

OSHA Electrical Safety-Related Work Practices

2 Days, 1.4 CEUs

While electrical hazards are not the leading cause of workplace injuries and accidents, they are disproportionately fatal and costly. These injuries not only disrupt the lives of the workers and their families, but also impact the productivity of employers. This course focuses on OSHA's electrical standards, which are written to protect employees exposed to dangers such as electric shock, arc flash, and explosions. The information in this course helps to interpret and apply these standards. A thorough understanding of OSHA electrical safety requirements, as they apply to your facility, is essential for minimizing electrical accidents and ensuring compliance.

This course is intended for any construction, industrial and commercial personnel that work on or around electrical equipment operating at 50 volts or more. This course assists in meeting the OSHA mandated training requirements of 29 CFR 1910.331-.335 for both "qualified" and "unqualified" personnel.

Lab and Classroom Attire

AVO Training Institute is committed to the personal safety of each participant and require long pants and ANSI rated "safety-toe" work shoes for lab activities. Lecture courses may involve a tour of a work or shop area and for this reason open-toe shoes and shorts are not considered appropriate attire for the classroom.

Learning Objectives

To receive 1.4 CEUs, participants must attend 2 days of class (14 contact hours) and attain a minimum grade of 80% on the final exam. Upon completion of this course the participant will demonstrate that he/she is able to:

- Explain the hazards and effects of electricity.
- Interpret applicable regulations.
- Perform hazardous energy control for industrial facilities as required by OSHA.
- Use safe work practices while working on or around industrial electrical equipment and overhead lines.
- Select appropriate personal protective equipment for a variety of applications.
- Apply the general requirements of electrical regulations and standards to establish an electrically safe work environment.

SCOPE

Day 1* (7 contact hours)

- I. Introduction (0.5 hr)
 - A. Schedule
 - B. Course Outline
 - II. Hazards of Electricity (1.5 hrs)
 - A. Electrical Shock
 - B. Electrical Arc Flash
 - C. Electrical Arc Blast
- AM Break

- III. Electrical Safety Regulations and Standards (2 hr)
 - A. Who is OSHA?
 - B. Overview of the Regulations and Standards
- Lunch
- IV. Deenergized Work (LOTO) (3 hrs)
 - A. Deenergization
 - B. Confirming a System is Deenergized

PM Break

- C. One-Line Diagrams
- D. Lockout/Tagout
- E. Application of Control
- F. Reenergization
- G. Additional Requirements
- H. Additional Regulatory Requirements for Electrical Lockout
- I. Typical Minimal Lockout or Tagout System Procedures

*Class scheduling times may vary based on discussions and size of class

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SCOPE

Day 2 (7 contact hours)

- V. Energized Work (2 hrs)
 - A. Definition of Energized Work
 - B. Definition of Qualified Person
 - C. Electrical Hazard Risk Assessment
 - D. Training Requirements for a Qualified Person
 - E. Regulatory Requirements for Energized Work
 - F. Overhead Line Clearances
 - G. Protective Equipment and Tools

AM Break

- VI. Personal Protective Equipment (2 hrs)
 - A. Protective Techniques
 - B. Electrical Protective Equipment
 - C. Arc Flash Protective Equipment
 - D. Arc Blast Protective Equipment
 - E. Other Protective Equipment
 - F. Energy Detection Equipment

Lunch

- VII. General Requirements (2 hrs)
 - A. Examination, Installation and Use of Electrical Equipment
 - B. Working Space for Electrical Equipment
 - C. Requirements for Industrial Facilities with Utility-Like Installations
- VIII. Conclusion (1 hr)
 - A. Review
 - B. Final Exam



STANDARD EQUIPMENT LIST
OSHA Electrical Safety Related Work Practices

REVISED: 10/5/22

COURSE NO. 259 BY: CORY MARCHANT DAYS: 2 DAYS

TEXT (PER 1 STUDENT)
OSHA Electrical Safety Related Work Practices, Course 259, Rev 4, December 2017

MATERIALS NEEDED (PER CLASSROOM)	
QUANTITY	ITEM
*1	PROJECTOR OR TV WITH PROJECTION CAPABILITIES
*1	DRY ERASE BOARD WITH MARKERS AND ERASER
*10	STUDENT TABLES
*10	STUDENT CHAIRS

FOR VIRTUAL CLASSES:
CONTENT MATERIAL WILL BE PROVIDED IN DIGITAL FORMAT