

A.A.S. IN ELECTRICAL SYSTEM TECHNOLOGY



2022-23

A.A.S. IN ELECTRICAL SYSTEM TECHNOLOGY

(A35130) 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.

Coursework, 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.

Fall Semester 1			Lecture	Lab	Credit
ELC	112	DC/AC Electricity	3	6	5
ELC	113	Residential Wiring	2	6	4
ENG	111	Writing & Inquiry	3	0	3
				Total	12

Spring Semester 1			Lecture	Lab	Credit
ELC	115	Industrial Wiring	2	6	4
ELN	231	Industrial Controls	2	3	3
ACA	111	College Student Success	1	0	1
MAT	110	Math Measurement & Literacy OR	2	2	3
MAT	171	Precalculus Algebra	2	2	4
				Total	11-12

Summer Semester 1			Lecture	Lab	Credit
ELC	125	Diagrams and Schematics	1	2	2
ISC	112	Industrial Safety	2	0	2
				Total	4

Fall Semester 2			Lecture	Lab	Credit
ELC	118	National Electrical Code	1	2	2
ELC	119	NEC Calculations	1	2	2
ELC	117	Motors and Controls	2	6	4
ENG	112	Writing/Research in the Disciplines	3	0	3
*Humanities Gen Ed Requirement			3	0	3
				Total	14

Spring Semester 2			Lecture	Lab	Credit
ELC	128	Introduction to PLC	2	3	3
ELN	131	Analog Electronics	3	3	4
CIS	110	Introduction to Computers	2	2	3
*Social Science Gen Ed Requirement			3	0	3
				Total	13

Summer Semester 2			Lecture	Lab	Credit
ELC	215	Electrical Maintenance	2	3	3
				Total	3

Fall Semester 3			Lecture	Lab	Credit
ALT	120	Renewable Energy Tech	2	2	3
ELN	133	Digital Electronics	3	3	4
ELC	127	Software for Technicians	1	3	2
				Total	9

TOTAL HOURS **66/67**

*Please see the section titled "General Education Requirements for A.A.S. programs" at the end of the Program of Study section for specific courses that fulfill these requirements.



DIPLOMA IN ELECTRICAL SYSTEMS TECHNOLOGY

(D35130)

			Lecture	Lab	Credit
ELC	112	DC/AC Electricity	3	6	5
ELC	113	Residential Wiring	2	6	4
ENG	111	Writing & Inquiry	3	0	3
ELC	115	Industrial Wiring	2	6	4
MAT	110	Math Measurement & Literacy OR	2	2	3
MAT	171	Precalculus Algebra	2	2	4
ELC	125	Diagrams and Schematics	1	2	2
ELC	118	National Electrical Code	1	2	2
ELC	119	NEC Calculations	1	2	2
ELC	117	Motors and Controls	2	6	4
ELC	128	Introduction to PLC	2	3	3
ELC	215	Electrical Maintenance	2	3	3
ELC	127	Software for Technicians	1	3	2
				Total	37/38

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