



CUHK Business School
The Chinese University
of Hong Kong



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



**2023-24
ADMISSION**

JS4276

Interdisciplinary Major Programme

BSc in Quantitative Finance and Risk Management Science



跨學科主修課程

**計量金融學
及風險管理科學**

<http://www.qfrm.cuhk.edu.hk>

University Affiliation
Program



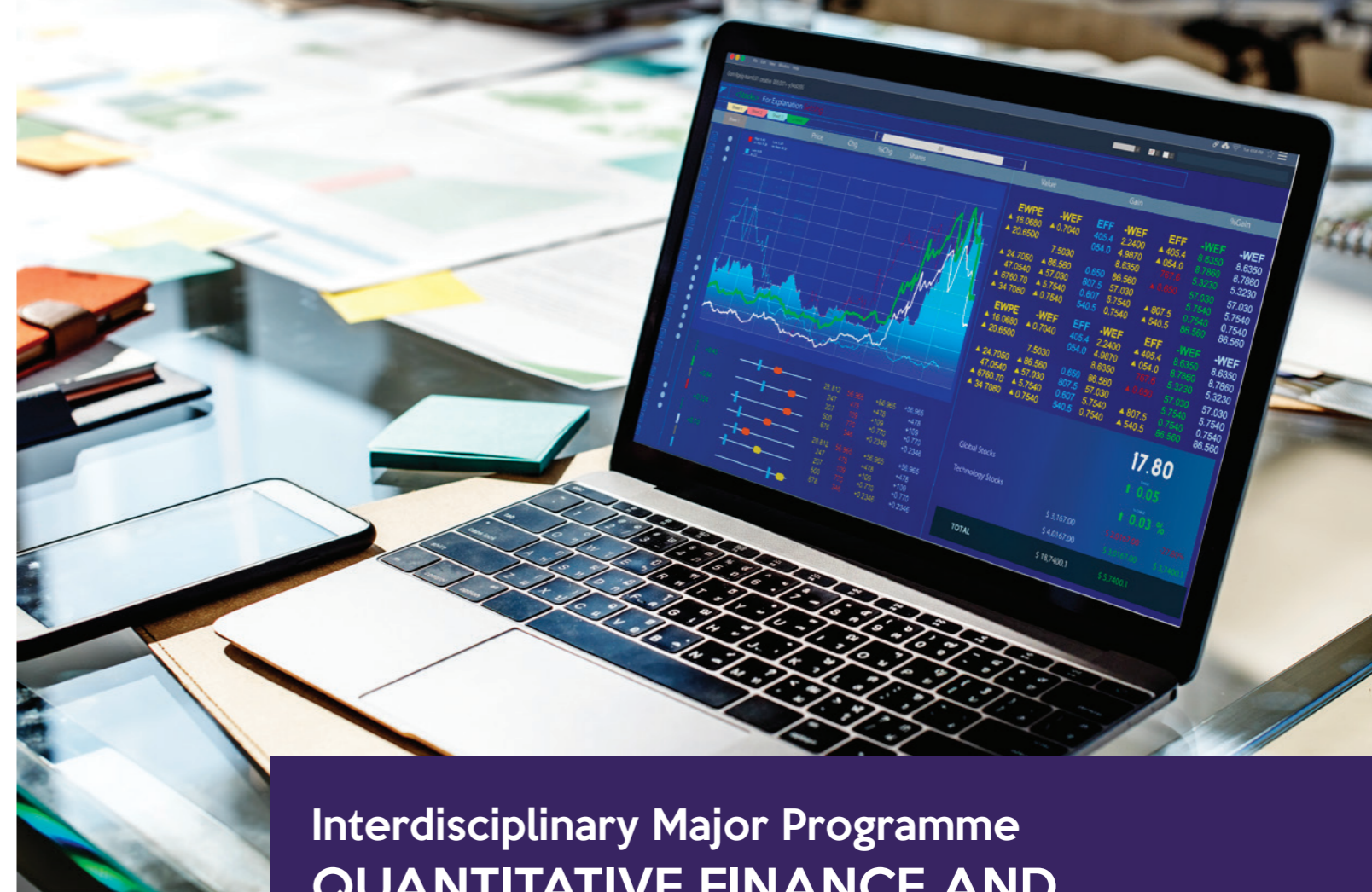
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Interdisciplinary Major Programme QUANTITATIVE FINANCE AND RISK MANAGEMENT SCIENCE (JS4276)

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MESSAGE FROM PROGRAMME

In light of the recent economic boom in the Asian Pacific Region, providing more tailor-made financial services and quantitative analysis on the underlying commercial activities are of ultimate importance to our rapidly changing community.

In this respect, CUHK continues to play the most critical role in training the future elites with diverse knowledge and skills to best adapt to those challenges and help to maintain Hong Kong as the major economic hub in the region. On the one hand, our world-renowned Business School has the longest history of success and has established a very well-equipped financial laboratory in close association with both financial and government sectors in Hong Kong. While on the other hand, our Faculty of Science also has a massive group of world-leading scientific scholars, including Nobel Laureates, Fields Medalists, and Academicians of Chinese Academy of Sciences, who play frontier roles in all areas of sciences and technological research. With their expertise across multiple disciplines, we can cultivate a cutting-edged learning environment and unique stimulating educational experience. Our Programme aims to nurture talents with both academic excellence and highly relevant soft skills to meet the growing demands in Hong Kong, mainland China and the rest of the world. Over the past few years, our students have acquired a broad exchange experience in various prestigious universities around the globe. Our Programme has also established strong networks and partnerships with the finance industry.



Dr. Fred Ku
Associate Dean (Undergraduate Studies)
Faculty of Business Administration



Professor Wong Hoi Ying
Associate Dean (Student Affairs)
Faculty of Science



Professor Chow Ying Foon
Programme Co-Director
Department of Finance
(Term: Until 31 Dec 2022)



Dr. Edwin Mok
Programme Co-Director
Department of Finance
(Term: From 1 Jan 2023 Onwards)



Professor Phillip Yam
Programme Co-Director
Department of Statistics



Dr. John Alexander Wright
Programme Deputy Co-Director
Department of Statistics

OVERVIEW

The Programme is jointly administered by the Department of Finance and the Department of Statistics at the Chinese University of Hong Kong. It combines the strengths and features of two well-established and highly successful programmes from the respective departments: the Quantitative Finance programme and the Risk Management Science programme. The Programme is one of the top programmes among all quantitatively related programmes in Hong Kong in terms of admission credentials.

As a major financial service centre, Hong Kong has a growing demand for professionals with both quantitative finance and risk management science background. The Programme provides state-of-the-art training in business and finance, risk management science, mathematics and statistics, and computing applications. By offering comprehensive academic and professional training, our Programme aims to nurture competent finance and risk management professionals who can work in investment banking, corporate and commercial banking, consulting, accounting and financial services, as well as in general management in the financial and government sectors. With our official tailor-made coaching schemes, students are also encouraged to participate in overseas exchanges and internships.

The Programme has established strong networks and partnerships with the finance industry over the years. Outstanding performance during internship renders strong motives for companies to offer them permanent positions upon graduation. The Programme also enables students to build up a solid theoretical background for pursuing further study, at the Master or PhD levels, in economics, finance, actuarial science and insurance, mathematics, statistics and risk management science.



ADMISSION REQUIREMENTS

The minimum criteria for applications are four core and two electives in HKDSE with the following requirements:

- Level 3 or above in Chinese Language
- Level 3 or above in English Language
- Level 3 or above in Mathematics
- Level 2 or above in Liberal Studies
- Level 3 or above in any two elective subject

Remarks:

1. M1 or M2 is counted as an elective
2. Double weight in English and Mathematics
3. 1.5 weight in the best one subject of M1/M2, Chemistry, Physics or Economics

“In terms of the median admission scores of the best five subjects, five out of the top 10 programmes and streams among the JUPAS institutions in the territory are at CUHK: Medicine (Global Physician-Leadership Stream), Medicine, Quantitative Finance and Risk Management Science, Global Business Studies...”

(Reference : Press Release of Communications and Public Relations Office, CUHK in Aug 2022)

JUPAS Admission Grades

2019 ENTRY

Admission Figures	CHIN	ENG	MATH	LS	MI/M2	Best Elective	2nd Elective	3rd Elective
Upper Quartile	5*	5	5**	5	5*	5**	5**	-
Median	4	4	5**	4	5**	5**	5**	4
Lower Quartile	5**	5*	5**	4	5	5*	5*	-

2020 ENTRY

Admission Figures	CHIN	ENG	MATH	LS	MI/M2	Best Elective	2nd Elective	3rd Elective
Upper Quartile	5	5	5**	4	5**	5**	5*	5*
Median	5	5	5**	5*	5*	5**	5*	-
Lower Quartile	4	4	5**	5	5*	5**	5*	4

2021 ENTRY

Admission Figures	CHIN	ENG	MATH	LS	MI/M2	Best Elective	2nd Elective	3rd Elective
Upper Quartile	5	5	5**	4	5**	5**	5**	5*
Median	4	4	5**	4	5*	5**	5**	5**
Lower Quartile	3	4	5**	4	5**	5**	5*	5*

2022 ENTRY

Admission Figures	CHIN	ENG	MATH	LS	MI/M2	Best Elective	2nd Elective	3rd Elective
Upper Quartile	4	5	5**	5**	5**	5**	5*	-
Median	4	5	5*	5	5**	5**	5**	-
Lower Quartile	4	5	5**	3	5*	5*	5*	5



COURSEWORK REQUIREMENTS (SUBJECT TO REVISION)

Faculty Package

- University Mathematics
- Economics for Business Studies I & II

Risk Management Science

- Introduction to Risk Management
- Simulation Methods for Risk Management Science and Finance
- Statistical Modelling in Financial Markets

Elective Courses

- Statistical Principles of Deep Learning with Business Applications
- Banking and Finance Practicum
- Practicum
- Corporate Finance: Theory and Practice
- Multivariate Techniques with Business Applications
- Actuarial Science
- Stochastic Calculus for Finance and Risk
- Time Series
- Risk Management with Derivatives Concepts
- Financial Data Analytics with Machine Learning

Mathematics and Statistics

- Linear Algebra I
- Advanced Calculus I
- Basic Concepts in Statistics and Probability I & II
- Introduction to Stochastic Processes
- Applied Regression Analysis

Quantitative Finance

- Financial Markets
- Investment Analysis and Portfolio Management
- Financial Management / Financial Management: Foundations and Analysis
- Foundations in Financial Accounting / Introductory Financial Accounting
- Risk Management and Insurance

Computing Applications

- Computer Principles and Programming (C / C++ / Java / Visual)
- Business Information Systems / Data Structures and Applications / Fundamentals in Information Systems

Sample Study Pattern of an Alumnus

Year of Attendance	Term	Courses
First Year of Attendance	1 st term	• Foundations in Financial Accounting • Economics for Business Studies I • University Mathematics
	2 nd term	• Economics for Business Studies II • Financial Management • Linear Algebra I • Computer Principles and C++ Programming
	Summer term	♦ Short Term Non-Local Exchange (e.g. the United Kingdom and Mainland China)
Second Year of Attendance	1 st term	• Basic Concepts in Statistics and Probability I • Introduction to Risk Management
	2 nd term	• Basic Concepts in Statistics and Probability II • Investment Analysis and Portfolio Management
	Summer term	♦ Internship in an Investment Banking Company
Third Year of Attendance	1 st term	♦ Overseas Exchange (e.g. Canada, the United States and Europe) and study equivalent courses of below: • Financial Markets • Options and Futures • Advanced Calculus I • Introduction to Stochastic Processes
	2 nd term	• Risk Management and Insurance • Fixed Income Securities Analysis • Applied Regression Analysis • Business Information Systems • Research Project in Quantitative Finance
	Summer term	♦ Internship in a Hedge Fund Company
Fourth Year of Attendance	1 st term	• Time Series • Financial Data Analytics with Machine Learning • Statistical Inference • Statistical Modelling in Financial Markets
	2 nd term	• Security Analysis • Quantitative Methods for Financial Derivatives • Simulation Methods for Risk Management Science and Finance • Statistical Principles of Deep Learning with Business Applications • Practicum

OVERSEAS EXCHANGE

QFRM students are encouraged to study and experience life in overseas universities. Over 85% of our students had exchange experiences and they participated in exchanges with universities around the world. Previous students' exchange places include:



Student Exchange Experiences

University of Pennsylvania

1. LEXI LIU

I had a most memorable and rewarding exchange experience at the University of Pennsylvania. You wouldn't want to miss a single class when you study here. The students are amazingly good at asking intelligent and relevant questions. The assignments can be challenging and out of the ordinary, but they push you right to the limit, where you need to tackle problems hands-on. When exposed to this different learning environment, I found myself reflecting on my study habits and even restoring my curiosity. I wouldn't have had this chance to visit such a prestigious business school without the support from the QFRM programme, and I am so grateful.



2. AARON LIU

Joining an exchange programme was one of the best decisions of my life. During my semester at Wharton, I learnt a lot both academically and culturally. The courses there were very different from those at CUHK. Students complete multiple group case studies, weekly reading and individual projects in addition to quizzes and exams. The assessments usually don't count for more than 30% of your overall mark, which means that you have to work hard on everything to secure a good grade. I met some amazing people there. I learnt a lot from exchanging thoughts and experiences with the good friends I made.



3. KENNETH CHAN

During the 2019 Fall semester, I participated in a student exchange programme at the Wharton School, University of Pennsylvania. I was less worried about my GPA so I decided to take advanced courses such as Stochastic Systems Analysis and Simulation, Fundamentals of Actuarial Science and Finance of Buyouts and Acquisitions. Students in the US were intelligent and proactive. I learned a lot from them. Besides studying, I passed my time with volunteer activities, mentorship programmes and parties where I made friends from all over the world.



4. BEN NG

My exchange study at the University of Pennsylvania was highly rewarding. I took courses in different disciplines and worked on projects with classmates from various backgrounds. Although we had fun, we also worked overnight together before the project presentations. The local students were very friendly and offered to show me around the city and campus. With my new friends, I explored exciting new activities such as mountain biking. Before the exchange, I never imagined I would have the opportunity to make friends and interact with people from different countries. My semester in Pennsylvania taught me many things about communicating with people of various cultural backgrounds, which was invaluable for my academic development and personal growth.



Student Exchange Experiences

University of California, Irvine **DICKSON YIP**

I am very glad that I was able to spend my second year at the University of California in Irvine: I had tons of chances to explore new things, and to experience new knowledge, new people and a new life! With a solid foundation from the CUHK, I was able to further my studies in mathematics, statistics and finance through advanced courses. However, studying abroad is more than just learning. I was fortunate enough to have the opportunity to be a team member of a Student Managed Investment Fund, an association that manages real money for an institution. I learned a lot of practical skills in investment and wealth management through working in the team. I will never forget how I worked through the night with my teammates every week!



University of California, Davis **HARRY SUEN**

During my exchange at UC Davis, I experienced a different style of learning and enjoyed travelling in California. One thing that surprised me was the enthusiasm for learning among the students at UC Davis. I used to have the impression that students in the West were more laid back in their studies, but that is not what I observed during my exchange. The students were well prepared for class, made detailed notes and participated very actively in their classes and study groups.

I made use of my free time in the US to travel around, and went to several fascinating country parks such as the Grand Canyon and Yosemite. Although it took a long time to reach these attractions, the views there were so beautiful that it was well worth it.



University of California, Berkeley **AMY YANG**

I stayed at the University of California, Berkeley (UCB) for one year after joining the CUHK exchange programme. UCB provides a variety of exposures so that everyone can find his own place there. In addition to taking a graduate-level financial engineering course, I worked as a research assistant for an economics professor and gained more insight into academic research. Berkeley organised various social events for exchange students and gave me the initiative to build relationships with people from different cultural backgrounds.



University of California, Los Angeles **RUSSELL HUANG**

Exchange life at UCLA was a fascinating cross-cultural experience. California is the motherland of adventure, which set the tone for my stay. In my three months there, I made real academic advances in subjects such as mathematics, economics and astronomy. Apart from that, my footpaths crossed the stunning city skyline and beautiful national parks. Moreover, the friendships I found with peers from diverse backgrounds opened up precious dialogues that have changed my life. I am grateful for having had such an opportunity in my study programme.



Queen's University **WOODY WONG**

The exchange experience at Queen's University was really fruitful. I widened my social circle and also broadened my horizons. I lived with four very nice local students. Their lifestyle and ways of socialising were different from ours. They loved to organise parties and have gatherings of friends at their house. On Saint Patrick's Day, I participated in the celebration by wearing green. To further immerse myself in their culture, I also went to see an ice hockey match, the most popular spectator sport in Canada. It was interesting to interact with Canadians, and to try and understand their ways of thinking and adopt their mind-set. I felt very different when I tried to do this.



Brown University **WEI-ZHIA KUA**

Before I came to Brown in my sophomore year, I believed that everything about university was, and should be, career oriented. However, studying at Brown challenged that deep-rooted assumption of mine and offered me the opportunity to question my educational aspirations. There, I experienced a very different, student-led learning environment in which I was invited to take control of my own education and was motivated to engage in independent research and reading.

From stimulating class discussions to insightful conversations around the dinner table with friends, during office hours with professors and research symposia with the prominent academics, from hosting a student from Kansas to enjoying concerts and musicals or volunteering at events, I was constantly inspired by the people I met: students, scholars, professors, musicians and even artists.

My journey of self-exploration at Brown had its ups and downs, but I learnt to deal with my own vulnerabilities and to ask for help when needed. Studying at Brown has been one of the greatest, most life-changing experiences I have ever had! I feel privileged and grateful to have had the chance to study there and I strongly encourage every student to join an exchange programme to explore, learn and grow.



University College Dublin **PAUL LO**

This exchange programme is definitely a far-reaching experience. I can still remember every single moment as if everything just happened yesterday. When I first came to the campus, I went to the residence straightaway. The most exciting part was that the residence was equipped with an open kitchen and a dining room shared by four exchange students. I met a German, an Australian and an Irish student. Not only did we share many experiences from our countries, but we also cooked our traditional dishes for each other. It was so fun!

To me, life at UCD was less stressful than life at CUHK. Although the classes were still competitive and the students were very eager to learn and succeed, they participated in a lot of student activities and sports as well. Everyone seemed to have a packed schedule. Travelling is always the best part of this exchange experience. I tried visiting several cities (e.g., London and Amsterdam), both on my own and with the people I met at UCD. Both experiences were awesome. What happened in these few months will forever stay in my mind.



Student Exchange Experiences

Sciences Po

LEUNG WAI NAM

Studying as an exchange student at Sciences Po for one semester was a truly valuable experience for me. With nearly half of the students being international, Sciences Po provided me with the opportunity to communicate with people from all around the world and learn more about different cultures. I mainly studied International Relations courses at this world-famous political sciences institution, which has nurtured seven of the last eight French presidents. There were many discussions and interactions in class, and I benefited a lot from them. Studying in Europe meant that it was not difficult to travel around. During the exchange period, I stepped on the soil of more than 20 countries and saw many things that I have never seen in Hong Kong. It was a great experience, and I just wish I could have stayed longer.



Vienna University of Economics and Business

CHARLES HO

I attended my exchange programme at the Vienna University of Economics and Business in Austria from February to June in 2017, where I studied Strategic Management and Social Policy. Besides my study, I also travelled to other countries, many with very beautiful scenery. Many good and bad things happened during my exchange study, and I learned to be much more independent from other people, including my parents. I made so many new friends and experienced their lifestyles, which are quite different from mine. I enjoyed the wonderful moments in Vienna very much, and I found it a much more liveable city than Hong Kong.



Stony Brook University

DOMINIC LEUNG

I had an enjoyable semester at Stony Brook University. Located in Long Island, the eastern part of New York, Stony Brook is a peaceful place, in stark contrast to Hong Kong. I loved exploring New York. There was always something interesting to get involved with, from joining a boat-building contest at the university to riding a 50-year-old (but very exciting) roller coaster at Coney Island.

Stony Brook is a great place to study quantitative finance because of its affiliation with one of the best quantitative hedge funds, Renaissance Technologies. From close up, I got a better picture of how modern finance (or quantitative finance) develops. A study exchange is definitely worthwhile, to embrace a new culture, get rid of the stress and tension of Hong Kong life and to broaden your network with people from around the globe.



University of British Columbia

1. CODY FU

My exchange to the University of British Columbia was a very enjoyable and fruitful experience.

I took courses in a variety of fields, including finance, mathematics, statistics and programming. I found the teaching style there to be very different from that in Hong Kong; it is more interactive and involves more group work and case study analysis. The university offers a wide range of societies that organise many activities to provide students the opportunity to mix with local and international students.

The travel opportunities in and around Vancouver were a bonus to university life. The scenery of the Whistler ski resort is out of this world!



2. JADE GUO

My exchange to UBC was one of the most enjoyable and memorable times of my life. Compared to CUHK, the workload at UBC is lighter and the exams are much easier. I was able to complete 18 credits and still spend every weekend hiking, sightseeing (there are many sights to see in the area) or picnicking with new friends. As a southerner, it was the first time that I experienced an entire winter with snow and witnessed spring rise. My time at UBC not only gave me a better understanding of different cultures but it also taught me to be calm and to reflect on my experiences, which I believe is crucial for senior year students entering the real 'grown-up' world.



3. KELVIN LAM

I am fortunate to have participated in the exchange programme at the University of British Columbia, Canada. I took courses in finance, statistics and earth science. The classes were interactive, and I was motivated to participate in the class discussions. I met people with diverse cultural backgrounds, shared my culture and experiences with them, and learned from their values and lifestyles.

In my spare time, I explored different cities in the beautiful country of Canada. I enjoyed a live NBA game in Toronto and loved the views at Niagara Falls and Whistler. The locals were really nice and friendly. This programme helped broaden my horizons and understanding of different cultures, and the experience was truly unforgettable.



University of Waterloo

TIMOTHY NG

During the third year of my studies at CUHK, I was very fortunate to be given a chance to join the exchange programme of the University of Waterloo in Canada.

The lifestyle in Waterloo is completely different from Hong Kong. People sleep earlier, work fewer hours and never rush. Spending four months here was very relaxing because of the spacious and tranquil environment. Sitting in a coffee shop, leaving all my problems behind and seeing the snow fluttering outside was one of the most enjoyable moments, which you could never experience in Hong Kong.

The exchange is not just an opportunity to study in a different country, but also to mingle with students of different nationalities, assimilate into different cultures and become more independent, as you are on your own in a brand new environment.

The four months of exchange brought me so many different experiences, and they will never be wiped from my memory. I hope you will enjoy yours as well!



Student Exchange Experiences

University of Toronto

1. DESMOND YAU

Under the QFRM programme, I have been very fortunate to have an exchange experience at the University of Toronto. Toronto is truly a beautiful and diverse city where you can meet a lot of people from all over the world. It is truly a good destination for exchange studies.

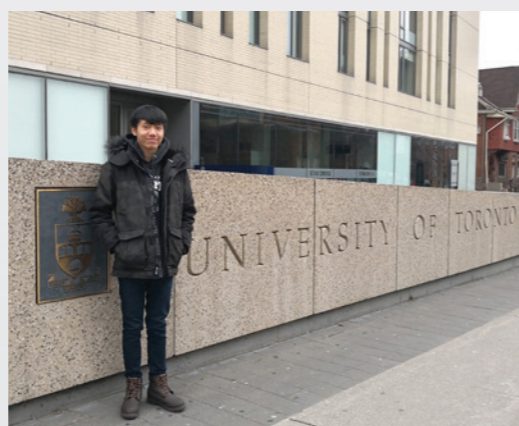
I enjoyed my stay in Toronto, both for studying and travelling. The University of Toronto is a very good school which provides an excellent academic environment and many interesting courses. I still remember the mock trading session in the finance lab for my fixed income class. In addition to studying, I had a great time exploring the city with some of my friends and visiting the beautiful city of Montreal. I truly recommend everyone to grab the chance and go on an exchange to explore new worlds during their four years of studies.



2. VICTOR KWOK

My exchange to the University of Toronto (U of T) was a truly memorable experience. U of T puts the onus on students to learn independently through discussion and creativity, so instead of 'lecturing', the professors guide students to discuss different topics and invite them to present their ideas. Moreover, everyone I met at U of T was really kind and helpful, which made me feel at home.

I enjoyed exploring Toronto and other cities in Canada. Toronto is a vibrant city that abounds with artistic atmosphere. In addition to myriad museums and galleries, the annual arts festival sees thousands of visitors swarm to exhibitions all around the city. A highlight for me was my visit to Yellowknife in northern Canada, where I witnessed the spectacular aurora borealis 'dancing' in the sky.



Utrecht University, University College Utrecht WAI LI TENG

I believe everyone would agree that an exchange programme in Europe wouldn't be complete without travelling and enjoying the laid-back lifestyle. However, now, when I recall my five-month stay in Europe, I am totally surprised at how vividly the academic experience affected me. Having studied in a liberal arts college, it gave me the privilege of taking subjects that I have never imagined myself learning. The content wasn't the only specialty of a liberal arts college, but also how the lecturers stimulate students' interests and contributions in class pinpoints the true value of such college. Hence, I wholeheartedly encourage outgoing exchange students to embrace different learning and ethnic cultures during your exchange sessions. Have a fruitful experience!



Copenhagen Business School VINCENT LIU

An exchange programme is much more than just studying in a different school. These four months in Denmark changed my life completely. Living away from home and having to overcome obstacles all by myself, I became much more mature than before.

In Denmark you will never be stressed, because life in Denmark is all about being "hygge," which means "cozy" in English. Unlike Hong Kong, you will never find people working at night. Instead, the Danes will just take their time and have fun with their families and friends. I am really glad to have had a chance to live in the happiest country on Earth.



The University of Sydney

BRYAN WANG

Last year, I exchanged at the University of Sydney for five months. That was an unforgettable experience. During my exchange, without too much concern for my academic results, I took a lot of advanced and interesting finance courses and benefited a lot from it. Also, because my student hostel held a party every week, I made a lot of local friends at those parties, and we are still keeping in contact. Furthermore, Sydney is an international city, and only 40% of the people were actually born there. By just simply talking with people on the street, I have heard a lot of interesting stories. During the school vacation, I also travelled to New Zealand. I recommend everyone to go for an exchange, and Australia is definitely a good country for your consideration.



King's College London WULA WAN

I went on an exchange to King's College London during the first semester of my third year of study. I took four mathematics courses, which enhanced my quantitative skills and prepared for me for advanced courses in the future. Although the classes were quite demanding, I managed to have some free time to travel. I went to different European countries with friends I met in London. My experiences were amazing. I definitely recommend anyone to go on exchange and explore different countries while a student.



University of Cambridge HAN XU

The exchange experience in Cambridge is marvellous. With the hope of exploring new possibilities, I took three challenging courses, each of which has either changed my stubborn view towards a specific field that I have already learned, or led me into a fascinating field that I have never noticed before. For instance, Foreign Policy Analysis is my favourite. Frankly speaking, it is quite relaxing to take summer courses in Cambridge, where we do not have to worry too much about grades. It is such a cosy environment, letting us think and discuss freely and spark new ideas. One professor stated, "What I need you to do in my class is not agree with me. Disagree with me. Challenge me." Therefore, I took every class as a chance to challenge the lecturer even though I failed most of the time. But this is the process that inspired me to think and link different subjects like Game Theory, International Relations and Foreign Policy together. For the first time, I gained heightened interest in international affairs such as the Washington Consensus, the Beijing Consensus and the recent 'Grexit' affair. What makes me even more excited is that I am forming my own methodology to analyse what really happens under the surface.



Cambridge is such a magical place, full of inspiration and physical beauty. I like life there, where I can take a lecture at the Botanic Garden with a professor who can barely contain himself with excitement about the obscure rituals of the bumblebee, where I can have my floor mate come round for a beer and barbecue and I can listen to the latest stories of his travels, debate with the grey-bearded professor over ancient Roman history and enjoy a cup of steamed milk with chocolate sprinkles on the top with my favourite friends.

Keio University JOSHUA CHOW

Spending a whole year here in Keio University of Japan has been one of the most amazing experiences in my life. Keio University offers a wide variety of English courses for exchange students, which really help people like me who are not sufficiently proficient in Japanese to take the local students' courses. I have been living in a dormitory and getting along with my roommates. I have also met a lot of people from Japan and all around the world, and have hung out with them during weekends and holidays. Definitely give it a try if you are a true lover of Japanese culture!



Student Exchange Experiences

Tsinghua University

1. HARRY CHEN

I consider myself very lucky to have had the opportunity to participate in the exchange programme to Tsinghua University, one of the top universities in Asia and the world. Based in Beijing, Tsinghua runs many general education courses related to Chinese culture. It is renowned for its science and engineering faculties and offers an array of first-rate finance courses, including actuarial science, intermediate financial theory and cases in corporate finance. To top off this all-around education, the university's rich seminar and activities programme this semester featured notable guest speakers, including high-level international politicians and top academics. Tsinghua has a very welcoming atmosphere, especially at Schwarzman College, where students from different backgrounds can share opinions and brainstorm.



2. POEY WONG

The exchange at Tsinghua University has been an eye-opening and inspiring journey. Not only did I take a course on Finance and Statistics here, but I also attended other courses on Public Policy and International Studies. Through exchanging ideas with local peers, I have learnt tremendously about their perspectives and the local culture.



I also joined various societies, including the Student Association of International and Strategic Studies (SAISS) and Entrepreneur Team, and attended various seminars held by international organisations, such as the World Bank and the United Nations Development Programme (UNDP). These valuable experiences have allowed me to explore more ideas about my career planning.

National University of Singapore

1. JASON ZOU

Hi, I am Jason, now a penultimate year major student in QFRM. I participated in an exchange study at the National University of Singapore (NUS) in the second semester of my third year. It was a great experience. The NUS is very beautiful, the people there are nice and the students work very hard, even harder than at CUHK. On the exchange, I did not need to worry about my GPA as I did in CUHK, so I took courses that I was interested in, like Japanese Study and Philosophy, which was great fun. There were orientation activities organised just for exchange students, so it was quite easy to meet students from all over the world and make friends with them. We often went out to have fun, travelled around the nearby countries and talked about different cultures. All in all, going on exchange is like taking a break from the busy study life of CUHK. It is a chance to embrace different cultures, and to experience life in another university in a different country.



2. ALEX SUN

In the second semester of 2020–2021, I joined the exchange programme in the NUS Business School. The experience has been extremely fruitful and valuable, especially given the COVID-19 pandemic situation. This programme provides interesting modules for non-graduating students. I highly appreciated the interactive teaching style in the Management and Entrepreneurship courses that I took. The case discussions were highly informative and helped me to become more proactive.



Moreover, the campus life was vibrant due to the pleasant environment and various types of facilities available on campus. For example, there were a series of activities organised in the residences and halls to allow students to explore the country. Diversity in Singapore makes it a friendly destination for all exchange students.

INTERNSHIPS

The internship programme allows students to acquire on-the-job training with the participating companies. Internships provide valuable opportunities for students to gain exposure to the professional environment, outside the classroom. QFRM students on average complete 3 internships prior to graduation. Over 90% have done at least one internship in a finance-related institution. The internship possibilities can lead to excellent career opportunities. Previous and existing internship partners:

- AIA
- Bain & Company
- Bank of America Merrill Lynch
- Bank of China
- Bank of East Asia
- Barclays Capital
- BNP Paribas
- CFA Institute
- CASH Algo
- Credit Suisse
- Citibank
- Commerzbank
- Ernst & Young
- Eurex Frankfurt AG
- Goldman Sachs
- Hang Seng Bank
- HSBC
- HKEX
- Hong Kong Monetary Authority
- J.P. Morgan
- Jane Street
- Morgan Stanley
- PWC
- Royal Bank of Scotland
- State Street Global Markets
- Standard Chartered Bank
- UBS Securities
- Western Asset Management Company

Student Internship Experiences



KENNETH CHAN BNP Paribas

I joined BNP Paribas as an intern in the Automated Market Making Team, which provides liquidity to the equity derivatives market. I worked with a number of traders and strategists on various quantitative research projects. The training in the QFRM programme on statistics, computer programming and logical thinking enabled me to handle a steep learning curve and add value to the team. I believe that all of the QFRM students are well equipped to excel both academically and in the workplace.



RAYMOND CHAN BNP Paribas

I spent a year working with the Stock Flow Option Trading Team at BNP Paribas, where I shared in a wide variety of tasks to support daily trading activities. For example, we had to monitor our positions and hedges according to market environments, check and remark parameters for option pricing to catch market sentiment and back-test trading strategies. The QFRM programme provided me with comprehensive training in a range of areas including finance, mathematics, statistics, risk management and computer science. These skills allow interns like myself to navigate the financial markets with strong problem-solving skills.



ANSON CHOW BNP Paribas Asset Management Asia Ltd.

QFRM is a rewarding programme that has equipped me with a strong foundation in quantitative research and programming skills and provided me with practical knowledge regarding the financial market. The curriculum provides all-round training for a career in trading, quantitative research and other fields of the financial industry. The knowledge I gained during QFRM helped me to land an internship offer at BNP Paribas Asset Management. Working with other professional traders in the Product Strategy team allowed me to explore the markets from a trader's perspective, which will certainly support my career development.

Student Internship Experiences



SAMUEL CHIU
Goldman Sachs

I joined Goldman Sachs as a controllers intern in the finance division. We work closely with the firm's businesses to ensure that our profitability is accurately measured and reported, whether the reports are for internal management or external investors. My training in QFRM prepared me to understand the basic business aspects of the firm's products and to make sense of the increasingly sophisticated measures applied to safeguard the firm and mitigate risks on our capital. My supervisors gave me the best advice I've ever received, namely to connect with lots of people and be prepared to ask the right questions.



AARON LIU
Goldman Sachs

This fall, I joined the Global Markets Division of Goldman Sachs as an off-cycle intern under the EQ PIPG Sales Team, which mainly distributes equity structured products to private bank clients. During my days at the desk, I assisted in pricing derivative products with exotic payoffs, summarised hedging and booking instructions, and participated in various types of ad hoc projects. The dynamic environment allowed me to work with talented people in different teams and learn new things every day. Over the 5 months here, the QFRM programme has enhanced my technical knowledge required to understand complex products and has equipped me with data analysis skills to analyse trade/quote data for revenue-generating insights and with the ability to learn fast under pressure.



ALAN LIU
J.P. Morgan

It was a wise decision to take the QFRM programme.

With full support from the programme, I joined the Mergers & Acquisitions team at J.P. Morgan as a semester intern. During the 15-week period, I worked on in-depth company and industry research, financial analyses and models and client pitches. I really enjoyed the huge responsibility when developing meaningful solutions for clients or executing significant transactions.

In QFRM, you will have support from both the Science Faculty and Business Faculty, you will meet groups of competent and passionate classmates, and you will get all-round financial and risk management training.



RAY LI
Citi Global Markets

The 10-week internship in Citi Global Markets was an extremely fruitful experience for me. With the two rotations at different desks (Electronic Execution and the Delta One trading desk), I not only gained diverse knowledge regarding different asset classes and market situations, but also developed relationships with other interns, colleagues and mentors that are important for my future career. The QFRM programme helped me to build up a solid foundation in statistics, mathematics and business that allowed me to successfully handle the price impact modelling project during my first rotation. In addition, the programme's strong alumni network helped me to expand my contacts at Citi in a much more efficient way.



KINSON CHAN
State Street Global Markets

I spent most of my time learning about FX trading and Macro Strategy when I underwent my 6-month internship at State Street Global Markets, an internship that granted me exposure to the real world of business. This was a lot different than a summer internship in which hypothetical case studies are assigned; instead, I was actually assisting the traders in building monitoring tools to help them trade. The financial knowledge and the quantitative skills I gained from QFRM certainly equipped me to excel in these duties. I believe this is the edge that the QFRM student enjoys: you have the flexibility to get exposure to both sides, and this has proven to be extremely beneficial.



SAM NG
UBS

Studying the QFRM programme at CUHK has been the most rewarding and fruitful journey of my life. There are so many opportunities in this programme, which can pave the best way for personal and career development. I didn't take economics or accounting electives in high school, but here you study, work and compete with the most talented students, and that motivates you to grow. I was glad to join UBS as their operations intern during my penultimate year because I met many great mentors there and explored how investment banking works. With support from both the business and science schools, I will go on to work as a graduate trader for the China International Capital Corporation.



HINSON HO
Commerzbank and Bank of America Merrill Lynch

The days I have spent in the QFRM programme have been hugely rewarding. The breadth and depth of the curriculum have allowed me to develop a solid foundation and suitable skill sets needed for my future career.

I was previously employed by Commerzbank AG as an intern on the DCM Loans Team. My main responsibilities were to conduct market research in the APAC region and facilitate my team along the loan syndication process.

Moving on, I will spend my summer at the Bank of America Merrill Lynch with the Wholesale Credit Team. Thanks to the QFRM programme, I was able to apply my knowledge and understand the statistical methodology of credit assessment and the hedging strategies our bank provides to our corporate and FI clients.



HAN XU
Bank of America Merrill Lynch

Looking back now, choosing QFRM was a wise decision. This programme offers the unique advantage of bringing qualitative and quantitative knowledge together and lends us full support for career development.

I worked as a gap-year intern with the China Economics Team at Bank of America Merrill Lynch in 2016-17. My duties were to assist in day-to-day research, including but not limited to model development, data comments, policy comments, etc. It was truly an insightful experience that not only showed me what a day was like as a sell-side researcher, but also empowered me with practical knowledge that was not taught in depth in class.



CHARLES TSUI
J.P. Morgan and Jane Street

Being a trader has always seemed like a desirable job to many people, including me. I am grateful for having had a chance to work at JPMorgan as a Global Markets Intern doing equities facilitation trading, which aims to provide liquidity for hedge fund clients to trade in bigger lots. I also had the chance to intern for Jane Street as its Quantitative Trading Intern and to seek trading opportunities through mathematical models. The experiences I gained from these two internships were quite different, but having a solid foundation in finance and statistics knowledge helped me a lot to nail these opportunities. QFRM was exactly the programme to equip me with the relevant skill sets I need and direct me into the industry.



SHERINE YEOW
Citi Private Bank

The exposure provided to me by both the Faculties of Business and Science has been unique and invaluable. QFRM equipped me with solid analytical and interpersonal skills, both of which are equally important in the private banking industry. During my internship, the combination of courses in finance and risk management laid a good foundation for me to study the market movements and reactions that affect clients' portfolio performance. I believe that QFRM students receive a distinctive advantage in the workplace by gaining a well-rounded mindset.

Student Internship Experiences



HEMAN LEUNG

Ernst & Yong and Hong Kong Monetary Authority

It is gratifying to be a member of the QFRM family and to participate in this fast-moving, competitive industry.

The previous summer, I worked with Ernst & Young Risk Advisory. Although I felt very nervous before starting this first internship, my supervisor, Wilson, was very friendly and provided a lot of support. As a fellow graduate of QFRM, he gave me a great deal of advice regarding my future development. Therefore, although the statistical work involved was new to me, I was able to quickly learn the skills involved and build on the solid training I had received before.

This summer, I am working with HKMA Economic Research. Coincidentally, my supervisor, Simon, is a graduate of RM. With his guidance, I am exploring the challenging world of econometrics, which requires strong economic sense and quantitative skills. This will be a highly useful experience for me in the future.



KEN YUEN

Morgan Stanley

QFRM has been hugely rewarding and resourceful for my academic, career and professional development through its solid training and support, which were well positioned to help me secure a semester internship at Morgan Stanley.

I was an off-cycle semester intern at both the Corporate Derivative Trading Desk and the Exotic Derivative Trading Desk within the Institutional Equities Division of Morgan Stanley. Every day was dynamic and full of challenges due to the dynamic market and highly sophisticated aspects of each trading desk. Thanks to the quantitative and financial training of the QFRM programme, I was able to handle the steep learning curve and understand the complex derivative structures, pricing models and risk profiles of each of the structures.



GRACE SHI

HSBC

As a co-op student trainee in unsecured lending risk at HSBC RBWM, I was tasked with designing an ad-hoc report template on SAS for a critical metrics analysis (payment ratio, delinquency rate, credit utilisation, etc.) of various Asia Pacific countries during the period of the Covid-19 pandemic. I was also tasked with consolidating on waterfall for proactive cross-selling, limit assignment strategy, and Covid mitigation measures and relief programmes.

My internship at HSBC gave me experience of using a wide array of updated methodology and application tools within a retail bank, including identification, measurement and mitigation of credit risk, especially for unsecured products (i.e. credit cards, personal instalment loans).

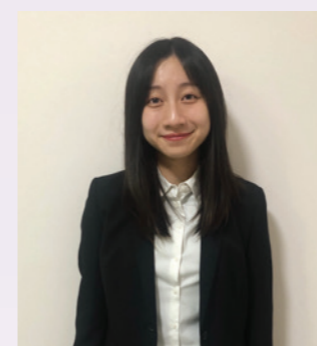


SUE QIN

Eurex Frankfurt AG

During my 6-month internship in Eurex, I was responsible for writing daily market analyses and intelligence reports on equity and fixed income derivatives. As a sales intern, I also provided support for the Asia team by creating fact sheets and marketing materials for products targeting the sell-side and buy-side firms. My university life, together with this internship, was a highly interesting and meaningful journey that provided me with a glimpse of the financial market.

I am grateful to be in the QFRM family. The courses and training provided by the QFRM programme have equipped me with the technical knowledge and experience required to kick-start my career smoothly.



NATALIE SO

Ernst & Young

I joined EY as an intern in the financial risk advisory department. I participated in a project related to interest rate risk in the banking book, which was tasked with helping a client develop statistical behavioural models using the SAS platform to estimate parameters such as the monthly prepayment rate and early withdrawal rate. I was assigned to handle a variety of tasks. For example, I assisted in model development learning on the SAS platform and VBA programming. I had the opportunity to pitch our models to our client, which improved my presentation skills. In short, I think the internship experience at EY was very good.



ALEX TSAO

PWC

My internship at PWC gave me the chance to put into practice everything I had learnt from the QFRM syllabus. During the 4-month internship, I acquired even more knowledge, not only from the tasks I was assigned, but also from my manager and my colleagues. Consulting services start in the office with peers. Outside the company, it is called consulting, but within the walls of PwC, it is called communication and collaboration – the two most important components to working with others and the most precious skills I took away from this internship.



RUBY HUI

Hong Kong Monetary Authority

QFRM is highly regarded in the banking and finance industry. The education and support that I received from QFRM helped me to secure a summer internship in the Hong Kong Monetary Authority (HKMA) Banking Supervision Department. This internship offered me the opportunity to learn more about the supervisory policies of HKMA and the Basel Standards, a global regulatory framework for banks. I also researched stress-testing scenarios used by foreign regulators and IFRS9 (International Financial Reporting Standard 9) practices used in the industry. QFRM provided me with quantitative training that enabled me to understand complex credit risk modelling. This deeper understanding of the industry practices in risk management has surely helped to pave the way for my career in risk management.



ZHANG QIANHUA

Silverhorn Investment Advisors Limited

My internship experience at Silverhorn was interesting and inspiring. I worked in the front office and learned various aspects of research and investing. I am very thankful to my supervisor and co-workers, who not only gave us the flexibility to work and relax but also provided valuable guidance and advice.

In a small company with a flat structure, I had the opportunity to interact with senior members and gain valuable insights and advice. My colleagues were passionate and friendly, and the work environment was conducive and flexible. Overall, I am very satisfied with this experience and very glad to have made contributions to the team.

I will be joining BlackRock as an analyst in the Risk and Quantitative Analysis team. Blackrock is not only one of the largest asset management firms, with popular investment products, but also renowned for its rigorous risk management and strong risk culture. Hence, I am looking forward to learning more about risk management from the best and developing my understanding of the area. I am certain that the training and experience will help me excel in business areas related to research and investing.

Student Internship Experiences



MICHAEL WAN Eurex Frankfurt AG

My six-month semester internship with Eurex Exchange was undeniably rewarding. As a Derivatives Sales Support and Business Intern, I used Bloomberg and MicroStrategy data to track the trading activities of Eurex's derivatives products. Additionally, I performed various market analysis and business research tasks.

The comprehensive QFRM programme provides students with sufficient training to be prepared for the internship. In the courses, I learned about futures, options and financial markets, which helped me accomplish challenging tasks. The programme helped sharpen my quantitative abilities and interpersonal and collaboration skills, thereby equipping me to develop a career in the business domain.



ALANA WONG HKEX

For me, spending time at the Hong Kong Exchanges and Clearing Limited (HKEX) as a summer intern was a real eye-opener. The practical experience I gained, such as handling client communications, providing administrative support for the listing ceremonies and visiting the Qianhai Mercantile Exchange, gave me a good overview of many different roles in finance. I was able to apply my finance knowledge and skills towards my projects at HKEX, and thus gained a much better understanding of market operations. I was also able to gain valuable insights into financial markets through attending seminars and presentations conducted by the management committee of the company. This internship was a great experience, giving me exposure across vertical markets, and the opportunity has strengthened my enthusiasm for pursuing a finance career.

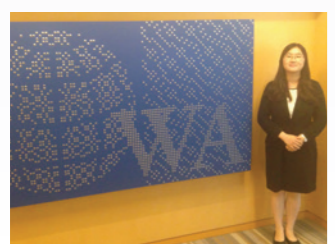


PETER XI CASH Algo

Interning in CASH Algo would be a thrilling experience for anyone who is interested in algorithm trading. As an intern, I was responsible for researching and developing profitable trading algorithms, and I assisted in updating and maintaining the risk management system.

My duties challenged my knowledge of financial products and risk management, my abilities to conduct quantitative analysis and my information technology skills like computer programming. These are all things that would be learned and researched by a QFRM student.

Facing an era in which quantitative methods and technologies have become increasingly significant in finance and risk management, I believe that QFRM is not only a programme that teaches but also a torch that shows the way, leading to the future of this industry.



AMY YANG Western Asset, California, USA

This summer I worked as a summer intern in the risk management department of Western Asset Management Company in California. My responsibilities were to provide research and analysis to assess portfolio security and to determine trade allocation parameters. The coursework in QFRM provided a very solid foundation for me in this internship, including programming skills and a good understanding of the financial market. Without QFRM's powerful career service, I would never have gotten this internship in the first place. From this summer internship, I was able to figure out my interest in quantitative research and the next direction of my future path.

Extra-Curricular Activities

QFRM students are also actively engaged in student activities, voluntary services and international competitions to broaden their horizons.



HINZ SHUM

National Best Team, International Quant Championship

We fondly remember the days we worked arduously around the clock on delicately designed alphas, which are models that use historical data to predict the future price movements of financial instruments. The International Quant Championship was a very rewarding experience for us. In reflecting on the process, we find ourselves deeply grateful for the QFRM programme at CUHK. By dint of the ample financial, mathematical and programming knowledge that we acquired in class, we triumphed over more than 10,000 teams from all over the world and won the National Best Award in our presentation in Beijing during the national final stage. Apart from what we achieved, we really enjoyed the moments when we were working hard together in the CUHK library, trying to apply the many brilliant ideas we had learned in class, ranging from different financial theories to mathematical equations. That breadth and depth of instruction is what we have found unique in the QFRM programme.



HENRY LIN

Champion, Greater China, International Quant Championship

The International Quant Championship is a quantitative trading competition that stimulates the participants' skills in identifying trading signals. This competition attracts PhD, Master's and Undergraduate candidates from prestigious universities all over the world. The participants are asked to identify the best weights of stock allocation, based on various kinds of data including company fundamentals, price movements or industry sentiments. Various statistical techniques including regression analysis and time series analysis are applied, in conjunction with overall knowledge in finance, mathematics and computer science.

I joined a team with three other CUHK students, whose fields of study were statistics, mathematics and computer science. With the joint effort of all three team members, we successfully advanced to the regional final and won the championship.



GISELLE YU

1st Runner-up, Peak Time Case Competition 2017

Together with Colin, Wilkins and Joyce, I participated in Peak Time 2017, an annual international business case competition held by the Stockholm School of Economics in Riga, Latvia. After competing in the preliminary rounds, the 20 top teams from 18 different countries were invited to join the final events in Riga. Our first task was to maximise the share price of a phone manufacturing company in a business simulation game. Then, we were asked to solve a business case in 4 hours. This case competition is an excellent platform for business students to apply book knowledge to a real scenario. We were also able to polish our team collaboration skills and presentation techniques.

Peak Time is more than just a competition; it is also a golden chance for participants to know more about Latvia and other countries. In the Riga sightseeing tour and cultural evening gathering, we learned about Latvian history and other countries' cultures by chatting with other finalists and tasting their traditional snacks.



LOUIS HU

Finalist, McGill International Portfolio Challenge 2019

I participated in the global final stage of the McGill International Portfolio Challenge as a member of a four-person team. We acted as a pension fund investment committee. Our task involved allocating assets into different asset classes across primary and secondary markets from a top-down perspective. The experience gave me a new perspective on our investment framework, a holistic view of fund operations and a comprehensive understanding of joining risk adjusted return with social responsibility.

QFRM is a great talent platform where I was able to bond with each of my amazing team members. I am also thankful for the classes that the QFRM programme offered. I was in a class on the theoretical preparation of asset allocation techniques where I learned how to quantitatively triangulate and optimise risk-adjusted return. My knowledge of this process solidified my team's strategy.

Extra-Curricular Activities



CATHERINE HUANG

Finalist, National Investment Banking Competition

Participating in the National Investment Banking Competition (NIBC) has been an exciting and rewarding experience that has motivated me to explore the corporate finance field and consider a career in investment banking. The NIBC is an annual international business case competition with undergraduate and postgraduate competitors from more than 100 universities around the world and professionals from investment banks, private equity, and assets management firms.

The 2018 competition in Vancouver was demanding – we worked all day to build valuation models and prepare and practise our presentations within eight hours – but it was a fantastic opportunity to develop and showcase our skills in financial analysis, modelling and pitching, which are essential for careers in investment banking.

The NIBC is also about expanding professional spheres. As one of the finalist teams, we were invited to join networking events where we got to know professionals in the investment banking, private equity and assets management industry, drinking, chatting and joking together.



PETER XI & KINSON CHAN

Best Consistency Award, CASH Algo Trading Contest

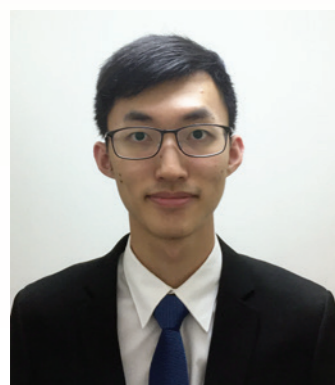
Participating in the CASH Algo Trading Contest has been a unique experience that cannot be obtained elsewhere. In the contest, our team strived to compose a trading strategy algorithm using Python in pursuit of both high returns and good consistency. The competition is a remarkable opportunity to apply knowledge of quantitative finance and risk management in the investment world, and furthermore, it has also been a chance to sharpen our programming skills. All of our team members enjoyed the contest, and winning the Best Consistency Award definitely better prepares us to be future quants.



CHLOE LEUNG & JUSTIN CHEUNG

1st Runner-up, CFA Institute Research Challenge 2020-21

It is our honour to be the first runner-up of the Hong Kong Local Final in the CFA Institute Research Challenge. In this equity research competition, we had to apply knowledge of various concepts, including the Discounted Cash Flow model, time series forecasting and financial analysis, that we learnt in the University to analyse the performance and intrinsic value of a company. This competition has not only equipped us with technical and industrial understanding but also strengthened our presentation skills and team spirit. This competition is a valuable opportunity for students to put theories into practice. We highly recommend students to participate in this competition.



VINCENT CHENG

1st place in Best Return, Best Sharpe and Best Strategy Design, Joint-University Algo FX Trading Challenge 2021 (Global)

It is an honour to be awarded first place in all three categories of the competition. In this challenge, we coded an algorithmic forex trading strategy to perform trading simulations over both historical and live market data. Initially, it was challenging to develop trading strategies owing to the high efficiency of the forex market. After several failed attempts, we realised that there was a slight statistical edge in using certain global economic factors. Based on this concept, we created trading signals based on various macroeconomic data series. This challenge was a wonderful opportunity to practically implement our theoretical knowledge in domains such as finance, statistics, programming and risk management and hone our deck design and presentation skills.

Career Planning and Development

The QFRM programme offers individual and group career coaching, training and advice. A number of career training workshops covering all aspects of the job-hunting process will be held in the first semester and early in the second semester. These equip students with a complete set of skills, from the identification of leads to CV writing, interview skills and job-hunting strategies and techniques. There will also be practical coaching and drilling, such as mock interviews, sharing sessions with alumni, mentorship and buddy programmes, etc.

Students are strongly encouraged to take part in these career activities early on in their studies, to gain a clear picture and a good understanding of the expectations and challenges of finding a job or an internship.

Training on Bloomberg Terminals

Visit to firms and organizations



Student Internship Sharing

Finance Trading Laboratory



QFRM students have access to high-end workstations at the computer laboratories of the Department of Finance and the Department of Statistics. The Finance Trading Laboratory, with 53 desks, is among the best of its kind on a university campus. The Laboratory is equipped with Bloomberg and Thomson Reuters terminals and is supported by unparalleled real time data feeds from major exchanges around the world including the New York Stock Exchange (NYSE), Hong Kong Stock Exchange (HKEX) and Eurex, one of the world's leading derivatives exchanges.

CFA Institute® University Affiliation Program



The QFRM Program at CUHK Business School is affiliated with the CFA Institute® University Affiliation Program. This affiliation certifies that our curriculum is well-suited to prepare students for CFA examinations and eventual employment in the finance and investment industry.

Our program covers 70 percent of Level I topics under the CFA Program Candidate Body of Knowledge and CFA Institute ethical and professional standards. As a QFRM student, you are entitled to CFA Institute curricula, exclusive online Level I sample examinations, journals, webcasts and other educational resources. You are also eligible to apply for Level I CFA examination scholarships.

Alumni Sharing

Further Studies



MICHAEL CHAU *Ph.D in Mathematical Finance, Imperial College London*

The QFRM programme has equipped me with solid theoretical knowledge of the quantitative methods and statistical tools used in finance. The experience gained during my half-year of exchange study at Uppsala University, Sweden, is valuable in my future studies, while my summer internship at the Royal Bank of Scotland enhanced my understanding of market risk management from the practitioner's point of view. After completing my undergraduate degree, I chose to pursue a Master's degree in risk management science at CUHK. The guidance and training offered by the Department of Statistics has enabled me to produce two original research papers for consideration in top-tier academic journals in the field of stochastic control and optimisation with application to operations research and finance. With this solid background in mathematical finance, I completed a joint PhD at Imperial College London in 2017. I am now working in Quantitative Strategies in Credit Suisse London, supporting structured credit desk. My duties include developing valuation model for product pricing and risk calculating using PDE and Monte Carlo methods.



BRIAN LING *Ph.D in Statistics, Columbia University*

The QFRM programme has a well-structured curriculum, which has equipped me with solid, practical knowledge of statistical methodologies and quantitative tools that are vital for my further studies. The valuable exchange study in the University of Toronto, Canada also broadened my horizons and gave me the experience of studying in a foreign country. As an undergraduate, I was also given the opportunity to be a research assistant under the supervision of Professor Wong Hoi Ying, and was a summer intern in the financial services risk management department at Ernst & Young. I therefore experienced both the academic research life and the business of risk management from the practitioner's point of view. After graduating, I chose to pursue a Master of Philosophy degree in Risk Management Science at CUHK. The guidance and rigorous training I was given while studying for my Master's helped me produce two original research papers in the field of statistics, which I submitted for consideration to top-tier academic journals. I am currently studying for my PhD in Statistics at Columbia University.



ASHLEY SHEN *Ph.D in Finance, Wharton School, University of Pennsylvania*

My name is Lin (Ashley) Shen. I spent four treasured years at the Chinese University of Hong Kong (CUHK) and received my BSc in Quantitative Finance and Risk Management Science (QFRM) in 2013. Currently, I am working on my PhD in Finance at the Wharton School of the University of Pennsylvania. The QFRM programme in CUHK provides students with training and resources in both the Business School and the Faculty of Science, which gives us great advantages when applying for jobs and graduate schools. In my case, I participated in the exchange programme with the Wharton School and took two finance PhD courses in the CUHK Business School. These experiences and all of the quantitative training that I received at the Faculty of Science have turned out to be very helpful to my PhD coursework and research.



LESTER CHAN *Ph.D in Economics, Boston University*

The QFRM programme offered me comprehensive academic training and equipped me with solid theoretical knowledge and practical quantitative tools, which are essential to my future studies. The valuable exchange experience at the University of Toronto also broadened my horizons and prepared me to further my studies overseas. As an undergraduate, I was a summer intern in the consumer credit risk management (secured) department at the China Construction Bank (Asia), where I learned more about risk management through actual practical experience. After graduating, I embarked on a Master of Philosophy degree in Economics at CUHK. The knowledge I acquired from the QFRM programme turned out to be very useful in the study of economics, and particularly important in research studies. I am currently pursuing a PhD in Economics at Boston University.

Further Studies

LOUIS HU *MSc in Accounting and Fundamental Analysis, Columbia Business School*

Quite different from QFRM, I am pursuing a Master of Science in Accounting and Fundamental Analysis. My experience at Columbia Business School, where value investing first originated, has exceeded my expectations as it puts me in an equal position to an MBA student or a PhD student in terms of course registration. My master's programme combines ~60% MBA courses and ~40% PhD courses, all of which are taught by hedge fund CIOs, portfolio managers, senior analysts and academics and are highly practical in orientation, something I have seldom experienced before.

During my QFRM tenure, I gained execution capabilities and honed my critical thinking skills. I would describe the programme as tough love, in terms of teaching, grading and logistics. I was often challenged, which helped me discover my true potential. I was fortunate to be exposed to a social atmosphere in which being challenged is the norm, so that when I met similar problems after college, I had the will and dedication to progress. I emerged from the programme more efficient and disciplined.

I especially enjoyed my lessons in Investment and Portfolio Management (Professor Darwin Choi), Financial Markets (Professor Wenxi Jiang) and Fixed Income Security Analysis (Professor Yizhou Xiao). Professor Jiang introduced us to information asymmetry and lemon markets, which inspired me to optimise solutions instead of following the crowd. The "coin flipping" email-based mental game that Professor Choi introduced helped me understand the skill/luck spectrum. Professor Xiao introduced us to different types of debt, which piqued my interest in special situations and products. All three courses were inspiring and pushed me to further study markets across capital structures.



MARTIN LAM *MSc in Financial Statistics, London School of Economics*

Being an interdisciplinary programme, QFRM has a comprehensive and balanced curriculum that helped me gain knowledge in a variety of fields such as finance, risk management, mathematics and data science. These courses laid a solid foundation for my master's studies, and the knowledge was applicable in many of my career-related and extracurricular experiences, not limited to the finance field. Majoring in QFRM allowed me to access resources from both the Department of Statistics and Department of Finance. Staff members from both departments were helpful and professional in responding to students' needs. With their support, I could explore my interests and make appropriate career choices in my undergraduate years.



XIE YU *Master of Finance, Massachusetts Institute of Technology (MIT)*

After graduating from the CUHK QFRM programme, I pursued a Master of Finance at MIT. The interdisciplinary nature of the QFRM programme allows one to delve into various fields such as statistics, finance and computer science. I had the opportunity to identify the domains that I was interested in and focus on them. The excellent peer group, professors and staff helped create a dynamic learning atmosphere and provided a long-lasting momentum for me to continuously learn and improve myself. This programme helped carve the path for my further studies, and for this, I am truly grateful.



Alumni Sharing

Career Prospects



FELIX CHAN

Microsoft

QFRM provides the best environment for students to grow because you can learn from both Business and Statistics perspectives. I had several internships in commercial and public sectors, thanks to the training and guidance I got from the departments. Besides academic and working experiences, studying abroad will definitely help prepare you for future challenges. I went to the University of St. Gallen for exchange and went backpacking in several European cities. However, I was not satisfied with doing the same thing after my graduation. I tried to be different and all these track records paved the way for my work at Microsoft, a global software company.



CHEUNG FUK SHING

BlackRock

My three-month summer internship experience in one of the largest asset management companies, BlackRock, was extremely enriching and provided me with practical experience in the financial markets. Working with other experienced traders in the iShares Capital Markets team, I was responsible for monitoring flows of ETF and presenting them to the management board. I also wrote pitching reports explaining investment opportunities to clients, and illustrating trading strategies. The internship helped me understand more about passive investment, and gave me further insight that will assist my career development in asset management business.

The QFRM programme provided me with good, solid knowledge in both finance and statistics, and gave me many opportunities to experience things like case competitions and exchanges to enhance my soft skills. I am proud to be a QFRM student.



SAMUEL CHIU

Goldman Sachs

The QFRM programme allowed me to explore a myriad of opportunities. With the full support of both departments, we were exposed to a broad spectrum of career options, including internships and job-seeking workshops. Rigid quantitative training equipped us with foundational knowledge of the financial markets and the field of risk management. The course structure allowed us to broaden our horizons through an overseas exchange programme, which gave us a great chance to meet new friends and gain new perspectives. I am very grateful for the support from the programme and am honoured to be part of the QFRM community.



CHARLES HO

Société Générale

I graduated from QFRM in 2019. Since then, I have been working at Société Générale as a Market Risk trainee. During my university life, I went to Vienna for the university exchange programme, which was a wonderful and unique experience. I also worked at HKEX and Schroders as an intern, which equipped me with the essential skills for my workplace. I would like to extend my gratitude for the support I received from the QFRM programme for my job searching and study. The staff members were kind, helpful and professional.



RUBY HUI

Ernst & Young

My 4 years studying in the QFRM programme left a lasting impression. The coursework was demanding and challenging, but it equipped me with the necessary finance, statistics and risk management knowledge, and all-important programming skills. The curriculum prepared me well to pass the Financial Risk Manager (FRM) examination, a leading worldwide certification for risk management. During the course, I completed internships at a securities firm, HKMA and Ernst & Young. I also went on a semester exchange to Singapore. These experiences enriched my university life. After graduating, I secured a job in credit risk management advice at Ernst & Young. My current duties include coding for interest rate risk impact calculations and writing key deliverables for clients. What I learnt in the QFRM has helped me excel in my job.

Career Prospects

JONATHAN KWOK

J.P. Morgan

QFRM is the best programme for building practical knowledge combined with solid quantitative skills. Along with strong career support and cross-faculty benefits, I have made a number of long-lasting friends who are all quite intelligent and supportive. Three of us, including me, joined J.P. Morgan as summer interns in its Risk Management division. By applying our classroom knowledge to reality, all of us have grown significantly, and I was lucky enough to secure a full-time position. Beyond my studies, I went on two exchanges: UC Berkeley in California and Sciences Po in France. By seizing these chances, I've left my footprints in over 20 countries. Isn't it amazing?



BOSCO LAM

Hong Kong Exchanges and Clearing Limited

The QFRM programme is an all-round curriculum that provided all of the necessary skills and opportunities for me to explore the financial industry. I received rigorous financial and mathematical training through lectures and projects during my 4-year study. Meanwhile, I participated in various trading competitions, case competitions and internships, which allowed me to put my programming skills and the financial theories I learnt to use. Working at HKEX is highly dynamic, especially with its growing business opportunities and its mission to shape market development. It is a place where you meet professionals from all over the world and work on the cutting edge of the financial market.



KAREN LAM

Bank of America Merrill Lynch

The QFRM programme provided me with a solid understanding of statistical and financial knowledge, ranging from financial modelling and portfolio management to big data analysis. The programme emphasises real-world applications, such as trading strategies, Bloomberg data analysis and risk simulations, which allowed me to link theoretical knowledge with practical experience and prepare myself for my internship in the asset management industry and early career as an FX trader in an investment bank.



RAY LI

Citigroup

My undergraduate QFRM studies were challenging yet inspirational and extremely fruitful, largely thanks to the supportive faculty and well-structured curriculum design.

The finance and statistics courses equipped me with the essential knowledge needed to find internships and graduate jobs, and the wide-reaching alumni network of the programme and the wider business school enabled me to start making contacts in the field even before I joined the industry and kept me up to date with the fast-changing financial world. Moreover, with the support of CUHK, my exchange to the United Kingdom was an eye-opening experience for me.



GEORGE WU

UBS Securities

The QFRM programme provided me with a foundation for pursuing a career in options trading. I joined BNP for a gap year trainee position, where I applied the knowledge that I had gained from the programme to understand the industrial standards of volatility modelling and vol marking. Later, I joined UBS as a sales trading high touch summer intern, where I engaged in coding tasks and providing market colour. I will soon be joining UBS as a junior trader. I am grateful for the programme, as it provided me with invaluable opportunities to prepare for my career in the finance industry.



Alumni Sharing

Career Prospects



LORRAINE ZHAO

Goldman Sachs

During my time at university, I treasured the chances available to go outside Hong Kong and explore the world. In my first year, I visited Scotland and attended an English Enhancement Course at the University of Edinburgh. Over the second summer holiday, I took part in an exchange programme with students from Tsinghua University. Both of these exchange experiences enabled me to better understand the wider world and cultivate a mind-set that embraces different cultures and values. This is essential to prepare me for work in an international company. In addition, I gained valuable experience in my last internship. Working with supervisors who had different styles taught me how to adapt to various working styles and how to prioritise tasks when schedules are tight. In job interviews I was frequently asked how I worked under pressure, and my internship experience provided valuable lessons regarding this. As a QFRM alumnus, I am very grateful of having joined the programme and learned technical skills and life values. The rich resources provided by the university have enabled me to aim higher in planning my future after graduation.



RYAN LIU

Wells Fargo

QFRM is an interdisciplinary programme that has equipped me with strong numerical acumen and solid financial knowledge. The curriculum is perfectly balanced between theory and real-life application, and it paves the way for prosperous careers in sales and trading, investment banking, investment management and many other fields. During my senior year, I went for a semester exchange to UC Berkeley, where I rekindled my passion for statistics and finance by meeting various scholars from around the world. After spending a summer at Wells Fargo Securities, I started working full time at the credit trading desk. Nothing beats the intensity and adrenaline of the fast-paced market!



KELVIN NG

Deutsche Bank

Having been a QFRM student for four years in my university life, I am glad to say that I have achieved more than I expected. Throughout my university life as a QFRM student, I joined one exchange programme, completed a few internships and absorbed useful knowledge and skills in finance and risk management.

My overseas exchange experience was a rewarding one. It was an unforgettable journey and encouraged me to step out of my comfort zone. With the support of our department, I was also able to complete a few internships, which provided insights into the industry. Finally, the demanding yet rewarding courses in QFRM provided us with a solid theoretical background and practical applications to the business world.

I would say the programme is one of the best programmes for students aiming for a career in finance and the risk management industry.



WULA WAN

Jane Street

I graduated from QFRM in 2021 and went on to work at Jane Street as a quantitative trader. The QFRM curriculum is a mix of financial, statistical and computer science courses, and you can choose to focus on either study area depending on your interests. In my third year, I went to King's College London as part of the university exchange programme and took several maths-based courses to further develop my quantitative skills. These experiences helped me carve the path to becoming a trader.

Career Prospects

HENRY LIN

Crédit Agricole CIB

The QFRM programme is an intensive course of study that offers solid knowledge in accounting, portfolio management, financial theory, programming and various statistical techniques. All of these studies have given me a greater understanding of and insight into the finance industry. In this programme, I've acquired highly useful knowledge concerning the classic Black Scholes Merton Pricing Model, Machine Learning, FinTech and various other hot topics in the industry. During my studies, with help from the programme office, I joined in various case competitions, became an exchange student at a prestigious university in Canada and connected with various industry practitioners. All of these experiences have broadened my horizon, enriched my university life and made me better prepared to join the industry.

In QFRM, you can always find helpful programme directors, career advisors and supportive staff. More importantly, you can always find a group of friends with common interests who are aiming for the same goal.



ALAN LIU

J.P. Morgan

Currently I'm working at JPMorgan's Healthcare Investment Banking team based in London. Before I relocated to the London office, I also worked in Hong Kong for a year as a M&A analyst.

The training that QFRM has provided me with was really unique – the curriculum includes not only financial courses, but also an inspiring science component. The program helped me build a broad knowledge base, which ranges from statistics to finance, from mathematics to programming.

During my study, I also had the opportunities to intern at the Regulation Department of Hong Kong Monetary Authority, as well as the Sales & Trading team at Jefferies.



WAI LI TENG

Ocean Global Capital Management

As an international student, I have found CUHK a comfortable home throughout my fruitful university experience. It is certainly safe to say that the university has much more to offer than just academic excellence. From my part-time barista job in my freshman year to an overseas exchange programme in the Netherlands, I found that CUHK was always there to provide a wide array of opportunities, with an emphasis on promoting whole-person development. Furthermore, having enrolled in the QFRM programme, I was excited to learn not only pure theory but also hard skills to leverage my knowledge in real-life situations. This kind of real support is, in my honest opinion, the principal aspect that gives CUHK students the edge in career advancement.



ALANA WONG

HSBC

QFRM is a unique programme that allowed me to acquire both financial and technical knowledge of topics such as finance, statistics, risk management and computing applications. The financial and technical areas of study are complementary. Quantitative finance provided me with theoretical knowledge of finance, whereas risk management science was more technical and helped me learn how to use programming tools to automate and streamline the simulation processes in the finance domain.

As an analyst at HSBC Asset Management, I apply the solid quantitative and qualitative knowledge that I acquired during the QFRM programme, for instance, to compose investment pieces on market outlook and prepare pitch decks on investment products.

I will always cherish being part of the QFRM family.



Alumni Sharing

Career Prospects



DICKSON YIP

Hong Kong Monetary Authority

It is my pleasure to be a student in the QFRM programme, where I have received rigorous training in quantitative skills and technical knowledge, participated in a yearlong exchange programme in the US and worked with several companies as an intern. Throughout my four-year study programme, I have received tremendous support from my home departments – not just academic support, but also career and personal development advice.

QFRM is more than just an academic programme. It is a platform that has connected me, a student, to the greater society. Being part of the working class now, I am very grateful that I have been well trained in the technical knowledge of finance and the soft skills required in the workplace. Looking back at myself when I just started college, I still cannot believe how much I have grown under the guidance of the QFRM programme.



KEN YUEN

Morgan Stanley

The QFRM programme has given me one of the best experiences in my life, and has helped me to develop my friendships, career, knowledge, and professional network. The programme was designed to equip students with both comprehensive business sense and in-depth technical knowledge, both of which are essential in the investment banking industry. Due to the programme's cross-faculty support, we enjoyed very strong career guidance, comprehensive academic support and additional exchange opportunities. All of these things contributed to giving me a highly valuable and eye-opening exchange experience with the University of Warwick. This set of experiences helped me land the internship and subsequently a full-time job offer from the Derivative Trading desk for Morgan Stanley.



ROBIN ZHAO

Deutsche Bank

My university life can be summarised by several keywords: QFRM, friends and hostel, exchange, internship and fun.

As business foundation students at CUHK, we are free to decide on our major in our second year. QFRM is definitely a good choice compared with other programmes, with its combination of finance courses and other quantitative mathematical and statistical courses that prepare students for a broad range of opportunities.

I spent my five university years at New Asia College and lived in Chih Hsing Hall, which is a great hostel with an excellent view and friendly staff, and I have also met some of my best friends here.

QFRM students enjoy a distinctive advantage in exchange opportunities, as we are eligible to apply for the exchange programmes offered by both the Business Faculty and the Science Faculty.

QFRM students can also take advantage of career guidance services from both the QFIN and the RMSC programmes and receive more information about internship and graduate jobs.

Alumni Sharing

Achievements



GORDON HO *Silver Medal for the Bridge Event at Asian Games 2018*

It was one of the greatest moments of my life to stand on the podium and receive the silver medal for the bridge event at the Asian Games 2018. There were many media reports about our success, but few people realised how hard our journey was.

Ten teams competed in the Supermix series, including China, whose team consisted of 6 world champions; host country Indonesia, whose team comprised professional players; and rising stars Chinese Taipei, whose team consisted of recent Asia Cup Champions members. The qualifying round was a round robin against all nine of the other teams. The top four teams entered the knockout stage. We did not have a great start and were in a slightly below-average position throughout the tournament. Believe it or not, with two rounds remaining, we were still in seventh position, and even the reporters said only a miracle could get us into the knockout stage. Yet we did not give up and played extremely well in the last two rounds to score almost the maximum (37 out of 40 vp) to obtain fourth place by a margin of 0.2 vp. None of our Hong Kong bridge friends could believe it and congratulated us for our unbelievable performance.



In the semi-final, we played a 48-board match divided into three rounds against the number one seed, Chinese Taipei. Once again, we exhibited a very high team spirit at the table to maintain only a small margin, 58:66, behind the top seeded team in the first two rounds. In the last round, we followed our coach's advice "to fight to the end". When our opponents were exhausted after a long match, we overcame the early deficit and gained the lead by 104:92 and won the match. I will never forget the moment when my captain and teammates ran over to us for a group hug. That moment felt like we had scored a last-minute penalty in the world cup and everyone was cheering for us.

Recently my friends have asked me why bridge should be listed as a sport in the Asian Games. I can now proudly tell them that bridge is no different from other sports – not only do you have to keep practising to improve, but your mentality, physical state, concentration and luck also contribute to your success. I would like everyone to appreciate the spirit of every athlete.



Phone: (852) 3943 1853; 3943 0461
Fax: (852) 2603 6586; 2603 5188
Email: qfrm@cuhk.edu.hk
Website: <http://www.qfrm.cuhk.edu.hk>
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The Chinese University of Hong Kong – University of Edinburgh Dual Degree Programme

Programme Overview

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 15th in the world in the QS World University Rankings in 2023. 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

1st Cohort

2023-24

Degrees Conferred

CUHK Major	CUHK Degree	UoE Degree
Statistics (STAT)	BSc in Statistics	BSc in Mathematics and Statistics
Risk Management Science (RMSC)	BSc in Risk Management Science	BSc in Mathematics and Business
Quantitative Finance and Risk Management Science (QFRM)	BSc in Quantitative Finance and 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 (information available later) of dual degree students, or they may have to extend their normative study period as deemed appropriate. Please check with the Department of Statistics for more information.





香港中文大學
The Chinese University of Hong Kong

The Chinese University of Hong Kong (CUHK) Business School

12 Chak Cheung Street, Shatin, Hong Kong

Tel: (852) 3943 7785

Email: bafac@cuhk.edu.hk

Website: www.bschool.cuhk.edu.hk/

Facebook: www.facebook.com/cuhkbschool

Linkedin: <https://www.linkedin.com/school/cuhkbusinessschool/>



Faculty of Science, The Chinese University of Hong Kong

G43, Charles Kuen Kao Building, Science Centre, North Block,

CUHK, Shatin, Hong Kong

Tel: (852) 3943 6327

Email: sfo@cuhk.edu.hk

Website: www.sci.cuhk.edu.hk

Facebook: www.facebook.com/CUHKScience

