Electronic Engineering Technology

Degree Type
Associate in Science

The Electronic Engineering Technology Program concentrates on the use of principles and theories of science, engineering, and mathematics to solve technical problems in research and development, manufacturing, sales, construction, and maintenance. Through the use of modern electronic laboratories, the student will become familiar with the areas of electronics, including circuit analysis, analog and digital integrated circuits, discrete semiconductor devices, electronic communications, and linear operational amplifier circuits. The student will also become familiar with C++ programming and microcontrollers using assembly language programming.

This program provides students with knowledge of currently established design and laboratory techniques.

The U.S. Department of Labor's Bureau of Statistics (BLS) reports that one of the top ten best paying jobs for individuals with an associate degree is the Engineering Technician, with positive job growth expected through 2026.

In addition to the general admission requirements, Electronics Engineering Technology applicants should be aware of the following criteria:

Completion of high school Algebra I, Algebra II and Geometry are recommended as well as other high school courses such as physics, chemistry, electronics and computer programming. Basic writing skills in English are required. Accepted students will be required to possess or purchase approximately $100 of minor accessories.

The Electronic Engineering Technology program prepares graduates to have competence in the following curricular areas:

1. the application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems; and
2. the application of natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems.

Technical Standards: Please refer to Technical Standards for details regarding this program.

NCC has a 2+2 agreement with UNH-Manchester which allows graduates to transfer to UNH-M with only 2 more years to complete their Bachelor of Science degree in electronic engineering technology.

***Accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.

At the completion of the degree in Electronic Engineering Technology, graduates must demonstrate that they will be able to:

1. apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
2. design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
3. apply written, oral, and graphical communication in well- defined technical and non-technical environments; and an ability to identify and use appropriate technical literature
4. conduct standard tests, measurements, and experiments and to analyze and interpret the results; and
5. function effectively as a member of a technical team.

In addition, the graduate will be able to demonstrate competency in the general education outcomes.

First Year - Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
ELET115N	Introduction to Programming Using C++	2	3	3
ELET121N	Digital Circuits I	2	3	3
ELET131N	Circuit Analysis I	3	3	4
ENGL101N	College Composition	4	0	4
MATH110N	Algebra & Trigonometry	4	0	4

First Year - Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
ELET132N	Circuit Analysis II	3	3	4
ELET141N	Electronics I	3	3	4
ENGL122N	Technical Writing	3	0	3
MATH120N	PreCalculus	4	0	4
PHYS130N	Physics I	3	3	4

Second Year - Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
ELET250N	Microcontrollers	3	3	4
ELET241N	Electronics II	3	3	4
HUMA230N	Ethics in the Workplace	3	0	3
MATH210N	Calculus I	4	0	4
PHYS131N	Physics II	3	3	4

Second Year - Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
ELET221N	Advanced Digital Circuits	3	3	4
	ELET245N or MATH211N			3-4
ELET274N	EET Capstone Project	1	3	2
	PSYC130N or Behavioral Social Science General Education Core Requirement			3
		Total Credits		**68-72**