

Practical Electrical Technician

Career Studies Certificate

Program Coordinator: Donnie Melvin • dmelvin@vhcc.edu • 276-739-2453

Length: Two Semesters

Purpose: This program is designed to prepare the student for full-time employment as an electrician's helper, immediately upon completion of the program. A student who completes the program is capable of performing the job skills normally expected of beginning electricians, working with a licensed electrician.

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester (Fall)				
ELE 111	Home Electric Power I	2	3	3
ELE 157	Electricity Fundamentals	3	6	6
SAF 130	Industrial Safety	1	0	1
Total		6	9	10
Second Semester (Spring)				
ELE 112	Home Electric Power II	2	3	3
ELE 131	National Electric Code I	3	0	3
ELE 141	DC and AC machines	3	3	4
Total		8	6	10
Total Credits for Career Studies Certificate				20

Advanced Practical Electrical Technician

Career Studies Certificate

Program Coordinator: Donnie Melvin • dmelvin@vhcc.edu • 276-739-2453

Length: Three Semesters

Purpose: This program is designed to prepare students for employment upon graduation as electrical technicians with emphasis on installation, power distribution, controls, programmable controls, mechanical systems and the maintenance of industrial machinery. Graduates are qualified for positions such as: Basic Electrician, Electrical/ Electronic Technician, Industrial Maintenance Technician, Industrial Technician.

Students must complete the Practical Electrical Technician Career Studies Certificate prior to enrollment in the Advanced Practical Electrical Technician Career Studies Certificate unless the Program Coordinator grants approval.

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester (Fall)				
ELE 233	Programmable Logic Controller Systems I	2	3	3
MEC 161	Basic Fluid Mechanics-Hydraulics/Pneumatics	2	3	3
ELE 245	Industrial Wiring	2	2	3
Total		6	8	9
Second Semester (Spring)				
ITE 100	Intro. Information Systems or Fundamentals of Computer Technology	3	0	3
ELE 175	Industrial Solid State Devices and Circuits	2	3	3
ELE 234	Programmable Logic Controller Systems II	2	3	3
ELE 225	Electrical Control Systems	3	3	4
Total		10	9	13
Third Semester (Summer)				
ELE 132	National Electrical Code II	3	0	3
WEL 110	Welding Processes	2	3	3
Total		5	3	6
Total Credits for Career Studies Certificate				28