## **ELECTRIC UTILITY SUBSTATION TECHNOLOGY, A.A.S.**

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#### 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
ELEC 1230	Safety Principles & OSHA	1
ELUT 1120	Specifications, Testing and Maintenance	2
MATH	Mn Transfer Area 4 course	3
	Credits Fall - Year 1	15
Spring - Year 1		
ELUT 1110	Transformer Banking I	3
ELUT 1115	Generation, Transmission and Distribution	3
CSCI 1102	Computer Applications I	3
	General Education	7
	Credits Spring - Year 1	16
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
ENGL 1101	Composition I	3
	Humanities	3
	Credits Fall - Year 2	16
Spring - Year 2		
ELUT 2100	Electrical Metering	3
ELUT 2126	Regulators and Capacitators	2
ELEC 2225	Electric Motors Control II	4
ELEC 2230	Programmable Logic Controllers	4
	Credits Spring - Year 2	13
	TOTAL CREDITS	60

### Notes: \* Math Mn Transfer courses:

Math 1105, Math 1107, Math 1111, Math 1113, Math 1118, Math 1121 \*\* Humanities Electives from the following:
Art, Foreign Language, Literature, Music, Philosophy, Theatre, Western Civilization
\*\*\* General Education Electives from:

English, Biology, Chemistry, Philosophy, Theatre, Western Civilization, Economics, Geography, History, Political Science, Psychology, and Sociology