

M.S. in Engineering Systems Management

Program Director

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The Master of Science in Engineering Systems Management is an interdisciplinary, 30-semester-hour program that emphasizes the areas of management, industrial engineering, systems of systems and behavioral sciences.

Successful engineering managers in manufacturing, the military or service industries use powerful analytic metrics and methods to solve complex problems. They combine their management expertise with engineering knowledge, enabling them to lead teams of specialists in highly technical tasks.

Engineering Management students take specialized courses from the School of Science, Engineering and Technology, as well as the Greehey School of Business.

The courses are taught by highly knowledgeable full-time and adjunct faculty with vast industry experience.

Our graduates are employed by a variety of companies, including the following: Boeing, Koch, USAA, Southwest Research Institute, Valero, Zachry, UPS, and Labatt Food.

Admission Requirements

Applicants must have a Bachelor of Science degree in engineering or a closely related discipline such as physics or mathematics. The graduate program director will evaluate applicants from other disciplines on an individual basis.

For more requirements, visit the catalog here (<https://catalog.stmarytx.edu/graduate/science-engineering-technology/engineering/#admissionrequirements>).

Master of Science (M.S.) Admission Requirements:

- Have a Bachelor of Science (B.S.) degree in engineering or a closely related discipline such as physics or mathematics. The graduate program director will evaluate applicants from other disciplines on an individual basis.
- Have a minimum Grade Point Average (GPA) of 3.00 (A = 4.00) for their bachelor's degree.
- Have a minimum GRE quantitative score of 148. GRE requirement would be waived for applicants with work experience or for applicants who have a graduate degree.
- International students must submit minimum TOEFL scores of 80 on the Internet-based test or at least 6.0 on the IELTS. Students who score 6.0 on the IELTS or 80-82 on the TOEFL will be required to enroll in EN6301 Academic Writing for International Students during the first semester of attendance.
- Submit a completed application form, a written statement of purpose indicating the applicant's interests and objectives, two letters of recommendation concerning the applicant's potential for succeeding in the graduate program, and official transcripts of all college level work.

Applicants who fail to meet any of the above requirements may be admitted on a conditional status. The Graduate Program Director will evaluate these cases on an individual basis.

Click on the course number to view course title and description.

Project Option

Code	Title	Semester Hours
Engineering Systems Management Courses		
EG 6303	Lean Production	3
EG 7306	Total Quality Systems	3
EG 6341	Supply Chain Management	3
EG 7351	Systems Engineering Concepts	3
EG 8300	Engineering Systems Management	3
EG/BA 7353	Project Management	3
EG 7356	Engr. Management Leadership and Ethics	3
Financial Management Elective		

Select one of the following:		3
EG 6305	Economic Analysis for Managerial Decisions	
EG 7350		
EG 7354		
ESM Elective		
Select one of the following:		3
EG 7155	Internship	
EG 7255	Internship	
EG 7355	Internship	
Or an ESM or BA course, with Program Director approval		
Capstone Project		
EG 8396	Capstone Project	3
Total Semester Hours		30

Thesis Option

Code	Title	Semester Hours
Engineering Systems Management Courses		
EG 6303	Lean Production	3
EG 7306	Total Quality Systems	3
EG 6341	Supply Chain Management	3
EG 7351	Systems Engineering Concepts	3
EG 8300	Engineering Systems Management	3
EG/BA 7353	Project Management	3
Elective		
Select one of the following:		3
EG 7155	Internship	
EG 7255	Internship	
EG 7355	Internship	
EG 7356	Engr. Management Leadership and Ethics	
Financial Management Elective		
Select one of the following:		3
EG 6305	Economic Analysis for Managerial Decisions	
EG 7350		
EG 6338	Special Topics (Financial Aspects of Engineering Projects)	
EG 6338	Special Topics (Engineering Cost Accounting)	
Thesis		
EG 8390	Thesis I	3
EG 8391	Thesis II	3
Total Semester Hours		30