Bachelor of Engineering Programme in Systems Engineering and Engineering Management
系統工程與工程管理學工程學士課程

Empower with Managerial Vision
What SEEM does
項目宗旨

The Bachelor of Engineering in Systems Engineering and Engineering Management (SEEM) trains students to utilize technologies (such as machine learning, big data analytics, and artificial intelligence) and mathematical tools (such as optimization, stochastic modeling, and simulation) to tackle decision-making problems for businesses including, but not limited to,

- financial investment decisions and risk management
- developing, pricing, and risk analysis of new financial products
- designing the supply chain network for global business
- developing, supporting, managing, and maintaining information systems and apps for data-intensive business applications
- dynamic pricing for the airline industry or e-commerce platforms
- large-scale route planning and scheduling in logistics systems
- patient flow management in healthcare systems
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Admission Requirements
入學要求

Applicants applying on the strength of the HKDSE examination results will be admitted through the Joint University Programmes Admissions System (JUPAS) (JUPAS Code - JS4458). Please visit the JUPAS website (www.jupas.edu.hk) for eligibility and details of JUPAS application.

Non-JUPAS applications are strongly encouraged.
Streams of Specialisation

Business Information Systems
商務資訊系統

The core of any enterprise in a knowledge-based society

- Software engineering for knowledge-based information processing
- Computational intelligence for decision making
- User interface technologies and design
- Information security and authentication

Decision Analytics
決策分析

The application of quantitative approaches and information technologies to solve financial problems

- Decision methodology and applications
- Financial decision and asset pricing models
- Financial markets and risk management
- Investment analysis and portfolio management

The strategic and operational nexus of a successful business

- Quality control and management
- Logistics systems planning
- Production and operations management
- Supply chain management: Analysis and coordination

An interdisciplinary approach to develop complex systems connecting people and technologies

- Service systems
- Service computing
- Service management
- Electronic payment systems
Alumni Sharing

Benson Ng
Graduation year: 1996
Current status: Ernst & Young, Hong Kong Business Consulting Leader

I lead EY’s business transformation consulting for Hong Kong to help clients build a better working world by realizing transformations through the power of people, technology, and innovation. My SEEM undergraduate and postgraduate experience back in 1992-8 was inspiring and highly enjoyable, especially the collaboration experience with professors and colleagues during projects. In retrospect, the SEEM programme helped me build the ability and confidence to tackle disruptive problems through research, and a broad exposure across multiple engineering disciplines from computer engineering and electronic engineering to industrial engineering. Both are key to my consulting career in helping clients with digital transformations.

BU Qianqian
Graduation year: 2018
Current status: Goldman Sachs, Associate

It was a great experience for me to study at SEEM. The programme designed a wide range of subjects for undergraduate students to learn. The department also provided resources that helped students with their academic and career development. After graduating from SEEM in 2018, I joined the Securities Lending Technology team at Goldman Sachs. I work in a dynamic trading environment in the front office, and my job is to design and build technical solutions for the securities lending business. The training provided by the SEEM programme not only helped me gain knowledge in finance, mathematics, and computer science but also improved my problem-solving and analytical skills. These skills allowed me to quickly adapt to the job and perform my duties at the start of my career.

I hope you all enjoy your time at SEEM.

Chan Chun Yin Johnny
Graduation year: 2012
Current status: Alibaba UK, Senior Developer

Currently, I am working in London as a senior developer at Alibaba UK. I am responsible for part of the Alipay B2B transaction functionalities.

After graduating from SEEM in 2012, I worked in different places, such as Hong Kong, mainland China, Germany, and the UK. My IT skills have provided me with great mobility to work around the globe. I am grateful for the training provided by SEEM, which helped me build a solid foundation for my IT career. Even though I have graduated 10 years, I still use the IT knowledge I learned from SEEM in my daily work.

I am glad that I put SEEM as my first choice in JUPAS. Without my SEEM background, I would not be in the place where I am now. Happy 30th Anniversary, SEEM!
With a curriculum closely related to the four pillar industries (finance, trading and logistics, professional service, and tourism) in HK, SEEM program keeps the graduates very competitive in the job market. After graduation, some students of the program have joined leading firms like AIA, Bank of China, Cathy Pacific Airways, FedEx, HSBC, IBM, PCCW, The Hong Kong SAR Government, and so on.

SEEM program graduates will be ideally suited for positions requiring strong engineering background (in technologies like AI and in mathematics like mathematical modeling) and a comprehensive understanding of the business management environment. Our graduates are very competitive for jobs such as

- Asset and wealth management (e.g., data-driven investment strategy design)
- Information Technology consulting (e.g., provide guidance on technology to companies to meet their business demands)
- IT Companies or IT service roles in banking or e-commerce companies (e.g., develop, support, manage, or maintain the IT system in these companies)
- Supply chain system management in e-commerce (e.g., use data analytics to predict the demand and hence determine the inventory level)
- Dynamic pricing for a broad class of industries (e.g., real-time pricing for flight tickets by incorporating customer behaviors)
- Healthcare systems management (e.g., appointment scheduling for surgeries)
- Operational analyst for logistics companies (e.g., using optimization models to improve the operations in logistics systems, such as route planning and scheduling)

**Career Placements in Recent Years**

近年畢業生的就業概況

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<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Logistics &amp; Operations</td>
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<tr>
<td>Management &amp; HR</td>
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<tr>
<td>Consultancy</td>
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<td>Sales &amp; Marketing</td>
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<td>Education</td>
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<td>Research</td>
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<td>Finance &amp; Accounting</td>
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<td>Information Technology</td>
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<td>Others</td>
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