

## ELECTRIC UTILITY SUBSTATION TECHNICIAN, DIPLOMA

### Electric Utility Substation Technician, Diploma

#### Overview

Curriculum includes extensive hands-on practice and theory in single and three-phase metering, overcurrent and complex relaying, single-and-three phase transformers, regulators, capacitors, generation, transmission, distribution and many other subjects. Career opportunities include: installing and calibrating electrical watt-hour meters, planning and working in electrical substations, testing and installing high voltage and high current relays used in transmission and distribution lines, electrical dispatcher, or a power plant maintenance technician.

#### Locations

Jackson

Course Number	Course Title	Credits
Fall - Year 1		
ELCO 1100	Electric Circuit Fundamentals	3
ELCO 1105	Electric Circuit Fundamentals Lab	3
ELUT 1105	Blueprint, Schematics and Transit	3
MATH 1100	Integrated Math or higher	3
ELEC 1230	Safety Principles & OSHA	1
ELUT 1120	Specifications, Testing and Maintenance	2
	<b>Credits Fall - Year 1</b>	<b>15</b>
Spring - Year 1		
ELUT 1110	Transformer Banking I	3
ELUT 1115	Generation, Transmission and Distribution	3
CSCI 1102	Computer Applications I	3
EMS 1112	AHA CPR Healthcare Provider, AED First Aid Certification	1
	<i>General Education Or Related Electives</i>	7
	<b>Credits Spring - Year 1</b>	<b>17</b>
Fall - Year 2		
ELUT 2110	Transformer Banking II	2
ELUT 2116	Reclosures and Protective Equipment	2
ELUT 2121	Protective Relays	2
ELEC 2205	Electric Motor Controls I	4
	<i>Electives</i>	5
	<b>Credits Fall - Year 2</b>	<b>15</b>
Spring - Year 2		
ELUT 2100	Electrical Metering	3
ELUT 2126	Regulators and Capacitors	2
ELEC 2225	Electric Motors Control II	4
ELEC 2230	Programmable Logic Controllers	4
	<b>Credits Spring - Year 2</b>	<b>13</b>
	<b>TOTAL CREDITS</b>	<b>60</b>

