

# Bachelor of Engineering in Decision Analytics



MAKING  
**SMART**  
DECISIONS

## Financial Engineering

- Data-Driven Portfolio Optimization
- Financial Engineering
- FinTech
- Financial Service Operations Management
- Systems Risk Management

OR

## Consulting Services

- Demand and Supply Analytics
- Dynamic Pricing & Revenue Optimization
- E-Commerce
- Integrated Production Systems
- Service Engineering & Management
- Supply Chain Management



### Major Core

#### Engineering Fundamentals

Calculus &  
Programming

+

- Engineering Economics & Accounting
- Industrial Data Systems
- Integrated Production Systems
- Microeconomics
- Predictive & Prescriptive Analytics
- Probability & Statistics for Engineers
- Stochastic Models
- System Simulation

+

University  
Core  
Education

+

Industry-  
sponsored  
Final Year  
Thesis/Project

\*We offer a flexible curriculum where students can declare their areas of specialization as early as their second year of study.

### Industrial Engineering and Decision Analytics (IEDA) is...

Engineering of **making smart decisions** based on **domain-specific knowledge, data, model** and **analysis**.

### Decision Analytics is ...

A systematic, **quantitative** and visual approach to make strategic business decisions with the emphasis on using **real-world / real-time data** and **statistical tools**.

### Consulting Services is...

A broad area including revenue management, dynamic pricing, service operations planning and capital allocation.

### Industrial Engineering is ...

**Optimizing** and **streamlining** various processes and systems to result in **efficient** and **effective** outcomes.

### Financial Engineering is...

An **interdisciplinary** subject which applies **quantitative tools** & **engineering methodologies** to solve finance-related problems including the design and pricing of financial options.



# Local Networking · Global Exposure

## Mentorship Program

Keep abreast of the industry trends and expand your professional network by getting in touch with successful industry leaders and IEDA alumni!

## International Exchange Program

Gain international exposure and broaden your horizons by taking part in the School of Engineering Exchange Program where you have chance to study in one of the top-notch engineering institutes across the globe.

## Internship Program

Earn practical working experience and better pave your career path by working as a summer intern or one-year placement in sizable companies.

## Case Competitions

Sign up for industry-sponsored contests to challenge yourself in applying theoretical knowledge into real-life business problems.

## Program Features

- ◆ Top engineering school in Hong Kong (QS World University Rankings by Subject 2021)
- ◆ State-of-the-art and flexible curriculum
- ◆ To be accredited by the Hong Kong Institution of Engineers (HKIE)

## Exciting Career Opportunities

Our graduates will possess strong analytical skills as well as the ability to develop algorithms and simulation models for decision-making, launching a successful career as manager, engineers, consultants and analysts in a wide range of industries in the knowledge economy, including:



### BANKING AND FINANCE

• Goldman Sachs, Morgan Stanley, Credit Suisse, ...



### E-COMMERCE

• Alibaba, Amazon, ...



### INFORMATION TECHNOLOGY

• Apple Inc., Cisco, IBM, ...



### TRAVEL AND LEISURE

• Cathay Pacific, Swire, ...



### CONSULTING FIRMS

• Accenture, Arup, McKinsey, TQM Consultants, ...



### HEALTH-CARE

• Johnson & Johnson, Walgreens Boots Alliance, ...



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