

# Electrical Line Worker: Third Class

**Certificate in Applied Science**

**Credit Requirements: 17 Semester Credit Hours**

During the Electrical Line Worker—Third Class program, offered in its entirety both Fall and Spring semesters, students will receive classroom training in electrical theory and troubleshooting, circuit analysis, power systems components and operation including three-phase transformer banking, personal protective equipment (PPE) and protective grounding, substation components, as well as a general overview of overhead and underground line work. Training especially emphasizes the importance of safety and teamwork in every aspect of the work. Students with this training are prepared to enter the utility industry as apprentice electrical line workers.

Admission into this program requires qualifying scores on SAT, ACT or TTC’s placement test. High school graduation or GED is required and you must be at least 18 years old. Students must hold a valid driver’s license. Students must also be comfortable working at considerable heights and must be physically fit. Industries will require prospective employees to pass a background check as well as a drug and alcohol screening.

ELW 110	Electrical Computations	2
ELW 111	Introduction to Electrical Line Worker	3
ELW 112	Introduction to Electricity	3
ELW 114	Overhead Line Construction I	3
ELW 211	Underground Line Construction I	3
ELW 231	Electrical Power Systems	3
		<b>Total 17</b>

# Electrical Line Worker: Advanced

**Certificate in Applied Science**

**Credit Requirements: 18 Semester Credit Hours**

The advanced certificate is taught under the direction of experienced electric utility instructors. Students must be employees of the utility during the semester they are taking the certificate courses. The course work continues the development of skills introduced in the Third Class certificate.

Admission into this program requires qualifying scores on SAT, ACT or TTC’s placement test and completion of the Third Class certificate or its equivalent. High school graduation or GED is required, and you must be at least 18 years old. Admission is restricted to employees of electric utilities. For more information contact the Division of Industrial and Engineering Technology at 843.574.6156.

ELW 113	National Electrical Safety Code	3
ELW 115	Overhead Line Construction II	3
ELW 116	Overhead Line Construction III	3
ELW 117	Overhead Line Construction IV	3
ELW 212	Underground Line Construction II	3
ELW 221	Advanced Line Construction	3
		<b>Total 18</b>

# Electrician: Automated Controls

**Certificate in Applied Science**

**Credit Requirements: 27 Semester Credit Hours**  
**Day**

The Electrician: Automated Controls certificate program prepares you for employment in industry as an automated controls maintenance technician. Emphasis is placed on electrical/electronic theory, programmable controllers and their applications, and hydraulic and pneumatic systems.

Admission into this program requires qualifying scores on SAT, ACT or TTC’s placement test. High school graduation is not required if you are at least 18 years old.

**Recommended Sequence of Courses**

**First Semester – Fall**

EEM 117	AC/DC Circuits I	4
IMT 131	Hydraulics and Pneumatics	4
		<b>Total 8</b>

**Second Semester – Spring**

EEM 118	AC/DC Circuits II	4
EEM 131	Solid State Devices	4
		<b>Total 8</b>

**Third Semester – Summer**

EEM 107	Industrial Computer Techniques	2
EEM 221	DC/AC Drives	3
		<b>Total 5</b>

**Fourth Semester – Fall**

EEM 251	Programmable Controllers	3
		<b>Total 3</b>