



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

6729

Bachelor of Science in
Actuarial Science
BSc(ActuarSc)

For 2025/26 admission



Section 1

Programme highlights and key features

The HKU Bachelor of Science in Actuarial Science (programme code: 6729) is the only programme in Hong Kong accredited by the UK's Institute and Faculty of Actuaries. It provides formal academic and professional training to students who wish to join the actuarial profession. Although actuarial science is a separate discipline with its own area of knowledge, modern actuarial training requires multidisciplinary knowledge in probability, statistics, data science, economics, investment, finance, law, taxation and accounting. The Actuarial Science curriculum reflects this requirement by incorporating various interdisciplinary courses into the basic yet comprehensive actuarial training.

The programme is designed to equip students with a solid background in actuarial science, and enable them to develop the confidence and analytical skills needed to define and tackle problems in actuarial science and related fields. Students should be able to evaluate and measure various kinds of risk using effective quantitative methods, and become proficient in formulating and communicating practicable business strategies with professionalism as well as accuracy.

Meanwhile, the Actuarial Science programme is also specifically designed to provide adequate knowledge for students to sit for the early professional examinations organised by international actuarial organisations, thus allowing them to successfully join the actuarial profession with internationally recognised qualifications upon graduation. In addition, the programme provides sufficient academic training to allow students to pursue postgraduate studies in actuarial science or related areas should they wish to.



What is an Actuary?

An actuary is a professional who deals with the application of probability and statistical theories to problems in insurance, investment, pensions, and financial risk management. The majority of actuaries work for life, health and property/casualty insurance companies, which heavily rely on actuaries' judgment to ensure their financial security. Other actuaries work for actuarial consulting firms, offering their expertise on financial services, health care, pension plans, asset/liability management, etc. Other opportunities are available for actuaries in a variety of industries.

The 'Brains'

Actuaries' duties are varied, challenging and so important that they are frequently called the "brains" of the insurance business. Actuaries work with facts, figures and people to solve business problems. They are not only the statisticians of the insurance industry, but also have broader responsibilities in financial management. They frequently evaluate the past, make use of known changes, interpret expected changes and set future directions to determine insurance premiums and retirement benefits.

Actuaries work in many capacities within businesses, consulting firms, government agencies and universities, and often fill senior managerial roles in insurance companies, even become senior officers or company leaders. Most importantly, all actuaries must have a strong aptitude for mathematics and the ability to apply actuarial knowledge to a range of financial situations.

Becoming an Actuary (精算師)

To become an actuary, you could first obtain a Bachelor of Science in Actuarial Science degree from HKU.

To qualify as an actuary, you must obtain an Associateship and Fellowship title from a professional organisation. Qualifications from Australia, the UK and the US are all fully recognised in the local actuarial and insurance industries. The average time needed to obtain the necessary titles ranges from three to nine years. The relevant professional organisations are shown below.

The HKU Bachelor of Science in Actuarial Science programme has exemption arrangements for certain professional examinations with the Institute and Faculty of Actuaries and the Society of Actuaries. It has also obtained Validation by Educational Experience (VEE) course approval from the Casualty Actuarial Society, the Society of Actuaries and the Canadian Institute of Actuaries in North America.

Institute and Faculty of Actuaries, UK	actuaries.org.uk
Casualty Actuarial Society, US	casact.org
Society of Actuaries, US	soa.org
Institute of Actuaries of Australia	actuaries.asn.au



Center of Actuarial Excellence

The Department of Statistics and Actuarial Science at HKU has been recognised as a Center of Actuarial Excellence (CAE) by the US Society of Actuaries since December 2011, reflecting its commitment to high standards in curriculum, faculty, research, and industry connections.

This prestigious designation is awarded to schools that demonstrate excellence in Actuarial Science by meeting strict criteria on curriculum quality, number and quality of graduates, qualified faculty, ties with business, and beneficial research and scholarship.

Over the years, the School has dedicated itself to world-class standards of research, teaching and learning, and it is now highly regarded as an international centre of research and learning in the field of statistics and actuarial science.

CAE Research Grant

The Department of Statistics and Actuarial Science at HKU received a CAE Research Grant of US\$281,490 from the SOA for a three-year project on dependent risks, making it the first university in Asia to be awarded such a grant and one of only five CAE-designated universities in Asia.

For details of the Department's SOA-funded project, please visit:
saasweb.hku.hk/center-actuarial-excellence



Institute
and Faculty
of Actuaries

IFoA Accreditation

Under the current accreditation agreement with the Institute and Faculty of Actuaries (IFoA), HKU joined the ranks of select institutions worldwide that offer the maximum exemptions (CS1, CS2, CM1, CM2, CB1, and CB2) approved by the IFoA in the UK.

HKU has previously obtained accreditation for IFoA subjects CT1-CT8 from the UK's only chartered professional body dedicated to educating, developing and regulating actuaries based both in the UK and internationally. With the current accreditation, students who graduate with a BSc(ActuarSc) degree from The University of Hong Kong with the required marks in specified subjects will be exempted from taking various IFoA subjects in the current curriculum, as they begin their journey towards qualifying as an actuary.

SOA - University-Earned Credit (UEC) Program

The University-Earned Credit (UEC) program of the Society of Actuaries (SOA) allows university students to become eligible for SOA exam credit by attaining a designated UEC mark on university courses at approved Centers of Actuarial Excellence (CAE).

HKU, as one of the CAE designated by the SOA, obtained the UEC status approved by the SOA in July 2022, as one of the 13 inaugural UEC participants. Students who have taken the approved courses at HKU (not by credit transfer) and received a UEC mark of 60% or above are eligible to apply for the corresponding UEC from the SOA for exam exemption

The UEC mark of a student taking an approved HKU course refers to Final Exam mark of that course.

The related SOA exams and the corresponding approved HKU course(s) are listed as follows:

Exam FM	STAT2902
Exam SRM	STAT3907, STAT4904
Exam ASTAM	STAT3908, STAT4903
Exam ALTAM	STAT3909, STAT3956

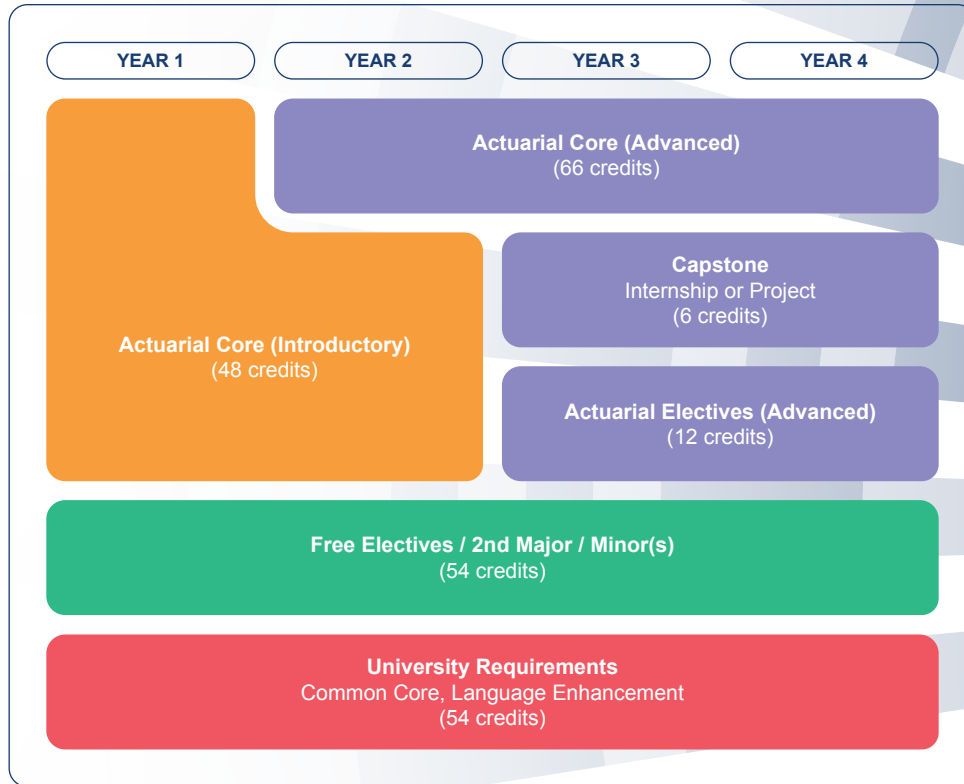
Note: Exam P is not eligible for UEC.

Actuarial University Ranking

HKU was ranked No.2 worldwide and No.1 in Asia based on research contributions from the top 4 actuarial journals (Insurance: Mathematics and Economics, North American Actuarial Journal, ASTIN Bulletin, and Scandinavian Actuarial Journal) from 1994 to 2019. It was 1994 when the BSc in Actuarial Science programme was launched. HKU was even ranked No.1 in 2006 and 2013 worldwide in this global study conducted by the University of Nebraska-Lincoln.

Section 2

Curriculum structure



Students are expected to be in full-time status for eight academic semesters (in addition to their six-month or longer full-time internships) in order to fulfill the degree requirements.

Students may optionally take Majors or Minors outside the BSc(ActuarSc) programme, provided that they fully satisfy the requirements.



Section 3

Entrance requirements and admission formula

Entrance requirements

JUPAS route:

Programme	English Language	Chinese Language	Mathematics	Citizenship and Social Development	Elective Subject: Category A subjects and Extended Module 1 or 2 in Mathematics (M1/M2)
6729 BSc (ActuarSc)	3	3	4	Attained	Level 4 in M1/M2 Level 3 in 1 subject

Non-JUPAS route:

Applicants with other local/international/national qualifications (e.g., IB, GCE-AL, SAT/AP, NJCEE) will be considered on an individual merit basis. More details are available from the programme website at cds.hku.hk/prospective-students/undergraduate



Admission formula

$1.2 \times \text{Eng} + 1.2 \times \text{Math} + 1.2 \times \text{M1 / M2} + \text{Best 2 Subjects}$



Section 4

Scholarships

Dr Patrick S C Poon Scholarship in Actuarial Science

Dr Patrick S C Poon, SBS, Honorary University Fellow of HKU, generously pledged to establish a scholarship scheme to encourage young talents to pursue a career in the actuarial profession and to promote the development of actuarial science in Hong Kong. Five awards shall be awarded annually to first-year BSc(ActuarSc) students freshly admitted through JUPAS with the most outstanding entrance record. Each Dr Patrick S C Poon Scholarship in Actuarial Science is valued at HK\$50,000, whilst an additional HK\$10,000 will be awarded to successful candidates who achieve Level 5** in HKDSE English Language or who urgently require financial assistance to complete their studies. The scholarship is renewable based on satisfactory performance in each year of study.

Sir Edward Johnston Prize

(awarded by the Institute and Faculty of Actuaries, UK)

The Sir Edward Johnston Prize is awarded to the best performing graduating students on the actuarial programmes at the five universities (in South East Asia), including HKU, which are linked to the Institute and Faculty of Actuaries (IFoA). For details, please visit the IFoA's website: actuaries.org.uk



Statistics and Actuarial Science (SAAS) Scholarships

Twenty-eight scholarships, each worth between HK\$4,000 and HK\$20,000, are made available each academic year by the Department of Statistics and Actuarial Science. The Department awards these scholarships annually on the basis of academic merit to outstanding students in different years of study who are pursuing a BSc degree in Actuarial Science.

The Life Underwriters Association of Hong Kong Scholarship

In 2022, The Life Underwriters Association of Hong Kong and The LUA Foundation Limited have both pledged an aggregate annual donation, for an initial period of five years, to support undergraduate students through scholarship and bursary. Two scholarships shall be awarded annually to year 2 or above local full-time undergraduate students reading the Bachelor of Science in Actuarial Science OR Bachelor of Science (Major in Risk Management) programs under the Department of Statistics and Actuarial Science. The Scholarship shall be awarded based on academic merit with cumulative GPA 3.2 or above. In cases of students of equal academic merit, participation of community service shall also be taken into consideration. The Scholarship shall be of the value of HK\$10,000 each.

The Hong Kong Federation of Insurers Scholarship

In 2012, the Hong Kong Federation of Insurers Educational Trust kindly pledged an annual donation to support scholarships for undergraduates majoring in Actuarial Science at HKU, with the objective of encouraging tertiary education in insurance. A maximum of six scholarships, each of the value of HK\$20,000, shall be awarded annually to outstanding BSc(ActuarSc) Year 3 or above local students.

YF Life Scholarship in Actuarial Science and Risk Management

In 2023, YF Life Insurance International Limited kindly pledged to establish the YF Life Scholarship in Actuarial Science and Risk Management at HKU, with an objective of nurturing talents for the insurance industry. Five scholarships, each of the value of HK\$15,000, shall be awarded annually to outstanding undergraduate students in the Bachelor of Science in Actuarial Science or Bachelor of Science (Major in Risk Management) degrees on the basis of academic merit and performance in an interview, if arranged by the Selection Committee.

For details about all HKU's scholarships, please visit:
aas.hku.hk/scholarship-opportunities



Section 5

Career prospects and employment statistics

Career Prospects

Given Hong Kong's booming insurance industry and the rapid development of the mainland China market, actuaries enjoy very attractive career prospects. Recent graduates hold positions in major insurance and reinsurance companies, actuarial consulting firms, and investment banks such as AIA, AXA Insurance, BOC Group Life Assurance, HSBC Life, Manulife, Sun Life Financial, Prudential, Willis Towers Watson, General Re, Reinsurance Group of America, JP Morgan, Standard Chartered, Ageas Insurance, Ernst and Young, Mercer, Goldman Sachs, Morgan Stanley, Deloitte Touche Tohmatsu and many others.

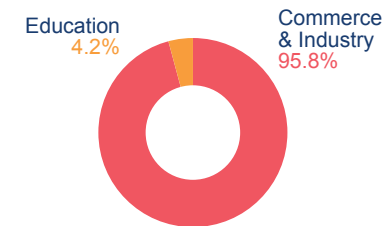
Some of our graduates have also pursued postgraduate studies in world-renowned universities such as Harvard University, Cambridge University, Oxford University, the London School of Economics and Political Science, The Wharton School of the University of Pennsylvania, Johns Hopkins University, Columbia University and Cornell University.

Career Advising Programme (CAP)

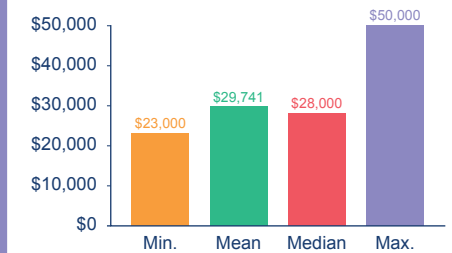
The School has introduced the Career Advising Programme (CAP) to help students pinpoint their strengths and weaknesses in terms of interview/CV writing skills and better prepare students to seize career opportunities readily. Besides one-to-one career consultation, the CAP will organise career-related activities to deepen students' understanding of the industries.

Employment statistics

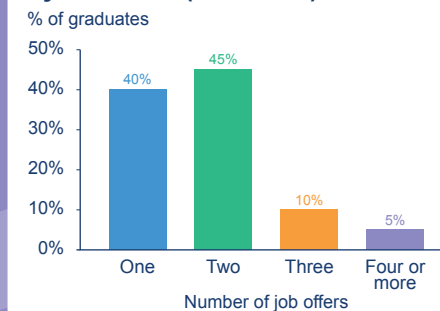
Employment Sector



Basic Salary of 2023 BSc(ActuarSc) Graduates



Number of Job Offers Received by 2023 BSc(ActuarSc) Graduates



Internship Programme

There is no better training than obtaining solid hands-on experience in the real workplace. Our Internship Programme serves precisely this purpose. As an intern, the student will gain insight into the challenging world and daily activities of an actuary while strengthening his/her technical, analytical and communication skills.

Under the Internship Programme, BSc(ActuarSc) students are eligible to use the School's Internship/Job Online-Application System, where related internships and other job openings including graduate positions will be posted. Our alumni may wish to know that normally they will still be eligible to use the System after graduation from our School.

The Internship Programme assists students by advertising part-time, summer, temporary and full-time internship positions, sending the CVs of interested students to employers, and arranging interviews for shortlisted students.

For details about our Internship Programme, please visit:
saasweb.hku.hk/teaching/internship-details.php



Partial list of companies participating in the School's internship programme:

- Ageas Insurance (富通)
- AIA Group Limited (友邦)
- AXA Insurance (安盛)
- BOC Group Life Assurance (中銀人壽)
- Deloitte Touche Tohmatsu (德勤)
- Ernst and Young (安永)
- FWD Life Insurance (富衛)
- General Re (通用再保險)
- Goldman Sachs (高盛)
- HKSAR Government (香港特別行政區政府)
- HSBC Life (滙豐保險)
- JP Morgan (摩根大通)
- Manulife (宏利)
- Mercer (美世)
- Morgan Stanley (摩根士丹利)
- Prudential (保誠)
- RGA Reinsurance (美國再保險)
- Sun Life Financial (永明金融)
- Standard Chartered (渣打)
- Swiss Reinsurance (瑞士再保險)
- Willis Towers Watson (韋萊韜悅)
- Zurich Insurance (Hong Kong) (蘇黎世保險)

More information

Computing Facilities

The School currently houses a statistical computer laboratory, which is equipped with up-to-date statistical software for teaching and learning and research purposes.

Student Society

The Statistics and Actuarial Science Society (SASS) has dedicated itself to promoting the study of actuarial science, decision analytics, risk management, statistics and applied artificial intelligence. It also serves to provide a sense of unity, promote the welfare of its members and maintain a harmonious relationship between staff members and students.

Every year, the SASS organises a variety of functions, including the alumni mentorship scheme, annual dinner, annual survey, firm visits and many more. The SASS works closely with the School and serves its members with enthusiasm. It strives in the best interests of their members and aim to ensure they enjoy a fruitful and joyful university life.

Alumni Mentorship Scheme

The alumni mentorship scheme provides two-way communication between mentors and mentees. Through regular gatherings and mutual sharing, mentees can learn from their mentors' life experience and, at the same time, better understand the employment situation and their career prospects. In return, mentors receive up-to-date information on the current student population, the Statistics and Actuarial Science Society, the School and the University at large. Mentors also enjoy opportunities to become acquainted with their counterparts working in similar fields.

HKU Worldwide Undergraduate Student Exchange Programme

At HKU, we aim to equip our students with not only academic excellence, but also the knowledge, skills, and values needed to become influential citizens in today's globalised world. To achieve this goal, we offer a variety of overseas learning opportunities. Studying abroad can be a transformative experience, and we actively encourage our students to take advantage of these programmes.

The HKU Worldwide Undergraduate Student Exchange Programme (HKUWW) provides exchange places from partner institutions (or host institutions) of the University for one or two semester(s). Students are offered exchange opportunities in world-renowned universities such as Harvard University, Columbia University, McGill University, the University of Toronto, the University of California at Berkeley, Davis, Santa Barbara and Los Angeles, the University of Melbourne, the University of British Columbia, the University of New South Wales, the University of Amsterdam, Georgetown University, the University of Waterloo, just to name a few.

For more information about the programme, please visit our website:

 cds.hku.hk/prospective-students/undergraduate



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cds.admission@hku.hk

