

# MECHANICAL ENGINEERING TECHNOLOGY MAJOR (B.S.)

<https://manchester.unh.edu/program/bs/mechanical-engineering-technology-major>

## Description

Engineering technology requires the application of engineering and scientific knowledge and methods combined with technical skills in support of engineering activities. Graduates may work in a variety of areas including engineering design, manufacturing, field service, testing, and sales and may work in management positions related to engineering, manufacturing, and technology.

The UNH Manchester BS in Mechanical Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET.

The programs at UNH Manchester are designed to meet the needs of both full- and part-time students with a mix of classes scheduled during the day and in the evening.

For information contact, the Office of Admissions ([unhm.admissions@unh.edu](mailto:unhm.admissions@unh.edu)) at (603) 641-4150.

## Requirements

### Degree Requirements

**Minimum Credit Requirement:** 128 credits

**Minimum Residency Requirement:** 32 credits must be taken at UNH

**Minimum GPA:** 2.0 required for conferral\*

**Core Curriculum Required:** Discovery & Writing Program Requirements

**Foreign Language Requirement:** No

All Major, Option and Elective Requirements as indicated.

\*Major GPA requirements as indicated.

### Major Requirements

Courses required in the major must be completed with a minimum grade of C-. Students must attain a minimum GPA in the major of 2.0.

Code	Title	Credits
COMP 424	Applied Computing 1: Foundations of Programming	4
COMP 560	Ethics and the Law in the Digital Age	4
ECN 411	Introduction to Macroeconomic Principles	4
ET 405	Engineering Design	4
ET 411	Manufacturing and Materials Processing	4
ET 450	Statics and Strength of Materials	4
ET 502	Measurement and Control	4
ET 505	Material Science	4
ET 550	Dynamics and Machine Design I	4
ET 560	Machine Design II	4
ET 625	Technical Communications	4
ET 635	Fluid Technology and Heat Transfer	4
ET 641	Production Systems	4
ET 644	Mechanical Engineering Technology Concepts in Analysis and Design	4

ET 645	Fluid Technology and Heat Transfer II	4
ET 674	Control Systems and Components	4
ET 675	Electrical Technology	4
ET 751	Mechanical Engineering Technology Project	8
ET 781	Introduction to Automation Engineering	4
PHYS 407	General Physics I	4
PHYS 408	General Physics II	4
MATH 425	Calculus I	4
MATH 426	Calculus II	4
CHEM 405	Chemical Principles for Engineers	4
Discovery Program Requirements, Writing Intensive (WI) Requirement, and electives		
<b>Total Credits</b>		<b>100</b>

## Degree Plan

This degree plan is a sample and does not reflect the impact of transfer credit or current course offerings. UNH Manchester undergraduate students will develop individual academic plans with their professional advisor during the first year at UNH.

### Sample Course Sequence

#### First Year

Fall		Credits
ENGL 401	First-Year Writing	4
CHEM 405	Chemical Principles for Engineers	4
ET 405	Engineering Design	4
MATH 418	Analysis and Applications of Functions	4
<b>Credits</b>		<b>16</b>

#### Spring

PHYS 407	General Physics I	4
ET 411	Manufacturing and Materials Processing	4
MATH 425	Calculus I	4
ET 450	Statics and Strength of Materials	4
<b>Credits</b>		<b>16</b>

#### Second Year

Fall		
PHYS 408	General Physics II	4
MATH 426	Calculus II	4
ET 502	Measurement and Control	4
ET 550	Dynamics and Machine Design I	4
<b>Credits</b>		<b>16</b>

#### Spring

ET 505	Material Science	4
ET 560	Machine Design II	4
Discovery Course		4
Discovery Course		4
<b>Credits</b>		<b>16</b>

#### Third Year

Fall		
COMP 424	Applied Computing 1: Foundations of Programming	4
ET 635	Fluid Technology and Heat Transfer	4
ET 641	Production Systems	4
Discovery Course		4
<b>Credits</b>		<b>16</b>

**Spring**

ET 625	Technical Communications	4
ET 645	Fluid Technology and Heat Transfer II	4
ET 675	Electrical Technology	4
Discovery Course		4
<b>Credits</b>		<b>16</b>

**Fourth Year****Fall**

ECN 411	Introduction to Macroeconomic Principles	4
ET 674	Control Systems and Components	4
ET 751	Mechanical Engineering Technology Project	4
Discovery Course		4
<b>Credits</b>		<b>16</b>

**Spring**

COMP 560	Ethics and the Law in the Digital Age	4
ET 644	Mechanical Engineering Technology Concepts in Analysis and Design	4
ET 751	Mechanical Engineering Technology Project	4
ET 781	Introduction to Automation Engineering	4
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>128</b>

## Student Learning Outcomes

### Program Learning Outcomes

The Engineering Technology program student outcomes include, but are not limited to, the following learned capabilities:

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- An ability to function effectively as a member as well as a leader on technical teams.