



## Electrical Safety in the Workplace – 8CR (0.8 CEU)

Please Call for Pricing: (541) 929-5997

### Course Agenda

- Basics of Electricity
- Electrical Hazards
- Qualified Person
- Working on De-Energized Parts
- Working on Energized Parts
- Lockout/Tagout (LOTO) §1910.333(b)(2), §1910.147 – NFPA 70E 120.2
- Verification Equipment & Circuits are De-Energized §1910.22(b)(2)(iv)
  - Stored Energy Release §1910.147(d)(5) – NFPA 120.2(F)(2)(b)
  - Verification & Isolation §1910.147(d)(6) – NFPA 120.2(F)(2)(e)
- Removal of LOTO Devices §1910.147(e) – NFPA 120.2(F)(2)(m)
- Other LOTO Procedures §1910.147(f) – NFPA 70E 120.2 (D)&(F)
- Working On or Near Exposed Energized Parts §1910.333(c) – NFPA 70E 130
  - Overhead Lines
  - Vehicular & Mechanical Equipment
  - Illumination
  - Working in Enclosed Work Spaces
- Conductive Materials and Equipment §1910.333(c)(7)&(8) – NFPA 70E 130.6(D)
- Portable Equipment §1910.224(a) – NFPA 70E 110.4(B)
- Alerting Techniques §1910.335(b) – NFPA 70E 130.7(E)
- Electric Power & Lighting Circuits §1910.334(b) – NFPA 70E 130.6(J) & (L)
- Test Instruments & Equipment §1910.224(c) – NFPA 70E 110.4(A)
- Approach Boundaries
- Brief Discussion of Arc Flash Analysis Methods and Procedures
- Personal Protective Equipment (PPE)
- Warning Label
- Energized Work Permit
- Safety Related Maintenance Requirements NFPA 70E Article 205-230



### Course Description

This course provides your employees with an overall understanding of on the job electrical hazards and how these hazards can be avoided by using the following electrical safe work standards as a guide: OSHA 29 CFR 1910.147, OSHA 29 CFR 1910.333, OSHA 29 CFR 1910.334, OSHA 29 CFR 1910.335 and NFPA 70E 2012. Upon completion of this course your employees will achieve the following:

- Basic understanding of electricity
- Types of Electrical Hazards.
- Precautions needed to work on de-energized & energized parts.
- Lockout/Tagout procedures based on current OSHA regulations and the most current NFPA 70E 2012.
- How to verify equipment and circuits are de-energized.
- The use of test instruments and equipment.
- Know the safety precautions that must be taken when working on or near exposed energized parts.
- Understand the requirements for conductive materials and equipment such as portable ladders and conductive apparel.
- Understand the requirements for portable equipment.
- Be familiar with the safety precautions necessary for electric power and lighting circuits.
- Who is considered a qualified employee.
- An understanding of the different approach boundaries.
- How to select proper personal protective equipment (PPE).
- Be familiar with and read properly Arc Flash Warning Labels.
- Know the Requirements of an Energized Work Permit
- Understand Safety Related Maintenance Requirements