## **NFPA 70E Qualified Person - 8 Hour**

**Course Outline (2018 Edition)** 

**Overview** This course provides a thorough knowledge & understanding of the recommended safe work practices for those who work around electrical hazards. Attendees gain an understanding of the latest guidelines, recommendations and regulations from NFPA 70E (2018 Edition) Chapter 1, applicable OSHA and the IEEE. 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 NFPA 70E (2018 Edition), OSHA Regulations (as applicable), IEEE

- MaterialsComprehensive Workbook, Curriculum Powerpoint Presentation Printed,<br/>Comprehension Test, Satisfactory Completion Certificate
- 1. Electrical Safety Facts, History, Definitions, Statistics
- 2. Electrical Related Government Regulations & Standards
  - Applicable OSHA, NFPA 70E
  - How Standards are Used / Relationship between OSHA and Consensus Standards
  - Key Definitions / Issues
- 3. Shock Hazard and Protection Strategies
  - Understanding Shock Hazards
  - Variables Impacting Hazard
  - Shock Hazard Assessment
  - Protection Boundaries
  - Energized Electrical Work Permit
  - Voltage Rated Gloves
  - Rated Insulated Tools and Other Equipment
- 4. Arc Flash Hazards & Protection Strategies
  - · Causes / Types
  - Arc Blast
  - Common Places and Scenarios
  - Mitigating Hazards
  - Incident Energy
  - Arc Flash Hazards Assessment
  - Arc Flash Boundary
  - Practical Application

- 5. Arc Rated PPE
  - Overview
  - Protecting Head, Hands and Feet
  - PPE Programs: Categories, Levels, Systems
  - Practical Considerations
  - PPE Selection
  - PPE Limitations
  - PPE Guidelines and Maintenance
- 6. Risk Assessment
  - Components of an Assessment
  - Human Factors
  - Incident Energy
  - · Methods: Calculations / Tables
  - Labeling Requirements
  - · Steps to Identify Boundaries / PPE
  - Task Assessment Exercise
- 7. Safety Related Work Practices
  - Defining "Electrically Safe Work Condition"
  - Task Planning
  - Identifying and Securing Boundaries
  - Tools and Test Equipment
  - Best Practices for LOTO, Verifying De-energized Status
  - Situational Conditions (Overhead, Underground, etc)
  - Special Equipment
  - Training
  - Administrative Guidelines
  - Recognizing Hazards and Poor Work
    Practices