



Electrical Systems Technology

Associates Degree

Diploma & Certificate

ADMISSION

Program Outcomes

The Electrical Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial and industrial facilities. Graduates qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical systems.

This program delivers a hands-on approach to:

- Circuit Analysis
- Commercial Wiring
- Industrial Wiring
- National Electric Code
- Hydraulics
- Industrial Motors and Controls

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 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 ccti.edu
- Submit official high school/GED/AHS transcripts and college transcripts
- Complete FASFA online at 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 sgreene@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 Justin Harris, Director, Energy & Construction Trades, at 828.726.2611 or jharris@cccti.edu

PROGRAM OFFERINGS – Electrical Systems Technology Associate Degree Program (A35130)

Fall Semester I						
ACA	115	Success & Study Skills	F/S/SS			1 Credit
BPR	111	Print Reading	Fall Only			2 Credits
ELC	113	Residential Wiring	Fall Only			4 Credits
ELC	118	National Electrical Code	Fall Only			2 Credits
ELC	131	Circuit Analysis I	Fall Only			4 Credits
ELC	131A	Circuit Analysis I Lab	Fall Only			1 Credit
ISC	112	Industrial Safety	Fall Only			2 Credits
					Total	16 Credits
Spring Semester I						
CIS	110	Introduction to Computers	F/S/SS			3 Credits
ELC	114	Commercial Wiring	Spring Only	Prerequisite: ELC 113		4 Credits
ELC	121	Electrical Estimating	Spring Only			2 Credits
ELC	128	Introduction to Programmable Logic Controller	Spring Only			3 Credits

MAT	121	Algebra/Trigonometry I	Spring Only			3 Credits
					Total	15 Credits
Summer Semester I						
COM	120	Intro to Interpersonal Communication	F/S/SS			3 Credits
ELN	231	Industrial Controls	F/S/SS	Prerequisite: ELC 131		3 Credits
					Total	6 Credits
Fall Semester II						
ELC	228	PLC Applications	Fall Only			4 Credits
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
Student Choice		Social Science Elective	F/S/SS			3 Credits
					Total	13 Credits
Spring Semester I						
ELN	131	Analog Electronics I	Spring Only	Prerequisite: ELC 131		4 Credits
ELN	133	Digital Electronics	Spring Only			4 Credits
MNT	160	Industrial Fabrication	Spring Only			2 Credits
WBL	110	World of Work				1 Credit
			OR			
WBL	111	Work-Based Learning I	F/S/SS			1 Credit
					Total	11 Credits
Total Credit Hours: 64						

PROGRAM OFFERINGS – Electrical Systems Technology Diploma Program (D35130)

Fall Semester I

BPR	111	Print Reading	Fall Only			2 Credits
ELC	113	Residential Wiring	Fall Only			4 Credits
ELC	118	National Electrical Code	Fall Only			2 Credits
ELC	131	Circuit Analysis I	Fall Only			4 Credits
ELC	131 A	Circuit Analysis I Lab	Fall Only			1 Credit
ISC	112	Industrial Safety	Fall Only			2 Credits
					Total	15 Credits

Spring Semester I

CIS	110	Introduction to Computers	F/S/SS			3 Credits
ELC	114	Commercial Wiring	Spring Only	Prerequisite: ELC 113		4 Credits
ELC	121	Electrical Estimating	Spring Only			2 Credits
ELC	128	Introduction to Programmable Logic Controller	Spring Only			3 Credits
MAT	121	Algebra/Trigonometry I	Spring Only			3 Credits
					Total	15 Credits

Summer Semester I

COM	120	Intro to Interpersonal Communication	F/S/SS			3 Credits
ELN	231	Industrial Controls	F/S/SS	Prerequisite : ELC 131		3 Credits

Student Choice		Social Science Elective	F/S/SS			3 Credits
					Total	6 Credits
Total Credit Hours: 39						

**PROGRAM OFFERINGS – Electrical Systems Technology
Certificate Program (C35130)**

Fall Semester I

ELC	113	Residential Wiring	Fall Only			4 Credits
ELC	131	Circuit Analysis I	Fall Only			4 Credits
ELC	131 A	Circuit Analysis I Lab	Fall Only			1 Credit
					Total	9 Credits

Spring Semester I

ELC	114	Commercial Wiring	Spring Only		Prerequisite: ELC 113	4 Credits
ELC	121	Electrical Estimating	Spring Only			2 Credits
ELC	128	Introduction to Programmable Logic Controller	Spring Only			3 Credits
					Total	9 Credits

Total Credit Hours: 18

COST

	Associate	Diploma	Certificates
Tuition (\$76/credit hour)	This program is designed to be completed in 2 years	This program is designed to be completed in 12 months	This program is designed to be completed in 6 – 12 months depending on certificate
	Fall Semester I \$1,064	Fall Semester I \$1,140	*Depending on certificate, price will vary*
	Spring Semester I \$1,140	Spring Semester I \$1,140	\$912 - \$1,140
	Summer Semester I \$684	Summer Semester I \$684	
	Fall Semester II \$1,140		
	Spring Semester II \$836		
	Tuition Total \$4,864	Tuition Total \$2,964	
Additional Fees			
	\$35 campus activity fee (each semester)	\$35 campus activity fee (each semester)	\$35 campus activity fee (each semester)
	\$2/per course (max \$10 per semester) campus service fee	\$2/per course (max \$10 per semester) campus service fee	\$2/per course (max \$10 per semester) campus service fee

	\$2 (per semester) student accident insurance	\$2 (per semester) student accident insurance	\$2 (per semester) student accident insurance
	Total Per Semester: \$47.00	Total Per Semester: \$47.00	Total Per Semester: \$47.00
Textbooks (purchased from CCC&TI Bookstore)	varies	varies	varies
OSHA Card	\$10.00	\$10.00	N/A
Graduation Fee	\$25	\$25	\$25
Total	approximately \$5,478	approximately \$2,818	approximately \$984 – \$1,212