United States The Electricity Forum Inc. Tel 289-387-1025

Canada The Electricity Forum 742 Pre Emption Road
Geneva, NY 14456
Pickering, ON L1W3V4
To 1005 696 1040 Tel 905-686-1040 Fax 905-686-1078 Toll Free 855-824-6131

# NFPA 70e Training

Course details: https://electricityforum.com/electrical-training/nfpa70e-training

#### **COURSE DATES AND TIMES**

July 23, 2025
10:00 am - 4:30 pm ET
August 20, 2025
10:00 am - 4:30 pm ET
<b>September 17, 2025</b>
10:00 am - 4:30 pm ET
October 22, 2025
10:00 am - 4:30 pm ET
November 19, 2025
10:00 am - 4:30 pm ET
December 17, 2025
10:00 am - 4:30 pm ET

NFPA 70e Training - Our 6-Hour live online instructor-led Arc Flash and Shock Electrical Safety course is designed to train front-line qualified electrical workers to the electrical safety regulations found in the National Fire Protection Association standard governing workplace safety. Our NFPA 70e course also explains the relationship between OSHA and NFPA 70E. This course moves through the standard, article by article, highlighting each important point.

# What is NFPA 70E training?

NFPA 70E arc flash safety training is essential for anyone exposed to electrical hazards in the workplace. This includes electricians, electrical contractors, maintenance personnel, engineers, supervisors, safety professionals, and anyone who works with or around electrical equipment. For visual examples of these hazards in action, visit our **Arc Flash Video** page.

The NFPA 70E standard for electrical safety in the workplace is recognized as an authority worldwide. To understand the underlying dangers this standard addresses, see our main **Arc Flash** information channel page for a detailed overview of causes and consequences.

The training is essential for qualified electrical workers responsible for installing, repairing, and maintaining electrical systems and equipment. These workers are at a high risk of being exposed to electrical hazards, including arc flash and shock, and must understand the hazards and how to protect themselves and others.

However, NFPA 70E training is for more than just electrical workers. Anyone who works in or around an area where electrical equipment is present should receive training to understand the hazards and how to protect themselves. This includes facility managers, building owners, and unqualified maintenance personnel who may need to unplug or reset electrical equipment.

Ultimately, NFPA 70E training is important for anyone who wants to ensure the safety of themselves and others in the workplace. By understanding the hazards and how to protect against them, individuals can prevent accidents and injuries, improve efficiency, and prevent catastrophic electrical failures! To see the real-world impact, view our **Arc Flash Injuries** highlighting the critical importance of safety protocols.

NFPA 70E training is essential for qualifying persons working in environments with electrical hazards. A critical component of this training is the ability to distinguish exposed energized parts and understand the importance of insulating and shielding materials. Proper electrical safety training ensures that individuals know the nominal voltage levels they may encounter and the associated risks. Additionally, the training requirements emphasize that workers must be equipped with the skills to select appropriate personal protective equipment (PPE) and follow procedures that safeguard them from electrical hazards. This comprehensive approach helps ensure the safety of personnel in the field. For a breakdown of required gear and ratings, see our guide on **Arc Flash PPE**.

# **NFPA 70E Training Benefits**

There are many benefits to receiving NFPA 70E Arc Flash and Electrical Safety training for individuals and companies to fortify their Electrical Safety program. Here are some of the key benefits:

**Enhanced safety:** The primary benefit of NFPA 70E arc flash training is enhanced safety. The training teaches workers how to identify and avoid electrical hazards, including arc flash incidents. By understanding these hazards and how to protect against them, workers can significantly reduce the risk of injury or death.

**Compliance with regulations:** OSHA requires employers to train employees who may be exposed to electrical hazards in the workplace. NFPA 70E is one of the standards that OSHA references. By providing this training to their employees, companies can ensure they comply with OSHA regulations.

**Reduced risk of accidents:** By training workers on electrical safety best practices, companies can reduce the risk of accidents and injuries in the workplace. This not only protects workers but can also help prevent damage to equipment and other property.

**Improved efficiency:** Workers who have received NFPA 70E arc flash training are better equipped to perform their jobs safely and efficiently. They can identify and avoid hazards more quickly and easily, leading to greater productivity and fewer delays.

**Cost savings:** Preventing workplace accidents and injuries can save companies significant amounts of money in lost productivity, medical expenses, and other costs/liability. Companies can save money in the long run by investing in safety training courses to improve safety.

Overall, the benefits of NFPA 70E arc flash training are numerous and significant. By investing in this training, individuals and companies can improve safety, comply with OSHA regulations.

#### Our NFPA 70e Training course will teach you how to:

- Define short circuits and electrical arcs.
- Understand arc flash parameters.
- Determine energy released during a short circuit and why you need to be protected.
- Learn techniques for reducing arc flash energy. A critical step in risk mitigation is performing an **Arc Flash Study**, which helps identify hazard levels and safety boundaries.
- Learn how to protect yourself and those around you from electrical hazards.
- Learn how to select proper personal protective equipment (PPE) for the right environment.

Dangers such as shock, electrocution, and arc blast will always be present, but proper training and safety strategies can minimize the likelihood of injuries and fatalities. NFPA 70E - Electrical Safety in the Workplace - covers the full range of electrical safety issues from work practices to maintenance, special equipment needed, and installation. In fact, OSHA in the United States already bases its electrical safety mandates on comprehensive information from this important standard. Our course comes with an Arc Flash certificate of completion.

### Upon completion, you should be able to:

- Pinpoint the changes to the latest edition, especially those affecting: Article 120, Establishing an Electrically Safe Work Condition, 110.1- Risk Assessment Procedure, Table 130.5, and Standards for PPE
- Understand the interaction between NFPA 70E and OSHA
- Define electrical safety hazards and how to protect against shock, electrocution and arc flash
- Identify safety policies and procedures employers are legally required to provide for their workers
- Describe the safety procedures needed to work safely while exposed to live circuits
- Determine arc flash PPE categories for many common workplace tasks and conditions
- Recognize the intent and limitations of personal protective equipment
- Understand the types of, and laundering standards of, Personal Protective Equipment
- Describe energized and de-energized power circuits
- Identify the elements of an Electrical Hazard Analysis
- Use the NFPA 70E Arc Flash PPE Tables to determine the Arc Flash PPE Category for various tasks This process requires understanding the **Arc Flash Boundary**, which defines the safe distance to prevent injury.
- Identify safety-related maintenance issues for various electrical equipment, including those specific to batteries and battery rooms, electrical distribution equipment, and safety grounding equipment.
- Identify the hazards to personnel working with equipment and employee responsibilities.

#### **Related Courses**

- Arc Flash Safety Courses
- Arc Flash Training CSA Z462
- Electrical Safety For EHS Managers
- Electrical Safety Program Development

- OSHA Lockout Tagout (LOTO)
- Electrical Safety For Non Electrical Workers
- Arc Flash Channel

#### WHO SHOULD ATTEND

Anyone whose job involves designing, reviewing, evaluating or installing electrical systems, including: designers, installers, engineers, electrical contractors, technicians, project managers, safety managers, inspectors, and others who are involved in hands-on electrical roles or maintenance planning. Industrial, Commercial, Institutional Electrical Professionals, Electrical Engineer,s Electrical Technician,s Plant Electricians, Linemen, Electrical Supervisors, Personnel Who Work On Or Near Energized Electrical Equipment And Systems

- Industrial, commercial, and institutional electrical professionals
- Electrical engineers
- Electrical technicians
- Plant electricians
- Linemen
- Electrical Supervisors
- Personnel who work on or near energized electrical equipment and systems

#### STUDENTS RECEIVE

- FREE 100-Page Digital Electrical Safety Handbook (Value \$20)
- Arc Flash Training Certificate
- .6 Continuing Education Unit (CEU) Credits (6 Professional Development Hours)
- \$50 Coupon Toward any Future Electricity Forum Event (Restrictions Apply)
- 100-Page Arc Flash/Electrical Safety Handbook
- **FREE** Magazine Subscription (Value \$25.00)
- Course Materials in PDF Format

# **NFPA 70E Training - Live Online Course Outline**

This session provides participants with a foundational understanding of the NFPA 70E standard, its purpose, scope, and relevance to electrical safety in the workplace.

Attendees will gain insight into NFPA 70E's relationship to OSHA regulations and its role in preventing electrical incidents. The session includes a guided walkthrough of the structure of NFPA 70E, highlighting key chapters, annexes, and tables.

This sets the stage for deeper learning by familiarizing learners with how the standard is organized and applied in real-world settings.

### **Learning Objectives:**

- Understand the intent and purpose of NFPA 70E
- Recognize how NFPA 70E supports OSHA compliance

### **Identify the main sections of the standard:**

- Chapter 1: Safety-Related Work Practices
- Chapter 2: Safety-Related Maintenance Requirements
- Chapter 3: Safety Requirements for Special Equipment
- Annexes and informational tables

Learn how to navigate the standard for practical use in job planning and risk assessments.

# **Course Outline**

### 1. Understanding Electrical Hazards

- Five main factors contributing to electrical accidents
- Electrical shock: causes and effects
- Arc flash: definition and implications
- Incident energy: what it is and why it matters
- Arc flash burn injuries and arc blast pressure
- Inhalation injuries resulting from electrical incidents

### 2. Standards and Regulations

- NFPA 70E: Standard for Electrical Safety in the Workplace
- IEEE 1584: Guide for Performing Arc Flash Hazard Calculations
- OSHA regulations related to electrical safety
- Occupational Health and Safety Act and applicable regulations
- NFPA 2112, clothing standards
- ASTM F 496-20, insulating gloves standards
- OSHA Lockout standards, 29 CFR 1910.147

## 3. Shock Hazards and Protection Strategies

- Understanding the nature of electrical shock
- Variables impacting shock hazard severity
- Establishing protection boundaries
- Selection and use of voltage-rated gloves and other shock PPE
- Utilizing rated insulated tools and equipment

# 4. Arc Flash Hazards and Mitigation Techniques

- Causes and types of arc flash incidents
- Understanding arc blast phenomena
- Common locations where arc flash hazards exist

- Engineering design and work methods to mitigate hazards
- Defining and applying arc flash boundaries
- Practical applications and real-world scenarios

### **5. Arc-Rated Personal Protective Equipment (PPE)**

- Overview of arc-rated PPE and its significance
- Protecting the head, hands, and feet from arc hazards
- PPE programs: categories, levels, and systems
- Environmental considerations affecting PPE selection
- Guidelines for PPE maintenance and care

### 6. Job Planning and Safety Procedures

- Key elements of effective safety planning
- Conducting thorough job briefings
- Understanding and implementing energized electrical work permits

### 7. Risk Assessment and Management

- Components of a comprehensive risk assessment
- Methods: utilizing tables or performing incident energy calculations
- Proper labeling practices for electrical equipment
- Determining required PPE based on risk assessment

• Task assessment exercises to reinforce learning- remove, we don't do this

# 8. Safety-Related Work Practices

- Defining an "electrically safe work condition"
- Identifying and securing appropriate boundaries
- Selection and use of tools and equipment for safety
- Best practices for lockout/tagout procedures and verification
- Best practices for Group/Complex Lockout/tagout

### **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.

 $\underline{https://electricityforum.com/onsite-requestforquote}$