

**PROGRAM PLANNING GUIDE**  
**ELECTRICAL SYSTEMS TECHNOLOGY**  
**A35130 Fall Start**

Replaces Curriculum Schedule with Revision Date: FA2024

Date Revised: FA2025

**CURRICULUM BY SEMESTER**

					Hours Per Week		Credits	Semesters Offered
Course No.		Course Title	Pre-Requisites	Co-Requisites	Class	Lab		
Fall Semester 1								
ACA	115	Success & Study Skills	None	None	0	2	1	FA, SP
ELC	125	Diagrams and Schematics	None	None	1	2	2	FA, SP
ELC	112	DC/AC Electricity	None	None	3	6	5	FA, SP
ELC	113	Residential Wiring	None	ELC 118	2	6	4	FA, SP
ELC	118	National Electric Code	None	None	1	2	2	FA, SP
Spring Semester 1								
ELC	114	Commercial Wiring	ELC 118	None	2	6	4	FA, SP
ELC	117	Motors and Controls	ELC 112 or ELC 131	None	2	6	4	FA, SP
ELC	119	NEC Calculations	ELC 118	None	1	2	2	FA, SP
		English Elective					3	
Summer Semester 1								
ELC	128	Introduction to PLC	ELC 117 or ELN 231	None	2	3	3	SP, SU
ISC	121	Environmental Health & Safety	None	None	3	0	3	FA, SP, SU
		Major Elective 1					3	
Fall Semester 2								
ELC	115	Industrial Wiring	ELC 114 and ELC 119	None	2	6	4	FA, SP
		Humanities Elective					3	
		Math Elective					3	
		Major Elective 2					3	
		Work-Based Learning Elective					2	
Spring Semester 2								
ELC	127	Software for Technicians	None	None	1	3	2	SP, SU
ELC	134	Transformer Applications	ELC 117	None	1	2	2	SP
		Communication Elective					3	
		Social Science Elective					3	
		Major Elective 3					3	

**Graduation Requirement Credit Hours: 64**

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### WORK BASED LEARNING ELECTIVE

WBL Electives: Take 2 Credit Hours

					Hours Per Week		Credits	Semesters Offered
Course No.	Course Title				Class	Lab		
ELC 121	Electrical Estimating		ELC 125 and ELC 114	None	1	2	2	FA, SP
WBL 111DE	Work-Based Learning I		14 program credits hours	None	0	10	1	FA, SP, SU
WBL 112DE	Work-Based Learning I		14 program credits hours	None	0	20	2	FA, SP, SU
WBL 121DE	Work-Based Learning II		14 program credits hours	None	0	10	1	FA, SP, SU

### MAJOR ELECTIVES

Major Electives: Take 9 Credit Hours

#### Renewable Energy Track

					Hours Per Week		Credits	Semesters Offered
Course No.	Course Title				Class	Lab		
ALT 120	Renewable Energy Technology		ELC 112	None	2	2	3	SU
ELC 220	Photovoltaic Systems Technology		ALT 120	None	2	3	3	FA
ELC 221	Advanced Photovoltaic System		ELC 220	None	2	3	3	SP

#### Business Track

					Hours Per Week		Credits	Semesters Offered
Course No.	Course Title				Class	Lab		
BUS 110	Introduction to Business		None	None	3	0	3	FA, SP, SU
BUS 115	Business Law I		None	None	3	0	3	FA, SP, SU
BUS 139	Entrepreneurship I		None	None	3	0	3	FA, SP, SU

### ENGLISH ELECTIVES

Take 3 Credit Hours

					Hours Per Week		Credits	Semesters Offered
Course No.	Course Title				Class	Lab		
ENG 110	Freshman Composition		ENG 002 (If required)	None	3	0	3	FA, SP, SU
ENG 111	Writing and Inquiry (University Transfer)		ENG 025 (If required)	ENG 045 (If required)	3	0	3	FA, SP, SU

### COMMUNICATION ELECTIVES

Take 3 Credit Hours

					Hours Per Week		Credits	Semesters Offered
Course No.	Course Title				Class	Lab		
COM 110	Introduction to Communication		ENG 002 or ENG 025 (If required), ENG 110	None	3	0	3	FA, SP, SU
COM 231	Public Speaking		ENG 111	None	3	0	3	FA, SP, SU

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## HUMANITIES ELECTIVES

Take 3 Credit Hours

				Hours Per Week		Credits	Semesters Offered
Course No.		Course Title		Class	Lab		
HUM	110	Technology and Society	ENG 002 or ENG 025 (If required)	None	3	0	3 FA, SP, SU
HUM	115	Critical Thinking	ENG 002, ENG 025, or ENG 111	None	3	0	3 FA, SP, SU

## SOCIAL SCIENCE ELECTIVES

Take 3 Credit Hours

				Hours Per Week		Credits	Semesters Offered
Course No.		Course Title		Class	Lab		
PSY	118	Interpersonal Psychology	None	None	3	0	3 FA, SP, SU
PSY	150	General Psychology (University Transfer)	ENG 002 or ENG 025 (If required)	None	3	0	3 FA, SP, SU

## MATH ELECTIVES

Take 3 Credit Hours

				Hours Per Week		Credits	Semesters Offered
Course No.		Course Title		Class	Lab		
MAT	110	Math Measurement and Literacy	MAT 003, MAT 010, or MAT 045M (If required)	None	2	2	3 FA, SP, SU
MAT	121	Algebra/Trigonometry I	MAT 003, MAT 021, MAT 035, or MAT 045A (If required)	None	2	2	3 FA, SP, SU
MAT	171	Precalculus Algebra (University Transfer)	ENG 002 or ENG 025 (If required) MAT 003, MAT 035, MAT 071, or MAT 045P (If required)	None	3	2	4 FA, SP, SU