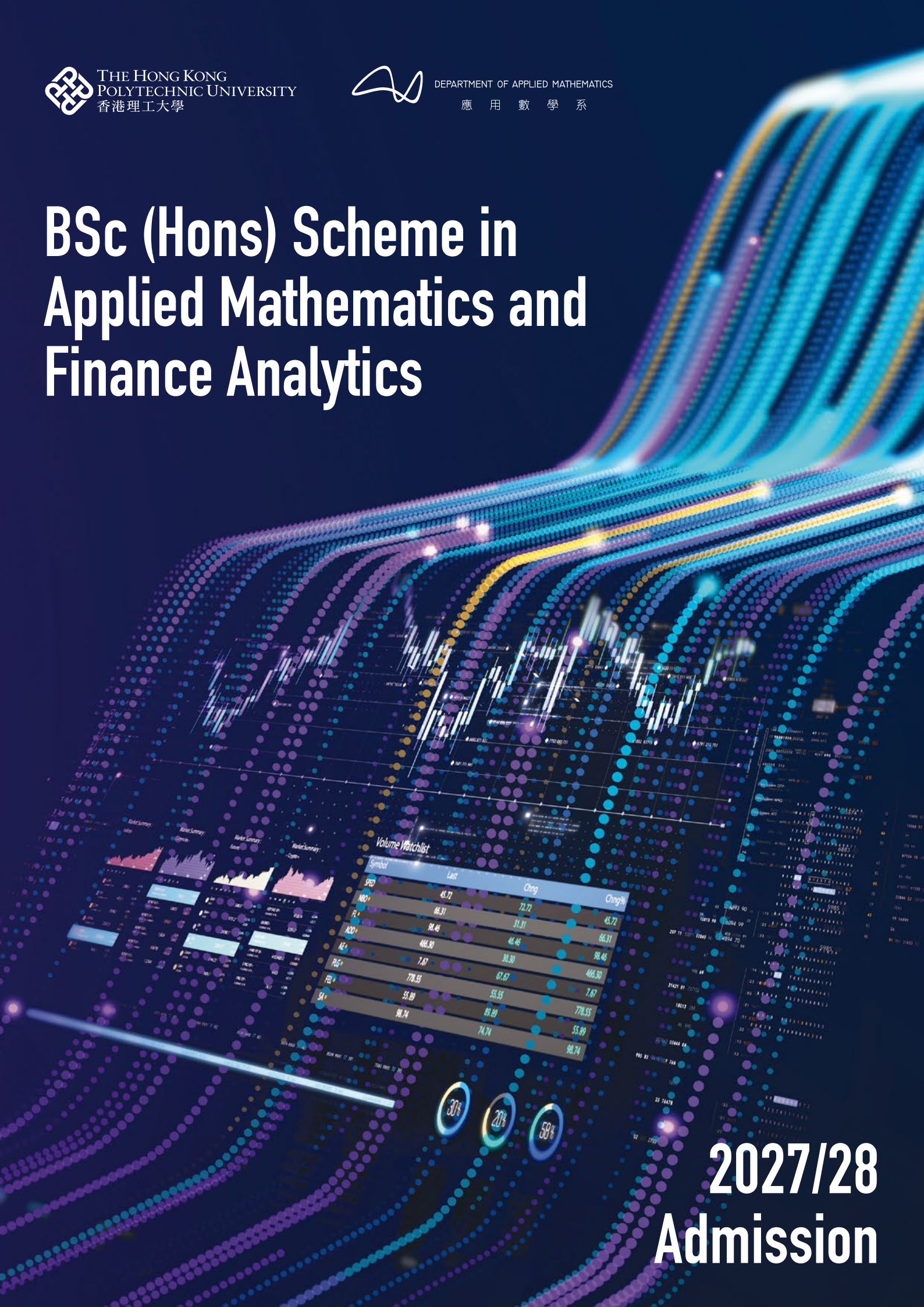
THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

DEPARTMENT OF APPLIED MATHEMATICS
應 用 數 學 系

BSc (Hons) Scheme in Applied Mathematics and Finance Analytics



2027/28 Admission

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Last updated in August 2026



About Us



Faculty of Computer and Mathematical Sciences (FCMS)

Faculty of Computer and Mathematical Sciences 計算機及數學科學學院

Established on 1st January 2025, FCMS is home to three dynamic departments: Applied Mathematics (AMA), Computing (COMP), and Data Science and Artificial Intelligence (DSAI). Together, we are set to lead the way in global digital transformation and artificial intelligence through exceptional education, groundbreaking research, and impactful knowledge transfer. At FCMS, students can explore a full spectrum of degree programmes designed to integrate the strengths of applied mathematics, computing, data science, and AI. As a vibrant hub for interdisciplinary collaboration and innovation, the Faculty is committed to driving technological advancements that benefit society at large.

Department of Applied Mathematics (AMA)

As one of the three constituent departments under FCMS, AMA is committed to excellent teaching and research in Applied Mathematics. With leading expertise in computational mathematics, scientific engineering, differential equations, financial mathematics, applied statistics, optimization, and management science, we are committed to passing on our knowledge to future generations and benefiting society and humanity.

With this mission in mind, we offer a broad range of high quality academic programmes, which are designed to groom graduates with sound mathematical, analytical and communication skills for different employment niches:

- **BSc (Hons) Scheme in Applied Mathematics and Finance Analytics (63430 / JS3220)**
- **Minor in Applied Mathematics (63430-YAM)**
- **MSc in Actuarial and Investment Science (63032)**
- **MSc in Operational Research and Risk Analysis (63024)**
- **MSc in Mathematics for Artificial Intelligence Technology (63031)**
- **MSc in Quantitative Finance and FinTech (63029)**
- **MPhil / PhD in Applied Mathematics**

Bachelor of Science (Honours) Scheme in Applied Mathematics and Finance Analytics

This 4-year full-time Scheme programme is designed to nurture future finance analytics, FinTech professionals, and applied mathematicians with solid training in mathematical and statistical skills coupled with computer programming techniques, with a special emphasis on interdisciplinary applications in investment and finance. This Scheme integrates key finance analytics, quantitative finance and FinTech elements as well as essential mathematical and statistical training, preparing students for pursuing careers in the evolving digital finance landscape or furthering their studies in related fields.

The Scheme is composed of three credit-based 4-year full-time undergraduate programmes. Students may choose between three majors upon completion of the first year of study:

Bachelor of Science (Honours) in Applied Mathematics (AM)

This programme aims to equip students with solid knowledge in mathematics, statistical analysis, computational methods, mathematical modelling, optimization, operations research, and differential equations. It is suitable for students who intend to further their studies or pursue their careers in education, research and other sectors.

Bachelor of Science (Honours) in Investment Science and Finance Analytics (ISFA)

Focusing on the strategic use of data and mathematical modelling in performing financial analysis and investment decision-making, this programme aims to cultivate investment and finance professionals with strong quantitative analysis, critical thinking, and communication skills. It prepares them for careers in various finance sectors, including investment banking, fund management, risk management and financial product development and pricing.

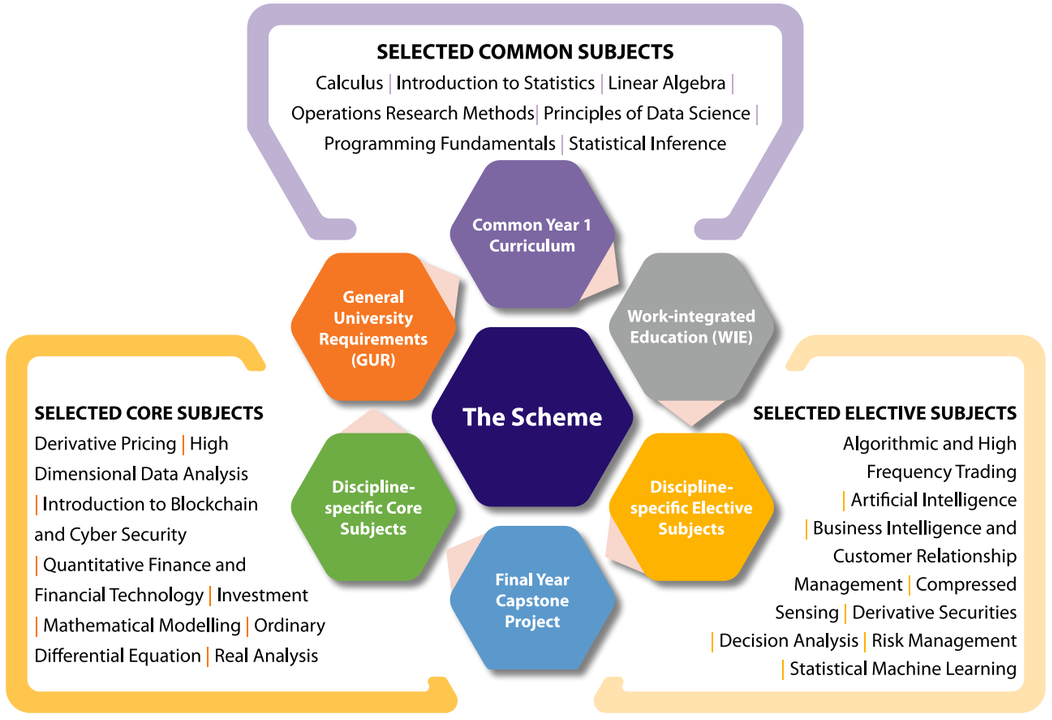
Bachelor of Science (Honours) in Quantitative Finance and FinTech (QFFT)

This programme focuses on the strategic use of IT technology to integrate FinTech elements such as blockchain technology, information security, algorithmic trading, robo-advising, deep hedging, and various applications of machine learning and reinforcement learning in finance.

General Programme Information

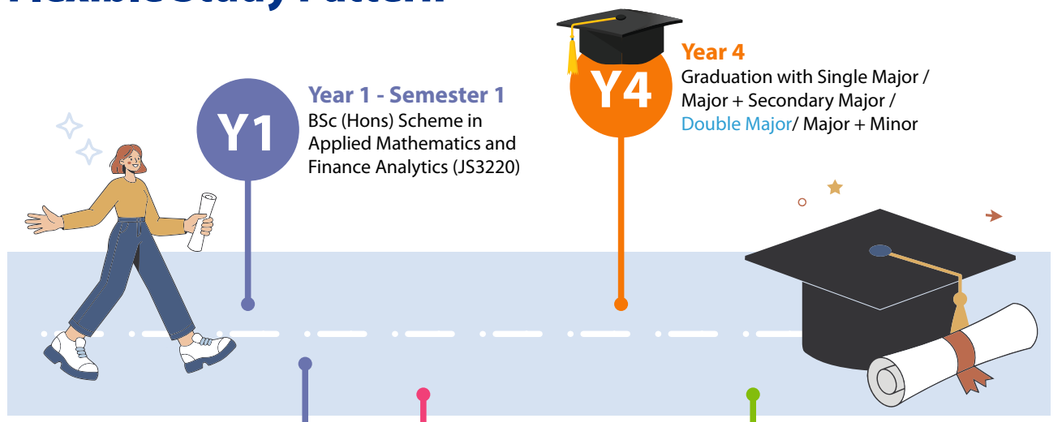
	JUPAS Intake	Senior Year
Programme code	63430	63430-SY
JUPAS code	JS3220*	NIL
Mode of study	Full-time	Full-time
Normal duration	4 years	2 years
Intake quota for local students	~19	13
Credits required for graduation	At least 120 credits (plus 2 training credits)	Normally 70 credits (depending on students' entry qualification) (plus 2 training credits)

Programme Structure



** Remark:*
In addition to applying directly to the Scheme, applicants interested in our three majors can also apply for the Bachelor's Degree Scheme in Computer and Mathematical Sciences (JS3006). After completing the first year of study, students can choose one of our three majors: AM, ISFA or QFFT. For more details about JS3006, please scan the QR code.

Flexible Study Pattern



AMA COMP DSAI

Single Major — 01
1. Applied Mathematics (AM)
2. Investment Science and Finance Analytics (ISFA)
3. Quantitative Finance and FinTech (QFFT)

Major + Minor — 02
AM / ISFA / QFFT + Minor

Major + Secondary Major — 03
AM / ISFA + Artificial Intelligence and Data Analytics

Double Major (AMA + COMP/DSAI) — 04

AM	+	• Artificial Intelligence^ ; or • Artificial Intelligence with Financial Technology; or • Computer Science; or • Enterprise Information Systems
ISFA	+	• Artificial Intelligence^ ; or • Artificial Intelligence with Financial Technology; or • Computer Science; or • Enterprise Information Systems
QFFT	+	• Artificial Intelligence^ ; or • Computer Science; or • Enterprise Information Systems

^ *The programme is offered pending approval.*

Fast-track Programme (5 yrs) — 05
- BSc (Hons) in Applied Mathematics + **MSc in Operational Research & Risk Analysis**
- BSc (Hons) in Investment Science and Finance Analytics + **MSc in Quantitative Finance and FinTech**
- BSc (Hons) in Quantitative Finance and FinTech + **MSc in Quantitative Finance and FinTech**

ENTRANCE REQUIREMENTS

Local applications via the Joint University Programme Admission System (JUPAS)

International applications

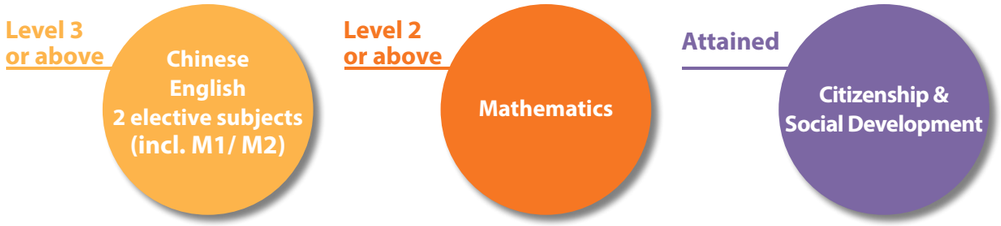
BSc (Hons) Scheme

Non-local applications with Joint Entrance Examination (JEE) qualifications

Local applications with other qualifications

Admission to 4-year Programme

For JUPAS applicants with Hong Kong Diploma of Secondary Education (HKDSE) qualifications, they must satisfy the General Entrance Requirements of PolyU:



For non-JUPAS and non-local applicants, the University will consider other qualifications as being equivalent to the specified entrance requirements on their individual merits. Please visit our website for details.

Admission to 2-year Programme (Local Senior Year Admission)

Eligible applicants should hold an appropriate Associate Degree or a Higher Diploma in Statistics, Information Technology, Engineering, Science or Business or similar qualification from a recognised institution. Suitable candidates will be considered for advanced standing entry to the senior year curriculum.



Interview

The interview aims to test the potential for and interest of applicants in the programme, and their communication skills and general knowledge in the field of study.

For HKDSE applicants:
Selected applicants will be invited to attend an interview prior to the announcement of HKDSE result.

For other applicants:
Selected applicants will be invited to attend an interview.

Scholarship

To recognize outstanding students admitted to our full-time undergraduate programmes, the Department offers entrance scholarship for local students with outstanding performance in HKDSE and/ or in their previous AD/ HD studies.

Professional Recognition

Upon the completion of programme, graduates with the major in BSc (Hons) in Investment Science and Finance Analytics are expected to receive partial exemption from the professional assessment of:

- Hong Kong Securities and Investment Institute
- Hong Kong Statistical Society
- Royal Statistical Society of UK

The ISFA programme is affiliated with the CFA Institute University Affiliation Program. This affiliation demonstrates that the ISFA curriculum is closely tied to professional practice and well-suited to preparing students to sit for the CFA examinations. The curriculum has been acknowledged as covering at least 70% of the CFA Program Level I Candidate Body of Knowledge (CBOK) topics. Through participation in the affiliation program, CFA student scholarship is available to ISFA students. Please visit our website for details.

University Affiliation Program CFA Institute®

EXCELLENT CAREER PROSPECTS

Our programmes are designed to meet the growing market demand of professionals who possess a unique blend of finance knowledge and advanced analytical skills. Our focus on mathematics, statistics, and computer programming skills represents a holistic approach to training future finance analytics professionals and applied mathematicians.

In the past decade, the Department of Applied Mathematics has groomed thousands of graduates and most of them have found employment in prestigious and renowned corporations throughout the Asia-Pacific area. They have applied their professional knowledge and developed excellent career path in various industries:

- ✓ Commercial and Investment Banks
- ✓ Securities Institutions
- ✓ Asset Management Companies
- ✓ Regulatory Authorities
- ✓ Trading Platform Providers
- ✓ Insurance Companies
- ✓ Accounting/Auditing Firms
- ✓ Marketing Research Companies
- ✓ Information Technology Solution Providers
- ✓ Database Management Service Companies

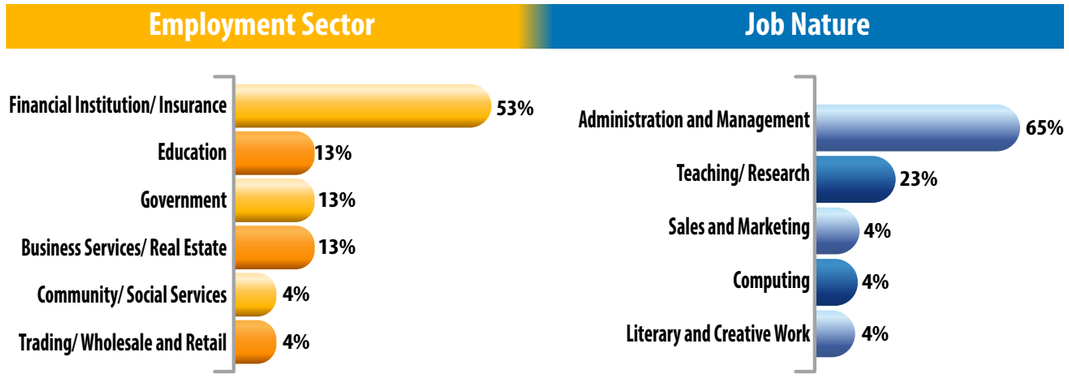
Some of the organizations where our graduates land their dream career:

JPMorgan Chase & Co. · State Street · Julius Bär · 野村證券 Nomura · IBM · Deloitte. · HSBC · J.P.Morgan · EY Building a better working world · KPMG · BNP Paribas · 中国移动 China Mobile International · CIBC · 中國銀行(香港) Bank of China · 中国建设银行(亚洲) China Construction Bank (Asia) · 恒生銀行 Hang Seng Bank · Standard Chartered · DBS · 交通銀行 Bank of Communications · nielsen · Swire Pacific · Hong Kong Monetary Authority 香港金融管理局 · HKEX 香港交易所 · Hysan 希慎 · Lenovo · PCCW Solutions · citibank · Hospital Authority · Wells Fargo · Bloomberg · Census and Statistics Department The Government of the Hong Kong Special Administrative Region



GRADUATE EMPLOYMENT STATISTICS#

Investment Science and Finance Analytics



Further Study

Our programmes not only support graduates to land dream jobs in notable companies, but also pave the way for advance education. Upon graduation, a number of our students pursue further study in world-class Universities:

Columbia University · University of Oxford · McMaster University · LMU Ludwig-Maximilians-Universität München · Imperial College London · University of Waterloo · University of Toronto · Yale University · Universität Heidelberg Zukunft seit 1386 · Harvard University · NYU Tandon School of Engineering · Rice Unconventional Wisdom · Stanford · ETH zürich · University of Leeds · Cornell University



Basis on the result of Graduate Employment Survey released in July 2026

ALUMNI SHARING

Graduates of BSc (Hons) in Investment Science/ Investment Science and Finance Analytics



Elvis Wong
Standard Chartered Private Wealth Management

The Investment Science programme helped me develop analytics and problem solving skill which has laid a strong foundation for my career development.



Jenna Ho
CitiBank

This programme integrated both mathematical and financial knowledge. I'm well prepared to establish insight through analyzing data and pursue career in the banking industry.



Edward Yeung
Silverbricks Securities Co. Ltd.

Having the chance to practice and gain hands-on experience on the renowned Bloomberg Terminal gave me an edge in landing my career in the financial industry.



Heidi Wan
Teacher

Studying in AMA is an unforgettable experience to me. Exchange and internship opportunities were always open for us to strengthen our learning experience and help us find our true selves. Many of us have found our career paths by taking internship.



Zhuang Yufan
Google Cloud AI Research

AMA's professors are very enthusiastic. PolyU has a solid and extensive alumni network which greatly facilitates students' career planning. Thanks to PolyU and AMA, I have had a lot of opportunities to explore and develop my interest liberally during my undergraduate study period.



Alice Anmaria
PhD student
The Hong Kong Polytechnic University

My study journey at AMA has been truly transformative. The dynamic curriculum in mathematics, finance, accounting, and computing equipped me with versatile skills and opened doors to diverse opportunities. Research assistantships, STEM internships, and an exchange at Singapore Management University enriched my experience, while AMA's supportive environment encouraged active extracurricular involvement.



Eurus Lam
The Bank of East Asia

The Investment Science and Finance Analytics programme provided a solid foundation in finance and mathematics, enabling me to analyze financial trends and make informed decisions. It has also fostered my understanding of the importance of digital transformation in the financial industry, allowing me to navigate the evolving landscape with confidence.



Kelvin Ng
HKEX

Graduated from Investment Science and Finance Analytics, I gained skills in Mathematics, Finance, and Computing, thriving as a Graduate Associate at HKEX. AMA's comprehensive resources enhanced my professionalism through lectures, entrepreneurship, community service, internships, and research projects.



So Tze Yau
AXA China Region Insurance Company

AMA programme offers a comprehensive curriculum that encompasses statistics, finance, and computer programming, equipping me with practical skills applicable to data analysis. My University life has been both memorable and challenging. Through academic studies, exchange experiences, and work opportunities, I have experienced personal growth and enhanced problem-solving skills.



Zhang Xingyue
AVNU

The IS programme is a perfect blend of statistics, programming, and finance, definitely helpful for my future study and career. The courses prepared me for pursuing further study in Data Science. Our department would also offer us research opportunities and keep us posted for any update on the career market.



Xia Yawen
Postgraduate student
Cornell University

AMA's professors helped me realize my potential in academia and industry, deepening my understanding of mathematics and finance while fostering resilience and confidence. The programme's resources and international experiences broadened my horizons, and workshops in Bloomberg, Python, and SAS further enhanced my practical skills for future challenges.



Nancy Dong
PhD student
University of Maryland, College Park

Beyond the classroom teaching, we have ample learning opportunities, e.g. internship, exchange and academic research, providing us an exceptional platform to achieve both academic and personal growth, while also fostering an international perspective.

WORK-INTEGRATED EDUCATION
(Local and Overseas Internship)

PolyU emphasizes practical training and the integration of classroom theory with workplace application. All undergraduate programmes include a mandatory Work-Integrated Education (WIE) component. AMA students are required to complete at least 120 hours of internships, either locally or overseas, related to their field of study. These internships provide hands-on experience, enhancing professional competence, independent thinking, communication skills, and a global outlook.

























STUDENT EXCHANGE

Participating in an exchange study is both exciting and life-enriching. To foster global citizenship and promote academic and cultural exchange, we encourage students to actively engage in opportunities beyond the school campus. Our students returning from overseas exchanges gain valuable experiences and develop fresh perspectives on the world and their future.





































BEYOND CLASSROOM ACTIVITIES

To facilitate students' learning and enhance their all-round development, the Department organizes various activities beyond classroom.

COMPANY VISIT




STUDENT LEARNING TOURS










ALUMNI-STUDENT NETWORKING EVENTS





CAREER TALK AND TRAINING









ENQUIRY

Email: amfa.info@polyu.edu.hk

Website: www.polyu.edu.hk/ama/study/ug/amfa/