chinese University of Hong Kong

Secretary
Prof. Albert WONG
Associate Professor
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Email: ifaa@baf.cuhk.edu.hk
Website: http://ifaa.bschool.cuhk.edu.hk

To learn more, please visit our website where you can find additional information, resources and FAQs.