THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

DEPARTMENT OF APPLIED MATHEMATICS
應 用 數 學 系

TOGETHER, WE CREATE FUTURE LEADERS!

▸ Bachelor of Science (Honours) in Investment Science
▸ Bachelor of Science (Honours) in Data Science and Analytics
▸ Master of Science in Operational Research & Risk Analysis
▸ Master of Science in Applied Mathematics for Science and Technology
(Specialisms: 1. Decision Science 2. Actuarial and Investment Science)

▸▸▸ Invitation to offer internships and graduate employment opportunities

> " We, the Department of Applied Mathematics of The Hong Kong Polytechnic University, are dedicated to offering you effective ways and channels to facilitate your recruitment of the best candidates for permanent, part-time, temporary or summer internship positions. "

Our Department's academic programmes are designed to produce graduates with professional knowledge and skills in mathematics and statistics, finance and investment science, data analysis, and operational research relevant to decision making and practical problem solving in different industries.

Academic Programmes	We train graduates with…
Bachelor of Science (Honours) in **Investment Science**	Strong mathematical and statistical skills and the abilities in quantitative analysis and critical thinking which support graduates to pursue careers in investment banking, fund management, risk management or financial product development and pricing.
Bachelor of Science (Honours) in **Data Science and Analytics**	Expertise that cuts across core disciplines of mathematics, statistics and computer science, which enables them to pursue a variety of careers such as finance, telecoms, information technology, market research, manufacturing and pharmaceuticals.
Master of Science in **Operational Research and Risk Analysis**	Strong operational research, risk analysis and statistical skills and a thorough understanding of their applications in the world of modern operational research and risk analysis, which help them pursue careers in the fast moving world of business, commerce, finance and insurance.
Master of Science in **Applied Mathematics for Science and Technology** Specialisms: 1. Decision Science 2. Actuarial and Investment Science	Graduates from the Decision Science Specialism possess theoretical and practical knowledge in statistics, operations research and scientific computing, which lay a solid foundation as professionals in engineering, finance and management. Graduates from the Actuarial and Investment Science Specialism possess solid foundation of actuarial and investment science, which allow them to become leading professionals in these areas.

NURTURE
YOUNG TALENT
AT WORK

Student Internship Programme

To equip students with professional competence, the ability of independent thinking, effective communication skills and a global outlook, our students of Bachelor of Science (Honours) in Investment Science AND Bachelor of Science (Honours) in Data Science and Analytics are expected to take placement or internship that are related to their academic studies (i.e. statistical analysis, software development, market research, business intelligence and data analysis, investment, consultancy, operations research, logistics, supply chain management etc.).

Depending on their study mode and workload, students could complete the internship during summer break, or take up part-time assignments of at least 120 hours.

PolyU's Graduates are ready to contribute to your team success

The Hong Kong Polytechnic University, with a proud and illustrious history, is committed to offering high quality education with a strong focus on application-based nature, aiming to groom students with professional knowledge to meet different needs of the society. Our graduates are well equipped to meet the challenges of their future careers.

Platform to Recruit Top Talent on Campus

In PolyU, we are dedicated to groom high calibre graduates who are also the potential future leaders. You are most welcome to contact us for:

- **On-campus Recruitment**
  Through on-campus recruitment talks, you can interact directly with our students and introduce the details of your recruitment needs to them.

- **Student Internship Programme**
  Be a partner in our Work-Integrated Education initiative and offer internship opportunities for students to apply classroom learning in a real work environment. You can also identify potential new staff and help nurture young talents in a cost and time-effective manner.

- **Free Job Posting**
  Through the free job posting service in our intranet, you can reach your target students/our fresh graduates, who possess the necessary professional knowledge and skills to become your employees or interns.

Our roles to support you on recruiting talents
- Free Job Posting Services
- Screening and Short Listing of Candidates
- Mediation and Consultation to both Students and Partner Placement Organizations

Benefits to employers:
- Your company gains publicity as a socially caring and responsible firm in the tertiary education sector;
- You may find many of our students hard-working, with a passion to develop a career in investment/market research/finanical industry;
- Our placement students may bring in new ideas and skills to your organization;
- We provide cost-effective intern/ trainee recruitment and you may be able to identify some potential, future, permanent employees through the placement programme.

Whether you require on-campus recruitment, or simply want to publicize your part-time/internship/job opportunities, we can work closely with your organization and help develop a tailored recruitment strategy.

- Simply send an email with your job descriptions / requirements to **alice.kwong@polyu.edu.hk**

- fax to **2764 4382** ; or

- Call us direct at **2766 6934**

STUDENT STORIES

Alex Wong
Sport Statistics Scientist and Marketing Intern at NBN23, Spain

"Last summer, I went to Spain and worked as a Sport Statistics Scientist and Marketing Intern in NBN23, a sports data company that generates value transforming big data into smart data for sports, especially in basketball. During the internship, I not only assisted the marketing team to translate the webpages, apps and company documents from English or Spanish to both simplified and traditional Chinese, but also developed the statistic algorithms for determining interesting patterns from large datasets. It was the most unforgettable experience for me as I could explore my career possibilities from different aspects and enhance my data analytics knowledge through the internship, which is undoubtedly beneficial to my future career."

Evan Zhuang
Intern at Bean Partners, United Kingdom

"My greatest accomplishment during this internship is that I built a comprehensive database consisting of more than 30,000 worldwide investors' information that I extracted with python and NLTK (Natural Language Tool Kit). This is my latest breakthrough in statistical learning. This idea is born out of my tiredness of the boring investors searching process through LinkedIn and other platforms. One day I suggested to my supervisor, 'why don't we consider using a programme to extract all the information we need from the Internet?' Luckily, my suggestion was adopted and it took me about two weeks to set up the project from scratch. I am excited that I can apply what I have learnt in the classroom and change the way my placement company works. It enhances my confidence when embarking on my future career."

Yanna Cheung
Intern at Census and Statistics Department, HKSAR

"My internship in the Census and Statistics Department was a valuable experience for me to get myself prepared for the future career. Working as a research intern, I was assigned to conduct a comparison report, which was related to the census questionnaire of Hong Kong and other countries such as United Kingdom, Canada and Singapore. To complete the tasks, I had to apply the statistics and economics knowledge that I learnt from my study. My supervisor, an experienced statistician, always shared with me his working experience and gave me a lot of inspiration. Such practical work experience helps me set a clear goal for my future career."

Sheena Shi
Internship at KPMG

"I worked as a trainee at KPMG, which was really a memorable experience to me. Not only did I get familiar with the workflow of auditing, but I was also given the opportunity to work with the clients, enabling me to enhance my communication skills. Through working with the professionals, I realized that teamwork is vital for moving ahead in a very competitive business world. The experience of working for big company will definitely give me the confidence to succeed in my future career."

Sylar Tsui
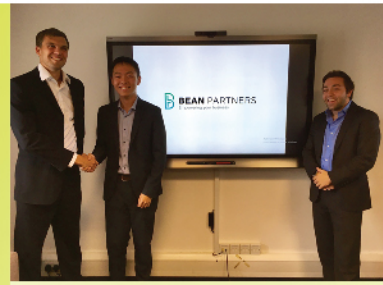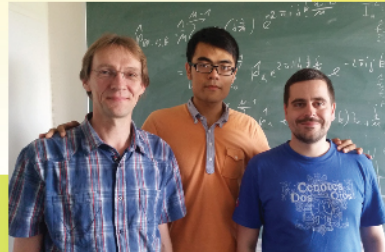*Data Analyst Intern at Burger King, Russia*

"Last summer, I went to Russia and worked as a Data Analyst Intern. I was assigned to find out the best gross margin of a restaurant in a particular time, using mathematical method and statistical software. Although I did not have much experience in handling such a large amount of fussy data in a real work setting, I could finish the task by using K-means clustering and achieved a very effective performance throughout the work period as commented by my employer. This internship not only enabled me to discover my potential and interest in finance and investment, but also gave me confidence in developing my career in this industry after my graduation."

Michael Lam
Summer Intern at OCBC Wing Hang Bank

"I am glad that I could have the opportunity to participate in the financial risk-based project during my internship. I not only learned how to prepare credit proposals, but also have the chance to know more about the procedures of purchasing property through lending from banks. This internship induces my interest in residential mortgage and I find that the competition between banks in the business of mortgage loan is far more vigorous than I expected. I am thankful to OCBC Wing Hang Bank for offering me such an invaluable chance."

"By the end of the internship, I successfully compiled a 45-page report to record the ideas, implementations and results from the machine learning project and all other experiments conducted. At the time of my leaving, I delivered sincere appreciation to my supervisors, Prof. Dr. Daniel Potts and Dr. Toni Volkmer, for their kind guidance and patience. The internship is to be a remarkable point in my life. It not only gives me hands-on technical working experience, but also an inspiration of problem solving methodology and a pre-sight of my future career path."

Coulson Li
Trainee at TU Chemnitz, Germany

"The focus of my internship was, firstly, on efficiency enhancement and optimization of the simulation model; and secondly, on simulations and analysis of the model. After the simulation, interns may have an opportunity to write a scientific paper for their work if a new result or technique is found. Through this internship, I gained practical knowledge and skills, which are extremely important to my study and future career development. More importantly, some unexpected result of my work has granted me an opportunity to publish a scientific paper! This internship experience has totally changed my perception towards research work. It is not as boring as I expected. Instead, it could be interesting and challenging. This internship opportunity has inspired me to pursue further study in Germany."

Tony Leung
Intern at Sun Hung Kai Real Estate Agency Ltd

"During the internship, I have learned how to generate accurate statistical data and prepare the post-event reports. Although I was equipped with statistical skills in my study, it was not that easy as I thought when I was assigned to prepare a formal statistical report in a real work setting. Thanks for the guidance from my supervisor, both my report writing and presentation skills have improved a lot. It's really a fruitful experience for me to work as an intern in this company."

Charlotte Ng
Marketing and Research Intern at Aristo

"It was a great opportunity for me to acquire work-based learning in Aristo. During the internship period, my supervisor provided me with a valuable chance to set the topic and design a quantitative questionnaire to collect commercial data. It helped train-up my creativity and sense of doing the research projects. I really enjoyed my time in Aristo and the practical experience I have gained through the internship makes me more confident to develop my career in the field of data analysis after graduation."
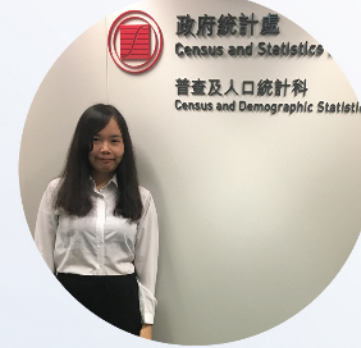
Kingsley Chung
Intern at Yuanta Futures, Taiwan

"It was a treasurable experience for me to take an internship in Yuanta Futures. I not only applied the financial knowledge that I have learnt from classroom to workplace, but also gained a deeper understanding of the background of options and futures products in the financial industry. I am glad that both my hard and soft skills have been enriched during this 8-week internship. I have decided to develop my career in the banking industry after my graduation."

Steven Tang
Research Intern at University of Oldenburg, Germany

Man Kuen Lam
Intern (Investment Banking Division) at China Merchants Bank, Shanghai

"The company provided chances for me to learn many new skill sets when dealing with the practical projects. During my internship, I was assigned to write an introduction for a project with statistical support within two weeks. It was a great challenge for me but I finally did it and the report ended up having more than 70,000 Chinese words. Due to my satisfactory performance, the manager allowed me to join many meetings and talks that involved different levels of officers and directors. It enhanced my interpersonal skills that are definitely useful to my future career and aroused my interests in the fields of asset management as well as merge and acquisition."

Ken Cheung
Internship at MVA

"During my internship at MVA Hong Kong Ltd, I was well trained in manipulating and analyzing survey data by using statistical software. I also have a deeper understanding of the work of research consultants. It was really a valuable experience as I could transfer the classroom knowledge to the world of practice. I would like to thank my supervisor and colleagues as they always provided guidance and shared with me their practical experience at workplace. I will make use of this fruitful internship experience to plan for my future career."

"Having joined the market risk team as an intern in Financial Services Risk Management Department of EY last summer, I worked closely with the clients and was engaged in the Interest Rate Risk In The Banking Book (IRRBB) project for one of the local banks in Hong Kong. From the intensive work and training, I learnt a lot every day. The job nature was closely related to what I have learnt from the Investment Science programme in the past three years, including statistical modeling, SAS programming, option pricing and so on. We worked as a team including my seniors and managers to solve challenges from our clients, which is critical in this industry. I felt that I was really engaged into the team, not just as an intern. The experience was so valuable and it was definitely a great exposure for my future career development."

Chester Cheng
Ernst & Young (2nd from the left)