



香港中文大學理學院  
**FACULTY OF SCIENCE**  
THE CHINESE UNIVERSITY OF HONG KONG

# Faculty of Science

ADMISSIONS  
HANDBOOK  
2021  
ENTRY

**Risk** Management  
Science  
Programme

風險管理科學課程



## 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 via JUPAS: 26
- JUPAS Code: JS4719



### Admissions Requirements and Formula

JUPAS applicants must have achieved the following minimum levels in the Hong Kong Diploma of Secondary Education Examination (HKDSE). The programme admissions score is computed based on the applicant's best five subjects (after weighting). Bonus points are granted for each extra core or elective subject, if any.

<b>Core Subjects</b>	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	Liberal Studies Minimum Level: Level 2 Weighting: 0.5
<b>Elective Subjects</b>	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	LS	M1/M2	Best Elective	Second Elective	Third Elective
<b>2020</b>	Upper Quartile	4	4	5*	4	5*	5*	5	4
	Median	4	3	5*	4	5	5*	5	-
	Lower Quartile	5	4	5	5	5*	5	4	-
<b>2019</b>	Upper Quartile	5	5	5**	5	5	5	5	4
	Median	4	4	5*	4	5*	5	5	-
	Lower Quartile	5	4	5	4	5*	5	5	5







## 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 the HKCEE, HKALE, 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/>.

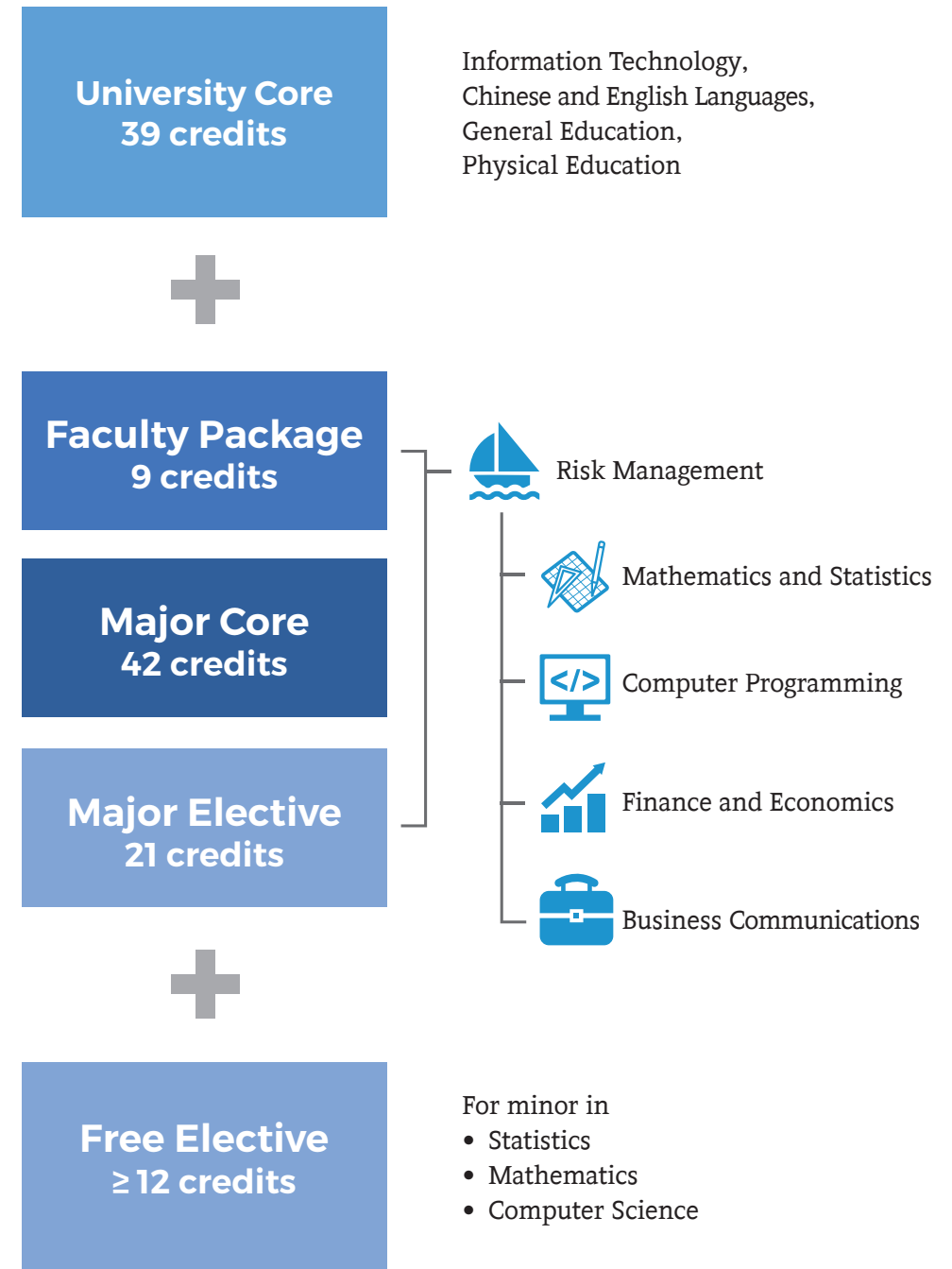
## SAYT-RMSC Summer Course for Prospective Students

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 <http://www.sci.cuhk.edu.hk/en-gb/sayt/application>.

## Curriculum



## 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.



Alumni Talks and Professional Sharing Sessions

## Scholarships

- Two full-time first-year undergraduate students in the Risk Management Science Programme will be awarded the Department of Statistics 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 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)



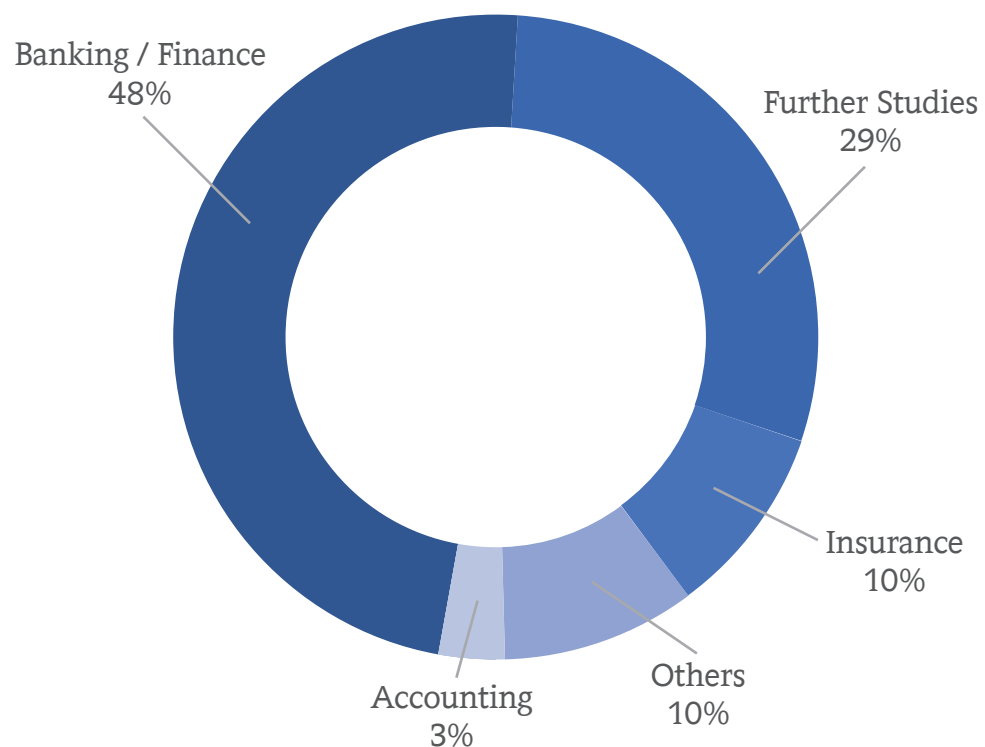
- Deloitte & Touche
- KPMG
- Ernst & Young
- HSBC Insurance (Asia)
- AIA Company Ltd

### Further Studies



- MSc/MPhil/PhD in
- Risk Management
  - Statistics
  - Operations Research
  - Financial Engineering

## Employment Statistics of 2018 and 2019 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) 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	2019-20	2018-19	2017-18
Number of students participating in internships and practicum	31	24	28



# 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.

**Kenneth Cheng**  
PartnerRe Limited



PartnerRe Limited is a US-based reinsurance company that underwrites non-life reinsurance treaties with major insurance companies worldwide. As an intern on the actuarial team, I helped pricing actuaries based in the UK to price motor and liability treaties on a day-to-day basis. I was responsible for analysing reinsurance treaties and developing initial pricing results for the actuaries. I was also tasked with consistently monitoring and improving the pricing models used for various treaties. As most of the pricing models were sophisticated statistical models, I was able to use the concepts taught in some of my statistics courses to improve them.

During this internship, I gained a broader understanding of how to model risk using statistical models. For example, some of the price reinsurance treaties I worked with had extra features that behaved just like options in finance, so I could apply the principles underlying financial options to the treaties. It was inspiring to see the link between derivative pricing and the

reinsurance world. Various statistical techniques were used daily to update the existing pricing model, which was also a great opportunity for me to demonstrate what I had learned in lectures. Lastly, my day-to-day tasks relied heavily on efficient communication with UK-based actuaries, so it was essential for me to work well with colleagues from different cultures. There was also one Korean intern in the Hong Kong office. I am grateful to have had the opportunity to work in this multicultural environment.

**Brian Cheung**  
FP Marine Risks Limited



I am grateful to have been offered an internship in Compliance Assistance from FP Marine (rebranded to RKH Specialty) after applying for the Summer Internship Programme in the insurance industry organised by VTC.

Throughout the programme curriculum, I learnt how to write a C.V. that would stand out from others. Given that my GPA is not the highest, having an interesting C.V. and interviewing well are absolutely necessary to receive an offer. I am very grateful that the programme curriculum provided me with the relevant knowledge I needed to make the cut.

In terms of compliance work, I learnt many of the things that are needed to protect the firm from legal problems. For example, I learnt how to screen our clients and insurer through ComplyAdvantage and the Dow Jones Risk & Compliance website to check whether they have any legal problems or sanctions and to avoid doing any illegal business. I also learnt about Global software, from which every transaction of the firm and information on the firm's clients can be obtained. I learnt how to extract and choose the correct material from Global and use it for current transactions.

Besides the actual work, FPM provided some lessons on insurance, such as one on marine insurance, and helped us to register for courses from the Chartered Insurance Institute. At the course I attended, the CII taught us the basic principles of money laundering and how to spot a questionable money source. From such courses, we came to know more about real world of insurance work while working for the firm.

Overall, I had a great time and experience in the internship period, during which I learnt many useful things for my future career and boosted my confidence in talking with foreigners in both formal and informal settings.

**David Duan**  
HSBC



For the first half of 2019, I had the opportunity to work for the Credit Risk Analytics team at HSBC (Hong Kong).

It was truly a challenging but rewarding journey, where I had the chance to learn and even implement the currently in-use credit risk models, such as the Probability of Default model. During the six-month internship, one of the largest projects I participated in was to develop an interactive R program that incorporates the risk models and visualises the computational results of the targeted models. It provided me not only with good programming training but, more importantly, with much valuable hands-on experience in real-world financial data analysis and modelling problems.

These experiences helped me to both reflect on my past learning and look towards possible future careers. Through frequent discussions and collaboration with team members, I also developed a certain workplace skillset that includes task prioritisation and efficiency in email communications. Last but not least, I feel rather fortunate to have met such lovely team members, who took great care of me and treated me as a close friend during the whole internship. They would always be there to support me whenever I was in need.

To secure such a job placement, our RMSC programme played a crucial role. The integrated curriculum means that we are exposed to many different fields, such as Statistics, Finance, and Computer Science, that are all related to the topic of quantitative finance and enhance our understanding of the topic from different perspectives. During the technical interview session, I had a nice discussion with one of the managers that covered various subjects, such as coding, regression modelling and VaR forecasting, most of which had been covered in previous RMSC courses. Moreover, my former colleagues reported that our programme has a very good reputation among big employers such as HSBC, especially when hiring for quantitative positions. This is a positive sign that we RMSC students are well positioned to secure our desired jobs upon graduation.

## Experiential Learning

### Harvin Leung

LegendArb Financial Limited



Interning as a quantitative research analyst at LegendArb Financial Limited gave me a great opportunity to learn about finance and trading. Most importantly, I gained exposure to quantitative and algorithmic arbitrage trading. Throughout my time at the company, all of my colleagues, and especially my supervisor Mr Richard SHI, gave me a lot of support and guidance, which allowed me to learn and perform my tasks efficiently in a friendly working environment. They also gave me great insights into arbitrage trading.

I was assigned several tasks, such as data analysis, strategic trade research, algorithm improvement and database handling. I started by doing some paper-based research to gain inspiration for creating new trading strategies. Next, I began coding with Python to build and back-test an algorithm. Once a strategy has been shown to be profitable through a back-test and live simulation, it can be deployed in the real financial market.

During my five-month internship, I gained a lot of knowledge in several areas. In terms of data handling, I learned how to build a dataset for use when building or back-testing an algorithm, including ways of handling missing data. I also had the chance to apply my quantitative analysis and trading skills in real markets, such as using spreads or regression when viewing charts and hedging during trading. These fundamental trading techniques provide a basis for the more complicated trading techniques I will learn in the future.

In addition, I used several programming-related tools and languages during the internship. For example, Excel VBA, SQL, Python, C#, Tortoise and the Bloomberg Terminal enabled me to more effectively and efficiently build programming structures and analyse datasets in greater depth.

In sum, my internship at LegendArb was a fruitful experience. I learned a lot, and it gave me a good opportunity to apply in practice all of the knowledge I had gained at undergraduate level. It showed me that programming plays an important role in statistics, especially with the rise of big data and machine learning. Again, I am grateful to LegendArb and CUHK's Department of Statistics for this internship opportunity and all of their help and support.

### Minnie Leung

HSBC Life



I worked in HSBC Life as a co-op student trainee for six months in the actuarial, risk and analytics department. I enjoyed being part of such a harmonious team and gained valuable experience.

My main task was to support scenario generation using Moody's Economic Scenario Generator. Although I had never used the relevant software before, the company provided solid training that enabled me to carry out my work smoothly. Thanks to the courses provided by CUHK for RMSC students, I had a good understanding of my work and the figures I was supposed to use for analysis. My background knowledge – from minor concepts such as different rates and their implications to major concepts such as the various assumptions made when simulating the distribution of a project – made me more confident in undertaking the multiple aspects of my work.

I also helped with financial reporting, which is related to business and does not involve complicated calculations. Again, the RMSC courses had provided me with relevant knowledge of basic economics and accounting. Therefore, I was able to identify the workings of spreadsheets in terms of accounting accuracy.

In sum, the internship gave me real-world work experience and equipped me with appropriate professional attitudes and communication skills. The RMSC Programme has provided me with knowledge relevant to my future career.

## 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-Universität 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

2019-20

2018-19

2017-18

Number of students participating in exchange programmes

11

16

15



## Exchange Sharing

### Chloris Cheung

Uppsala University, Sweden



On 17 January 2020, 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 a 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.

### Chung Tin Koo

McGill University, Canada



Participating in the exchange programme at McGill University, Canada was a wonderful experience. I enjoyed plenty of exchange activities. In our first week there, McGill University held some orientation activities for exchange students. The most valuable one was an orientation brunch. Nearly all of the exchange students were there. The event offered a free meal and gave us the opportunity to meet other exchange students. I made some friends during this event, and had the chance to interact with students from around the world.

Several courses were worth taking at McGill University. For example, I took a mathematical finance course that reviewed basic concepts of derivative pricing, and then introduced measure and probability theory and more advanced discrete and continuous time mathematical models with applications in option pricing. It was like an elementary version of the stochastic calculus course offered by the CUHK RMSC Programme. I was able to gain some basic knowledge of the topic that will benefit my studies in the future. I noticed that the lessons at McGill and CUHK are quite different. The professor did not upload lecture notes to an online platform. Instead, he just wrote notes on the blackboard for students to copy. This greatly encouraged students to attend lessons, as it would have been hard to catch up if they had skipped lessons.

In addition, the exchange programme greatly enhanced my personal growth. I tried a lot of new things. When living abroad, people normally cook for themselves. This gave me the chance to learn to cook. I started with basic dishes, like a simple dish of spaghetti with ready-made pasta sauce. When I got used to it, I found that cooking was fun and relaxing. Then I tried to cook some more advanced dishes, such as lasagne and rib-eye steak. It was nice to develop a new hobby during this period.

Moreover, the exchange programme gave me new inspiration in terms of my life path and goals for the future. I had the invaluable opportunity to study abroad for a term, experiencing new things and new places – all very different from Hong Kong. I truly believe that one should seize every opportunity to do something different. If you do not, you may never have a second chance. I would like to study abroad again to make myself more well-rounded and outgoing.

### Ruiqi Mao

University of Massachusetts Amherst, US



I am honoured to be one of this year's recipients of the Undergraduate Student Overseas Exchange Sponsorship Scheme 2019/20 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.

### Ling Poon

Danmarks Tekniske Universitet, Denmark



I am glad to have had the opportunity to go to Danmarks Tekniske Universitet (DTU) for a term-long exchange. I met people from diverse cultural backgrounds and gained knowledge of statistics and computer science from top-tier teachers.

Academically, during my time at DTU, I took computer science and statistics courses and focused on topics that I considered practical and interesting, like machine learning, discrete mathematics and software engineering. The teaching method at DTU is vastly different from that of the RMSC Programme at CUHK. The teaching staff encourage cooperation and experiential learning by placing a heavy focus on group work and projects. I learned a lot through this teaching approach. I am fortunate to have had very proactive, cooperative and capable group mates. Our group work was enjoyable and its outcome was good. The group projects simulated the workplace environment to a large extent. I now feel very confident and comfortable in communicating and cooperating with others for academic or work purposes.

Of the various courses I took, the machine learning course interested me the most. I worked with international students on a group project in which we predicted film ratings. Although we did not find an accurate model, we gained experience of applying machine learning to real-life problems. This stimulated my interest in data science and encouraged me to learn more about and find real-life applications for data science principles.

Socially, in the first week I was welcomed by a buddy group composed of old and new students from various countries, very similar to "O Camp" at CUHK. They were fun and very friendly.

The exchange was very rewarding, and I am grateful to the Department of Statistics for providing a scholarship to support students' personal development through this experience.



## Exchange Sharing

### Ken Wun

Royal Melbourne Institute of Technology, Australia

It is my pleasure to share my memories of the 2018-2019 exchange programme. Last term, I travelled to the Royal Melbourne Institute of Technology (RMIT) in Melbourne, Australia for a term-long exchange.

At RMIT, I took three courses related to risk management, statistical inference and advanced calculus. These courses were interesting and enjoyable. I really learned a lot, such as how to trade financial products in the real market. The lecturers' teaching skills really impressed me, and the classroom atmosphere was very different from that at CUHK. The teaching staff at RMIT focus on every student's personal abilities; they are willing to communicate with students after class to ensure that each and every one of them is keeping up with the lessons. When students fall behind, the teaching staff provide examples, exercises and tutorials for them instead of just ignoring the problem. Due to the close relationship between teachers and students, RMIT students are very proactive; they ask many questions during lectures. I really appreciated my professors' help, and I learned a lot from them.

Apart from studying, I travelled to many places in Australia, such as Tasmania, Sydney, Brisbane, the Gold Coast and Cairns. I tried so many new things, such as skiing, taking a road trip and camping in the desert. I also went scuba diving to see the coral in the Great Barrier Reef. Unfortunately, water pollution has caused coral bleaching for the last ten years. My instructor told me that if the situation does not improve, the Great Barrier Reef will soon disappear. This memorable experience reminded me of the importance of protecting the environment.

I wish to express my sincere gratitude to the University for its support and assistance during my exchange studies. This experience not only gave me the opportunity to explore the world and develop a global mindset, but also made me more independent and equipped me with the strength to overcome difficulties. I am grateful to have had such an invaluable experience of living and studying in a foreign country.



### Christy Yau

University of Hawai'i in Mānoa, US

Looking back on my journey in Hawai'i, I feel grateful and lucky to have had the chance to enjoy a cultural and academic exchange with the students there.

In spring 2019, I embarked on my exchange studies at the University of Hawai'i in Mānoa (UHM). Studying finance at UHM helped me to understand more about US financial systems, as well as broadening my social network. I had the chance to meet international students who shared my interest in finance. In addition to my major courses, I took a course on geology at UHM to experience a more comprehensive education in a foreign country. The main difference between US education and Hong Kong education is that US education emphasises continuous learning. Your performance in a single mid-term/final examination does not greatly affect your final grade. If you want to get a good grade, working hard on your coursework is also important. As a result, there is less stress and tension when studying in the US than in Hong Kong.

I also met many international students during the exchange programme. Although English was not everyone's mother language, we connected and became friends by using English. This made me realise the importance of English. In Hong Kong, English is not widely used outside lectures. But in Hawai'i, conversation covered everyday matters as well as academic issues. So I felt uncomfortable about chatting with others in English at first. Fortunately, the people around me were very nice and did not mind my speaking slowly. This helped me understand that English is just a tool for communication. Grammar and vocabulary are not that significant.

Last but not least, I wish to express my thanks to my sponsor. The scheme truly encourages students to explore the world beyond Hong Kong.



## Extracurricular Activities

### Competition Highlights



### Ivan Leung

1st Runner-up in the Hong Kong Regional Final of the Global Management Challenge

The Global Management Challenge is the largest strategy and management competition in the world. Participants are required to make various numerical decisions on the daily operations of a simulated company within a time limit. This valuable experience teaches the participants how operational procedures and decision-making processes can affect a company's gains and losses. Using the skills and techniques learned in our undergraduate studies, our team analysed financial statements, studied opponents' strategies and projected future profits and losses. We overcame many difficulties, large and small, and I am proud of our excellent performance.



### Jack Sung

Champion in the Hong Kong Tertiary Students Virtual Securities Investment Contest

The Bank of China (Hong Kong) held the Hong Kong Tertiary Students Virtual Securities Investment Contest. Participants were given HK\$1 million and RMB1 million to trade for stocks on a virtual securities investment platform. The contest taught me that choosing investments is a tough job. Investors must thoroughly study both the market and securities every day before making decisions.

I wish to express my heartfelt gratitude to the Risk Management Science Programme and BOCHK for providing me with theoretical and practical training in investment practices. I sincerely hope that more students from our programme will participate in activities organised by the industry. I am certain that such practical and fruitful experiences will equip students well for their future careers.

# 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.



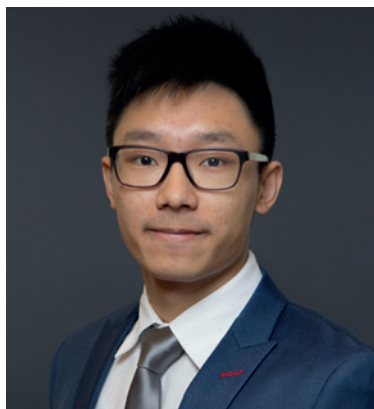
**Vincy Chen**

*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 Paribas**

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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