## ELECTRICAL SYSTEMS TECHNOLOGY DIPLOMA (D35130)

This curriculum is designed to provide training for persons interested in the installation and maintenance of electrical 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, 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 field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical systems.

## **COURSE & HOUR REQUIREMENTS**

Course Number & Name		<b>Class Hours</b>	Lab Hours	Credit Hours
FALL SEMESTER				
ACA 111 College Student Success		1	0	1
ELC 112 DC/AC Electricity		3	6	5
ELC 117 Motors and Controls		2	6	4
ELC 125 Diagrams and Schematics		1	2	2
	Total	7	14	12
SPRING SEMESTER				
ELC 114 Commercial Wiring		2	6	4
ELC 118 National Electrical Code		1	2	2
ELC 119 NEC Calculations		1	2	2
ELC 128 Intro to PLC		2	3	3
*MAT 110 Mathematical Measurement & Lit.		2	2	3
	Total	8	15	14
SUMMER SEMESTER				
ELC 115 Industrial Wiring		2	6	4
ELN 229 Industrial Electronics		3	3	4
*ENG 101 Applied Communications I		3	0	3
	Total	8	9	11
TOTAL SEMESTER CREDIT HOURS FOR DIPLOMA				37

\*This course is a component of the general education requirements needed for graduation. **NOTE:** Students are required to take ACA 111 in their first semester.

## MOTOR CONTROLS CERTIFICATE (C35130M)

## **COURSE & HOUR REQUIREMENTS**

Class Title	Class Hours	Lab Hours	Credit Hours
ELC 112 DC/AC Electricity	3	6	5
ELC 117 Motors and Controls	2	6	4
ELC 118 National Electrical Code	1	2	2
ELC 125 Diagrams and Schematics	1	2	2
TOTAL SEMESTER CREDIT HOURS FOR CERTIFICATE	7	16	13

**NOTE:** This certificate can be completed in 1 semester.