

# ELECTRICAL TECHNOLOGY

(Wallace Campus)

(Easterling Correctional Facility–Electrical Technology Certificates Only)

The Electrical Technology program prepares individuals to apply technical knowledge and skills to install, operate, maintain, and repair electric apparatus and systems such as residential, commercial, and industrial electric-power wiring; and DC and AC motors, controls, and electrical distribution panels. Includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.

## DEGREE CURRICULUM (Wallace Campus)

<i>Course</i>		<i>Credit Hours</i>
<b>Area I: Written and Oral Communications</b>		<b>6</b>
ENG 101	English Composition I	3
SPH 106	Fundamentals of Oral Communication <b>OR</b>	
SPH 107	Fundamentals of Public Speaking	3
<b>Area II: Humanities and Fine Arts</b>		<b>3</b>
	Humanities/Fine Arts Elective	3
<b>Area III: Natural Sciences, Mathematics, and Computer Science</b>		<b>10</b>
CIS 146	Microcomputer Applications	3
MTH 100	Intermediate College Algebra	3
PHS 112	Physical Science II	4
<b>Area IV: History, Social and Behavioral Sciences</b>		<b>3</b>
PSY 200	Psychology	3
<b>Area V: Career and Technical Courses</b>		
<b>Required Orientation Courses</b>		
ORI 101	Orientation to College <b>OR</b>	
ORI 105	Orientation and Student Success	1-3
ORI 104	WorkKeys® Assessment and Advisement	1
<b>Required Field of Concentration Courses</b>		
WKO 110	NCCER Core	3
ELT 108	DC Fundamentals <b>OR</b>	
INT 101	DC Fundamentals	3
ELT 109	AC Fundamentals <b>OR</b>	
INT 103	AC Fundamentals	3
ELT 221	Electronics for Electricians	3
ELT 231	Introduction to Programmable Logic Controllers	3
ELT 209	Motor Controls I <b>OR</b>	
INT 113	Industrial Motor Controls I	3
ELT 212	Motor Controls II <b>OR</b>	
INT 213	Industrial Motor Controls II	3
ELT 110	Wiring Methods	3
ELT 114	Residential Wiring I	3
ELT 115	Residential Wiring II	3
ELT 117	AC/DC Machines	3
ELT 118	Commercial/Industrial Wiring I	3
ELT 132	Commercial/Industrial Wiring II	3
ELT 224	Security and Alarm Systems	3
ELT 225	Smart House Wiring	3
WKO 106	Workplace Skills	3
	<b>Total Option Credits</b>	<b>50-52</b>
	<b>Total Credits for Degree</b>	<b>72-74</b>

## *Electrical Technology* *Associate in Applied Science Degree* *Suggested Course Sequence*

<i>FIRST SEMESTER</i>	<i>SECOND SEMESTER</i>	<i>THIRD SEMESTER</i>
WKO 110	ELT 109 or INT 103	ELT 115
CIS 146	ELT 114	ELT 118
ELT 108 or INT 101	ELT 117	ELT 209 or INT 113
ELT 110	MTH 100	ELT 231
ENG 101	Humanities/Fine Arts	
ORI 101 or 105*	Elective	
<i>FOURTH SEMESTER</i>	<i>FIFTH SEMESTER</i>	
ELT 132	ELT 221	
ELT 212 or INT 213	ELT 224	
ELT 225	ORI 104	
PHS 112	SPH 106 or 107	
PSY 200	WKO 106	

## SHORT CERTIFICATE CURRICULUM ELECTRICAL TECHNOLOGY (Wallace Campus and Easterling Correctional Facility)

<i>Course</i>		<i>Credit Hours</i>
<b>Area V: Career and Technical Courses</b>		
<b>Core Electrical Technology Course Requirements</b>		
ELT 108	DC Fundamentals <b>OR</b>	
INT 101	DC Fundamentals	3
ELT 109	AC Fundamentals <b>OR</b>	
INT 103	AC Fundamentals	3
ELT 110	Wiring Methods	3
ELT 221	Electronics for Electricians	3
	<b>Total Core Technical Credits</b>	<b>12</b>

*After completing the Core Technical Course Requirements, students may choose from the following concentrations:*

<b>INDUSTRIAL ELECTRICITY CONCENTRATION (IAI)</b>		
ELT 209	Motor Controls I <b>OR</b>	
INT 113	Industrial Motor Controls I	3
ELT 117	AC/DC Machines	3
ELT 212	Motor Controls II <b>OR</b>	
INT 213	Industrial Motor Controls II	3
ELT 231	Introduction to Programmable Logic Controllers	3
	<b>Total Concentration Credits</b>	<b>12</b>
	<b>Total Credits for Short Certificate</b>	<b>24</b>

## **RESIDENTIAL AND COMMERCIAL WIRING CONCENTRATION (IAR)**

<i>Course</i>		<i>Credit Hours</i>
ELT 114	Residential Wiring Methods I	3
ELT 115	Residential Wiring Methods II	3
ELT 118	Commercial/Industrial Wiring Method I	3
ELT 245	Electrical Grounding Systems	3
	<b>Total Concentration Credits</b>	<b>12</b>
	<b>Total Credits for Short Certificate</b>	<b>24</b>