

ENGINEERING TECHNOLOGY MANAGEMENT, BACHELOR OF SCIENCE

This Bachelor's program requires an ABET Accredited associate degree in Engineering Technology before full acceptance into the degree program. The Engineering Technology Management program is accredited by the Engineering Technology Accreditation Commission of ABET (<https://www.abet.org>).

Code	Title	Hours
General Education Courses		
<i>I. Communication</i>		
English:		
ENGL U101	Composition I	3
Speech:		
SPCH U201	Foundations in Oral Communication	3
<i>II. Mathematics, Logic & Natural Sciences</i>		
Mathematics:		
MATH U127	Precalculus II	3
MATH U141	Calculus I ¹	4
Natural Science (w/ lab):		
Select one of the following:		4
ASTR U111	Descriptive Astronomy (Select one of the following:)	
BIOL U101 & U101L	Introductory Biology I and Introductory Biology I Lab	
BIOL U102 & U102L	Introductory Biology II and Introductory Biology II Lab	
BIOL U110 & U110L	General Biology and General Biology Lab	
BIOL U220 & U220L	Botany and Society and Botany and Society Laboratory	
BIOL U244 & U244L	Human Anatomy and Physiology II and Human Anatomy and Physiology II Lab	
CHEM U109 & U109L	Chemistry of Living Things and Chemistry of Living Things Lab	
CHEM U111 & U111L	General Chemistry and General Chemistry Lab	
CHEM U112 & U112L	General Chemistry and Qualitative Analysis and General Chemistry and Qualitative Analysis Lab	
GEOL U101 & U101L	Physical Geology and Physical Geology Lab	
GEOL U102 & U102L	Historical Geology and Historical Geology Lab	
GEOL U103 & U103L	Environmental Geology and Environmental Geology Lab	
PHYS U101 & U101L	Introduction to Physical Science and Introduction to Physical Science Laboratory	
PHYS U201 & U201L	General Physics I and General Physics I Lab	
PHYS U202 & U202L	General Physics II and General Physics II Lab	

Probability & Statistics:		
Select one of the following:		3
ECON U291	Probability and Statistics	
MATH U102	Elementary Statistics	
PSYC U225	Psychological Statistics	
SOCY U201	Introduction to Statistics for the Social Sciences	
<i>III. Information Technology</i>		
Information Technology:		
Select one of the following:		3
CSCI U138	Introduction to Computer Technology	
CSCI U150	Introduction to Computer Science	
DGST U101	Intro to Digital Studies	
INFO U101	Survey of Information Technology	
INFO U102	Introduction to Digital Safety	
<i>IV. Fine Arts, Humanities & History</i>		
Fine Arts, Humanities & History:		
Select one of the following:		3
AFAM U204	African American Culture	
AMST U101	American Studies, 17th - 19th Century	
AMST U102	American Studies, 20th Century	
ARTH U101	Introduction to Art	
ARTH U105	History of Western Art: Prehistory - Middle Ages	
ARTH U106	History of Western Art: Renaissance - Modern	
ENGL U208	Introduction to Creative Writing	
ENGL U245	Business Writing	
ENGL U252	Understanding English Grammar	
ENGL U275	Masterpieces of World Literature	
ENGL U279	Survey of American Literature I	
ENGL U280	Survey of American Literature II	
ENGL U289	Survey of British Literature I	
ENGL U290	Survey of British Literature II	
ENGL U291	African American Literature	
FILM U240	Introduction to Film	
HIST U101	Introduction to World History I	
HIST U102	Introduction to World History II	
HIST U105	History of the United States to 1877	
HIST U106	History of the United States from 1865	
MUSC U110	Introduction to Music	
MUSC U140	History of American Popular Music	
PHIL U102	Introduction to Philosophy	
PHIL U111	Political Philosophy	
PHIL U211	Contemporary Moral Issues	
RELG U103	Comparative Religion	
SOST U201	Introduction to Southern Studies	
THEA U161	Introduction to Theatre Art	
THEA U170	Fundamentals in Acting	
<i>VI. Social & Behavioral Sciences</i>		
Social & Behavioral Science:		
Select one of the following: ^{7,8}		3
AFAM U201	Introduction to African American Studies	
ANTH U102	Understanding Other Cultures	
ECON U221	Principles of Macroeconomics	

ECON U222	Principles of Microeconomics
GEOG U103	Introduction to Geography
POLI U101	American National Government
PSYC U101	Introduction to Psychology
SOCY U101	Introduction to Sociology
SPCH U210	Interpersonal Communication
UNIV U201	Leadership Development I
WGST U101	Introduction to Women's & Gender Studies

VII. General Education Electives

General Education Electives

One Gen Ed or free elective must be Reach Act Complaint

Select any approved general education course or courses (<https://academic-catalog.uscupstate.edu/academic-programs/general-education-courses/>)

Major Requirements^{3,4}

Technical Courses in Discipline (transfer-in block with Associate's Degree) ^{2,5}	31	
ETMG U320	Engineering Cost Analysis	4
ETMG U330	Engineering Work Analysis	4
ETMG U370	Systems Decision Making	4
ETMG U410	Engineering Teams Theory and Practice	4
ETMG U415	Quality Practices	4
ETMG U420	Engineering Project Management	4
ETMG U499	Senior Seminar	3

Upper Level Electives or Minor⁷

ETM Majors may select Upper Level Electives (12 hours) or a Minor 12-18 (18-27 hours).

*Upper Level Electives*³

Select two of the following:

ACCT U348	Issues in Commercial Law
MKTG U350	Principles of Marketing
MKTG U351	Consumer Behavior
MKTG U352	Marketing Communications
MKTG U452	International Marketing
MKTG U456	Business Marketing
MKTG U457	Marketing Research
MKTG U458	Marketing Management
MGMT U371	Principles of Organizational Management
MGMT U372	Operations Management
MGMT U374	Management of Human Resources
MGMT U377	Advanced Organizational Behavior
MGMT U378	The International Business Enterprise
MGMT U471	New Business Enterprise
MGMT U475	Advanced Operations Management
MGMT U476	Process Improvement
ECON U326	Managerial Economics

Select two additional Upper Level Electives^{3,6}*Minor*

Select 18-27 credits

Supporting Courses

ECON U292	Statistical Inference	3
Technical Communications Course ⁹		3

Elective

Select twelve credits

12

Total Hours **120-128**

- ¹ The successful completion of MATH U141 Calculus I or higher with a minimum grade of C fulfills Mathematics requirement. The credit hours must be replaced with General Education electives.
- ² A maximum of 90 hours, including 31 hours of technical courses, may be transferred from a technical college curriculum. All courses transferred for degree credit must be a minimum grade of "C."
- ³ A minimum grade of C is required and an ETMG course used to meet ETM major requirements may not be taken more than twice. Attempts include receiving a "W", "WF", and "Audit". Appeals to this policy may be made to the Chair of Informatics and Engineering Systems.
- ⁴ To receive an Engineering Technology Management degree, students must complete at least 15 hours of major course credit at USC Upstate.
- ⁵ Technical content transfers in from the associate degree in an Engineering Technology area.
- ⁶ Upper Level Electives include 300 level or higher courses and any course accepted by the University as meeting the requirements of a cognate.
- ⁷ ECON U221 Principles of Macroeconomics or ECON U222 Principles of Microeconomics is recommended for a Social and Behavioral Sciences elective for students choosing to complete a minor in Business Administration.
- ⁸ ECON U222 Principles of Microeconomics is recommended for a Social and Behavioral Sciences elective for students planning to take ECON U326 Managerial Economics for a cognate or minor in Business Administration.
- ⁹ College-level technical communications course (e.g., ENGL U346 Technical Writing or INFO U345 Technical Presentation and Communication).

Program Entry Requirements: Students must possess an ABET Accredited associate degree in Engineering Technology. Students within 12 hours of Technical College Completion may be provisionally admitted to the program but may take no more than 12 hours of ETMG courses with the ABET-accredited associate degree in Engineering Technology. Exceptions for admission of students from non-ABET accredited Engineering Technology programs may be granted based on the ETM Exception Policy.