



AETech Electrical Training Center ***Arne Electro-Tech Seminars***

Steve Arne

P.O. Box 2272
Rapid

City, SD 57709

Email: office@aetech.com

Phone: (605) 342-9088

Continuing Education for the Electrical Professional

- Course:** 2021 NFPA 70E Electrical Safety in the Workplace
- Schedule:** 8:00 a.m. – 5:00 p.m. each day; sign-in starts at 7:30 a.m.
- Format:** Lecture format using Power Point slides including e-hazard Low Voltage Qualified Course Material and in -class disussions based on the “2021 NFPA 70E Standard”.
- Text book:** Required 2021 NFPA 70E Standard and e-Hazard Low Voltage Qualified workbook.
- Instructor:** Steve Arne: Certified Technical Educator, Licensed Electrical Contractor, Master Electrician, Licensed Electrical Inspector, SD Electrical Commission Board Member
- Criteria used to identify successful course completion:**
Daily attendance sign-in sheets and instructor observation of attendance/application.
- Objectives:** This course provides a thorough knowledge of the recommended safe behaviors for those who work around electrical hazards. Attendees gain an understanding of the latest guidelines and regulations from NFPA 70E and OSHA. Electrical workers and safety professionals learn key practical information: best work practices in electrical safety and how to apply them in real-world situations

Course Outline: *

See next page for Low Voltage Qualified Outline that follows the e-hazard Course material and workbook.

*additional topics from the NEC will be covered as applicable

Additional books and resources are available at our web site:
www.AETech.com

Low Voltage Qualified

8-Hour Course

OVERVIEW This course provides a thorough knowledge of the recommended safe behaviors for those who work around electrical hazards. Attendees gain an understanding of the latest guidelines and regulations from NFPA 70E and OSHA. Electrical workers and safety professionals learn key practical information: best work practices in electrical safety and how to apply them in real-world situations.

REFERENCES *Current NFPA 70E Standard, OSHA Regulations (as applicable)*

MATERIALS *e-Hazard Low Voltage Qualified Workbook, Current NFPA 70E Standard*

1. **Electrical Safety Facts/Risks**
2. **Electrical Related Government Regulations & Standards**
 - Applicable: NFPA 70E/OSHA
 - How Standards Are Used
 - Key Definitions/Issues
3. **Shock Hazards & Protection Strategies**
 - Types
 - Understanding Shock
 - Variables Impacting Hazard
 - Protection Boundaries
 - Voltage Rated Gloves and Other Shock PPE
 - Rated Insulated Tools and Other Equipment
4. **Arc Flash Hazards & Protection Strategies**
 - Causes/Types
 - Arc Blast
 - Common Places
 - Mitigating Hazard through Engineering Design and Work Methods
 - Arc Flash Boundaries
 - Practical Application
5. **Arc Rated Personal Protective Equipment**
 - Overview
 - Protecting Head, Hands and Feet
 - PPE Programs: Categories, Levels, Systems
 - Environmental Considerations
 - PPE Guidelines and Maintenance
6. **Job Planning**
 - Elements of Safety Planning
 - Job Briefing
 - Energized Electrical Work Permit
7. **Risk Assessment**
 - Components of Assessment
 - Methods: Tables or Incident Energy Calculations
 - Labeling
 - Steps to Determine PPE Required
 - Task Assessment Exercise
8. **Safety Related Work Practices**
 - Defining "Electrically Safe Work Condition"
 - Identifying and Securing Boundaries
 - Tools and Equipment
 - Best Practices for Lock Out/Tag Out, Verifying De-energization and LV Grounding
 - Situational Conditions (Overhead, Underground, etc)
 - Special Equipment
 - Training
 - Administrative Guidelines
 - Recognizing Hazards and Poor Work Practices



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Toll Free: 1-888-603-5050
Email: office@aetech.com

Program Cost: \$170.00

Class Schedule:

Typically, 8:00am to 5:00pm with a 1-hour lunch break

2021 NFPA 70E ELECTRICAL SAFETY IN THE WORKPLACE - 8 HOURS

March 12, 2021 - AETech 320 E. Blvd North, Rapid City, SD., 57701

Additional classes to be scheduled.

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Certificate of Attendance

Attendee

License #(s):

Course Name: 2021 NFPA 70 E ELECTRICAL SAFETY IN THE WORKPLACE

Code Hours: 8 Hours Continuing Education Credit – NON CODE

Course Location: RAPID CITY, SD

Date(s) Attended:



Steve Arne

Steve Arne, Instructor

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Visit our website at: www.aetech.com