

Electronics Engineering Technology

The Associate in Applied Science degree in Electronics Engineering Technology is accepted at some colleges and universities as the first two years of a bachelor's-level engineering technology program. This program is specifically designed to ease the transition for students planning to join the Bachelor of Science in Engineering Technology (BSET) program at UNC Charlotte, but it also can be applied to many other universities. A BSET graduate is known as a technologist.

Electronics Engineering Technicians (associate degree holders) typically build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, instrumentation systems, communication systems, and power electronic systems.

Emphasis is placed on developing the ability to think critically, analyze, and troubleshoot electronic systems. Beginning with electrical fundamentals, course work progressively introduces electronics, circuit simulation, solid-state fundamentals, digital concepts, instrumentation, C++ programming, microprocessors, programmable Logic Controllers (PLCs). Course work includes setup and maintenance of instrumentation devices, PIDs, Programmable Logic Controllers (PLCs), LabVIEW programming, C++, and microprocessors. Other course work includes the study of various fields associated with the electrical/electronic industry.

This program is intended for university transfer but also can be used to gain employment after graduation. Graduates also may seek employment as technicians, engineering assistants, field service engineers, electrical and electronics repairers, electromechanical equipment assemblers, electronics and instrumentation technician, or salespersons in electrical generation/distribution, industrial maintenance, automation, electronic repair, or other fields requiring a broad-based knowledge of electrical and electronic concepts.

Information on the Electronics Engineering Technology program is available on the Electronics Engineering Technology website.

For specific information about potential positions and wages in electronics engineering technology employment, visit the Central Piedmont Career Coach website.

Electronics Engineering Technology (A40200)

Degree Awarded

The Associate in Applied Science degree - Electronics Engineering Technology is awarded by the college upon completion of the program.

Program Accreditation

The Electronics Engineering Technology program at Central Piedmont is accredited by the Engineering Technology Accreditation Commission of the Accreditation Board of Engineering and Technology (TAC of ABET), abet.org.

How to Apply

Visit Get Started on the home page of the Central Piedmont website to apply.

Contact Information

If you are in this program or have questions about this program please contact our faculty for advising.

The Electronics Engineering Technology program is in the Engineering Technologies Division. For additional information, visit the Electronics Engineering Technology website or call the Engineering Technology Division at 704.330.6773.

General Education Requirements

ENG 111	Writing and Inquiry	3.0
Select 1 of the following:		3.0

ENG 112	Writing and Research in the Disciplines	
	or ENG 113 Literature-Based Research	
	or ENG 114 Professional Research & Reporting	
Select 1 of the following:		3.0

COM 110	Introduction to Communication	
	or COM 231 Public Speaking	
Select 1 of the following:		3.0

ART 111	Art Appreciation	
	or ART 114 Art History Survey I	
	or ART 115 Art History Survey II	
	or DRA 111 Theatre Appreciation	
	or HUM 120 Cultural Studies	
	or HUM 130 Myth in Human Culture	
	or MUS 110 Music Appreciation	
	or MUS 112 Introduction to Jazz	
	or PHI 215 Philosophical Issues	
	or PHI 240 Introduction to Ethics	
	or REL 110 World Religions	
Select 1 of the following:		3.0

ECO 251	Principles of Microeconomics	
	or ECO 252 Principles of Macroeconomics	
	or HIS 111 World Civilizations I	
	or HIS 112 World Civilizations II	
	or HIS 131 American History I	
	or HIS 132 American History II	
	or POL 120 American Government	
	or PSY 150 General Psychology	
	or SOC 210 Introduction to Sociology	
Select 1 of the following:		3.0

MAT 171	Precalculus Algebra	4.0
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Major Requirements

ACA 122	College Transfer Success	1.0
ELC 133	Circuit Analysis II	4.0
ELN 131	Analog Electronics I	4.0
ELN 133	Digital Electronics	4.0
ELN 232	Introduction to Microprocessors	4.0
ELN 260	Prog Logic Controllers	4.0
Select 1 of following two groups:		4.0

Group 1:		
ELC 131	Circuit Analysis I	

Group 2:		
ELC 138	DC Circuit Analysis	

ELC 139	AC Circuit Analysis	
Other Major Requirements:		
EGR 110	Introduction to Engineering Technology	2.0
CSC 134	C++ Programming	3.0
MAT 172	Precalculus Trigonometry	4.0
MAT 271	Calculus I	4.0
PHY 151	College Physics I	4.0
or PHY 251	General Physics I	
PHY 152	College Physics II	4.0
or PHY 252	General Physics II	
MAT 272	Calculus II	4.0
or PCI 170	DAQ and Control	
Total Credits		69

No diplomas are offered in Electronics Engineering Technology.

Electronic engineering Technology Certificates

Electronic Engineering Technology Certificate Specialization in Electronics Engineering Technology Pathway (C40200-C5)

Major Requirements

ELC 131	Circuit Analysis I	4.0
ELN 131	Analog Electronics I	4.0
ELN 133	Digital Electronics	4.0
MAT 171	Precalculus Algebra	4.0
Total Credits		16

The following is the suggested plan for when to take each course to complete the Associate in Applied Science degree, based on the program requirements of the 2022-2023 catalog. This is only a recommendation — you may take courses in another order upon consultation with your advisor. This plan is based on you starting with college-level math and English courses, starting your program in the fall, and attending full-time. You can also follow this sequence if you attend part-time. Speak with an advisor about the plan and any questions. This program might also offer diplomas or certificates; visit the catalog or contact the program for details.

Electronics Engineering Technology suggested course sequence