

Electrical Safety for NFPA 70E Arc Flash and OSHA 1910

Training Course



Ensuring Safety and Compliance

This training course focuses on the inherent dangers that exist with the operation, maintenance, and repair of electrical equipment. Electrical hazards – specifically arc flash and arc blast – can result in serious injury or death to electrical workers. Ensuring worker safety and meeting the challenges of the new arc flash safety requirements can be a difficult task without assistance from resources familiar with industry standards and recommended practices. This course covers the proper use of safety equipment, electrical hazards, and how to respond in the event of an electrical disaster. This knowledge is critical for all electrical personnel and those working on or around electrical equipment.

Next Level Reliability

To learn more about ERS' Training Services, please contact us at 1-877-468-6384 or visit ERS.vertiv.com.

Course Overview

This electrical safety training course will explain the principles of arc flash protection, as well as, address the fundamentals of electrical hazards, safe work practices, and risk mitigation. The course will also provide a review of the industry codes and standard specifications regulating safety compliance. **Course Duration: 8 Hours**

This course covers the following topics:

Background & Safety Fundamentals

- Patterns in Electrical Accidents
- Definition and Basic Premise of Electrical Safety

Fundamentals of Electrical Hazards

- Electric Shock
- Quantifying the Shock Hazard
- Shock Prevention – Selection of Proper Personal Protective Equipment (PPE)
- Electric Arc Flash/Arc Blast
- Quantifying the Arc Flash Hazard
- Flash Protection – Selection of Proper PPE
- Prevention of Hazards from the Arc Flash/Arc Blast

Codes and Standards

- Occupational Safety and Health Administration (OSHA) 1910.269 & 1910.331-335
- National Fire Protection Agency (NFPA)
- American National Standards Institute (ANSI)
- Institute of Electrical and Electronics Engineers (IEEE) Standards
- NFPA 70E Standard for Electrical Safety in the Workplace

Safe Work Environments

- Employer Responsibilities
- Employee Responsibilities
- Contractor Responsibilities
- Qualified/Unqualified Persons
- Training Requirements
- Preliminary Planning
- Selection and Use of Safe Work Practices
- Clearances
- Approach Distances
- Flash Protection Boundaries
- De-energizing Equipment
- Verification of De-energization
- Safe Switching Practices
- Lockout/Tagout Procedures
- Application of Personal Protective Grounds
- Re-energization

Training Materials

Electrical Reliability Services (ERS) will provide student manuals, supplemental materials, video presentations, and demonstration equipment. A "Certificate of Completion" is provided for students meeting or exceeding minimum course standards. Minimum course standards are defined as a 70% score on the written post course examination.