Electrical Technology

Associate of Applied Science Degree

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

Length: Four semesters (two years)

Purpose: The Associate of Applied Science Degree in Electrical Technology 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.

Occupational Objectives:

Basic Electrician, Electrical/ Electronic Technician, Industrial Maintenance Technician, Industrial Technical Sales, Industrial Field Service, Maintenance Supervisor

Admission Requirements: A student eligible for admission to the College can normally be considered for admission to the Electrical Technology curriculum. Proficiency in high school English and mathematics is required. Direct enrollment guidelines using either multiple measures or informed placement will determine a student's placement into college-level English and mathematics courses.

Program Requirements: The Electrical Technology Degree is a two-year program with two-thirds of the program content in electrical and mechanical courses, and the remaining one-third consists of math, social sciences, English, humanities, and physical education. Course content will include the theoretical concepts and practical applications as they pertain to industry needs. The graduate will be awarded the Associate of Applied Science in Electrical Technology upon satisfactory completion of the two-year program.

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester (Fall)				
DRF 161	Blueprint Reading	1	2	2
ELE 157	Electricity Fundamentals	3	6	6
ELE 111	Home Electric Power I	2	3	3
ENG 111 or ENG 115	College Composition I or Technical Writing	3	0	3
SDV 101	Orientation to College Success	1	0	1
SAF 130	Industrial Safety – OSHA 10	1	0	1
	Total	**11**	**11**	**16**
Second Semester (Spring)				
MTH 111	Basic Technical Mathematics	3	0	3
ELE 112	Home Electric Power II	2	3	3
ELE 141	DC & AC Machines	3	3	4
ITE 100	Introduction to Information System[1]	3	0	3
ELE 131	National Electrical Code I	3	0	3
	Total	**14**	**6**	**16**
Third Semester (Fall)				
ELE 233	Programmable Logic Controllers I	2	3	3
ELE 245	Industrial Wiring	2	3	3
MEC 161	Hydraulics & Pneumatics	2	2	3
EEE	General Education Elective	3	0	3
EEE	Humanities Elective	3	0	3
	Total	**12**	**8**	**15**

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
Fourth Semester (Spring)				
ELE 234	Programmable Logic Controllers II	2	3	3
ELE 225	Electrical Control Systems	3	3	4
PED	Physical Education	0	2	1
ELE 175	Industrial Solid State Devices & Circuits	2	3	3
EEE	Social Science Elective	3	0	3
	Total	**10**	**11**	**14**
Fifth Semester (Summer)				
ELE 132	National Electric Code II	3	0	3
WEL 110	Welding Processes	2	3	3
	Total	**5**	**3**	**6**
Total Minimum Credits for AAS Degree				**67**

Footnote:

[1]ITE 115, ITE 119, or ITE 152 are acceptable substitutes

Students are urged to follow the recommended pathway for this degree when choosing electives.

Additional approved humanities and social science electives are listed at http://www.vhcc.edu/GenEdCore.