Master of Science (MSc) Program in Engineering Enterprise Management

Program Director:

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In today's knowledge-based economy, companies and enterprises must compete relentlessly in terms of costs, quality and time to market themselves in the global context. Knowledge of cutting-edge management techniques, such as Logistics Management, Supply Chain Management, Six Sigma Processes, and knowledge in the effective deployment of information technology are necessary to help companies compete successfully in the global arena. In addition to these advanced management techniques, a good foundation in basic managerial training such as operations management, project management, people management and basic business management is essential in launching a management career.

This unique Master of Science (MSc) program in Engineering Enterprise Management is the result of collaboration between the School of Engineering and the School of Business and Management. It is specially designed for professionals with technical background who wish to launch or further their career in management. It provides the know-how and techniques from line management to middle management, and all the way to global enterprise management.

The program is designed for practicing engineers and scientists of all disciplines who wish to start a career in management. Industry managers who desire more advanced and up-to-date training to further their careers in future global enterprise - either in the service industry or manufacturing industries - can benefit from the program.

Program Learning Outcomes

On successful completion of the program, graduates will be able to:

- Develop integrated and innovative business strategies based on basic principles and techniques in various areas including operations, logistics, marketing, finance, accounting, economics and information systems;
- Identify, formulate and analyze engineering management problems and arrive at effective and efficient solutions;
- Apply quantitative and qualitative methods to conduct product and innovation development and quality management from design to market;
- Apply advanced management techniques and skills to decision making in global enterprises;
- Use engineering tools and data analytics to develop solutions for the design, analysis, operations, and evaluations of real-world complex systems; and

- Apply organizational and team skills to manage projects, processes and businesses, and communicate effectively at all levels.

Admission Requirements

Applicants must possess a bachelor's degree preferably in Science or Engineering, or an equivalent qualification from a recognized university.

Program Duration

The program can normally be completed in one year in full-time mode, or two years in part-time mode. All lectures will be delivered at HKUST. Classes will be held on weekday evenings and/or weekends.

Program Fee

The program fee is HK$129,000. New students admitted with credit transfer are also required to pay the full program fee. Students who take additional courses or need to retake any courses are required to pay additional fee.

Curriculum

The program comprises a total of 30 credits of coursework. Students are required to take:

- 1 credit of EEMT 5990 Problem Solving for Engineering Managers; and
- 29 credits from the following course list:

EEMT	5100	Principles and Techniques for Technical Management
EEMT	5120	Operation/Production Management
EEMT	5160	Transportation and Logistics Management
EEMT	5220	Six Sigma Quality Management
EEMT	5260	Product Development Management
EEMT	5300	Global Supply Chain Management
EEMT	5360	IT System for Global Enterprise
EEMT	5500	Applied Probability, Statistics and Data Analytics
EEMT	5510	Engineering Economics and Cost Management
EEMT	5520	Service Operations Management
EEMT	5530	Financial Engineering and Risk Management
EEMT	6000	Special Topics in Engineering Enterprise Management
EEMT	6900	Independent Study
SBMT	5010	Accounting for Managers
SBMT	5020	Fundamentals of Economics and Finance
SBMT	5030	Marketing Management and Strategy

Subject to the approval of the Program Director and course instructor, students have an option to take a maximum of 6 credits of other postgraduate courses from outside this list.

Part-time students may take a maximum of 9 credits in each term.

Credit Transfer

Credit transfer may be granted to students in recognition of studies completed successfully elsewhere. With the guidance of the Program Committee and upon the approval of the Program Director, a maximum of 6 credits may be transferred to the program, subject to University regulations governing credit transfer for postgraduate programs.

Graduation Requirements

Students must complete the program with a graduation grade average (GGA) of 2.850 or above as required of all postgraduate students at the University. Students failing to meet the GGA requirement are required to repeat or take additional course(s) even if they attain passing grades for all courses.