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 adopting a modern Decision Analytics approach. Our UC 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

Applications in Business

- Banking and finance
  - Citibank, Morgan Stanley, HSBC, ... (Customer Service, Sales, Investment banking, Trading, ...)  
- Consulting firms
  - Accenture, McKinsey, Deloitte, ... (Strategic consulting, Business consulting, Operations consulting, ...)
- Container & air cargo terminals
  - Cosco, China Ocean Shipping, ... (Logistics, Project management, Operation management, ...)
- Engineering and technical services
  - General Electric, KLA-Tencor, ... (Engineering, Technical support, Project management, ...)
- Global manufacturers
  - Apple, Samsung, ... (Production, Supply chain management, Quality control, ...)
- Information technology
  - IBM, Oracle, ... (Software development, IT infrastructure, Data analytics, ...)
- Global logistics
  - DHL, UPS, ... (Supply chain, Logistics, Transportation, ...)

Curriculum Highlights

- BEng in Decision Analytics
  - Financial Engineering
  - Financial Management
  - Financial Services Operations
  - Systems Risk Management
  - Consulting Services
  - Demand and Supply Analytics
  - Dynamic Pricing & Revenue Optimization
  - E-Commerce
  - Integrated Production Systems
  - Service Engineering and Management
  - Supply Chain Management

- 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

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

Bright Career Prospects

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

- Mr. Ken Leung
  - Industrial Engineering Project Manager, Hong Kong Disneyland
  - BEng (IEEM), Class of 1996

- Mr. Matthew Lee
  - Director, Supply Chain Management, adidas Group
  - BEng (IEEM), Class of 2000

- Mr. Quentin Tsui
  - Investment Banking Associate, Morgan Stanley
  - BEng (IEEM), Class of 2015

- Ms. Helen Liu
  - Senior Business Analyst, McKinsey & Company, USA
  - Master of Engineering in Operations Research, University of California, Berkeley (2016)
  - BEng (IEEM), Class of 2005