ELECTRICAL TECHNOLOGY, Certificate - 4370

Engineering, Trades & Computer Technologies Department
CIP Code: 46.0302

The Electrical Technology certificate provides students with the fundamental knowledge and skills needed within the electrical field. Residential, commercial construction, and maintenance applications and presented. Curricular coursework covers basic electrical theory, residential and commercial wiring, safety, the National Electrical Code, and blueprint reading. Students are exposed to the fundamentals of electrical systems through hands-on laboratory exercises that involve mock wiring of commercial and residential systems. This certificate may be completed at the Harrisburg Campus through on-campus/in-person instruction.

Career Opportunities
Graduates find employment as general electricians, electrician apprentices, residential electricians, electrical service technicians, electric linemen, electric installers, and industrial maintenance technicians. ***(SOC Code: 47-2111 Electricians)***

Competency Profile
This curriculum is designed to prepare students to:
- Demonstrate a variety of technical skills in the electrical field
- Recognize and practice safe and healthy work procedures
- Perform basic electrical mathematical calculations
- Properly and safely handle electrical tools and materials
- Read and interpret blueprints necessary for specified installations
- Interpret the National Electric Code and use it in specific applications
- Demonstrate fundamental procedures of an electrical system used in residential, commercial, and industrial construction
- Solve complex problems of circuit design and analysis

PROGRAM REQUIREMENTS (TOTAL CREDITS = 30)

General Education	Major Requirements		Other Required Courses	
	ELOC 153 Fundamentals of Electricity	4	Program Elective*	**4**
	ELOC 157 Electrical Wiring I	4		
	ELOC 163 Electrical Wiring II	4		
	ELOC 169 Low Voltage Wiring	3		
	ELOC 171 Electrical Service	2		
	ELOC 172 National Electrical Code	2		
	ELOC 175 Electrical System Troubleshooting	3		
	GTEC 101 Safety: OSHA-30 & NFPA-70E	3		
	GTEC 105 Customer Service	1		
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Students are to select their program electives from the following areas: ARCH, AUTO, BUSI, CAD, CIS, CNT, ELOC, FIRE, GTEC, HVAC, IA and WELD.

RECOMMENDED SEQUENCE FOR 15-WEEK SEMESTER

Fall Semester I		Spring Semester I	
ELOC 153	4	GTEC 105	1
ELOC 157	4	ELOC 169	3
ELOC 163	4	ELOC 171	2
GTEC 101	3	ELOC 172	2
		ELOC 175	3
		Program Elective*	4

RECOMMENDED SEQUENCE FOR 7-WEEK SEMESTER

Fall Semester I 1ST 7-Weeks		Fall Semester I 2nd 7-Weeks		Spring Semester I 1st 7-Weeks		Spring Semester I 2nd 7-Weeks	
ELOC 153	4	ELOC 163	4	ELOC 171	2	ELOC 169	3
ELOC 157	4	GTEC 101	3	ELOC 172	2	GTEC 105	1
				ELOC 175	3	Program Elective*	4