

ELECTRICAL/ELECTRONICS TECHNOLOGY

(D35220)

Diploma

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Course work, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, electronics, programmable logic controllers, industrial motor controls, applications of the National Electric Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical/electronic field as an on-the-job trainee or apprentice, assisting in the layout, installation and maintenance of electrical/electronic systems.

COURSE AND HOUR REQUIREMENTS

Title	Class	Lab	Work Exp/		Credits
			Clinical		
I. GENERAL EDUCATION COURSES					
Communications:					
ENG 102	Applied Communications II	3	0	0	3
Natural Science/Mathematics:					
MAT 101	Applied Mathematics I	2	2	0	3
A. CORE					
Required Subject Areas:					
Wiring:					
ELC 113	Basic Wiring I	2	6	0	4
Motor Controls:					
ELC 117	Motors and Controls	2	6	0	4
DC/AC:					
ELC 112	DC/AC Electricity	3	6	0	5
B. CONCENTRATION: (not applicable)					
C. OTHER MAJOR HOURS:					
Required Courses:					
ELC 115	Industrial Wiring	2	6	0	4
ELC 118	National Electrical Code	1	2	0	2
ELC 119	NEC Calculations	1	2	0	2
ELC 125	Diagrams and Schematics	1	2	0	2

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ELC 215	Electrical Maintenance	2	3	0	3
ELN 229	Industrial Electronics	3	3	0	4
PHY 101	Fundamentals of Physics I	3	2	0	4

Major Electives: (Select 4 hours)

BPR 111	Blueprint Reading	1	2	0	2
CIS 110	Introduction to Computers	2	2	0	3
COE 111,112,113	Cooperative Work Experience I	0	0	10-20-30	1-2-3
COE 121,122,123	Cooperative Work Experience II	0	0	10-20-30	1-2-3
COE 131	Cooperative Work Experience III	0	0	10	1
ELC 114	Basic Wiring II	2	6	0	4
ELC 128	Introduction to PLC	2	3	0	3
ISC 110	Workplace Safety	1	0	0	1
MNT 110	Introduction to Maintenance Procedures	1	3	0	2
MNT 165	Mechanical Industrial Systems	1	3	0	2

TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA: 44

INDUSTRIAL WIRING

(C35220I)

Certificate

COURSE AND HOUR REQUIREMENTS

	Title	Class	Lab	Work Exp/	
				Clinical	Credits
ELC 112	DC/AC Electricity	3	6	0	5
ELC 113	Basic Wiring I	2	6	0	4
ELC 115	Industrial Wiring	2	6	0	4
ELC 125	Diagrams and Schematics	1	2	0	2

TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE: 15