



# Electronics Engineering Technology Associates Degree

## ADMISSION

### Program Outcomes

The Electronics Engineering Technology curriculum provides a basic background in electronic related theory with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may work as assistants to engineers or as liaisons between engineers and skilled craftsmen.

These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects. Course work includes mathematics, natural sciences, engineering sciences, and technology. Graduates should qualify to obtain occupations such as technical service providers, materials, and technologies testing services, process improvement technicians, engineering technicians, construction technicians, and managers, industrial and technology managers, or research technicians. Electronics Engineering Technology is a course of study that prepares the students to apply basic engineering principles and technical skills to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, and microprocessors or programmable logic controllers. Graduates should qualify for employment as electronics engineering technician, field service technician, instrumentation technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

### Program Information

Course work in Electrical/Electronics Technology includes the following:

- basic electricity
- solid-state fundamentals
- digital concepts
- microprocessors

### Working conditions

The DOL's *Occupational Outlook Handbook* states "Many electrical and electronics installers and repairers work in factories, which can be noisy and sometimes warm. Installers and repairers may have to lift heavy equipment and work in awkward positions. The vast majority work full time."

(Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook* , electronics technicians, on the Internet at [Electrical and Electronics Installers and Repairers](#) ).

## Occupational Outlook

According to the U.S. Department of Labor's Occupational Outlook Handbook, "employment is projected for electrical and electronics installers and repairers of commercial and industrial equipment. This equipment will become more sophisticated and will be used more frequently as businesses strive to lower costs by increasing and improving automation. Companies will install electronic controls, robots, sensors, and other equipment to automate processes such as assembly and testing."

To learn more about employment outlook and work environment in the Electrical/Electronics Technology field, go to: <https://www.bls.gov/ooh/installation-maintenance-and-repair/electrical-and-electronics-installers-and-repairers.htm>

## Admission Steps

- Complete CCC&TI admissions application online at [cccti.edu](http://cccti.edu)
- Submit official high school/GED/AHS transcripts and college transcripts
- Complete FASFA online at [www.studentaid.gov](http://www.studentaid.gov)
- Meet placement testing requirements
- Meet with advisor to register for classes
- Pay for classes and purchase books bundle bookstore

## Important Contact Information

### Admissions

Contact Sara Greene, Admissions Specialist, at 828.726.2706 or [sfgreene@cccti.edu](mailto:sfgreene@cccti.edu) for more information and how to complete the enrollment and registration process.

### Financial Aid

Contact Financial Aid at 828.726.2713 as soon as possible to inquire and complete your FAFSA. Check your CCC&TI student email frequently to monitor your Financial Aid status.

### Program Director

Contact Lucas McGuire, Director, Biomedical Equipment and Electronic Engineering Technologies, at 828.726.2392 or [lmcguire@cccti.edu](mailto:lmcguire@cccti.edu)

## PROGRAM OFFERINGS – Electronics Engineering Technology (A40200)

<b>Fall Semester I</b>					
ACA	115	Success & Study Skills	F/S/SS		1 Credit
ELC	131	Circuit Analysis I	Fall Only	Corequisite ELC 131A (L)	4 Credits
ECL	131 A	Circuit Analysis I Lab	Fall Only	Corequisite ELC 131 (L)	1 Credit
ENG	111	Writing and Inquiry	F/S/SS	Prerequisite DRE-098 or ENG-002	3 Credits
HYD	110	Hydraulics/Pneumatics I	Fall Only		3 Credits
ISC	112	Industrial Safety	Fall Only		2 Credits
				Total	14 Credits
<b>Spring Semester I</b>					
ELC	128	Introduction to Programmable Logic Controller	Spring Only		3 Credits
ELN	131	Analog Electronics I	Spring Only	Corequisite: ELC 112 or ELC 131 (L)	4 Credits
ELN	133	Digital Electronics	Spring Only		4 Credits
MAT	121	Algebra/Trigonometry I	Spring Only	Prerequisite: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, or MAT-003	3 Credits
MNT	110	Intro to Maint. Procedures	Spring Only		2 Credits
				Total	16 Credits
<b>Summer Semester I</b>					
COM	120	Intro to Interpersonal Communication	F/S/SS		3 Credits
ELN	231	Industrial Controls	F/S/SS	Prerequisite ELC 112 or ELC 131 (L)	3 Credits
*Student Choice		Social Science Elective	F/S/SS		3 Credits
				Total	9 Credits
<b>Fall Semester II</b>					
ELC	228	PLC Applications	Fall Only		4 Credits

ELN	232	Introduction to Microprocessors	Fall Only	Prerequisite ELC 133	4 Credits	
NET	125	Introduction to Networks	F/S/SS		3 Credits	
*Student Choice		Humanities/Fine Arts Elective	F/S/SS		3 Credits	
					Total	14 Credits
<b>Spring Semester II</b>						
ATR	282	Robotics and CIM	Spring Only		4 Credits	
CSC	134	C++ Programming	Spring Only		3 Credits	
MNT	160	Industrial Fabrication	Spring Only		2 Credits	
PHY	110	Conceptual Physics	F/S/SS		3 Credits	
AND						
PHY	110A	Conceptual Physics Lab	F/S/SS		1 Credit	
OR						
PHY	131	Physics - Mechanics	On Demand	Prerequisite: MAT 121 or MAT 171	4 Credits	
OR						
PHY	151	College Physics I	On Demand	Prerequisite: MAT 171 (S) Corequisite: MAT 172 is recommended prior to or concurrently with this course (L)	4 Credits	
WBL	110	World or Work	On Demand		1 Credit	
OR						
WBL	111	Work-Based Learning I	F/S/SS		1 Credit	
					Total	14 Credits
<b>Total Credit Hours: 67</b>						

# COST

	<b>Associate</b>
<b>Tuition</b> (\$76/credit hour)	<b>Fall Semester I</b> \$1,064 <b>Spring Semester I</b> \$1,216 <b>Summer Semester I</b> \$684 <b>Fall Semester II</b> \$1,064 <b>Spring Semester II</b> \$1,064 <b>Tuition Total</b> \$5,092
<b>Additional Fees</b>	\$35 campus activity fee (each semester) \$2/per course (max \$10 per semester) campus service fee \$2 (per semester) student accident insurance <b>Total</b> <b>(per semester)</b> \$47
<b>Textbooks</b> (purchased from CCC&TI Bookstore)	varies
<b>Graduation Fee</b>	\$25
<b>Total</b>	approximately <b>\$5,305</b>