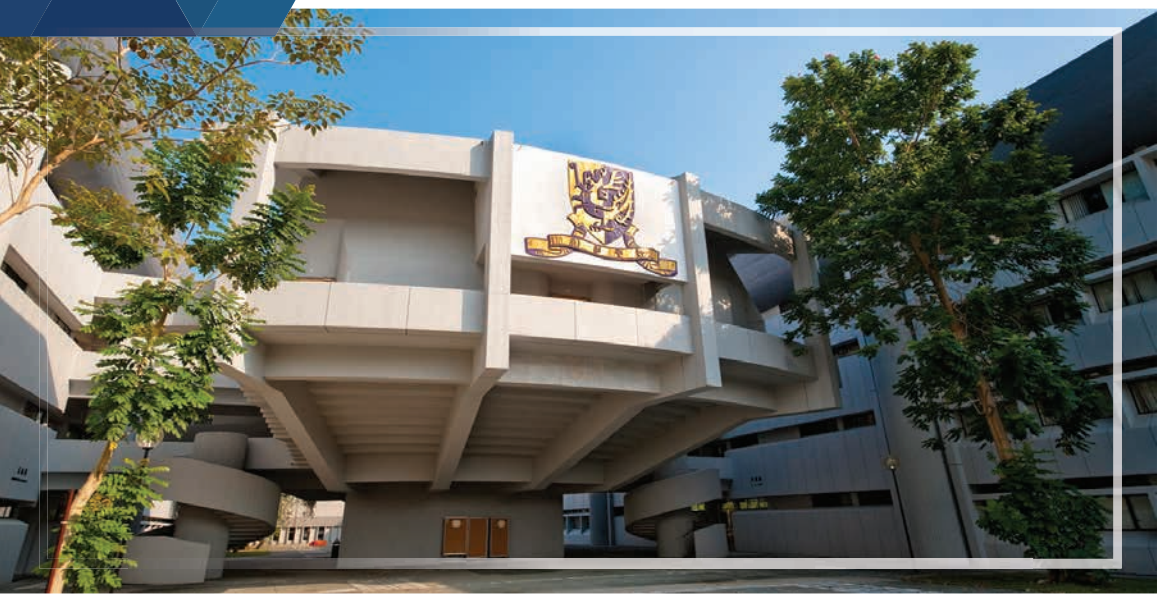
香港中文大學統計與數據科學系
Department of Statistics and Data Science
THE CHINESE UNIVERSITY OF HONG KONG



FACULTY OF SCIENCE

ADMISSIONS HANDBOOK

Risk Management Science Programme

風險管理科學課程

2027 ENTRY

JUPAS Code:
JS4719

https://rmsc.sta.cuhk.edu.hk/

Overview

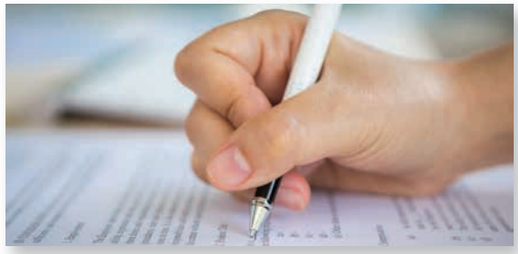
Since its establishment in 2000, the Risk Management Science Programme has been the pioneer in Hong Kong for nurturing well-trained professionals in the risk management field.

Recent financial crises have stimulated public interest in risk management and raised awareness of its importance in today's investment environment. The ability to extract meaning from data and possess a thorough understanding of risk management has become vital to financial institutions. This programme is designed to fulfil the increasing demand for talent in this area.

Our programme is tailored for students who want to pursue a career in the financial industries, and who are interested in quantitative and mathematical methodologies. It is specifically designed to equip students with the knowledge and skills to understand risk management from both theoretical and application perspectives in insurance, finance and other related areas. Risk management is an interdisciplinary subject. Our students receive solid training in statistics and other foundational subjects including finance, economics, accounting, mathematics and computer science. In addition, various enrichment activities such as alumni talks and seminars, research-based projects and industrial practicums provide in-depth professional training and act as a bridge between the classroom and industry.

Our graduates are well equipped for positions in risk management, finance, banking, insurance and related areas in which the quantitative and analytical skills of risk management are required.

Admissions



Basic Information

- Duration of Study: 4 years
- Number of Student Intake: 25
- JUPAS Code: JS4719

Admissions Requirements and Formula

JUPAS applicants must have achieved the following minimum requirements in the Hong Kong Diploma of Secondary Education Examination (HKDSE). The programme admission scores are calculated based on the applicant's best five subjects (with weightings applied). Bonus points are granted for each extra core or elective subject, if any.

Core Subjects	Chinese Language Minimum Level: Level 3 Weighting: 1.0	Core Mathematics Minimum Level: Level 3 Weighting: 2.0
	English Language Minimum Level: Level 3 Weighting: 1.0	Citizenship and Social Development Minimum Level: A (Attained)
Elective Subjects	Mathematics (Module 1 or 2) Minimum Level: Level 3 Weighting: 2.0	Elective (Any one of Category A elective subjects) Minimum Level: Level 3 Weighting: 1.0

JUPAS Statistics

	HKDSE	CHI	ENG	MATH	CSD	M1/M2	Best Elective	Second Elective	Third Elective
2026	Upper Quartile	3	5	5**	A	5*	5	5	-
	Median	5*	5	5*	A	5*	5	-	-
	Lower Quartile	5	3	5*	A	5**	4	4	-
2025	Upper Quartile	3	4	5*	A	5*	5*	5	-
	Median	4	5	5*	A	5*	5	4	-
	Lower Quartile	4	4	5**	A	4	5*	5	4

Risk Analytics Stream

With the rise of big data, practices in the risk management industry have been revolutionised by instantaneous access to voluminous information. Advanced knowledge of data science and data analytics subjects such as statistical learning and data mining is increasingly important. In response to demand for talents in both risk management and data analytics, the Risk Analytics Stream is offered to elite students in the programme.

The stream places special emphasis on statistical science and computer science, including but not limited to subjects such as statistical inference, actuarial science and financial mathematics. Learning is augmented by various enrichment activities, such as mentorship, practicum in banks and start-up companies, and summer research. Upon graduation, students are well-equipped to become professional risk managers with a strong background in data science and data analytics. Job referral services on internships and graduate jobs and opportunities for further studies will be provided to students of the stream.

Students who have obtained a total score of 30 or above in their best five DSE subjects or a cumulative GPA of 3.7 or above in their first or second year of attendance may apply for specialisation in the Risk Analytics Stream.

Non-JUPAS Admissions Scheme

Students with non-HKDSE qualifications (e.g., public examinations such as IB, SAT, GCE, GCSE or Gaokao) and diploma/sub-degree credentials are welcome to apply via the non-JUPAS admissions scheme. For further details, please visit the homepage of the Office of Admissions and Financial Aid at http://admission.cuhk.edu.hk/.

SAYT-RMSC Summer Course for Prospective Students

Science Academy for Young Talent (SAYT) organised by the Faculty of Science, CUHK provides a number of credit-bearing summer courses for secondary school students.

Our programme provides a foundation course (SAYT1006 – Risk Management and Actuarial Science) in which inspiring and interesting fundamental concepts of risk management are discussed. It is held in early August each year and is suitable for prospective students. One unit of university credit is waived upon completion of this course.

For application information, please visit the SAYT homepage at https://www.sci.cuhk.edu.hk/sayt/

Curriculum

University Core
39 credits

Chinese and English Languages, General Education, Understanding China, Hong Kong in the Wider Constitutional Order, Digital Literacy and Computational Thinking, Physical Education

+

Faculty Package
9 credits

Major Core
42 credits

Major Elective
21 credits

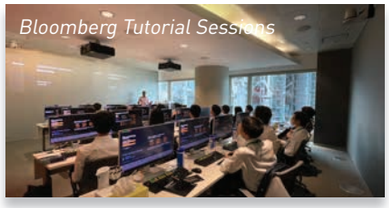
- Risk Management
- Mathematics and Statistics
- Computer Programming
- Finance and Economics
- Business Communications

+

Free Elective
≥ 12 credits

For minor in
- Statistics
- Mathematics
- Computer Science

Curriculum Overview


Bloomberg Tutorial Sessions

Our curriculum places special emphasis on the analytical and critical aspects of risk management. The core courses in the curriculum cover fundamental theories and pragmatic knowledge from a wide range of subjects in mathematics, statistics, finance, accounting, decision science and managerial economics. Our elective courses enable students to explore the advanced aspects of risk management, including stochastic calculus, statistical modelling and simulation methods for financial applications.

Enrichment Activities

Our programme offers students a series of enrichment activities, such as alumni talks, professional sharing sessions and Bloomberg tutorial sessions. These activities support students' development as risk management professionals and encourage them to adapt to our ever-changing knowledge-based society.

The Chinese University of Hong Kong – University of Edinburgh Dual Degree Programme

Under the dual degree programme, students will graduate with two bachelor's degrees each from CUHK and UoE respectively. The University of Edinburgh is one of the UK's leading centres in Mathematics and ranked 16th in the world in the QS World University Rankings in 2022. In addition to core courses and capstone/ dissertation, the School of Mathematics offers a range of options in pure mathematics, applied mathematics, theoretical physics, statistics, operational research, financial mathematics and business analytics.

Programme Structure

Duration: 4 years

Study Pattern: first 2 years in CUHK + second 2 years in Edinburgh

Degrees Conferred

CUHK Major	CUHK Degree	UoE Degree
Risk Management Science (RMSC)	BSc in Risk Management Science	BSc in Mathematics and Business

Minimum Requirements

1. Cumulative GPA of 3.3 or above in their first year of studies (summer term included).
2. Students should have taken courses following the recommended study plan of dual degree students, or they may have to extend their normative study period as deemed appropriate. For more details, please visit: https://www.sta.cuhk.edu.hk/programmes/cuhk-uoe/

Scholarships

- Four full-time first-year undergraduate students in the Risk Management Science Programme will be awarded the Department of Statistics and Data Science Scholarships upon admission. The scholarship is granted based on admissions results. The amount is HK$10,000 each.
- The Fan Fang Qi Ying Memorial Bursary is offered to a student in demonstrable financial need. The sum is HK$10,000, tenable for a maximum of four years.
- The Department of Statistics and Data Science and Faculty of Science provide Undergraduate Student Exchange Sponsorship/Scholarship Schemes to support students who wish to undertake exchange studies abroad.
- University- and College-wide scholarships are also offered on the basis of admissions results, academic performance and merit, in addition to financial need. For more information, please visit the website of the Office of Admissions and Financial Aid at http://admission.cuhk.edu.hk/finance.html.

Career Prospects

Our graduates have a wide range of career choices in finance, banking, insurance and related areas. New graduates commonly take the positions of assistant risk manager, market risk officer, credit risk officer, market risk analyst, financial analyst, quantitative analyst, actuarial officer, accounting officer, etc. in major commercial banks, investment banks, security houses, insurance companies and accounting firms. Some of our graduates pursue Master's and doctoral degrees in prestigious schools in Hong Kong and overseas.

Investment Banks

- JP Morgan
- Morgan Stanley
- BNP Paribas
- Goldman Sachs
- Royal Bank of Scotland

Retail Banks

- HSBC
- Standard Chartered Bank
- Bank of East Asia

Financial Services

- Bloomberg
- Convoy Financial Group

Government Services

- Census and Statistics Department
- Hong Kong Monetary Authority
- Airport Authority

Accounting and Insurance Firms (Risk Advisory)

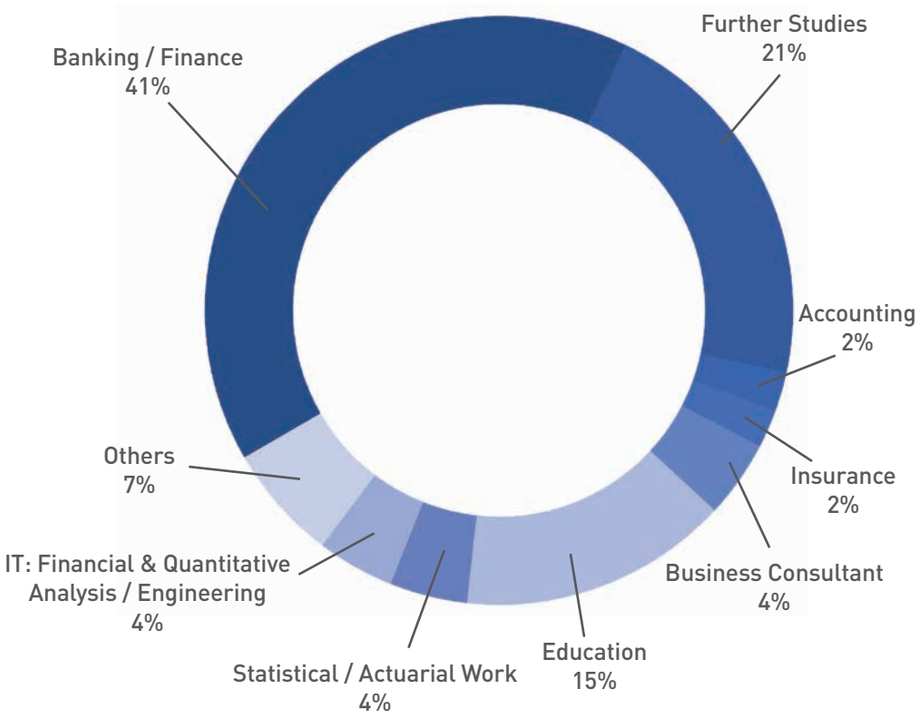
- Deloitte & Touche
- KPMG
- Ernst & Young
- HSBC Insurance (Asia)
- AIA Company Ltd

Further Studies

MSc/MPhil/PhD in

- Risk Management
- Statistics
- Operations Research
- Financial Engineering

Employment Statistics of 2024 and 2025 RMSC Graduates



Experiential Learning

Internships and Practicum

Students have the opportunity to enhance their work experience through summer internships and other internship opportunities. A credit-bearing course (RMSC4202 Practicum / RMSC4212 Practicum in Risk Analytics) strengthens students' professional training and connects the classroom with the business world. Many participants have subsequently received offers to return to their positions as a result of their outstanding performance.

Some of the companies in which our students have had internships are listed below.

BNP Paribas	Citibank	Credit Suisse	DBS Bank
HSBC	Standard Chartered Bank	EFG Bank	Hang Seng Bank
Bank of China	Ernst & Young	Société Générale	Parexel International
HKEx	CASH Algo	AXA	AIA Group Limited
Gottex Penjing	AON Hong Kong Limited	Airport Authority	AEGON

Academic year	2025-26	2024-25	2023-24
Number of students participating in internships and practicum	21	20	21

Summer Research Internship Programme

The Risk Management Science (RMSC) Summer Research Internship Programme provides an opportunity for RMSC students to conduct a research project under the supervision of the department teaching staff with an allowance in summer. The programme aims to encourage students to engage in research activities and to be exposed to the research environment.

Career-related Activities

The programme regularly organises career-related activities to help students make an informed decision about their career direction after graduation.

Career Talks

NVIDIA Workshop

Company Visit

Career Training Workshops

Internship Sharing

Steve Chan

UBS AG

It was my great honour to join the Industrial Placement Program (IPP) at UBS AG last year. During this one-year internship, I was involved in many different projects to automate and improve processes throughout the trade lifecycle. I played different roles in these projects, including that of a business analyst, a developer and even a project manager overseeing the progress of the projects. Majoring in RMSC helped me greatly in this internship, especially in terms of hard skills and financial knowledge.

In terms of hard skills, the advanced courses enabled me to develop my programming muscles. Because coding is required for derivatives pricing and simulation in some courses, the training in Excel VBA and R enabled me to perform my tasks in the internship. The machine learning and data analysis courses also helped me acquire both the theoretical knowledge and practical skills to process large amounts of data.

In terms of financial knowledge, RMSC courses provided me with a deep understanding of various kinds of financial products and exotic derivatives, rather than merely descriptive financial knowledge. For instance, CBBC (Callable Bull/Bear Contract), Variance Swap and other 'real-world' products were covered in these courses. Although stochastic calculus and the pricing of exotic derivatives might not have been much use in my internship work, studying these topics helped me to understand the nature and the background operations of these structured products. Surprisingly, these lessons facilitated my adaptability at the bank and smoothed the process of developing automation and process improvements.

Overall, this one-year internship gave me a glimpse of real-world practices and an opportunity to transfer what I have learnt in the RMSC courses to the workplace. Again, I am most grateful to UBS AG and the Department of Statistics for this opportunity and for their support.

Jocelyne Jusuf

Reinsurance Group of America

During my actuarial internship at Reinsurance Group of America (RGA), I had the opportunity to work closely with the Regional Valuation Team and to contribute to actuarial systems development and US GAAP LDTI reporting. My tasks included cashflow reconciliation, data analysis, and supporting the AXIS software to improve actuarial processes.

One major project I worked on was the "Improvement in AXIS for Principle-Based Initiatives (PBI)". This set of initiatives is used each year when submitting to the regulator for compliance and for evaluating the company's financial and risk management. Hence, my team aimed to streamline scenario testing and improve the efficiency of applying assumptions to the best-estimate dataset. The project involved consolidating datasets and optimising assumptions to reduce run time and human error. I also worked on the "Reserve Impact Calculator" and its checking files, which assesses reserve changes and financial projections. In this process, issues such as the "New Business Tagging Issue" and unnatural data movements were identified. Overall, this template helped to improve data accuracy and consistency.

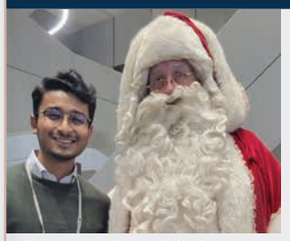
I also contributed to the development of training materials for incoming interns, focusing on SQL, Excel, and LDTI principles, to ensure a smooth transition into actuarial tasks.

The support from my mentors at RGA was an important factor in my work, and their guidance helped me navigate complex actuarial tasks. The RMSC courses I took provided me with an understanding of statistics and financial knowledge, and studying RStudio was essential for learning SQL and other software tools. The analytical and problem-solving skills I developed through those courses enabled me to quickly grasp SQL and adapt to new tools at work. I am grateful for the experience and the opportunity to apply my academic knowledge in a professional setting, which has greatly enhanced my technical and industry skills.

Internship Sharing

Musavvir Khan

HSBC



Last year, I had the opportunity to intern with HSBC's Global Risk Analytics Department on the Traded Risk team. As a placement intern for 6 months, my focus was on various Market Risk and Stress Testing activities.

The Traded Risk team serves as the first line of defence for the APAC region's trading desk activities. Upon identifying risks, the team analyses them and applies relevant mathematical and statistical models built by the modelling teams. On the Market Risk side, I performed a peer review analysis based on the Pillar 3 reports of the GSIBs, conducted a gap risk analysis for the USD–CNY volatility curve, executed VaR and sVaR shock analyses for USD and JPY curves, and summarised the proposed Basel 3.1 regulations. In Stress Testing, I assisted the team in updating model methodologies and acted as the model risk manager for one model, aiming to improve its efficiency and accuracy using Python. I also performed annual model monitoring and built a tool to test model effectiveness.

A notable aspect of the internship was the emphasis on teamwork and collaboration. By working in diverse groups, I experienced an environment where different perspectives and ideas were welcomed. This not only enhanced my problem-solving skills but also taught me the importance of effective communication and interpersonal relationships in the workplace.

The internship required a good understanding of financial products, stochastic calculus, programming and statistical modelling. The RMSC programme curriculum provided me with a solid foundation in statistics and finance and applied knowledge of programming in R, VBA, and Python, which helped me stand out during the placement. Furthermore, the one-credit RMSC courses incorporated soft skills that helped me to secure the internship and thrive in a professional environment.

Overall, the RMSC curriculum, coupled with the internship experience, has given me the confidence to tackle challenges and excel in a professional setting. I am grateful to HSBC and the RMSC Department for this opportunity and the support that I have received during my time at the university.

Kristy Lee

PricewaterhouseCoopers Hong Kong

During my six-month placement in the Risk & Management Consulting practice at PwC Hong Kong, I experienced firsthand the multifaceted role of a consultant: diagnosing client challenges, designing data-driven solutions, and enabling strategic implementation through structured frameworks and cross-functional collaboration. My rotation spanned finance and non-finance teams, involving stakeholder interviews, contributions to board-level discussions, and the hands-on development of a centralised customer data merchant identification platform for a local bank.

This platform served as an integrated data hub, consolidating disparate internal and external sources into a governed, service-oriented architecture. Key deliverables included data integration, asset standardisation, API-enabled service layering, and analytical support for business functions such as targeted marketing and risk control. I applied K-means clustering for customer segmentation, performed regression analysis to identify attrition drivers, and developed interactive dashboards in Power BI to visualise customer journey flows. Concurrently, I conducted risk assessments focusing on model risk, data quality governance, and regulatory compliance, proposing mitigation approaches such as enhanced validation frameworks and secure digital engagement channels.

The RMSC curriculum provided an essential foundation for this role. Core courses in statistical modelling, operational risk, and regulatory compliance equipped me with the analytical rigour needed to assess and mitigate risks effectively. Required computer science courses delivered practical proficiency in Python, Java, and VBA, which I applied daily for data processing, automation, and model development. Furthermore, the programme's one-credit RMSC courses cultivated crucial soft skills in teamwork, stakeholder communication, and project logistics, enabling seamless collaboration in multidisciplinary settings.

My technical and analytical skills and keen risk awareness were recognised by my team, who regarded me as a versatile contributor and invited me to continue my journey with PwC. This reflects how comprehensively the RMSC programme prepares students to tackle real-world challenges in different industries. I am grateful to PwC and the RMSC Department for this invaluable professional foundation.

Parco Liu *Risk Analytics Stream*

Census and Statistics Department, HKSAR

Earlier this summer, I worked as a summer intern in the Labour Statistics Division of the Census and Statistics Department. This internship offered me valuable hands-on experience of data systems development, as I helped to refine tools to support Hong Kong's official statistical operations.

My major responsibilities covered two Python projects. The first involved the development of an AI-assisted survey chatbot. I implemented validation logic, user interface improvements, multilingual speech-to-text features, and an AI response module based on survey guidelines. Through this project, I learned how to embed risk aware thinking into technical design, especially to manage data privacy, improve usability, and ensure response accuracy. The second project involved extending a vehicle routing problem with time windows tool using Google OR Tools. I introduced real-world constraints, workload balancing, depot logic, and search functionalities to support field officers' daily routing. This strengthened my understanding of optimisation methods and highlighted how operational risks can be mitigated with good modelling.

In addition, I completed various tasks using Excel VBA, such as developing new modules for the department's fieldwork system, automating validation for a temporary time log platform, and upgrading the GIR template system used for statistical analysis and report generation. Through these exercises, I came to understand that even minor workflow modifications can greatly decrease human errors and increase reliability.

The Risk Management Science curriculum greatly supported my internship. Courses in optimisation, statistics, programming, and risk analysis equipped me with both the technical foundation and the mindset needed to identify uncertainties and design practical controls. The programme's emphasis on analytical thinking and applied problem solving helped me bridge theory with public-sector work. This experience has strengthened my interest in the intersection of risk management, data science, and digital transformation in government services.

Carens-Georgia-Pangabdi

Maples Fund Services (Asia) Limited

Last summer, I interned at Maples Fund Services (Asia) Limited for three months. During this tenure, I had the opportunity to rotate across various teams, including Fund Accounting, Registrar and Transfer Agency, Client Onboarding, and Anti-Money Laundering. My primary responsibility was to prepare a net asset value package for hedge fund clients, involving regular cash and position reconciliations, price verifications, and financial statement generation using Advent Geneva and Bloomberg Terminal. This task enhanced my knowledge of accounting and the structure of hedge funds and different types of securities. Additionally, I conducted quality assurance testing on a newly implemented Advent Geneva function aimed at automating expense booking. This involved assessing its functionality and identifying potential issues to ensure reliability and effectiveness. I also learned to provide services to the investors of the fund, especially in handling subscription and redemption requests. I gained valuable experience of analysing and extracting relevant information from the Private Placement Memorandum of both Hedge Funds and Private Equity Funds. Furthermore, I learned the steps and actions needed to identify and mitigate risks related to money laundering, terrorist financing, and other criminal activities to ensure compliance with all required regulations for the fund and its investors.

The RMSC programme equipped me with essential knowledge in finance, investments, statistics, and mathematics, which helped me gain this internship opportunity and excel during my time there. The analytical skills developed during the curriculum proved to be extremely useful in the learning process, even for the areas not explicitly covered by the programme. Overall, the curriculum provided strong support during my internship journey.

Exchange

Students can participate in student exchange programmes organised by CUHK. The University and Colleges offer more than 280 student exchange programmes. For details of the University-wide exchange programmes, please visit the homepage of the Office of Academic Links at http://www.oal.cuhk.edu.hk.

Some notable destinations of the University-wide exchange programmes are listed below.

University-wide Exchange Programmes

United States
- University of Washington
- University of Wisconsin-Madison
- University of Pennsylvania

United Kingdom
- King's College London
- University of Aberdeen
- University of Cambridge
- London School of Economics

Australia
- The University of Queensland
- The University of Melbourne

Europe
- Universite Paris 1 Pantheon – Sorbonne
- Humboldt-Universitat zu Berlin
- University of Helsinki

China
- Tsinghua University
- Fudan University

Japan
- Kyoto University
- Waseda University

Singapore
- National University of Singapore
- Nanyang Technological University

South Korea
- Seoul National University
- Ewha Womans University

Taiwan
- National Tsing Hua University

Academic year	2025-26	2024-25	2023-24
Number of students participating in exchange programmes	10	15	8

Exchange Sharing

Chloris Cheung
Uppsala University, Sweden

I embarked on my journey to Uppsala University in Sweden. Despite having learnt about and been in touch with the outside world through the internet, I had never actually visited a Western country. Sweden is one of the Nordic countries, and the concepts of gender equality, environmental friendliness and social responsibility are everywhere. I still remember the amazement I felt when I heard that it is common for man to be a stay-at-home dad and that it could be considered impolite for a man to hold the door for a lady. There were second-hand shops and zero-waste apps everywhere. Students from nearby countries had spent an extra twenty hours getting to Sweden by taking an expensive train instead of flying just to be environmentally friendly and responsible to our planet. You first experience these tiny details, and as they accumulate, you gradually realise the amazing cultural differences. I visited many cities and museums, and I started reading European history to get to know more about the places I had seen. Uppsala University has many exchange students, which allowed me to cultivate a sense of global citizenship by making friends from all around the globe.

Academically, I studied Multivariate Analysis, Time Series and other subjects, and I lived in a student hostel with a shared corridor. The lessons were not very different from those in Hong Kong, but I enjoyed how practical they were because we were asked to complete real time series analysis projects in the assignments. I feel that I learnt much more from undertaking these step-by-step projects than I did from the lectures, as they built up a map of connections in my brain and helped me to really absorb what I studied.

Overall, my journey to Sweden was way beyond my expectations. I was worried that it would be a boring country without many activities, but I found that, although it might not have the huge shopping malls and convenient lifestyle of Hong Kong, the harmonious and simple lifestyle in Sweden is so comfortable and relaxing. It really was a very pleasant journey.

Yan Tung Chu
Singapore University of Technology and Design, Singapore

The academic experience at SUTD allowed me to explore beyond my major in Risk Management Science. I intentionally selected three unconventional courses to broaden my perspective: Games of History, Imagine Dragons, and Fundamentals of Investment. Games of History transformed my understanding of the past – through strategic simulations we debated historical decisions and experienced first-hand how minor choices can create ripple effects. This course unexpectedly enhanced my risk analysis skills by teaching me to evaluate long-term consequences. Imagine Dragon encouraged me to explore the humanities more deeply, opening my eyes to fresh perspectives I hadn't considered before. Fundamentals of Investment, while outside my usual coursework, provided practical financial knowledge that perfectly complements risk management. These courses together sharpened my critical thinking, teamwork, and adaptability, which are skills I now apply daily.

My semester at SUTD gifted me not just memories, but a new way of thinking: one that balances analytical rigour with creative problem-solving and cultural awareness. The lessons I learned in Singapore continue to guide me both personally and professionally. This exchange wasn't just a chapter in my education, it was an experience that taught me how to learn from the world around me.

Exchange Sharing

Kam To Chow

Aston University, United Kingdom

I had the incredible opportunity to participate in an exchange programme at Aston University in Birmingham, United Kingdom. My choice of the UK as the exchange destination was influenced by the historical ties between the UK and Hong Kong, as well as my passion for football and the renowned Premier League. Additionally, Aston University's reputation in engineering and statistics made it the ideal choice for my academic pursuits.

One of my favourite modules at Aston University was CS3DM_Techniques for Data Analysis (Data Mining). This course delved into the various techniques used in data mining, such as classification, regression, clustering, data processing, and model building. The course's practical approach, balanced with theoretical concepts, was particularly appealing. The professor incorporated real-life examples and datasets, allowing us to apply our knowledge meaningfully. Weekly tutorial tasks sharpened my data analytics and visualisation skills using Python, providing valuable hands-on experience.

Moreover, the course highlighted the significance of data mining across various industries. We explored how data mining can be used in finance, healthcare, and marketing, among other fields. This broadened my perspective on the potential applications of data analysis and provided insights into the practical implications of the techniques learned. It was fascinating to see how data mining has become an indispensable tool for decision-making and problem-solving in today's data-driven world.

In conclusion, my exchange experience at Aston University was a remarkable adventure that provided me with valuable academic and cultural experiences. From the engaging modules to the study freedom and interactions with individuals from around the globe, I am grateful for the opportunity to explore the UK and expand my knowledge in the field of statistics. This exchange programme broadened my horizons and allowed me to develop a deeper understanding of the world. The memories and lessons from this experience will forever hold a special place in my heart, shaping my personal and academic growth.

Thanapat Klungnak

Royal Melbourne Institute of Technology, Australia

During my exchange semester I enrolled in four courses – Multivariate Analysis, Time Series Analysis, Introduction to Graphic Design, and Communicating Sustainability. This was a mix of two courses related to my major, Risk Management Science, and two electives based on my personal interests. I chose electives that were different from my core discipline as I wanted to explore new teaching styles in Australia and learn something new outside of my academic focus. Unlike my past school experiences, in which exams were common, these courses are primarily graded through projects and reports. This allowed me to engage with the content and apply what I have learned in real-life situations. It was a valuable experience that exposed me to alternative learning styles and helped me reflect on which styles suit me best.

One of the highlights of my exchange was working on group projects with people from different cultures and academic backgrounds. Through conversations and collaborations, we exchanged our experiences, which made me feel more connected to the university community. Adapting to the local environment also helped me improve my communication skills and become more flexible in unfamiliar environments.

In conclusion, the exchange programme to Australia was an unforgettable experience for me. From exploring the new academic environment in RMIT to immersing myself in a culturally rich city, the experience helped me develop both academically and personally. Over the five-month period, I developed not only technical skills related to my major discipline but also soft skills such as independence and adaptability. I am confident that what I have gained during the exchange programme will benefit me during my final year at CUHK and as I move forward in my career.

Ruiqi Mao

University of Massachusetts Amherst, United States

I am honoured to be one of this year's recipients of the Undergraduate Student Overseas Exchange Sponsorship Scheme provided by the Department of Statistics. I am writing to express my sincere appreciation for the generous support of the Department.

I attended the University of Massachusetts (UMass) Amherst for a term-long academic exchange. During the semester, I took four courses offered by the departments of finance, economics, and philosophy. In addition to my academic pursuits, I was actively involved in several extracurricular activities, through which I was able to broaden my horizons and experience different cultures. Having had so many opportunities to communicate with people from all over the world with significantly diverse backgrounds, I learnt that it is always important to listen to the experience and views of others, and then to use this knowledge to enhance our own perspective. After the exchange, I will continue to study in CUHK while preparing to apply for graduate schools.

I participated in a number of extracurricular activities at UMass, and I would like to highlight one that comprised a series of seminars on the theme of inclusiveness. The seminars aimed to help students engage with issues of diversity and inclusion in business through participation in the Inclusive Leadership Summit. It seemed natural for me to be inclusive at the beginning, but I did not realise then how different identities affect people's careers and lives in society. The different races in the U.S. – White, Black, Asian, Latino and others – have made great efforts over a long period to fight for equal rights and respect. I learnt that we should avoid using certain misleading expressions in business situations, such as using 'sexual orientation' instead of 'sexual preference'. Although it may seem trivial, these details reflect one's sensibilities. This activity, together with other experiences such as traveling to New York City, Philadelphia, the Grand Canyon and California, enriched my exchange experience and broadened my perspective.

Altogether, the exchange opportunity has helped me to establish a solid foundation on which to build my future.

Chun Hei Tse

University of Toronto, Canada

During the winter term, I had an incredible opportunity to participate in an exchange programme at the University of Toronto (U of T). As part of this enriching experience, I enrolled in a selection of stimulating courses that expanded my knowledge and skills. The courses I took included Introduction to Machine Learning, where I gained a comprehensive understanding of the fundamental principles and algorithms used in this exciting field. In this course, I collaborated with classmates from diverse ethnic backgrounds on a project about building neural networks. This experience not only enhanced our problem-solving skills but also taught us the importance of cultural diversity in our academic pursuits.

Additionally, I took Statistical Computation, which equipped me with valuable tools for data analytics. One challenge that I encountered in this course was adapting to a discussion-based lecture. This teaching style, which required pre-reading before each class to actively participate in discussions, was different from what I was accustomed to at CUHK. To overcome this challenge, I developed a disciplined routine of pre-reading and invested my time and effort to understand the mathematics literature before each lecture. I actively engaged in discussions, sought clarification from the professor, and collaborated with my classmates. This experience taught me the importance of adaptability, time management, and active learning. It also reinforced the value of critical thinking, effective communication, and independent learning. Ultimately, this challenge strengthened my resilience and expanded my academic horizons, preparing me for future challenges.

Beyond academics, I actively engaged in campus life by joining the D2 Soccer team at Trinity College. This allowed me to immerse myself in the vibrant sports culture at U of T and participate in the U of T Intramural League. Being part of the soccer team not only honed my athletic abilities but also fostered teamwork, discipline, and perseverance. It was an exceptional opportunity to connect with my fellow students and build lasting friendships.

Alumni Sharing

Carlos Au-yeung

BSc in RMSC 2013
Market & Liquidity Risk Associate
Banco Santander

Recent economic instability has highlighted the growing importance of risk control for financial institutions and regulatory agencies. The RMSC Programme offers comprehensive training in risk analysis and is very helpful for students who want to pursue careers in the financial industry. The programme also provides students with a career counselling service, internships and research opportunities, ensuring that they can make informed decisions about their career directions after graduation.

Vincy Chen

BSc in RMSC 2015
Operations Analyst
Goldman Sachs

The Risk Management Science Programme provides intensive qualitative and quantitative training in risk analysis, which is extremely valuable given the volatility of the financial market and tightening of regulatory control.

The programme is challenging but certainly rewarding for those who take the opportunity to develop their skills. It provided me with the analytical skills and mind-set needed to approach problems effectively and find solutions.

Kam Kwok

BSc in RMSC 2018
Risk Analyst
BNP Paribus

The RMSC Programme covers an array of subjects, such as statistics, mathematics, economics and finance. The well-designed courses and practical training help you develop solid analytical and technical skills. On top of that, I strongly encourage students to go on an overseas exchange trip. This will give you the opportunity to broaden your horizons and improve your soft skills, which are particularly helpful at work. With the sheer variety of choices it offers, the programme can show you directions you never knew existed and help you discover your own career path.

After graduation, I joined BNP Paribas as a risk analyst. This role exposes me to a variety of risk areas. Undoubtedly, the RMSC Programme helped me to reach the point I am at now, from outsmarting others during job hunting to excelling at my daily work. The technical skills I learned enable me to contribute to various areas, such as credit risk, market risk and automation, and my soft skills help me communicate with people across the globe in this multinational bank. Working in a bank, I have seen a growing demand for risk specialists and people with a risk-aware mind-set. If you are interested in quantitative analysis and keen to join the financial industry, this programme is for you.

Carol Yin

BSc in RMSC 2016
Quantitative Research Analyst
McKinsey Investment Office

The RMSC Programme provides thorough training in theoretical knowledge, such as topics in statistics and math, and in practical applications, such as simulations. The cohort is small but close, and I received significant help from my professors and classmates. After graduating from RMSC, I gained an employment opportunity with the EY Quantitative Risk Advisory team through an RMSC alumnus.

The programme prepared me well for my career after graduation and for obtaining an advanced degree in Computational Finance at Carnegie Mellon University. After graduating from CMU, I decided to continue to explore the field of quantitative finance and joined McKinsey Investment Office as a Quantitative Research Analyst.

Yiran Huang

BSc in RMSC 2015
Product Developer and Manager
UBS

I graduated from the RMSC Programme in December 2015 and started my career as a data analyst in the consulting industry. In July 2016, I joined UBS as a graduate trainee in group risk. The trainee programme offered me many rotation opportunities in the risk control functions of investment banking, wealth management and asset management. The solid quantitative skills and extensive financial knowledge I had gained from the RMSC Programme enabled me to succeed in all of the rotations, through which I formed a comprehensive view of UBS Group. After the trainee programme, I chose to become a product developer and manager in UBS Asset Management. An important part of my job is performing competitor analysis, and I am able to leverage the strong data analytics foundation provided by the RMSC statistics curriculum. In sum, the RMSC Programme equipped me with the wide-ranging knowledge and rigorous thinking ability I need to work with various functions and businesses within the financial industry.

Jason Lau

BSc in RMSC 2017
Valuation and Risk Controller
BNP Paribas

The RMSC Programme provides solid quantitative training in statistics and mathematics and interdisciplinary knowledge of finance, economics and computer science. In addition to the well-rounded curriculum, students engage in projects and internships during which they can use their theoretical knowledge to solve real-life risk management problems.

This programme gave me a huge advantage in my current role as Valuation and Risk Controller at BNP Paribas. The wide product knowledge and good understanding of risk sensitivities that I gained from the programme enable me to effectively carry out my daily tasks: monitoring risk limits and escalating excess to the front office. The programme's rigorous training in derivatives pricing also gave me an advantage in the area of valuation.

Risk Management Science Programme

風險管理科學課程

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