



OSHA Electrical Safety Training for Workplace Safety

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COURSE DATES AND TIMES

What This OSHA Electrical Safety Training Course Delivers

This course is structured to move beyond awareness-level instruction and focus on defensible compliance and practical risk control. Participants learn how OSHA electrical standards apply to everyday tasks involving energized equipment, temporary wiring, testing, maintenance, and troubleshooting.

By the end of the course, participants can apply OSHA requirements correctly, interpret NFPA 70E guidance, and make safer decisions when electrical hazards cannot be fully eliminated.

Course Format and Delivery

- Live, instructor-led online instruction
- Total duration: 6 hours (one day)
- Real-time interaction with an electrical safety specialist
- Scenario-based instruction and case examples
- Knowledge checks and final assessment

This format mirrors the structure used by top-ranking OSHA electrical safety courses while maintaining the depth expected by industrial employers.

OSHA Electrical Safety Requirements Explained

OSHA electrical safety requirements are enforced under 29 CFR 1910 Subpart S, which governs power system installations, equipment operation, and general industry safety-related work practices. These regulations require employers to protect workers from shock, arc flash, arc blast, and related hazards through instruction, procedures, and appropriate protective equipment.

OSHA requires instruction covering:

- Electrical shock effects and exposure risks
- Arc-flash and arc-blast hazards
- Temporary wiring and flexible cords
- Ground-fault protection
- Safe use of tools and test instruments
- Establishing electrically safe work conditions

Instruction must be documented, task-specific, and updated when conditions or equipment change.

OSHA and NFPA 70E – How They Work Together

A major reason organizations struggle with electrical safety compliance is a misunderstanding of the relationship between OSHA and NFPA 70E.

- OSHA establishes legally enforceable safety obligations
- NFPA 70E provides the accepted industry method for meeting those obligations

OSHA does not publish detailed step-by-step work procedures. Instead, it expects employers to follow recognized safe-work practices. NFPA 70E fills that gap by defining approach boundaries, PPE selection, hazard analysis methods, and work practices that align with OSHA enforcement expectations.

This course explains what OSHA requires, how NFPA 70E supports compliance, and how to apply both correctly.

What You Will Learn

Participants completing this OSHA Electrical Safety Training will be able to:

- Interpret OSHA 29 CFR 1910 Subpart S electrical safety requirements
- Recognize shock, arc-flash, and arc-blast hazards
- Apply NFPA 70E safe-work practices appropriately
- Distinguish between qualified and unqualified workers
- Establish electrically safe work conditions
- De-energize equipment and verify absence of voltage
- Perform lockout/tagout procedures correctly
- Select arc-rated PPE based on task and exposure
- Maintain OSHA-compliant training documentation
- Support audits and regulatory inspections confidently

Practical Hazard Scenarios Covered

Instruction includes realistic scenarios commonly cited in OSHA electrical safety violations, such as:

- Troubleshooting energized control panels
- Temporary power installations
- Improper PPE selection during testing
- Failure to verify absence of voltage
- Inadequate lockout/tagout coordination
- Misclassification of worker qualification

Each scenario demonstrates how training prevents incidents, injuries, and citations.

Related Courses

- [Arc Flash Training](#)
- [CSA Z462 Arc Flash Training](#)
- [NFPA 70E Arc Flash Training](#)
- [Electrical Safety For EHS Managers](#)
- [Lockout Tagout Training](#)
- [Electrical Safety For Non-Electrical Worker](#)

WHO SHOULD ATTEND

This OSHA Electrical Safety Training course is appropriate for both qualified and unqualified workers whose job duties place them near hazards, as well as those responsible for safety oversight.

Ideal participants include:

- Maintenance electricians and power technicians
- Power engineers and supervisors

- Plant and facility maintenance personnel
- Safety managers, coordinators, and EHS professionals
- Manufacturing and industrial operations personnel
- Contractors who perform maintenance or inspections in industrial or commercial settings
- Non-electrical personnel exposed to hazards

STUDENTS RECEIVE

- OSHA Electrical Safety Training Course Certificate
- .6 Continuing Education Unit (CEU) Credits (6 Professional Development Hours)
- FREE Electricity Forum 120-Page Arc Flash Safety Handbook (Value \$20.00)
- \$50 Coupon Toward Any Future Electricity Forum Event (Restrictions Apply)
- FREE Magazine Subscription (Value \$20.00)
- Course Materials In PDF Format

COURSE OUTLINE

OSHA Electrical Safety Training Course Outline

1. Introduction to OSHA Electrical Safety

- Course objectives
- Overview of OSHA electrical safety regulations (29 CFR 1910 Subpart S)
- Importance of safety in the workplace

2. Understanding Electrical Hazards

- Effects of electric shock and arc flash on the human body

- Common hazards in industrial and commercial facilities
- Hazard recognition and control

3. OSHA Standards and NFPA 70E Integration

- Overview of OSHA 29 CFR 1910 Subpart S (Electrical Safety Requirements)
- Relationship between OSHA and NFPA 70E
- Employer and employee responsibilities under OSHA

4. Equipment and Safe Work Practices

- Understanding circuits and equipment operation
- Inspection and maintenance of equipment
- Personal protective equipment (PPE) requirements (1910.335)
- Use of tools and test instruments (1910.334)

5. Safety-Related Work Practices

- Qualified vs. unqualified persons (1910.332)
- De-energizing equipment and verification of zero energy (1910.333)
- Lockout/Tagout procedures (1910.147)
- Working on or near energized parts – approach boundaries and risk assessment
- Arc flash and shock protection concepts from NFPA 70E

6. Training and Documentation Requirements

- OSHA course obligations for employees exposed to hazards
- Documenting instruction and competency records
- Refresher instruction and periodic evaluations

7. Interactive Learning and Assessment

- Case studies and scenario-based activities
- Knowledge quizzes and final assessment

8. References and Resources

- OSHA 1910 Subpart S
- NFPA 70E Standard for Electrical Safety in the Workplace
- OSHA 1910.147 Lockout/Tagout Standard

COURSE SCHEDULE

Start: 10 a.m. Eastern Time

Finish: 4:30 p.m. Eastern Time

Contact us Today for a FREE quotation to deliver this course at your company's location.

[Request Quote](#)