

ELWK-ELECTRICAL LINeworker

ELWK 130. Introduction to Electrical Power Systems

2 Credits (2)

An overview of electrical power systems, equipment, safety practices, first aid and CPR. Students must be accepted into the electrical lineworker program before enrolling in this course. Restricted to: OEET majors. Restricted to Community Colleges campuses only.

Corequisite: OEET 110, OEET 131.

Learning Outcomes

1. Professionally communicate in oral and written forms.
2. Work effectively in a team-based environment.
3. Accurately perform electrical related calculations and interpret results for the purpose of repair or installation of electrical power systems.
4. Demonstrate the use of current industry techniques and equipment to diagnose electrical power systems and perform appropriate repairs.
5. Demonstrate the use of current industry techniques and equipment to perform the service and maintenance of electrical power and systems.
6. Demonstrate the use of current industry techniques and equipment in the installation of electrical power lines and associated equipment.
7. Demonstrate understanding of basic electrical principals as they relate to the installation and maintenance of electrical power systems.
8. Determine the appropriate ethical action that should occur in a given circumstance.
9. Demonstrate the ability to perform lineworker duties in a safe manner.

ELWK 131. Electrical Lineworker Lab I

6 Credits (12P)

Climbing and work on utility poles using ropes and rigging, pole setting and an introduction to transmission and distribution line construction. Maintenance and troubleshooting to include the use of hot sticks. Students must be accepted into the electrical lineworker program before enrolling in this course. Restricted to: OEET majors. Restricted to Community Colleges campuses only.

Corequisite: OEET 110, OEET 130.

Learning Outcomes

1. Professionally communicate in oral and written forms.
2. Work effectively in a team-based environment.
3. Accurately perform electrical related calculations and interpret results for the purpose of repair or installation of electrical power systems.
4. Demonstrate the use of current industry techniques and equipment to diagnose electrical power systems and perform appropriate repairs.
5. Demonstrate the use of current industry techniques and equipment to perform the service and maintenance of electrical power and systems.
6. Demonstrate the use of current industry techniques and equipment in the installation of electrical power lines and associated equipment.
7. Demonstrate understanding of basic electrical principals as they relate to the installation and maintenance of electrical power systems.

8. Determine the appropriate ethical action that should occur in a given circumstance.
9. Demonstrate the ability to perform lineworker duties in a safe manner.

ELWK 140. Electrical Power Systems II

3 Credits (2+2P)

Theory of power generation and distribution with emphasis on three phase systems to include transformers, voltage regulators, surge arrestors. Includes troubleshooting. Students must be accepted into the electrical lineworker program before enrolling in this course. Restricted to: OEET majors. Restricted to Community Colleges campuses only.

Corequisite: OEET 141.

Learning Outcomes

1. Professionally communicate in oral and written forms.
2. Work effectively in a team-based environment.
3. Accurately perform electrical related calculations and interpret results for the purpose of repair or installation of electrical power systems.
4. Demonstrate the use of current industry techniques and equipment to diagnose electrical systems and perform appropriate repairs.
5. Demonstrate the use of current industry techniques and equipment to perform the service and maintenance of electrical power and systems.
6. Demonstrate the use of current industry techniques and equipment in the installation of electrical power lines and associated equipment.
7. Demonstrate understanding of basic electrical principals as they relate to the installation and maintenance of electrical power systems.
8. Determine the appropriate ethical action that should occur in a given circumstance.
9. Demonstrate the ability to perform lineworker duties in a safe manner.

ELWK 141. Electrical Lineworker II

6 Credits (12P)

Practice in the installation of electrical power lines including transformers, voltage regulators, and surge arrestors. Also advanced hot sticking procedures, troubleshooting, underground systems procedures, and pole-top rescue. Students must be accepted into the electrical lineworker program before enrolling in this course. Restricted to: OEET majors. Restricted to Community Colleges campuses only.

Corequisite: OEET 140.

Learning Outcomes

1. Professionally communicate in oral and written forms.
2. Work effectively in a team-based environment.
3. Accurately perform electrical related calculations and interpret results for the purpose of repair or installation of electrical power systems.
4. Demonstrate the use of current industry techniques and equipment to diagnose electrical power systems and perform appropriate repairs.
5. Demonstrate the use of current industry techniques and equipment to perform the service and maintenance of electrical power and systems.
6. Demonstrate the use of current industry techniques and equipment in the installation of electrical power lines and associated equipment.
7. Demonstrate understanding of basic electrical principals as they relate to the installation and maintenance of electrical power systems.

8. Determine the appropriate ethical action that should occur in a given circumstance.
9. Demonstrate the ability to perform lineworker duties in a safe manner.

ELWK 221. Cooperative Experience I

1-4 Credits (1-4)

Supervised cooperative work program. Student is employed in an approved occupation and is supervised and rated by the employer and instructor. Student will meet in a weekly class. May be repeated up to 4 credits. Consent of Instructor required. Graded: S/U Grading (S/U, Audit). Restricted to Community Colleges campuses only.

Prerequisite(s): Consent of instructor.