

# Technology Management (TMGT) B.S.

The Bachelor of Science (B.S.) degree in Technology Management is an online and/or classroom taught program of study designed to integrate technology, applied engineering, project management, cost engineering, quality, construction management, business management, leadership and design into a variety of business, construction, and industrial careers. Graduates are suited for professional positions where the solving of complex technological problems; management of the environment, processes and workforce; controlling cost and resources; and ensuring a safe and ergonomically correct workplace are essential. Leadership, communication skills, group collaboration, managing and understanding cultural differences, construction, sustainability, increasing value, technological skills and the effective management of current and future global enterprises are emphasized throughout the program. Program graduates are prepared for and encouraged to continue their education after the awarding the Bachelor of Science degree by obtaining the Master of Science degree in Technology Management.

## Student Outcomes for BS Technology Management Program

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## Core Curriculum Courses

See the Core Curriculum Requirements (<https://coursecatalog.tamuc.edu/undergrad/core-curriculum-requirements/>) 42

### Required courses in the major

TMGT 335	Managing Sustainability	3
TMGT 350	Principles of Technology Management	4
TMGT 411	Risk Management	3
TMGT 444	Decision Theory	3
TMGT 455	Project Planning & Scheduling	3
TMGT 456	Value Chain Control & Management	3
TMGT 458	Project Management	3
TMGT 471	Technology Management Capstone Project	4

### Required Support Courses

ENGR 110	Introduction to Engineering and Technology	3
ENGR 113	Product Design and Development	3
ENGR 1304	Computer-Aided Design (CAD)	3
ENGR 2304	Computing for Engineers	3
ENGR 2308	Engineering Economic Analysis	3
TMGT 240	Quality in Technology Management	3
TMGT 303	Technical Communications	3
TMGT 311	Environmental and Safety Management	3
TMGT 340	Managerial Statistics	3
TMGT 351	Organizational Behavior	3
TMGT 352	Principles of Cost Engineering	3
TMGT 439	Construction Management	3
TMGT 457	Decision Making for Emerging Technologies	3
ACCT 2301	Principles of Acct I	3
MGT 301	Legal Environment of Business	3
ECO 2301	Prin Macro Economics (3 sch) *	

or ECO 2302	Principles of Micro Economics	
COSC 1436	Introduction to Computer Science and Programming	4
MATH 2312	Pre-Calculus	3
MATH 2413	Calculus I (*4 sch)	
PHYS 1401	College Physics I (4 sch) *	
PHYS 1402	College Physics II (4 sch) *	

**Total Hours** **120**

\* These courses should be used to satisfy the Core Curriculum Requirements in Social and Behavioral Science, Natural Sciences, Mathematics and Component Area Option, respectively; otherwise, the credit hours required to earn the B.S. in TMGT will exceed 120.

A grade of "C" or higher must be earned in all courses in this Major.

#### First Year

Fall	Hours	Spring	Hours
ENG 1301 *		3 ENG 1302 *	3
ECO 2302 *		3 Creative Arts *	3
MATH 2312		3 Component Area Option *	3
ENGR 110		3 MATH 2413 *	4
ENGR 1304		3 ENGR 113	3
		<b>15</b>	<b>16</b>

#### Second Year

Fall	Hours	Spring	Hours
HIST 1301 *		3 HIST 1302 *	3
PHYS 1401 *		4 PHYS 1402 *	4
COSC 1436		4 ACCT 2301	3
ECO 2302 *		3 ENGR 2308	3
ENGR 2304		3 TMGT 240	3
		<b>17</b>	<b>16</b>

#### Third Year

Fall	Hours	Spring	Hours
PSCI 2305 *		3 PSCI 2306 *	3
MGT 301		3 TMGT 335	3
TMGT 303		3 TMGT 350	4
TMGT 311		3 TMGT 351	3
TMGT 340		3 TMGT 352	3
		<b>15</b>	<b>16</b>

#### Fourth Year

Fall	Hours	Spring	Hours
TMGT 411		3 TMGT 444	3
TMGT 439		3 TMGT 457	3
TMGT 455		3 TMGT 458	3
TMGT 456		3 TMGT 471	4
		<b>12</b>	<b>13</b>

**Total Hours: 120**

\* Course can be satisfied by the Core Curriculum Requirements