

ELECTRICAL SAFETY BASED ON THE 2018 NFPA 70E STANDARD

2-DAY HANDS ON ELECTRICAL SAFETY IN THE WORKPLACE

“LEARN BY DOING!”

This course combines the discussion of content and application of material in an in-class interactive format. It provides a “hands-on” experience where attendees perform the same safety skills they must demonstrate in the field. This is what NTT Electrical Safety Training is all about.

The NFPA 70E® Standard for Electrical Safety in the Workplace provides the prescriptive methods for OSHA compliance for electrical safe work. NTT Training provides the interpretation of the standard, hands-on instructor demonstration and student practice for implementing the standard. Tabletop and hands-on exercises will have students work with their own copy of **NTT’s Illustrated and annotated explanation of the NFPA 70E**, helping to ensure they understand these requirements.

With the publication of the 2018 edition of this electrical safety standard, NFPA 70E continues to emphasize a risk assessment approach to electrical safety.

For the NTT student, this means:

- **learning to identify the hazards of an electrical job,**
- **assessing what can be done to eliminate hazards,**
- **understanding methods of mitigating hazards,**
- **how to use best industry practices to comply with requirements,**
- **and achieve a safe-as-practical approach to performing electrical work.**

CLASS FORMAT:

Hands-on

STANDARD CLASS SIZE:

NTT recommends a class of no more than 25 participants to obtain the best results.

NTT TO PROVIDE:

- Two days (16 contact hours) of on-site instruction
- Textbook Options
 - **Digital (PDF) only or Digital and hardcopy**
 - NTT’s “Electrical Safety Based on the 2018 NFPA 70E® Standard” with full NFPA 70E explanation
 - NTT Electrical Safety Job Aid
 - **Optional:** “NFPA 70E Standard for Electrical Safety in the Workplace®, 2018 Edition”
- Classroom consumables
- Completion certificates
- Shipping and instructor travel logistics

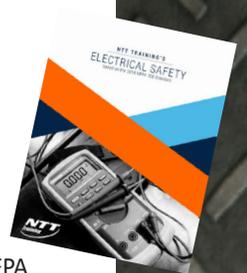
CLIENT PROVIDES:

- Classroom of 900 square feet or greater
- Projection screen, white board and/or flip chart(s)

WHO SHOULD ATTEND:

- Electricians
- Maintenance electricians
- Linemen & Utility workers
- Owners & managers
- Warehouse employees
- Temporary workers
- Safety directors
- Electrical contractors

Operators, Supervisors, and non-qualified workers and those who work on and around industrial equipment will benefit from this course.



ELECTRICAL SAFETY BASED ON THE 2018 NFPA 70E STANDARD, 2-DAY HANDS ON FOR ELECTRICAL SAFETY IN THE WORKPLACE

COURSE AGENDA

CHAPTER 1: ELECTRICAL SAFETY AND YOUR ELECTRICAL SAFETY PROGRAM

- Trainees start off receiving a brief overview of electrical safety history.
- Using the NTT's illustrated and annotated explanation of the NFPA 70E Standard, trainees will identify the electrical safety program requirements.
- They will compare those requirements to their own company's electrical safe work program.

CHAPTER 2: UNDERSTANDING ELECTRICAL HAZARDS

- Trainees participate in group exercises around risk awareness.
- Information regarding the risks of shock, arc flash, and arc blast are presented.
- Trainees review shock potentials and incident energy levels in a facility distribution system.
- They will learn to mitigate shock and arc flash hazards based on NFPE codes and technical hands-on interactions.

CHAPTER 3: ELECTRICAL SAFE WORK PRACTICES AND PROCEDURES.

- Safe work practices identified in NFPA 70E are laid out in steps.
- Trainees will learn these steps as they use the NTT Job Aid to develop a Job Safety Analysis (JSA).
- This JSA will be used throughout the remainder of the class for hands-on activities.

CHAPTER 4: INSPECTING, DONNING AND DOFFING, AND MAINTAINING ELECTRICAL PERSONNEL PROTECTIVE EQUIPMENT (PPE)

- Trainees will discuss characteristics and maintenance of various types of PPE.
- They will use the checklist in their text to inspect NTT or student supplied PPE.
- The instructor will demonstrate proper donning and doffing techniques.

CHAPTER 5: NORMAL OPERATION OF EQUIPMENT

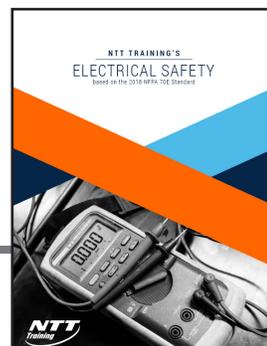
- Discussion of NFPA 70E's five requirements of electrical equipment to achieve Normal Operation status.
- Trainees will perform a visual inspection of the NTT electrical equipment for installation and maintenance issues.
- Examples of good and bad installations are discussed, including proper body positioning and techniques for typical switching operations.
- Trainees will use the table in the NFPA 70E Standard to determine the need for PPE.
- Hands-on use of an infrared camera through an infrared window, an ultrasonic detector, and the setup and use a remote indicating multimeter; reducing exposure to hazards.

CHAPTER 6: ESTABLISHING THE ELECTRICALLY SAFE WORK CONDITION

- OSHA and 70E requirements are presented and discussed.
- Trainees perform a Lockout/Tagout procedure on electrical equipment.
- The 3-point method is used to verify that a circuit is electrically safe.

CHAPTER 7: CONDUCTING AN EMERGENCY RESPONSE DRILL

- Following NFPA 70E requirements, trainees will develop an emergency response plan.
- Trainees then implement the plan following the scenario given by the instructor to simulate an electrical accident.
- Conclusion that will summarize the electrical safe work practices learned.



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