

PROGRAM PLANNING GUIDE

ELECTRICAL SYSTEMS TECHNOLOGY A35130 Spring Start

Replaces Curriculum Schedule with Revision Date: Fall 2024

Date Revised: FA2025

CURRICULUM BY SEMESTER

					Hours Per Week		Credits	Semesters Offered
Course No.		Course Title	Pre-Requisites	Co-Requisites	Class	Lab		
Spring 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
Summer Semester 1								
ELC	127	Software for Technicians	None	None	1	3	2	SP, SU
		Math Elective					3	
		Major Elective 1					3	
Fall 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	
		Major Elective 2					3	
Spring Semester 2								
ELC	115	Industrial Wiring	ELC 114 and ELC 119	None	2	6	4	FA, SP
ELC	134	Transformer Applications	ELC 117	None	1	2	2	SP
		Communication Elective					3	
		Humanities Elective					3	
		Work-Based Learning Elective					2	
		Major Elective 3					3	

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Summer Semester 2								
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
		Social Science Elective					3	

Graduation Requirement Credit Hours: 64

WORK BASED LEARNING ELECTIVE

Major Electives Credit Hours Needed: 4								
Course No.		Course Title			Hours Per Week		Credits	Semesters Offered
					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

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ENGLISH ELECTIVES

Major Electives Credit Hours Needed: 3								
Course No.		Course Title			Hours Per Week		Credits	Semesters Offered
					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

Major Electives Credit Hours Needed: 3								
Course No.		Course Title			Hours Per Week		Credits	Semesters Offered
					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

HUMANITIES ELECTIVES

Major Electives Credit Hours Needed: 3								
Course No.		Course Title			Hours Per Week		Credits	Semesters Offered
					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

Major Electives Credit Hours Needed: 3								
Course No.		Course Title			Hours Per Week		Credits	Semesters Offered
					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

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MATH ELECTIVES								
Major Electives		Credit Hours Needed: 3						
Course No.		Course Title			Hours Per Week		Credits	Semesters Offered
					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