

Master of Science Information Engineering and Management



Today's technology-based businesses and governments urgently need people with a balance of business and technical skills. The Bobby B. Lyle School of Engineering at SMU offers a Master of Science in Information Engineering and Management (MSIEM), designed for technical workers in organizations where engineers are critical, but business knowledge is needed.

The 30-hour MSIEM program develops students' technical and managerial expertise in information technology and systems, their design, application, and management. Our program's unique structure, designed in consultation with industry, covers topics in computer and telecommunications hardware and software, systems engineering, operations research, entrepreneurship, and engineering management.

This blend of enterprise and technical expertise is provided in the context of information technology application and management, where a well-conceived IT strategy can yield a competitive advantage. Lyle's MSIEM program also develops the leadership and managerial skills required to create high-quality, effective information infrastructures for an organization competing in a rapidly changing business

Engineering leaders ... shaping tomorrow.

For more information, please email EngineeringLeaders@smu.edu, call 214-768-2002, or visit lyle.smu.edu.

SMU ENGINEERING LEADERS MASTERS SERIES

ADMISSION REQUIREMENTS

Bachelor's degree in an engineering or technical discipline. The technical requirement may be waived with sufficient relevant work experience.

An undergraduate G.P.A. of 3.00 or higher on a 4.00 scale.

DEGREE REQUIREMENTS

The MSIEM course requirements are structured in four pedagogical groups:

Foundational courses: enterprise and information systems fundamentals (9 TCH)

- Enterprise Fundamentals
- Information System Architecture
- Information System Design Strategies

Business context courses: foundational concepts applied to the construction of information systems and the management of operations (6 TCH)

- Management of Information Technologies
- Production Systems Engineering

Depth courses: advanced information engineering for strategic systems and managerial decision support (6 TCH)

- Information Engineering and Global Perspectives
- Decision-Support Systems

Focus courses: entrepreneurship and specialization to specific interests, applications and industries. (9 TCH) elective set from:

- Technical Entrepreneurship
- Systems Engineering Management
- File Organization and Database Management
- Probability and Statistics for Scientists and Engineers
- Advanced Database Management Systems
- Data Mining
- Information Retrieval
- Operations Research Models
- Engineering Economics and Decision Analysis
- Other EMIS, computer science or engineering courses with advisor approval

