Engineering Management (MSE)

This program is offered by the Cockrell School of Engineering and administered by Texas Engineering Executive Education. The mission of the program is to contribute significantly to engineers' managerial leadership abilities within their technological organizations by allowing students an opportunity to pursue higher education that is innovative and intellectually inspiring. The program fulfills this mission by offering curriculum that teaches engineers how to lead and manage projects, processes, personnel, products, and services in real-world situations.

This program's challenging, innovative, and intellectually inspiring curriculum is designed to meet the needs of working professionals and technology organizations of all types and help students become better engineering leaders who can manage personnel, projects, processes, products, and services. The program's special scheduling option allows working professionals to earn an advanced degree while maintaining their career, meeting once a month on Fridays and Saturdays.

The interdisciplinary engineering management faculty includes members of the Cockrell School of Engineering and the McCombs School of Business. Current faculty research includes such topics as finance and accounting for engineering manager; strategic decision and risk analysis; marketing and negotiation; management of people and organizations; and legal issues and technology management, such as product liability and patent law.

All curriculum aligns with the American Society for Engineering Management Body of Knowledge. In addition, all curriculum aligns with the University's policies governing non-formula-funded (Option III) degree programs.

Graduate Handbook

Graduate handbook information is updated and maintained by each program. Graduate handbooks are available within each program's office and online. Please contact the program with concerns or questions.

Admission

This two-year program provides graduate education for the working professional who is employed in or planning to move into the field of engineering management. Classes meet all day one Friday and Saturday a month, with an orientation session at the beginning of the program. The program requires a serious commitment on the part of the student and the student's employer. The coursework is rigorous and demanding and can provide an excellent educational experience.

It is preferred that applicants have at least 18 months of professional industry-related experience, an upper-division GPA of a 3.0, and a bachelor of science in engineering, engineering technology, or related technical field.

Total Hours Required: 30

Traditional Program Total Hours: 30

Fast-track Program Total Hours: 30

Requirements

Code	Title	Hours
Major		
ENM 380E.1	Managing People and Organizations (Topic 1: Managing People and Organizations)	3
ENM 380E.2	Engineering Project Management (Topic 2: Engineering Project Management)	3
ENM 381E.1	Marketing and Negotiation (Topic 1: Marketing and Negotiation)	3
ENM 381E.2	Legal Issues and Technology Management (Topic 2: Legal Issues and Technology Management)	3
ENM 381E.3	Finance and Accounting for Engineering Managers (Topic 3: Finance and Accounting for Engineering Managers)	3
ENM 382E.1	Analytics for Engineering Managers (Topic 1: Analytics for Engineering Managers)	3
ENM 382E.2	Strategic Decision and Risk Analysis (Topic 2: Strategic Decision and Risk Analysis)	3
ENM 382E.3	Engineering Operations Management (Topic 3: Engineering Operations Management)	3
Choose a sequence below:		*6*
Sequence 1:		
ENM 385C	Projects in Engineering Management I	
or ENM 397F	Projects in Engineering Management	
ENM 385D	Projects in Engineering Management II	
Sequence 2:		
ENM 385C	Projects in Engineering Management I	
or ENM 397P	Projects in Engineering Management	
ENM 385K	Special Topics in Engineering Management (any topic; taken on a letter-grade basis)	
Sequence 3:		
ENM 385K	Special Topics in Engineering Management (any topic; taken on a letter-grade basis)	
ENM 385D	Projects in Engineering Management II	
Graduate Engineering Requirements		
Graduate University Requirements		
Total Hours		**30**

Objectives

The core objective of the engineering management program is to provide engineers who have chosen to pursue leadership and management career paths with the tools and education that will most directly support their success. Students are expected to develop their perspectives on leadership and management of technology in industry and to gain insight into other management issues critical to leading or managing a technological organization through the program's requirements.

The goal of the degree program is to provide engineering professionals with a solid foundation to help them continue lifelong learning while employed in industry. Additional objectives include teaching students about managing technical, business, and human performance processes in order to achieve corporate goals; to develop and learn core business fundamentals in areas including economics, negotiations, analytics, operations management, marketing, and decision analysis and risk

assessment; and to provide an understanding of marketing risks associated with new products, financing a new venture, and legal issues associated with a new project or product.