



NFPA 70E Electrical Safety Training (2 Days)

Course Duration: 16 Hours (2 Days)

Based on: NFPA 70E-2024 Edition

Training Format: Available Onsite and Virtual

Course Overview

This comprehensive 2 Day course provides essential electrical safety training based on the latest NFPA 70E-2024 standard. Participants will gain practical knowledge and hands-on experience to identify electrical hazards, implement safe work practices, and establish electrically safe work conditions in accordance with OSHA requirements.

Learning Objectives

Upon completion of this course, participants will be able to:

- Understand electrical fundamentals and their relationship to workplace safety hazards
- Identify the four primary electrical hazards: shock, arc flash, arc blast, and thermal burns
- Implement the 8-step Electrically Safe Work Condition (ESWC) process
- Conduct proper risk assessments for shock and arc flash hazards
- Select appropriate Personal Protective Equipment (PPE) based on hazard analysis
- Establish and maintain comprehensive electrical safety programs
- Execute proper lockout/tagout procedures for electrical systems
- Respond effectively to electrical emergencies

Course Modules

Module 1: Course Framework & Introduction

Course objectives, electrical safety statistics, and incident case studies

Module 2: Electrical Fundamentals

Basic electrical theory, circuit analysis, fault conditions, and power systems

Module 3: NFPA 70E Overview and Structure

Updated: June 2025



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Standard organization, 2024 updates, OSHA relationship, and workplace application

Module 4: Definitions and Key Terms

Critical NFPA 70E definitions, qualified persons, and electrical boundaries

Module 5: Hazard Recognition

- **5A:** Electrical hazard identification and workplace dangers
- **5B:** Effects of electric shock, burns, and current on human body
- **5C:** Arc flash fundamentals, causes, and case studies

Module 6: Emergency Response

Emergency response planning, first aid procedures, and incident investigation

Module 7: Equipment and Testing (Article 110)

Test instruments, live-dead-live procedures, and GFCI protection

Module 8: Lockout/Tagout and Electrically Safe Work Conditions

8-step ESWC process, energy control, and temporary protective grounding

Module 9: Electrical Safety Program Elements

Program development, risk assessment, and human performance factors

Module 10: Energized Work Requirements

Energized work permits, normal operating conditions, and job safety planning

Training Methods

Interactive lectures, hands-on exercises, equipment demonstrations, and scenario-based learning

Course Materials Included

Reference Materials and Certificate of Completion

Assessment and Certification

End-of-Course Competency Assessment: All participants must successfully complete a comprehensive examination covering all course modules with a **minimum score of 75%** to receive certification.

Assessment Format:

Updated: June 2025



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- Written examination testing knowledge retention
- Practical demonstration of key safety procedures
- Scenario-based problem solving

Certification: Upon successful completion, participants will receive a certificate demonstrating compliance with NFPA 70E training requirements.

Who Should Attend

Maintenance workers, electricians, engineers, safety professionals, supervisors, and anyone working on or near electrical equipment ≥ 50 volts

Prerequisites

Basic understanding of electrical systems - no prior NFPA 70E training required

Contact NFPA70E.net today to schedule your NFPA 70E training and ensure your workforce is prepared to work safely around electrical hazards in accordance with the latest 2024 standard.

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