## **ELECTRICAL SYSTEMS TECHNOLOGY**

The Electrical Systems Technology 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.

<b>A.A.S.</b> ]	FRICAL SYSTEMS TECHNO Degree (A35130) I Sequence of Courses	LO	GY	ELECTRICAL SYSTEMS TECHNOLOGY Diploma Program (D35130) Suggested Sequence of Courses			
Prefix	Course Title	Class	Lab	Clinic	Work	Credit	brelix Conse Litle Credit Conses
FALL SEMESTER 1							FALL SEMESTER 1
	Success and Study Skills <i>or</i>						ACA 115 Success and Study Skills or
	2 College Transfer Success	0	2	0	0	1	ACA 122 College Transfer Success 0 2 0 0 1
	DC/AC Electricity	3	6	0	0	5	ELC 112 DC/AC Electricity 3 6 0 0 5
	Residential Wiring	2	6	0	0	4	ELC 113 Residential Wiring 2 6 0 0 4
ELC 118	National Electrical Code	1	2	0	0	2	ELC 118 National Electrical Code 1 2 0 0 2
ELC 125	Diagrams and Schematics	1	2	0	0	2	ELC 125 Diagrams and Schematics 1 2 0 0 2
ISC 112	Industrial Safety	2	0	0	0	2	ISC 112 Industrial Safety 2 0 0 0 2
	TOTALS	9	18	0	0	16	TOTALS 9 18 0 0 16
SPRING	SEMESTER 1						SPRING SEMESTER 2
	Commercial Wiring	2	6	0	0	4	ELC 114 Commercial Wiring 2 6 0 0 4
	Motors and Controls	2	6	0	0	4	ELC 117 Motors and Controls 2 6 0 0 4
	Introduction to PLC	2	3	0	0	3	ELC 128 Introduction to PLC 2 3 0 0 3
	NEC Calculations	1	2	0	0	2	ELC 119 NEC Calculations 1 2 0 0 2
	Hydraulics/Pneumatics I	2	3	0	0	3	HYD 110 Hydraulics/Pneumatics I 2 3 0 0 3
111111110	TOTALS	9		0	0	16	TOTALS 9 20 0 0 16
							CHARLED CEMECTED
	R SEMESTER I						SUMMER SEMESTER
	Freshman Composition or	_					ENG 110 Freshman Composition or
ENG 11.	1 Expository Writing	3	0	0	0	3	ENG 111 Writing & Inquiry 3 0 0 0 3
	Humanities / Fine Arts Elective	3	0	0	0	3	General Education Requirement 3 0 0 0 3
	TOTALS	6	0	0	0	6	TOTALS 6 0 0 0 6
FALL SE	MESTER 2						DIPLOMA TOTAL 38
AHR 110	Intro to Refrigeration	2	6	0	0	5	
AHR 111	HVACR Electricity	2	2	0	0	3	
	Print Reading	1	2	0	0	2	
BUS 110	Introduction to Business	3	0	0	0	3	
ELC 213	Instrumentation	3	2	0	0	4	ELECTRICAL SYSTEMS TECHNOLOGY
	TOTALS	11	12	0	0	17	Residential Electrical Technician
							Certificate Program (C35130A)
SPRING	SEMESTER 2						Required Courses
CIS 110	Intro to Computers	2	2	0	0	3	Prefix Course Title Crash
	Public Speaking <i>or</i>						Prefix Course Title ☐ ☐ ☐ ☐ ☐ ☐ ☐
ENG 11	5 Oral Communication	3	0	0	0	3	
MAT 110	Math Measurement and Literacy	2	2	0	0	3	ELC 112 DC/AC Electricity 3 6 0 0 5
	Behavioral/Social Sciences Elective	3	0	0	0	3	ELC 113 Residential Wiring 2 6 0 0 4
	TOTALS	10	4	0	0	12	ELC 118 National Electrical Code 1 2 0 0 2
							ELC 125 Diagrams and Schematics 1 2 0 0 2
	PROGRAM TOTAL					67	TOTALS 7 16 0 0 13
							CERTIFICATE TOTAL 13

Industr	TRICAL SYSTEMS TECHNO ial Electrical Technician ate Program (C35130B)	LO	GY	ELECTRICAL SYSTEMS TECHNOLOGY Manufacturing Electrical Technician Intermediate Certificate Program (C35130G) Required Courses			
Kequirea	Courses	SSI	0	nic	Work	Credit	Prefix Course Title C C C C C C C C C C C C C C C C C C C
Prefix	Course Title	Class	Lab	Clinic	₩	Cre	Prefix Course Title Credit Course Lite Course Lit
							ELV A OPPARATION
	DC/AC Electricity	3	6	0	0	5	FALL SEMESTER  DDD 111 Print Positing 1 2 0 0 2
	Commercial Wiring	2 2		0		4	BPR 111         Print Reading         1         2         0         0         2           ELC 118         National Electrical Code         1         2         0         0         2
ELC II/	Motors and Controls TOTALS	2 7		0	0	4 13	ELC 178 National Electrical Code 1 2 0 0 2 ELC 125 Diagrams and Schematics 1 2 0 0 2
	IUIALS	/	18	U	U	13	MAT 121 Algebra/Trigonometry I 2 2 0 0 3
	CERTIFICATE TOTAL					13	TOTALS 5 8 0 0 9
	CERTIFICATE TO THE					10	
							SPRING SEMESTER
							ELC 117 Motors and Controls 2 6 0 0 4
	ELECTRICAL SYSTEMS TECHNOLOGY						HYD 110 Hydraulics/Pneumatics 2 3 0 0 3 TOTALS 4 9 0 0 7
Line Te	ate Program (C35130E)						TOTALS 4 9 0 0 7
Required							CERTIFICATE TOTAL 16
riequii eu		Class	ρ	nic	Work	Credit	
Prefix	Course Title	Cla	Lab	CÏ	₩	Cr	
	Success and Study Skills	0	2	0	0	1	ELECTRICAL SYSTEMS TECHNOLOGY
	DC/AC Electricity	3	6	0	0	5	Manufacturing Electrical Technician Advanced Certificate Program (C35130H)
	Residential Wiring National Electrical Code	2	6	0	0	4	
	Diagrams and Schematics	1		0		2	Required Courses 용 기 보 형
ISC 112	Industrial Safety	2	0	0	0	2	Prefix Course Title Class  Climic Climic Cedit
150 112	TOTALS	9			0	16	Trenx course rate
							FALL SEMESTER
	CERTIFICATE TOTAL					16	HUM 115 Critical Thinking 3 0 0 0 3
							HYD 210 Advanced Hydraulics 1 3 0 0 2
							TOTALS 4 3 0 0 5
ELECT	TRICAL SYSTEMS TECHNO	LO	GY		SPRING SEMESTER		
Manufacturing Electrical Technician							ELC 119 NEC Calculations 1 2 0 0 2
Beginne	er Certificate Program (C35130	0F)					ELC 128 Introduction to PLC 2 3 0 0 3
Required	Courses	7.00		၁	<b>~</b>	ij	ELC 135 Electrical Machines 2 2 0 0 3
		Class	ap	ĬĬ.	/orl	Credit	TOTALS 5 7 0 0 8
Prefix	Course Title	C	Ĩ	C	=	C	CEDTATE CATTO TOTAL
FALL SE	MESTER						CERTIFICATE TOTAL 13
	Introduction to Computers	2	2	0	0	3	
	DC/AC Electricity		6				
	Residential Wiring	2		0		4	ELECTRICAL SYSTEMS TECHNOLOGY
ISC 112	Industrial Safety	2	0			2	Photo Voltaic Technology Certificate Program
	TOTALS	9	14	0	0	14	(C35130I)
SDDING	SEMESTED.						Required Courses
	SEMESTER Commercial Wiring	2	6	0	0	4	Lab Colinic Course Litle Course Litle Credit Course Litle Credit Course Litle Credit Course Litle Credit Course Credit Course Litle Courses
	Math Measurement & Literacy	2	2		0	3	Prefix Course Title ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
1411 110	TOTALS	4	8		0	7	FALL SEMESTER
							ELC 112 DC/AC Electricity 3 6 0 0 5
	CERTIFICATE TOTAL					21	ELC 118 National Electrical Code 1 2 0 0 2
							ISC 112 Industrial Safety 2 0 0 0 2
							TOTALS 6 8 0 0 9
							SPRING SEMESTER
							ELC 114 Commercial Wiring 2 6 0 0 4 ELC 220 Photovoltaic Sys Technology 2 3 0 0 3
							ELC 220 Photovoltaic Sys Technology 2 3 0 0 3 TOTALS 4 9 0 0 7
							101ALO 4 7 0 0 7
							CERTIFICATE TOTAL 16