

B.S. ENGINEERING MANAGEMENT TECHNOLOGY

WHERE INDIVIDUALS RISE

What is the CSUN Engineering Management Technology (EMT) Program?

The management of any technical business is just as important as the actual creation of the product being made by that company. Without proper management, the product made by an organization would not matter. For this reason, more than two-thirds of all engineering professionals invest a significant portion of their career in managing and administering a wide range of technical engineering and research projects and budgets. As the engineering profession evolves, an increasing need has emerged for entry-level engineering professionals who have both a broad engineering background and the knowledge and ability to interface between the business and technical functions within organizations.

The EMT program develops a well-rounded STEM graduate who is able to understand both the technical aspect as well as the business side of engineering projects—a winning combination for any technical organization, due to which the demand for engineering management technology majors has been increasing.

In today's interconnected business world, the role of the engineer has changed from only focusing on the technical aspect to being involved with various integration aspects of the technology and business operations, which is the focus of the EMT program.

Businesses like Apple, Amazon, Boeing, BMW, Space X, and many other high tech firms, ALL need engineering management technology majors.

Industry Relevant Skillset Obtained from the EMT Program

- ◆ Internet Technologies
- ◆ Engineering Graphics
- ◆ Business Law
- ◆ Micro & Macro Economics
- ◆ Technical Innovation & Entrepreneurship in high tech firms
- ◆ Marketing
- ◆ Engineering Project Management
- ◆ Engineering Cost Analysis
- ◆ Lean Manufacturing & Supply Chain Management

Common Careers for Engineering Management Technology Majors

- ◆ Project Engineer
- ◆ Production Engineer
- ◆ Logistics & Supply Chain Professional
- ◆ Industrial Engineer
- ◆ Quality Engineer
- ◆ Business Analysts
- ◆ Manufacturing Engineer



CALIFORNIA STATE UNIVERSITY NORTHRIDGE

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PROGRAM REQUIREMENTS

Lower Division Required Courses (53 units)

Freshman Year

CHEM 100/L	Principles of Chemistry & Lab (3/1)
MATH 105	Pre-Calculus II (5)
MATH 103	Mathematical Models for Business (3)
MSE 101/L	Introduction to Engineering & Lab (1/1)
PHYS 100A/L	General Physics I (3/1)
ECON 160	Principles of Microeconomics (3)
COMP 100	Computers: Their Impact and Use (3)
CIT 160/L	Internet Technologies (2/1)

Sophomore Year

MATH 140	Introductory Statistics (4)
PHYS 100B/L	General Physics II (3/1)
MSE 220/L	Construction Materials & Lab (2/1)
ACCT 220	Introduction to Financial Accounting (3)
MSE 248/L	Engineering CAD & Graphics & Lab (2/1)
BLAW 280	Business Law (3)
ENGL 215	Critical Thinking about Research Writing (3)
ECON 161	Principles of Macroeconomics (3)

Upper Division Required Courses (40 units)

Junior Year

MSE 303	Innovation, Invention, & Technology (3)
MSE 300	Construction Technology Economy (3)
MKT 304	Marketing Management (3)
SOM 306	Operations Management (3)
CM 340	Statics and Strength of Materials (3)

Senior Year

MSE 401	Introduction to Engineering & Technology Management (3)
MSE 402	Engineering Project Management (3)
MSE 403CS	Facilities Planning and Design (3)
MSE 406	Engineering Cost Analysis (3)
MSE 407	Production Systems (3)
MSE 420	New Product Innovation & Technical Entrepreneurship for Engineers (3)
MSE 488A	MSEM Senior Design I (2)
MSE 488BCS	MSEM Senior Design II (2)
MSE 507	Lean Manufacturing Systems (3)

Total Units in Major: 93

Total General Education Units: 27

Total Units Required for B.S. EMT Degree: 120

What Industries Recruit EMT Graduates?

The EMT skillset is applicable across a wide variety of industries, thereby making it a major from which there are a wide range of employment opportunities

- ◆ Consulting (Accenture)
- ◆ Defense/Government (US Air Force, Edwards Air Force Base)
- ◆ Utility Companies (Southern California Edison)
- ◆ Manufacturing (Ford, Boeing, Budweiser, Pepsi)
- ◆ Aerospace (Rocketdyne, Boeing, Lockheed Martin)
- ◆ Logistics (Amazon, UPS, FedEx)



For More Information

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To Apply to the EMT Program

<https://www2.calstate.edu/apply>

CSUN

COLLEGE OF
ENGINEERING AND
COMPUTER SCIENCE