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

最早於香港提供綜合技術與管理的學系
課程設計緊扣香港經濟支柱行業的需要
教授隊伍在學術領域享譽盛名
教研設施達世界一流水準

Empower
with Managerial Vision

SEEM

DEPARTMENT OF SYSTEMS ENGINEERING AND ENGINEERING MANAGEMENT

香港中文大學
The Chinese University of Hong Kong

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

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
專修範圍

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   知識及信息處理的軟件工程
- Computational intelligence for decision making   決策分析中的計算智能
- User interface technologies and design   人機界面的技術及設計
- Information security and authentication   信息保安及確証

Decision Analytics
決策分析

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

- Decision methodology and applications   決策方法及應用
- Financial decision and asset pricing models   金融決策及定價模型
- Financial markets and risk management   金融市場及風險管理
- Investment analysis and portfolio management   投資分析組合管理

The strategic and operational nexus of a successful business

- Quality control and management   品質控制與管理
- Logistics systems planning   物流系統策劃
- Production and operations management   生產和營運管理
- Supply chain management: Analysis and coordination   供應與需求鏈之分析和協調

An interdisciplinary approach to develop complex systems connecting people and technologies

- Service systems   服務系統
- Service computing   服務計算學
- Service management   服務營運的管理
- Electronic payment systems   電子支付系統

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!

Career Prospects
畢業生就業概況

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
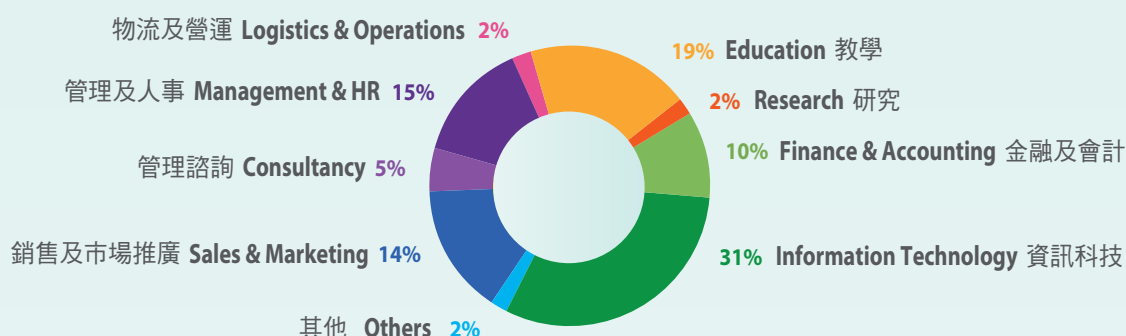
由於與香港四大支柱產業（貿易及物流、金融服務、專業服務和旅遊）結合緊密，系統工程與工程管理項目的畢業生於就業市場上非常有競爭力。部分學生畢業後，加入了傑出公司如友邦保險、中國銀行、國泰航空、聯邦快遞、滙豐銀行、IBM、電訊盈科、香港政府機構等等。

系統工程與工程管理項目的畢業生非常適合需要深厚的工程背景（專注於人工智能等技術及數學建模等數學領域）和對商業管理環境有全面了解的職位。我們的畢業生在工作方面非常有競爭力，例如

- **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

物流及營運 **Logistics & Operations** 2%

管理及人事 **Management & HR** 15%

管理諮詢 **Consultancy** 5%

銷售及市場推廣 **Sales & Marketing** 14%

其他 **Others** 2%

19% **Education** 教學

2% **Research** 研究

10% **Finance & Accounting** 金融及會計

31% **Information Technology** 資訊科技

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**Department of Systems Engineering
and Engineering Management
系 統 工 程 與 工 程 管 理 學 系**