

ELECTRICAL ENGINEERING TECHNOLOGY MAJOR (B.S.)

<https://manchester.unh.edu/program/bs/electrical-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 computer technology.

The UNH Manchester BS in Electrical Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, www.abet.org.

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 about the electrical engineering technology program (EET), contact the B.S. engineering technology program coordinator, [Sean Tavares](mailto:Sean.Tavares@unh.edu) (sean.tavares@unh.edu). For admissions information, contact the [Office of Admissions](mailto:unh.admissions@unh.edu) (unh.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

Each course 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
CHEM 405	Chemical Principles for Engineers	4
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 421	Digital Electronics I	4
ET 431	Circuit Analysis I	4
ET 432	Circuit Analysis II	4
ET 522	Digital Electronics II	4
ET 541	Electronic Devices	4
ET 542	Analog Electronics	4
ET 590	Embedded Microcontrollers	4
ET 625	Technical Communications	4

ET 671	Digital Systems	4
ET 674	Control Systems and Components	4
ET 677	Analog Systems	4
ET 680	Communications and Fields	4
ET 781	Introduction to Automation Engineering	4
ET 788	Introduction to Digital Signal Processing	4
ET 790	Microcomputer Technology	4
ET 791	Electrical Engineering Technology Project (Senior Capstone Project) ¹	8
MATH 425	Calculus I	4
MATH 426	Calculus II	4
PHYS 407	General Physics I	4
Discovery Program Requirements, Writing Intensive (WI) Requirement, and electives		
Total Credits		96

¹ Senior Capstone Project, two semesters; satisfies the Discovery Senior Capstone Experience requirement.

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
MATH 418	Analysis and Applications of Functions	4
COMP 424	Applied Computing 1: Foundations of Programming	4
ET 431	Circuit Analysis I	4
Credits		16

Spring

PHYS 407	General Physics I	4
ET 421	Digital Electronics I	4
MATH 425	Calculus I	4
ET 432	Circuit Analysis II	4
Credits		16

Second Year

Fall

CHEM 405	Chemical Principles for Engineers	4
MATH 426	Calculus II	4
ET 522	Digital Electronics II	4
ET 541	Electronic Devices	4
Credits		16

Spring

ET 542	Analog Electronics	4
ET 590	Embedded Microcontrollers	4
Discovery Course		4
Elective Course		4
Credits		16

Third Year

Fall

ET 671	Digital Systems	4
--------	-----------------	---

ET 674	Control Systems and Components	4
ET 680	Communications and Fields	4
Discovery Course		4
Credits		16
Spring		
ET 625	Technical Communications	4
ET 677	Analog Systems	4
Discovery Course		4
Discovery Course		4
Credits		16
Fourth Year		
Fall		
COMP 560	Ethics and the Law in the Digital Age	4
ET 790	Microcomputer Technology	4
ET 791	Electrical Engineering Technology Project	4
Discovery Course		4
Credits		16
Spring		
ECN 411	Introduction to Macroeconomic Principles	4
ET 781	Introduction to Automation Engineering	4
ET 788	Introduction to Digital Signal Processing	4
ET 791	Electrical Engineering Technology Project	4
Credits		16
Total Credits		128

Student Learning Outcomes

Engineering Technology program, the student outcomes must 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.