

# Admission Talk for HKU Actuarial Science - BSc(ActuarSc)

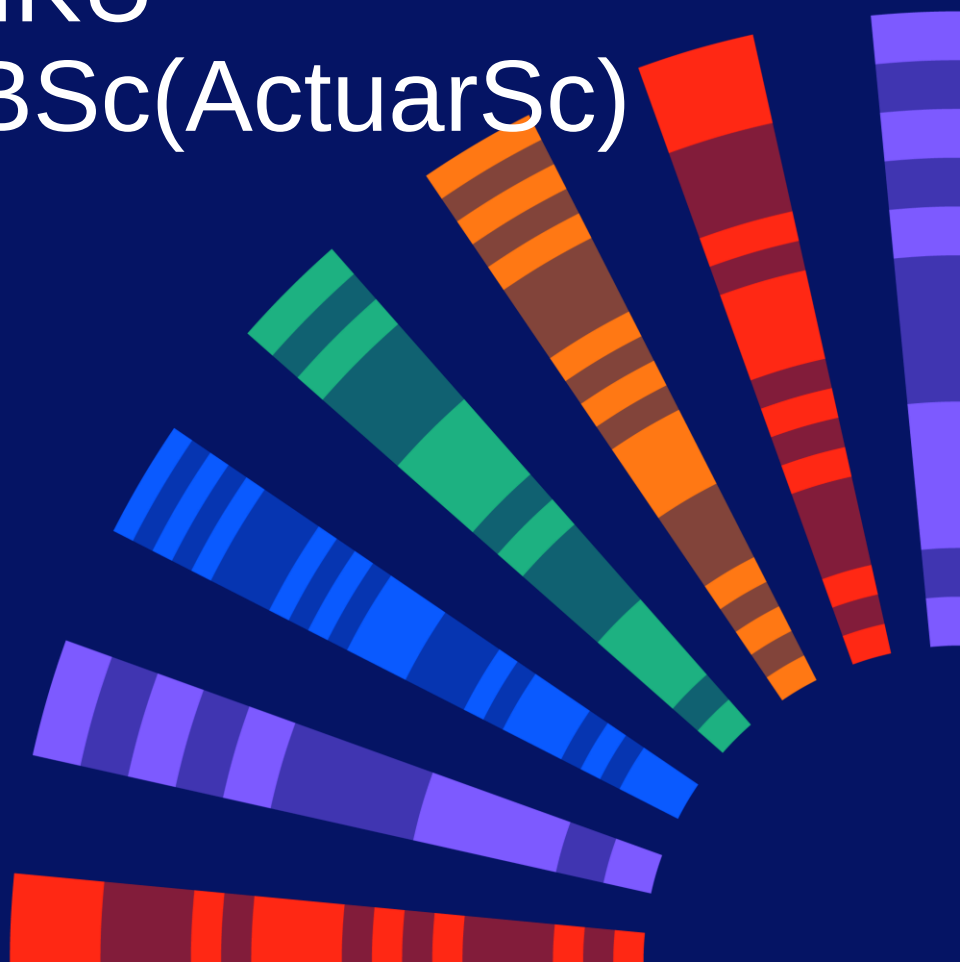
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JUPAS Programme Code: 6729

25 October 2025



SCHOOL OF  
**COMPUTING &  
DATA SCIENCE**  
The University of Hong Kong



# About School of Computing & Data Science (CDS)

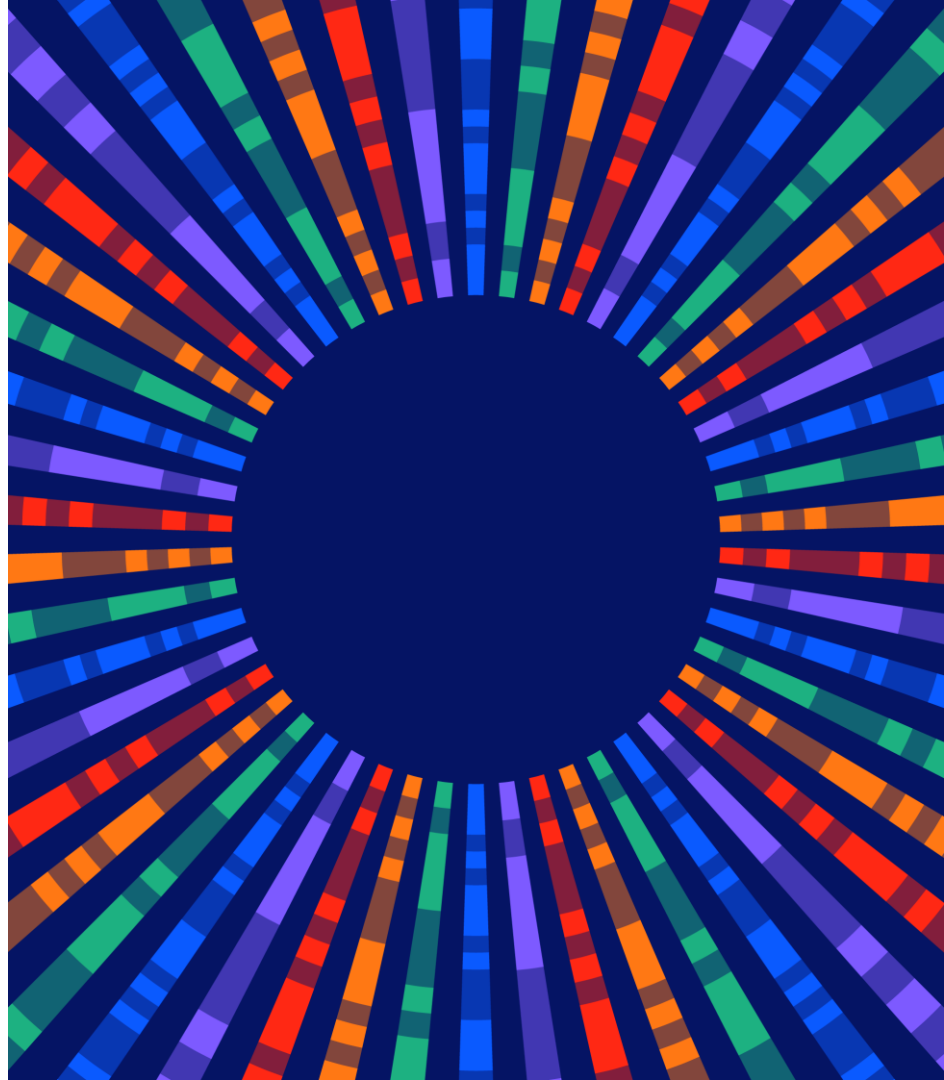
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*Empowering Changemakers of the Future*

- Established in 2024 at The University of Hong Kong
- Encompasses three departments: AI & Data Science, Computer Science, and Statistics & Actuarial Science
- Aims to foster innovation, collaboration, and excellence in the vital fields of
  - Computing
  - Statistical Sciences
  - Data Science
  - Artificial Intelligence



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School of Computing & Data Science



# International rankings of HKU



#2  
in Asia

#11  
in the world

#18

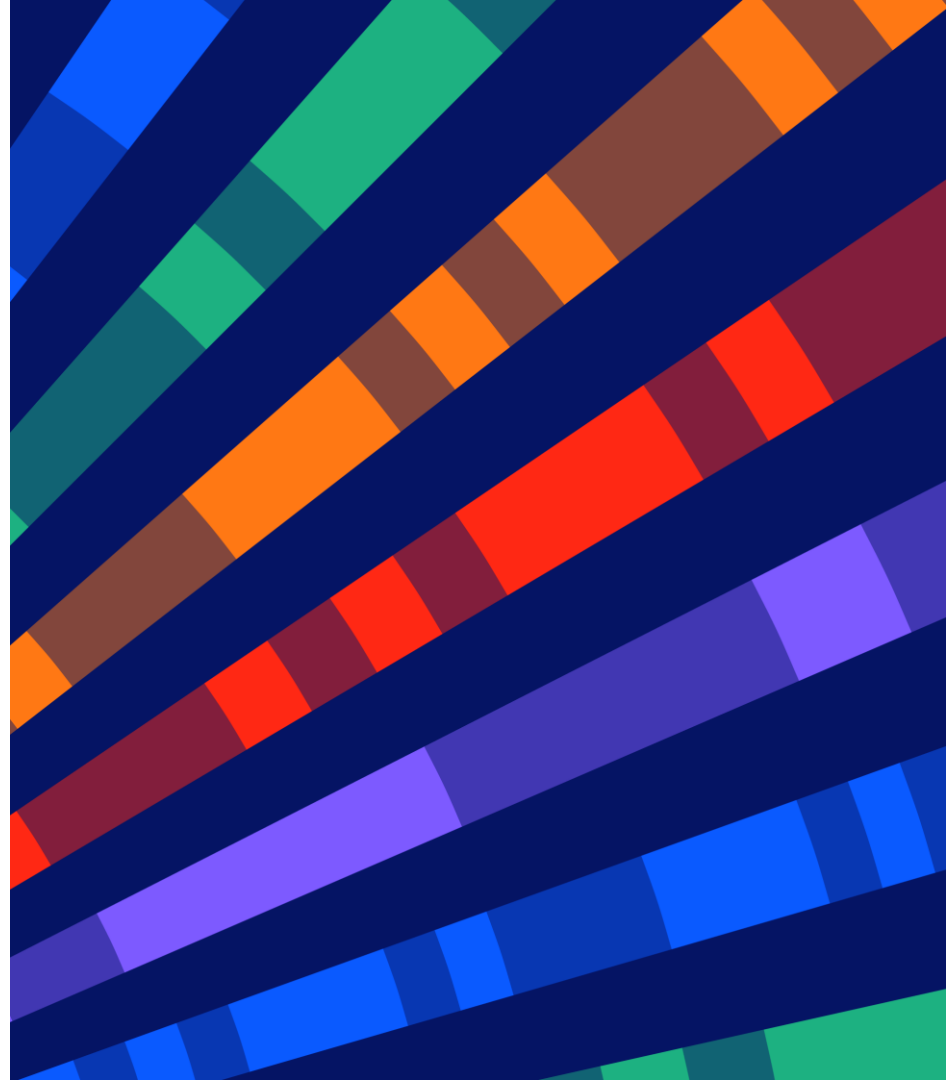
Data Science and Artificial Intelligence



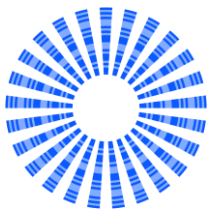
#6  
in Asia

#33  
in the world

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# Programme Overview



Computer Science &  
Data Science



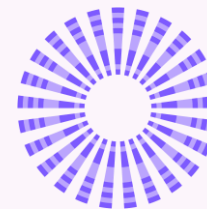
AI &  
Applied AI



Statistical Decision  
Sciences



FinTech



Actuarial  
Science

精算學



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Department of Statistics & Actuarial Science  
BSc(ActuarSc) Admission Talk

# What is Actuarial Science? 什麼是精算?

- Actuarial science is the discipline that applies modern **mathematical** (數學) and **statistical** (統計) methods to assess and **manage risk** (風險) in the **insurance** (保險) and **finance** (金融) industries
- Actuarial science includes a number of interrelating subjects, including **probability** (概率) and **statistics** (統計), **data science** (數據科學), **finance** (金融), and **economics** (經濟)



# Actuary's Work 精算師的工作



- Actuaries are **experts and professionals**, qualified in this field through examinations and experience, that utilize actuarial methods and techniques to address future financial risk
- 精算師是運用精算方法和技術去解決未來財務風險的**專家和專業人士**



# Actuary's Work 精算師的工作



- Actuaries are the **leading professionals** in finding ways to manage risk.
  - It takes a combination of **strong analytical skills** and **business knowledge** to manage today's complex risks facing our society.
- Actuaries are **key players** on the management team of companies that deal with risk.
  - In a fast-changing world, with emerging risks and the need for more creative ways to tackle them, there are **constant opportunities for personal and professional growth**.
- Actuaries are the **analytical backbone** of our society's financial security programs.

*(Be An Actuary)*





保險公司的後勤部門設有不同的工作崗位，不少崗位是由精算師出任。大家又是否知道，精算師在一間保險公司內，是擔任什麼角色呢？

其實，精算師於保險行業一直擔當著重要角色。他們的工作範圍廣泛，從新保險產品的設計，保費定價及準備金預算，到為保險公司進行風險評估及制定投資策略等，都離不開精算師的參與。隨著風險為本資本制度（RBC regime）的實施，以及國際財務報告準則第17號（IFRS 17）將於2023年生效，保險公司對於富經驗的精算師，更加是求賢若渴。

就   而言，於高級管理層當中，便有7位具有精算師資格，包括副行政總裁暨首席財務官、首席產品總監、首席風險總監、首席投資及資產負債管理總監、首席精算師、首席資本管理總監以及中國項目負責人。此外，超過20位同事亦擁有精算師資格，於不同部門中擔當著重要崗位。各人憑著其專業知識，在瞬息萬變的市場環境中，為公司制定良策部署，做好風險管理，達致財務穩健，為保單持有人謀取最佳利益。

Source: <https://www.stheadline.com/columnists/lifestyle/3179047/%E5%AF%8C%E9%80%9A%E4%BF%9D%E9%9A%AA-%E7%B2%BE%E7%AE%97%E5%B8%AB%E6%96%BC%E4%BF%9D%E9%9A%AA%E5%85%AC%E5%8F%B8%E8%88%89%E8%B6%B3%E8%BC%95%E9%87%8D%E7%9A%84%E8%A7%92%E8%89%B2%E5%9F%8E%E4%B8%AD%E7%86%B1%E4%BA%8B>



# How to Become an Actuary?

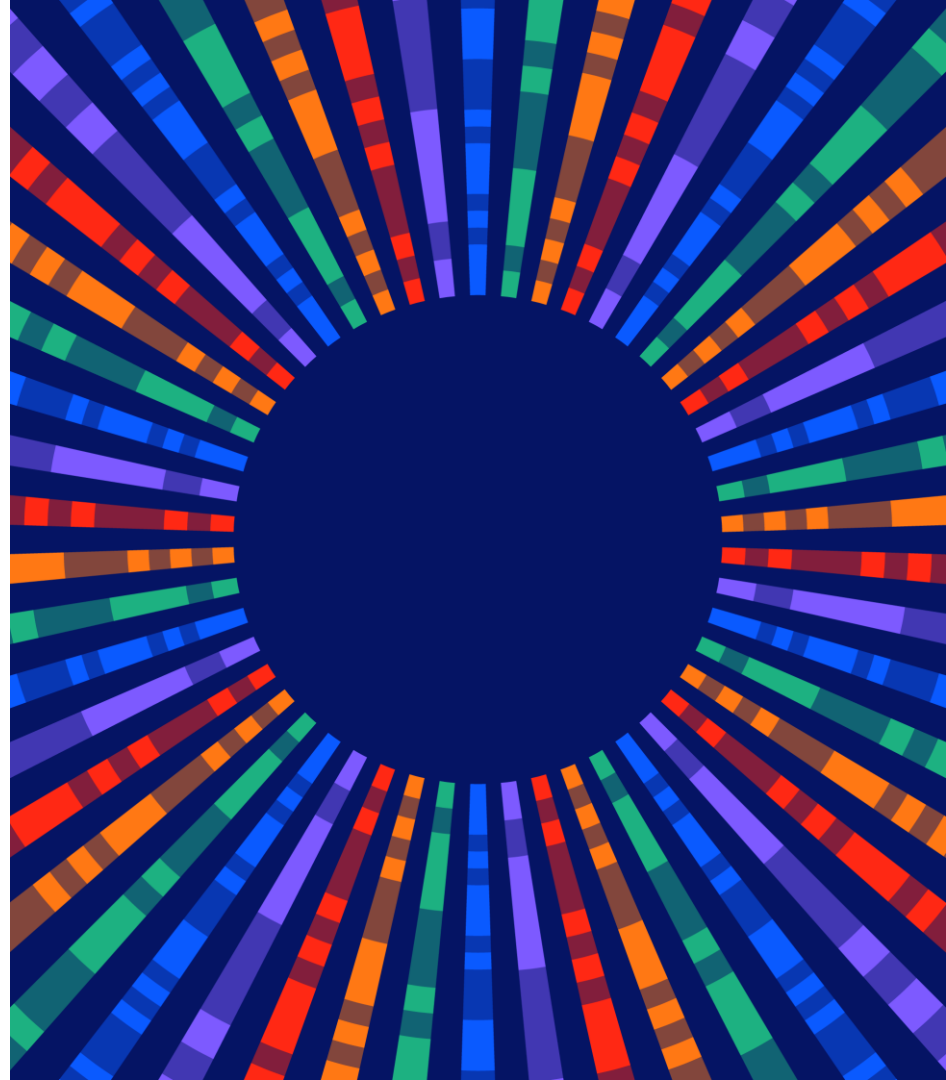
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怎樣成為一個精算師？

**Actuaries**  
Risk is Opportunity.®



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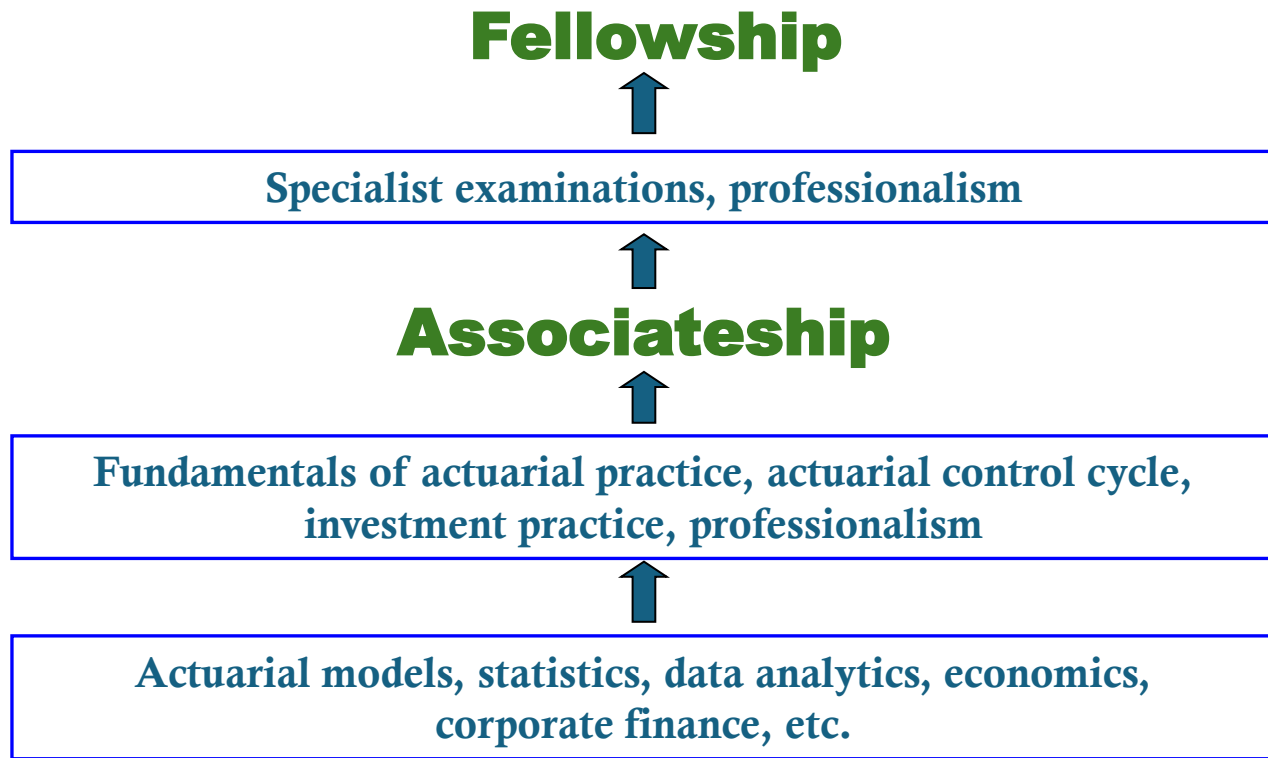


# Becoming an Actuary 成為一個精算師

- Admitted into one of the professional bodies in the US, UK, or Australia  
考取美國、英國、澳洲等地其中一個專業資格
- There are usually two stages 一般分兩個階段
  1. **Associateship** (準/副精算師會員)
  2. **Fellowship** (精算師會員)
- Generally takes 5 – 8 years  
需時大概 5 – 8 年



# Typical Exam Systems 典型考試制度



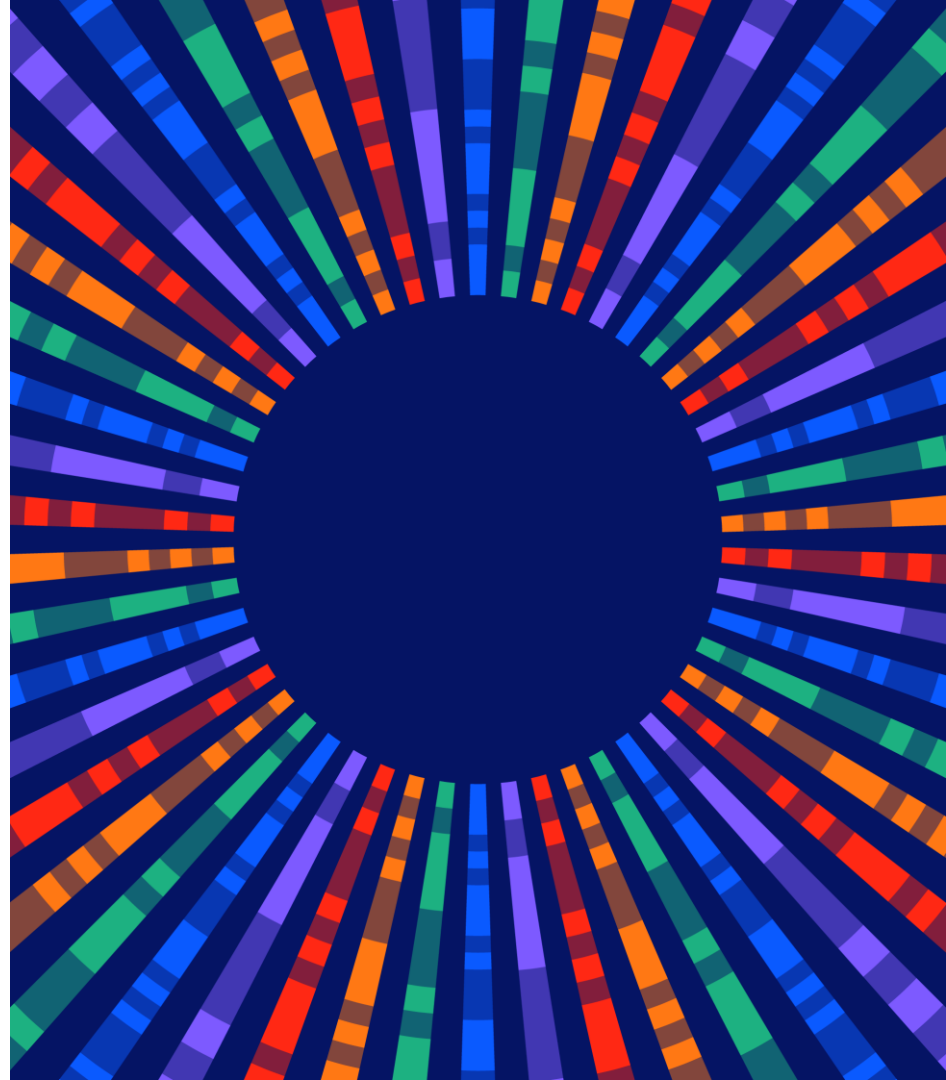
# Top 6 Reasons

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you should choose  
HKU Actuarial Science



The University of Hong Kong  
School of Computing & Data Science



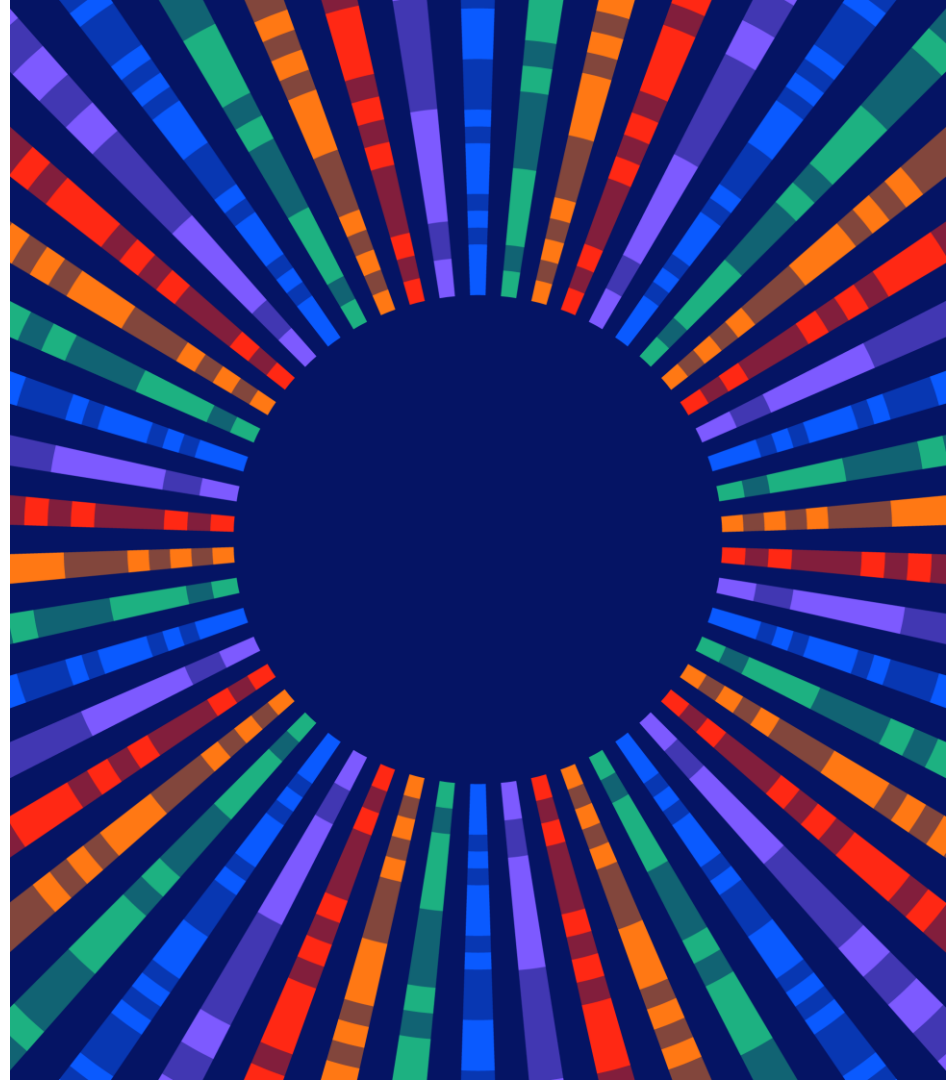
# Reason #1

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## Excellent Employment Prospect



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# Best Universities for Actuarial Science in Asia

Updated: March 02, 2025 EduRank

Below is a list of best universities in Asia ranked based on their research performance in Actuarial Science. A graph of 735K citations received by 78.7K academic papers made by 355 universities in Asia was used to calculate publications' ratings, which then were adjusted for release dates and added to final scores.

We don't distinguish between undergraduate and graduate programs nor do we adjust for current majors offered. You can find information about granted degrees on a university page but always double-check with the university website.

## 1. University of Hong Kong

 China | [Hong Kong](#)

For Actuarial Science

#1 in [China](#)

#22 in [the World](#)



Acceptance Rate **17%** • Enrollment **21,652** • Founded **1911**



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Department of Statistics & Actuarial Science  
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Source:  
<https://edurank.org/business/actuarial-science/as/>

# Prospect of Actuaries 精算師出路多！



- Actuarial qualification is recognized worldwide  
精算專業資格，世界通行





Source:  
<https://www.themuse.com/advice/high-paying-jobs-in-demand-for-future>

## 8. Actuary

Median salary in 2023: \$120,000

Projected growth rate between 2023 and 2033: 21.8%

Actuaries typically work for insurance companies and are responsible for evaluating risk. They use math, data, and statistics to determine whether their employer should issue a policy to a potential customer and what the premium should be—whether that's an individual or a business.

As an actuary, you'd make evaluations regarding health, life, automobile, homeowners, medical malpractice, and workers' compensation insurance, as well as retirement benefits and other investments.

A degree in actuarial science (which focuses on using math and statistical modeling to assess risk) or a related field, such as math or statistics, is a must. Plus, actuaries need to pass a series of rigorous exams over the course of several years in order to be certified by the [Casualty Actuarial Society](#) (CAS) or the [Society of Actuaries](#) (SOA).





# These are the 6 fastest-growing jobs of the decade that pay over \$100,000

Published Wed, Sep 29 2021 3:10 PM EDT

| Job                                                                  | Projected Employment Change,<br>2020-2030 | Median Pay |
|----------------------------------------------------------------------|-------------------------------------------|------------|
| Nurse practitioners                                                  | 52.2%                                     | \$111,680  |
| Information security analysts                                        | 33.3%                                     | \$103,590  |
| Medical and health services managers                                 | 32.5%                                     | \$104,280  |
| Physician assistants                                                 | 31.0%                                     | \$115,390  |
| Actuaries                                                            | 24.5%                                     | \$111,030  |
| Software developers, software quality assurance analysts and testers | 22.2%                                     | \$110,140  |

Source: Bureau of Labor Statistics • [Get the data](#)

Source: <https://www.cnbc.com/2021/09/29/the-6-fastest-growing-jobs-of-the-decade-that-pay-over-100000.html>





Actuaries

Financial services



Business Support



Creative Industries,  
Arts and Culture,  
Performing Arts



Development and  
Construction



Environmental  
Technology  
Services



Financial Services



Healthcare  
Services



Innovation and  
Technology



Legal and Dispute  
Resolution  
Services



Maritime Services



# HK Salary Survey 2025



| POSITION TITLE                                                                    | 25TH PERCENTILE | 50TH PERCENTILE | 75TH PERCENTILE |
|-----------------------------------------------------------------------------------|-----------------|-----------------|-----------------|
| <u>Assistant Actuarial Analyst / Actuarial Analyst / Senior Actuarial Analyst</u> | HK\$249,000     | HK\$436,000     | HK\$603,000     |
| <u>Assistant Manager / Manager - Actuarial</u>                                    | HK\$540,000     | HK\$720,000     | HK\$900,000     |
| <u>Senior Manager - Actuarial</u>                                                 | HK\$884,000     | HK\$1,060,000   | HK\$1,248,000   |
| <u>Sub Team Head / Director - Actuarial</u>                                       | HK\$1,248,000   | HK\$1,508,000   | HK\$1,747,000   |
| <u>Appointed Actuary / Senior Director / Chief Actuary</u>                        | HK\$1,976,000   | HK\$2,308,000   | HK\$2,704,000   |
| <u>CFO - Insurance / Actuarial</u>                                                | HK\$2,028,000   | HK\$2,392,000   | HK\$3,016,000   |

(Robert Half Hong Kong Salary Guide 2025)



# UK Salaries



| Earning Potential in Insurance  |              |               |               |
|---------------------------------|--------------|---------------|---------------|
| Business Function               | Entry Level* | Senior roles* | Partner/Head* |
| Underwriting                    | £28,000      | £125,000      | £250,000      |
| Claims                          | £28,000      | £100,000      | £150,000      |
| Broking                         | £28,000      | £125,000      | £250,000      |
| Risk and Compliance             | £30,000      | £90,000       | £150,000      |
| Projects, Change and Operations | £30,000      | £110,000      | £175,000      |
| Actuarial                       | £40,000      | £150,000      | £210,000      |

\*Salaries based on jobs across the UK. Source: **Salary & Recruiting Trends 2025 | Digital Guide | Hays**

Source: <https://www.insurancecareers.co.uk/profession-overview/insurance-salary-survey-2025-hays/>



# 2024 Actuarial Science Graduates



- Employed 77.2%
- Further Studies 17.5%
- Mean Salary
  - Basic: \$30,324
  - Gross: \$31,144
- Number of Full-time Job Offers
  - One: 63.3%
  - Two: 30.0%
  - Three: 6.7%



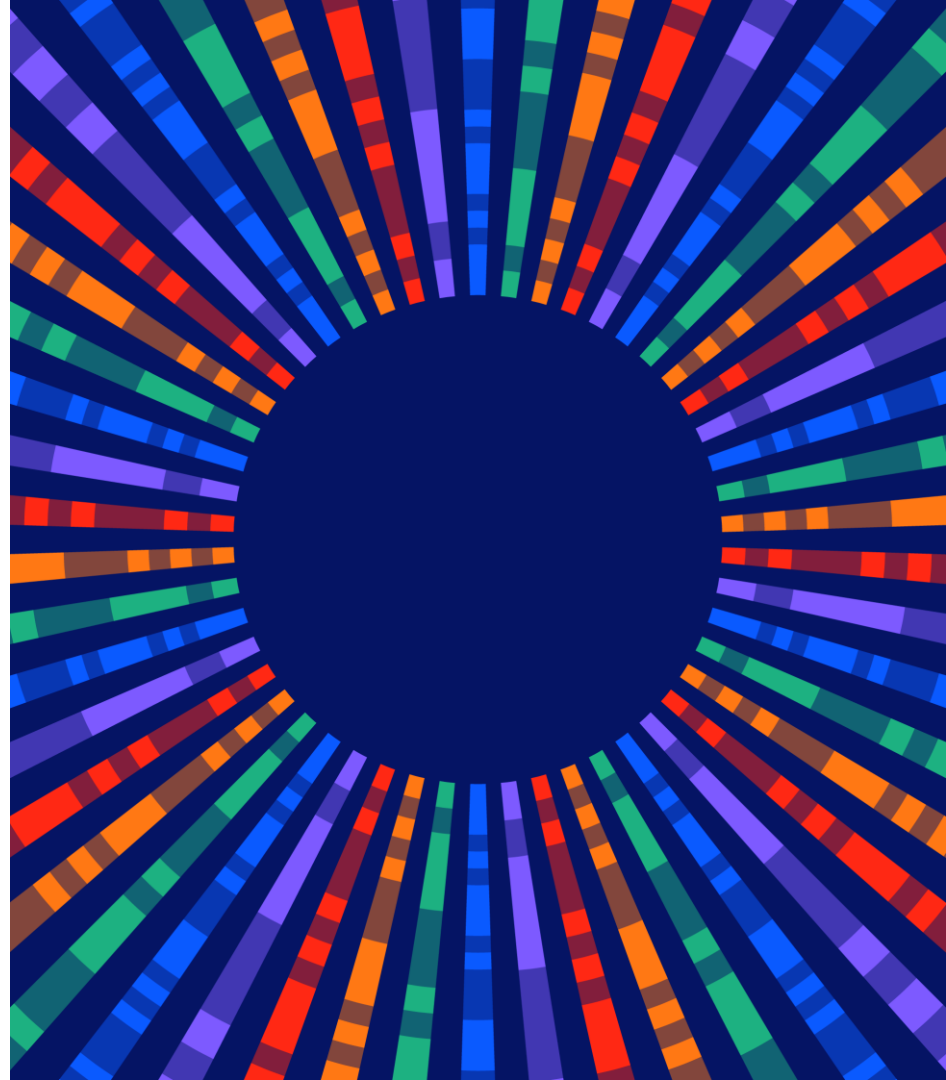
## Reason #2

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# Comprehensive and Flexible Curriculum



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# Cover over 90% of the ASA exam requirement of the SOA

## 覆蓋北美精算學會 (SOA) 準精算師考試課程 90% 以上

| FOUNDATIONS                                                   | ACTUARIAL I                                                                                         | ACTUARIAL II                                                                                                                                                        | ADVANCED                                                                      | PROFESSIONALISM                                              |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------|
| <b>EXAM</b><br>FINANCIAL MATHEMATICS<br>SDST2902, SDST3905    | <b>EXAM</b><br>FUNDAMENTALS OF<br>ACTUARIAL MATHEMATICS<br>SDST3901, SDST3906<br>SDST3908, SDST4903 | <b>EXAM</b><br>ADVANCED LONG-TERM<br>ACTUARIAL MATHEMATICS<br>OR<br>ADVANCED SHORT-TERM<br>ACTUARIAL MATHEMATICS<br>SDST3901, 3909, 3956<br>OR SDST3906, 3908, 4903 | <b>e-LEARNING</b><br>FUNDAMENTALS OF<br>ACTUARIAL PRACTICE<br>SDST3953        | <b>SEMINAR</b><br>ASSOCIATESHIP<br>PROFESSIONALISM<br>COURSE |
| <b>EXAM</b><br>PROBABILITY<br>SDST2901, SDST3902              | <b>VEE</b><br>MATHEMATICAL<br>STATISTICS<br>SDST3902                                                |                                                                                                                                                                     |                                                                               |                                                              |
| <b>VEE</b><br>ECONOMICS<br>ECON1210, ECON1220                 |                                                                                                     | <b>EXAM</b><br>PREDICTIVE ANALYTICS<br>SDST4904                                                                                                                     | <b>e-LEARNING</b><br>ADVANCED TOPICS IN<br>PREDICTIVE ANALYTICS<br>(SDST4904) |                                                              |
| <b>VEE</b><br>ACCOUNTING AND<br>FINANCE<br>ACCT1101, SDST3904 | <b>EXAM</b><br>STATISTICS FOR RISK<br>MODELING<br>SDST3907, SDST4904                                |                                                                                                                                                                     |                                                                               |                                                              |
| <b>e-LEARNING</b><br>PRE-ACTUARIAL<br>FOUNDATIONS             | <b>e-LEARNING</b><br>ACTUARIAL SCIENCE<br>FOUNDATIONS<br>(SDST3953)                                 |                                                                                                                                                                     |                                                                               |                                                              |



Students can freely choose to take any **major or minor study**  
學生可自由選擇**主副修課程**

### Possible combinations

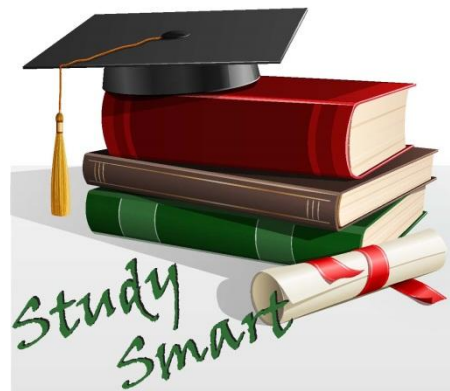
- ✓ 1<sup>st</sup> Major (AS) + 2<sup>nd</sup> Major
- ✓ 1<sup>st</sup> Major (AS) + Minor
- ✓ 1<sup>st</sup> Major (AS) + 1<sup>st</sup> Minor + 2<sup>nd</sup> Minor

### Popular choices of 2nd Major

Computer Science; Economics; Finance; Sociology

### Popular choices of Minor

Accounting; Computer Science; Economics; Finance; Hong Kong Studies; Mathematics; Physics; Spanish; Sustaining Cities, Cultures, and the Earth (SCCE)



# Industry Collaboration

- Collaborate with **AIA Group** (largest publicly traded life insurance group in the Asia-Pacific region) and **FIS** (one of the largest financial technology companies in the world) to offer a new course, SDST3957 *Essential Principles in Actuarial Modelling*.
- **Features of the course:**
  - Taught by a team of **experienced actuaries** from AIA
  - Students will learn how to perform **actuarial modelling** through practical business case studies
  - Students will gain **hands-on experience** of using **Insurance Risk Suite (formerly Prophet)**, a state-of-the-art professional actuarial modelling solution, developed and sponsored by FIS.



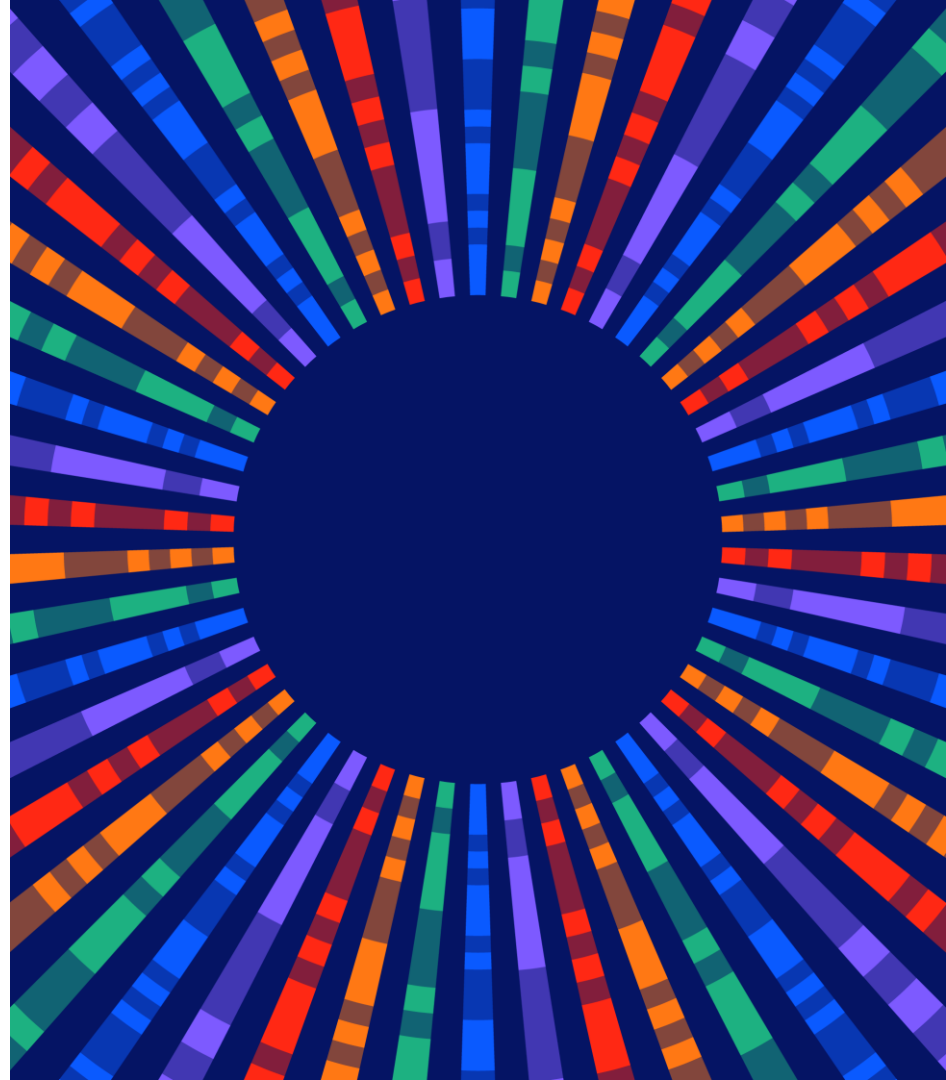
## Reason #3

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# Recognition by Professional Bodies



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## Institute and Faculty of Actuaries (UK)



Institute  
and Faculty  
of Actuaries

- ✓ **Accreditation** for **SIX** Core Principles subjects  
**CS1, CS2, CM1, CM2, CB1, CB2**
- ✓ Our BSc(ActuarSc) programme is **the first in Asia, the only one in HK**, accredited by the IFoA

## Society of Actuaries (US)

- ✓ All 3 VEEs
- ✓ **Center of Actuarial Excellence**
- ✓ **Exemption** of professional exams:  
**FM, SRM, ALTAM, ASTAM**



CENTER OF ACTUARIAL  
EXCELLENCE



UNIVERSITY-EARNED  
CREDIT



SOCIETY OF ACTUARIES®



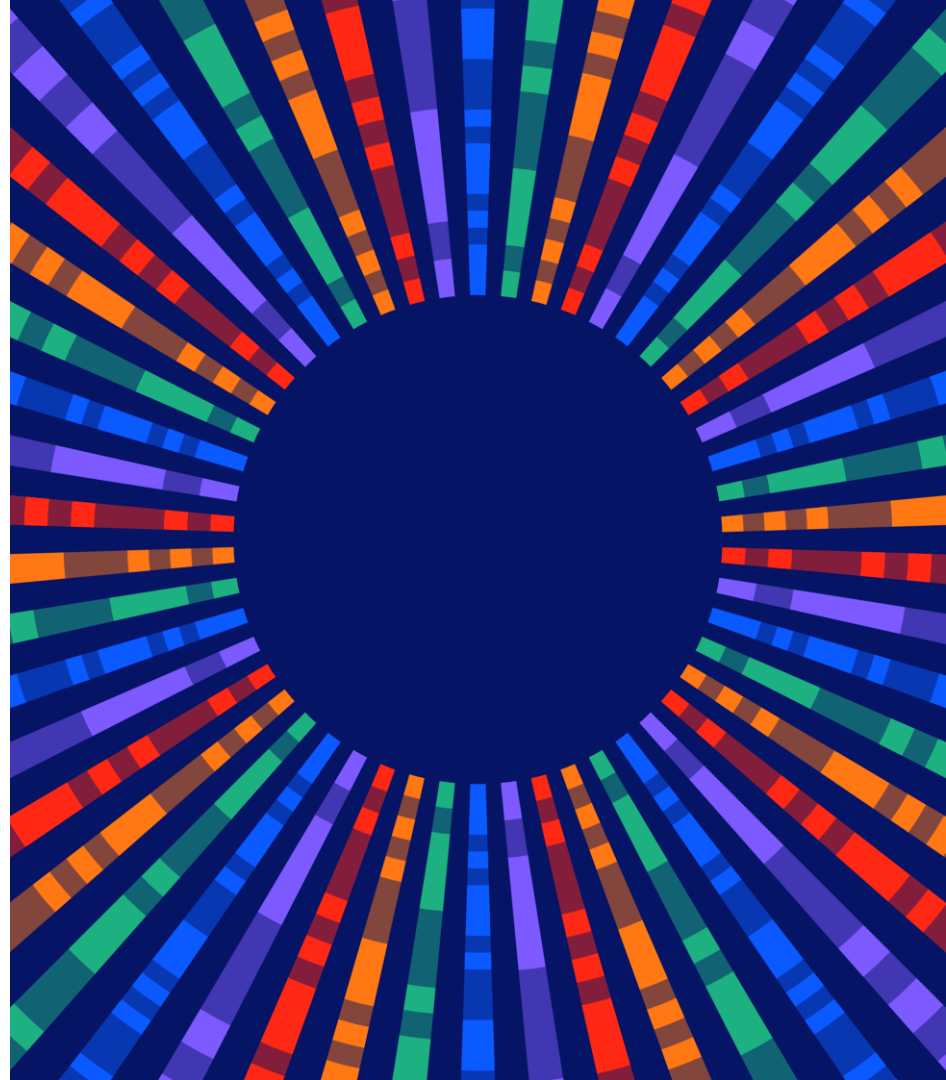
## Reason #4

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# Comprehensive Career Support

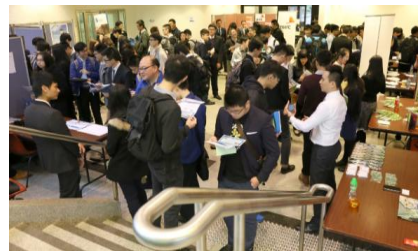


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# Professional Development – Career Advising Programme

- Professional Preparation Programme (PPP)
- Individual consultation on cover letter, CV and interview skills
- Corporate Mentorship Programme (CMP) *AIA Group, AIA International, AXA, Bloomberg, China Life, Chubb, Cigna, Deloitte, Ernst & Young, HSBC, KPMG, SCOR Re, Swiss Re, etc*
- Market information workshops
- Firm visits and alumni sharing
- Career Fair



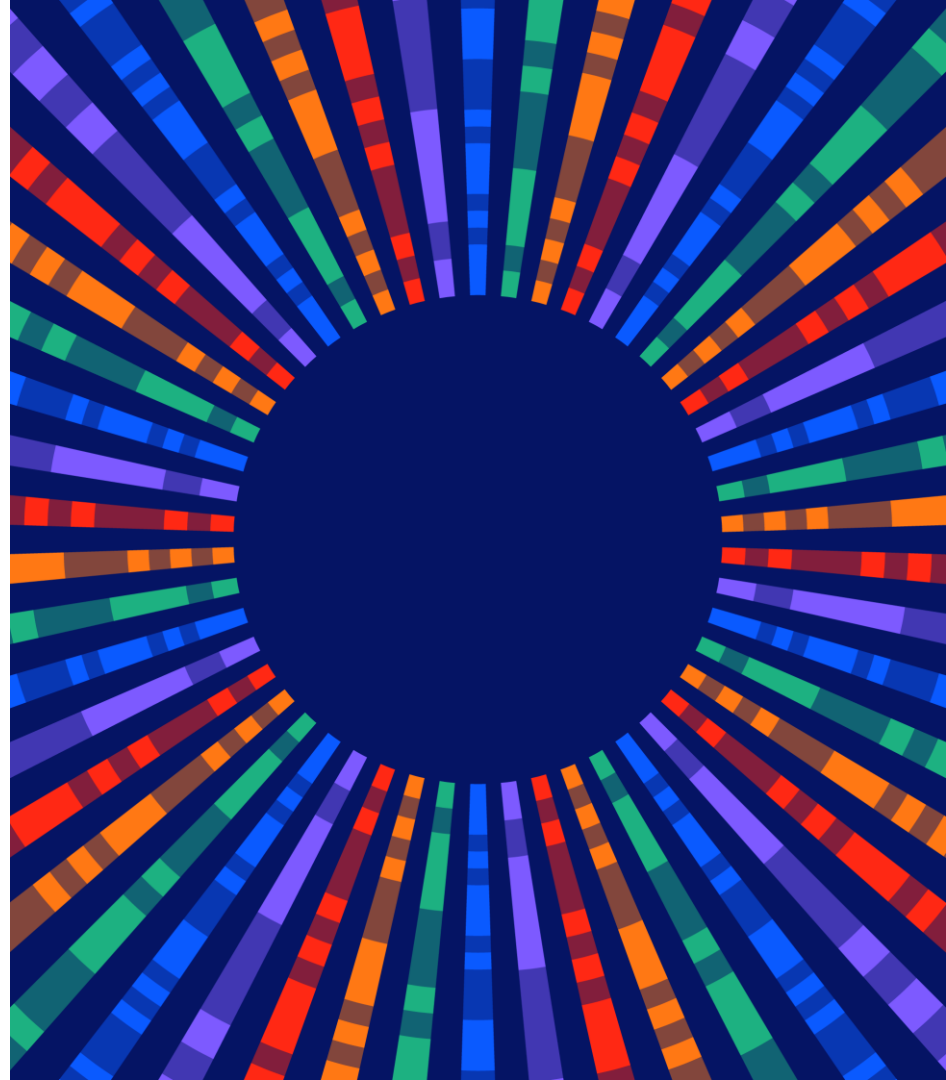
# Reason #5

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## Internship Opportunities



The University of Hong Kong  
School of Computing & Data Science





Blue Cross 藍十字  
Member of BIA Group



PRUDENTIAL  
英國保誠保險

Sun Life Financial  
永明金融

ERNST & YOUNG  
Quality In Everything We Do

宏利  
Manulife

Gen Re | LifeHealth



94% of our students have participated in the internship programme!

- ABN AMRO Asset Management
- ACE Life
- American International Assurance (AIA)
- Aon Hewitt
- AXA
- BOC Group Life Assurance
- Citibank
- Dah Sing Life
- Deloitte
- Deutsche Bank
- Ernst & Young
- FTSE Group
- FWD Life Insurance Company (Bermuda) Ltd.
- Goldman Sachs
- Hang Seng Bank
- Hewitt Associates
- HSBC Investment (HK) Ltd.
- ING Life
- JP Morgan
- KPMG
- Manulife (International) Ltd.
- Morgan Stanley
- Munich Reinsurance Co.
- New York Life
- Prudential Assurance Co. Ltd.
- Rabobank
- RGA Reinsurance
- Standard Chartered Bank (Hong Kong) Ltd.
- Swiss Re
- Towers Watson



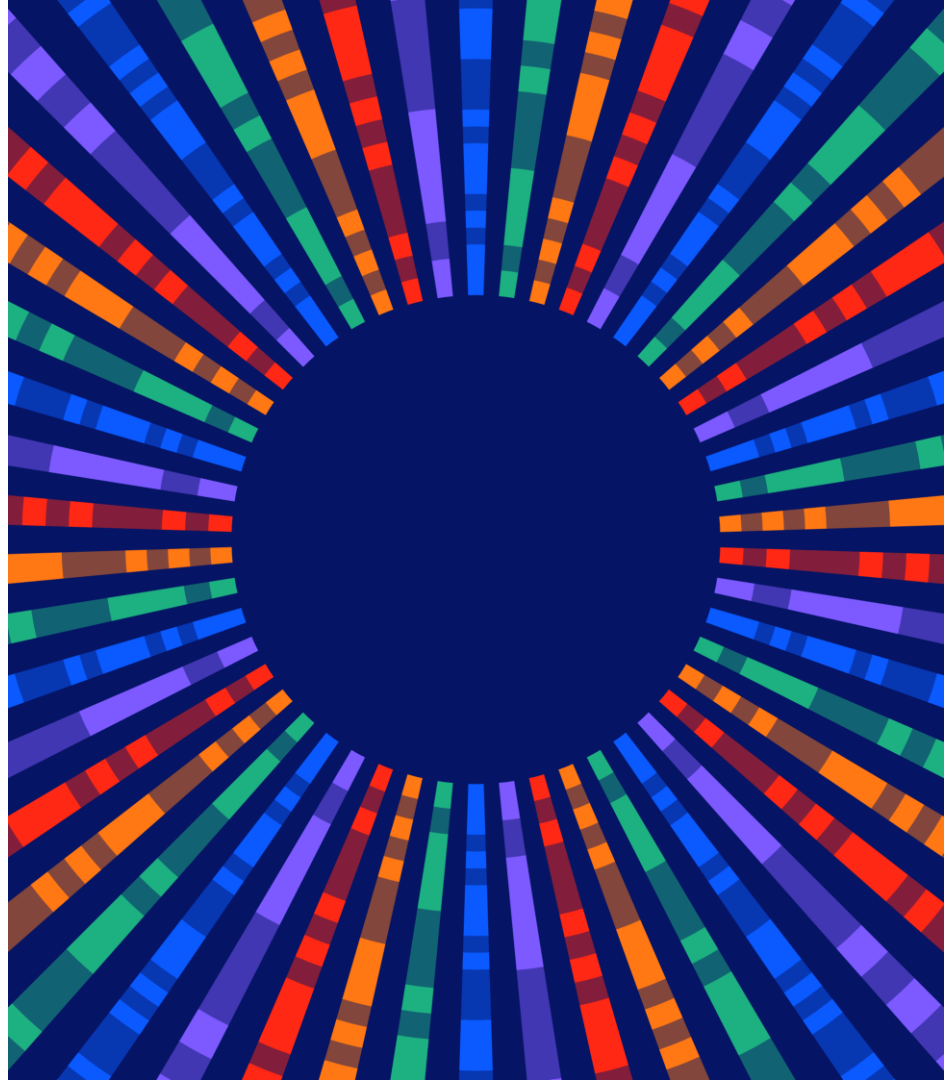
# Reason #6

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## Scholarships



The University of Hong Kong  
School of Computing & Data Science



# Dr Patrick S C Poon Scholarship in Actuarial Science

- ★ 5 scholarships
- ★ Awarded to first year students admitted through JUPAS with most outstanding entrance record
- ★ Each at **HK\$50,000** or **HK\$60,000 per year**, all **renewable** based on satisfactory performance in **each year's** study in the programme



## School of Computing and Data Science Entrance Scholarship

- ❖ Up to 10 scholarships for new undergraduate students of the School of CDS
- ❖ Award of **HK\$50,000, tenable for four years**

## Statistics and Actuarial Science (SAAS) Scholarships

- ❖ 21 scholarships for actuarial science students
- ❖ Award of **HK\$10,000 to HK\$20,000**

## Hong Kong Federation of Insurers Scholarship

- ❖ Up to 6 scholarships
- ❖ Award of **HK\$20,000**



## YF Life Scholarship in Actuarial Science and Risk Management



- ❖ Shared between actuarial science and risk management students
- ❖ Award of **HK\$15,000**

## The Life Underwriters Association of Hong Kong Scholarship



- ❖ Shared between actuarial science and risk management students
- ❖ Award of **HK\$10,000**

## China Life Insurance (Overseas) Scholarship in Actuarial Science



- ❖ 5 scholarships
- ❖ Award of **HK\$10,000**



## Sir Edward Johnston Prize (by Institute and Faculty of Actuaries (IFoA))

- ❖ Only for actuarial students at **specific universities**
- ❖ An annual award of **£250**



## QRT-HKU Scholarship

- ❖ Covers students' **composition fee** (and subsistence allowance for non-local students)
- ❖ Up to 5 scholarships



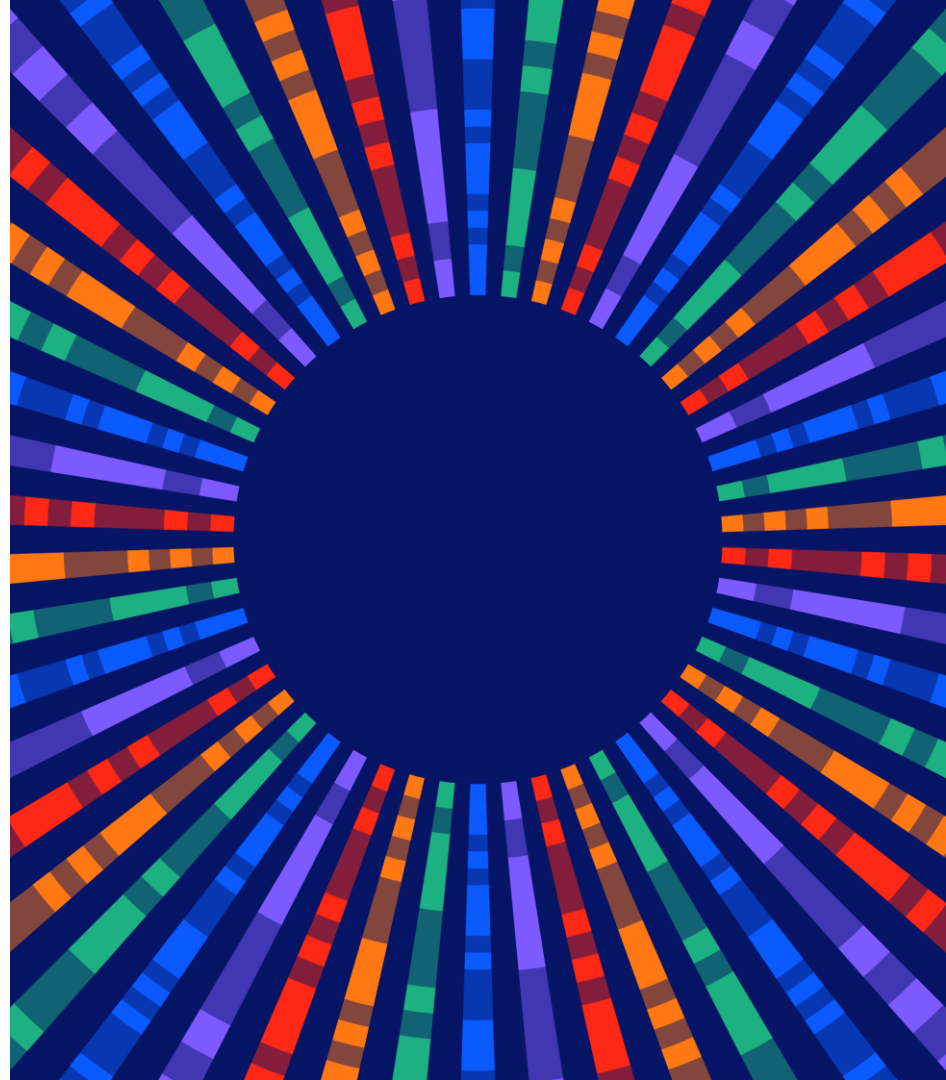
# BSc(ActuarSc) Admission Requirement

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精算課程入學要求



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School of Computing & Data Science



# Admission Requirements 入學要求



## JUPAS (HKDSE)

- ☺ English Language Level 3
- ☺ Chinese Language Level 3
- ☺ Mathematics (Compulsory Part) Level 4
- ☺ Mathematics (Extended Part – Module 1 or 2) Level 4
- ☺ Citizenship & Social Development/Liberal Studies Attained/Level 2
- ☺ 1 Elective Level 3

**Admission formula = [Eng + Math + (M1 or M2)] × 1.2 + Best 2**

| DSE Level | 3 | 4 | 5   | 5* | 5** |
|-----------|---|---|-----|----|-----|
| Score     | 3 | 4 | 5.5 | 7  | 8.5 |



# Admission Requirements 入學要求



## Non-JUPAS

- Applicants with other local/international/national qualifications (e.g., IB, GCE-AL, SAT/AP, NJCEE) will be considered on an individual merit basis.
- Please visit the **HKU Undergraduate Admissions** webpage for more information on the criteria for specific qualifications:  
<https://admissions.hku.hk/apply/international-qualifications>



# Enquiries

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Website: <https://saasweb.hku.hk>

Facebook: <https://www.facebook.com/hkustatisticsactuarialscience>

Website



Facebook Page



SCHOOL OF  
**COMPUTING &  
DATA SCIENCE**  
The University of Hong Kong