Engineering and Technology Management, M.S.

Visit the Technology Management and Mechatronics Department page (https://www.uvu.edu/tm/) for more information on the program and access to advising.

Program Description

The Engineering and Technology Management (ETM) program prepares engineering and technological professionals to make process-, product-, and project-oriented strategic and operational decisions and become leaders in the management of technology by providing the link between engineering, science, and management. It helps companies, research organizations, and governments to plan, develop, and implement technologies by specifically addressing real needs identified by industry leaders. Effective planning, selection, implementation, and management of technology, and the teams involved, is essential to the success of any business in today's complex and time-critical global markets. Students learn to apply proven evaluation concepts and implementation strategies to fast moving, technical management decisions that make the difference in both career and business success. Courses provide practicing engineers and managers of technical teams or projects with the knowledge, tools, and skills to manage projects, operations, organizations, and people. The program includes product and project management, engineering management, quality and safety management, and statistical analysis to enable the graduate to be more effective in technical managerial and leadership roles in a business environment. The program is specifically tailored for professionals who want to advance their careers while still working full time. The entire program is available through distance learning as well as face to face and involves 30 credit hours of course work.

Matriculation Requirements

Application for admission to graduate program with application fee by the established deadline.

The university uses a selective admission process for admitting students to graduate programs. Meeting minimum admissions criteria does not guarantee admission to the graduate program or to the University as a graduate student.

A bachelor's degree from a regionally accredited college/university, a nationally accredited program, or an international college or university recognized by a Ministry of Education

Overall undergraduate GPA of 3.0 or higher on a 4.0 scale from an accredited institution, or GPA of 3.0 or higher on a 4.0 scale from an accredited institution in last 60 semester hours (90 quarter hours) of undergraduate coursework

Three professional letters of recommendation

Official transcripts from all attended institutions of higher education

A personal statement

Program Requirements

Code	Title	Credit
Total Credit Hours		30
Discipline Core Requirem	pents	
TECH 6010	Intellectual Property Fundamentals	3
TECH 6400	Six Sigma Project Management	3
TECH 6420	Finance for Technical Systems	3
TECH 6430	Product Management Processes	3
TECH 6450	Engineering Economics and Project Evaluation	3
TECH 6700	Data Driven Decision Making	3
TECH 6950	Engineering and Technology Projects I	3
TECH 6960	Engineering and Technology Projects II	3
Electives		
Complete six credits from the following:		6
TECH 6000	Management of Technological Innovation	
TECH 6500	Resource Management in Engineering and Technology	
TECH 6440	Artificial Intelligence and Society	
TECH 6550	People and Culture	
TECH 6710	Materials Management	

TECH 6790R	Special Topics in Engineering
TECH 6900R	Independent Study

Graduation Requirements

Complete all courses with an overall GPA of 3.0 or higher

A grade of "C" or higher required for all courses used to satisfy graduation requirement

Courses must be finished within a five-year period. No courses will apply toward graduation that are older than five years

Graduates may not transfer more than ten semester credit hours into this master's program. Only transfer courses approved by the graduate program faculty shall be counted as approved credit for the degree. Graduate credits accepted from another regionally accredited institution or equivalent shall have been completed within four years of the graduate student's matriculation into the graduate program and cannot be older than six years at the time of graduation with a master's degree from the University.

A minimum of 30 credits is required

The MS-ETM and MS-AAI requires 20 hours to be completed at Utah Valley University. Graduates may not transfer more than ten semester credit hours into this master's program. Only transfer courses approved by the graduate program faculty shall be counted as approved credit for the degree.

Acceptance into a graduate program, or approval of the graduate program director is a pre-requisite to all MS-ETM or MS-AAI coursework.

Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/ or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http:// www.uvu.edu/wolverinetrack/).

First Year		
Semester 1		Credit Hours
TECH 6400	Six Sigma Project Management	3
TECH 6420	Finance for Technical Systems	3
	Credit Hours	6
Semester 2		
TECH 6430	Product Management Processes	3
TECH 6450	Engineering Economics and Project Evaluation	3
	Credit Hours	6
Semester 3		
TECH 6700	Data Driven Decision Making	3
Elective		3
	Credit Hours	6
Second Year		
Semester 4		
TECH 6010	Intellectual Property Fundamentals	3
TECH 6950	Engineering and Technology Projects I	3
	Credit Hours	6
Semester 5		
TECH 6960	Engineering and Technology Projects II	3
Elective		3
	Credit Hours	6
	Total Credit Hours	30

An online graduation plan offers students a flexible yet structured approach to their academic journey. While this sample serves as a general guideline, individual plans may differ based on Math and English placement scores. Meeting with an academic advisor is strongly recommended to customize plans and ensure all graduation requirements are met.

Courses marked with an asterisk (*) are Certified Online Courses, meeting UVU's high standards for quality and accessibility.

	Credit Hours	6
TECH 6420	Finance for Technical Systems	3
TECH 6400	Six Sigma Project Management	3
Semester 1		
First Year		
Course	Title	Credit Hours

Semester 2		
TECH 6430	Product Management Processes	3
TECH 6450	Engineering Economics and Project Evaluation	3
	Credit Hours	6
Semester 3		
TECH 6700	Data Driven Decision Making *	3
Elective		3
	Credit Hours	6
Second Year		
Semester 4		
TECH 6010	Intellectual Property Fundamentals	3
TECH 6950	Engineering and Technology Projects I	3
	Credit Hours	6
Semester 5		
TECH 6960	Engineering and Technology Projects II	3
Elective		3
	Credit Hours	6
	Total Credit Hours	30

Program Learning Outcomes

- 1. Apply a business-driven approach to engineering and technology concepts.
- 2. Employ product and project management with the use of rationale and effective decision making.
- 3. Improve company practices using current technology, analysis, and design. Upon successful completion of this program, students will be able to make strategic and operational decisions in the management of technology by providing the link between engineering, science, and management.

Industrial production managers

- Total Positions230,100
- Field Growth2.8%
- Median Salary\$116,970
- Average Openings17.1

Architectural and engineering managers

- Total Positions210,200
- Field Growth5.5%
- Median Salary\$165,370
- Average Openings15.0

Medical and health services managers

- Total Positions562,700
- Field Growth28.5%
- Median Salary\$110,680
- Average Openings61.4

Natural sciences managers

- Total Positions100,100
- Field Growth7.5%
- Median Salary\$157,740
- Average Openings8.3

Managers, all other

- Total Positions1,282,500
- Field Growth5.7%
- Median Salary\$133,560
- Average Openings105.8

Project management specialists

- Total Positions973,600
- Field Growth7.2%
- Median Salary\$98,580
- Average Openings77.0