

MASTER OF ENGINEERING IN**Engineering Science: Systems Engineering and Technology Management**

The SETM program is a multidisciplinary Master of Engineering program designed to provide engineering students with an opportunity to extend their understanding of emerging technologies within their disciplines while providing fundamental background in technical decision making methods and technology management. The program provides essential background in the financial metrics of business performance, the analytical modeling tools for applying these metrics in organizational and technical decision making systems, and the critical challenges associated with new models of value creation and business growth across different industries. Students will be prepared for technical management roles as they simultaneously extend their technical expertise in the undergraduate engineering discipline beyond the Bachelor's level. Graduates of the program will be prepared to assume management responsibilities sooner upon entering the professional workforce.

This program is open to all engineering majors and is specifically designed for individuals seeking a Master's program that integrates decision sciences/management skills with the undergraduate engineering discipline, while simultaneously extending technical depth in the engineering discipline beyond the bachelor's degree. Based on a review of the SETM curriculum by corporate recruiters, a wide variety of corporations have expressed interest in recruiting graduates of this program including IBM, General Motors, General Electric, Fidelity Investments, United Technologies, Shell Oil, Pfizer, Cisco Systems, Target, W.L. Gore and others.

ADMISSION REQUIREMENTS

- Bachelor of Science degree from an accredited undergraduate institution
- Strong undergraduate performance
- Evidence of strong quantitative and problem-solving skills
- Undergraduate GPA of 3.0 or higher
- Grades of "B" or better in courses completed since bachelor's degree
- Completed application form
- Official transcripts for all undergraduate and graduate work
- Statement of background and goals as it applies to the program
- GRE required
- TOEFL required for international students
- Two letters of recommendation
- Resume

GRADUATION REQUIREMENTS

- Matriculated Status
- Approved Plan of Study
- At least 15 credits must be at the 6000 level
- Minimum 3.0 GPA; minimum 30 credits

PLAN OF STUDY (30 credit hours)**I. Systems Engineering and Technology Management Core Courses (15 credits)**

DSES-6610 Systems Modeling in Decision Sciences
 DSES-6620 Discrete Event Simulation
 MGMT-7740 Accounting for Reporting and Control
 MGMT-6020 Financial Management I
 MGMT-6080 Networks Innovation and Value Creation I

II. Technical Concentration (15 credits)

(select a concentration of courses with your adviser in one of the following areas)

Civil Engineering

Industrial Engineering

Electrical Engineering

Computer Systems Engineering

Aeronautical Engineering

As an alternative to the four-to-five course culminating technical concentration, students can elect a three-to-four course technical concentration plus an engineering Master's project for 3 credit hours.

To complete this requirement, students must register for three credit hours under the 6980 Master's project course in their engineering discipline and complete a project directly related to the technical concentration.