

INDUSTRIAL ENGINEERING AND DECISION ANALYTICS

What is Industrial Engineering & Decision Analytics (IEDA)?

Industrial Engineering and Decision Analytics (IEDA) is the active and dynamic discipline of advanced scientific management - it is also known as the engineering of making smart decisions.

The Hong Kong economy is now transforming towards one that is increasingly knowledge-based. To equip students with future trends and industry requirements, our programs are adapting a modern, Decision Analytics approach. Our UG curriculum includes predictive and prescriptive analytical tools, as well as domain specific knowledge in areas ranging from operations planning and scheduling to transportation systems and policies, from supply chain management to quality control, and from financial engineering to consulting.

Graduates will have strong analytical skills as well as the ability to develop algorithms and simulation models for decision-making in design / management / operations of modern enterprises, and to provide optimal solutions to decision problems in logistics, production, and service operations, driven by real-world data.

Enrichment Programs

- Overseas Exchange
- Summer & Year-long Internships
- Mentorship Program
- Industry-sponsored Contests
- Fast-track Admission to IEOR MS Programs in Columbia University

Curriculum Highlights

BEng in Decision Analytics

- Financial Engineering
- Financial Engineering - FinTech - Financial Service Operations - Systems Risk Management

Engineering

- Calculus &

Core

Fundamentals

- Consulting Services Analytics - Dynamic Pricing &
- E-Commerce Integrated Production Systems - Service Engineering and

Major Core

- Demand and Supply Revenue Optimization

Management

- Supply Chain Management

- Integrated Production

- Microeconomics

- Engineering Economics - Predictive &

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

Prescriptive a
Prescriptive Analytics

University Core

Final Year

BEng in Industrial Engineering and Engineering Management

- **Engineering Management** - Computing in Industrial
- Applications Ergonomics & Safety
- Management Manufacturing Processes
- Product Design Quality Engineering

Logistics Management - Design of Logistics &

- Manufacturing Systems Logistics & Freight Transportation Operations
- Routing & Fleet
- Management Supply Chain Management

Industry-

Thesis/

Project

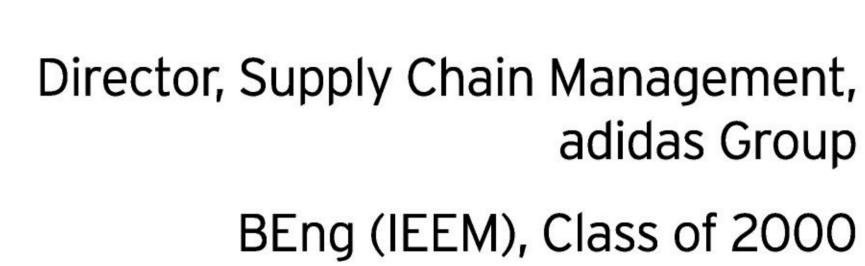
Bright Career Prospects

Our alumni are managers, engineers, consultants and analysts in wide ranges of industries.



Industrial Engineering Project Manager, Hong Kong Disneyland

BEng (IEEM), Class of 1996







Investment Banking Associate, Morgan Stanley BEng (IEEM), Class of 2015

Senior Business Analyst, McKinsey & Company, USA Master of Engineering in Operations Research, University of California, Berkeley (2016) BEng (IELM), Class of 2015



Applications in Business

- Industrial Data Systems - Probability & Statistics + Education

for Engineers

Stochastic Models

- System Simulation

OR



Global manufacturers (Avery Dennison, Hilti, Esquel, ...)



Information technology

(IBM, Cisco, ...)

Container & air cargo terminals (Cathay Pacific, HIT, HACTL, ...)

Consulting firms

(Accenture, Arup, McKinsey, ...)



Global logistics (Kerry Logistics, DHL, Damco, P&G, Li & Fung, ...)

Engineering and technical services (Towngas, MTR, ...)







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