OCCUPATIONAL SAFETY

NFPA 70E Arc Flash Safety

This course will review the NFPA 70E 2024 updates and comparisons to 2018 standards. Learn best practices for safe electrical work, electrical hazards, and safety maintenance through provided materials. This course will cover:

- Electrical safe work conditions
- Article 100 definitions
- Consensus standards: ASTM, IEEE, ANSI
- The relationship between voltage, current, and resistance in an electrical system
- Three main electrical hazards and their significance
- Fault current in an electrical system
- How to identify several types of electrical hazards controls
- Labeling requirements or electrical equipment
- Proper PPE
- Instrument procedures for safe use
- Energized electrical work permits
- Use of temporary grounding

Wednesday, March 18

9 AM - 3 PM

SMC Sedalia
1616 W Main St
Sedalia, MO 65301

Cost: $600

Includes Lunch

To register, please contact Ashli Anderson at aanderson@smcelectric.com

COURSE SMCNFPA70

Course Agenda

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- Introduction
- How does electricity act?
  - Types of electrical hazards
    - Shock
    - Difference in potential
  - How an electrical shock is received
  - Dangers of electrical shock
- Arc
  - Determining the degree of arc hazards
  - Arc faults
  - Bolted faults
  - Warning labels
  - Blast
  - Incident energy
  - NFPA 70E hazard categories
- Test instruments & equipment
  - Safeguards for personal protection
    - Use of protective equipment
      - Types of PPE
    - Insulated tools
    - Meter safety and usage
    - Meter transient protection
    - Usage of temporary grounding
- Arc flash analysis
  - Defining arc flash analysis
  - Basic calculations
  - Important considerations
  - Calorie rating reduction methods
- Safe work practices
  - Establishing electrically safe work conditions
- Personal Protection
  - Approach boundaries
  - Flash approach boundary
  - Selection of personal protective equipment
    - PPE required for various tasks
  - Protective clothing & PPE
  - Simplifies two-category, arc rated clothing system
  - Testing and inspection intercals
- Warning labels
  - Critical information required
- Energized work permit

Upon Completion

Students will receive:

- Certificate of completion
- A copy of 2024 NFPA 70E standards
- 7-piece insulated tool starter kit (pictured)

*with class purchase at full price

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OUR KNOWLEDGE IS YOUR POWER