

### Overview

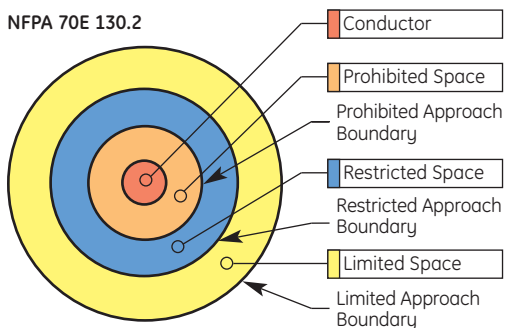
GE Energy's safety training team specializes in the development and delivery of world-class safety training programs with an emphasis on consistency, quality, and providing a practical learning experience for each student. Our professional safety instructors can help you realize these benefits by delivering safety training programs that provide insight and understanding into the risks inherent to electrical equipment and systems.

Courses focus on electrical safety requirements as identified by OSHA in the General Industry Standards; requirements of the NFPA 70E Consensus Standards; and the requirements of the General Industry Lockout/Tagout (LOTO) Standard. Training courses can be offered at the customer's site or at a GE Training Center.

Electrical Safety & NFPA 70E for Qualified Individuals and LOTO require the student to achieve a passing score upon final examination. Certificates will be presented to students that successfully pass the course.

### Approach Boundaries – Shock Protection

NFPA 70E 130.2



The Approach Boundaries relate to the voltage of the conductor

### Applicability

These courses are applicable to a broad range of industries where employees will encounter electrical equipment energized at greater than 50 volts.



### Available Courses

#### Electrical Safety & NFPA 70E for Qualified Individuals

**Course Description:** Required for individuals who face the risk of electrical shock, electrocution, or arc flash if the electrical system is not reduced to an electrically safe work condition. This course meets the electrical section of OSHA requirements – 29 CFR 1910.269, 29 CFR 1910.303 through 29 CFR 1910.308, and 29 CFR 1910.333.

Course content includes: safety around electrical systems; affects of current on the body; Personal Protective Equipment (PPE) required for working near energized equipment; additional PPE that is required for applying LOTO to equipment that is to be de-energized; electrical power tool safety; grounding; bonding; static electricity and equipment potential hazards. (If purchased with a GE Arc Flash Hazard Study, this course will be customized to incorporate explanations of selected results detailing potential issues and recommendations.)

#### Objectives

- Explain the fundamentals of electrical accidents
- Define proper procedures for identifying energized equipment and working on de-energized electrical equipment safely
- Explain how to recognize electrical safety hazards
- Recognize defined appropriate safe distances to energized equipment
- Explain static electricity and how it develops
- Explanation of “Equipotential” and Step Potential
- Selection of test equipment for identifying energized equipment
- Understand the limitations of test equipment

- Selection of PPE for individuals at risk of an electrical arc or explosion
- Proper method for identifying and applying electrical safety grounds
- Apply inspection guidelines for PPE and test equipment
- Understand hazard risk categories and their application in a number of situations

**Length:** 8 Hours

**Recommended Prerequisites.** Prior knowledge of electrical equipment and systems, personal protective equipment and Lockout/Tagout training.

**Audience.** Any individual who will be working near energized equipment and has the need to determine the degree and extent of the hazard and the personal protective equipment to perform a given task safely. *Note: This course should not be provided to those individuals who do not have knowledge of the construction and operation of electrical equipment or the ability to determine the degree and extent of the hazard and the personal protective equipment to perform a given task safely.*

## Lockout/Tagout

This program is designed for workers who may be involved in Lockout/Tagout (LOTO) work as defined by the electrical section of OSHA requirements 29 CFR 1910.147. Lockout/Tagout training gives individuals the necessary steps to perform LOTO in the workplace. It is intended to give individuals the knowledge needed to prevent serious injury from the unexpected release or start-up of hazardous energy.

### Objectives

- Explain the meaning of Lockout/Tagout
- Define the requirements of a LOTO program
- Outline employee LOTO responsibilities
- Identify different types of energy sources

- Describe the basic Lockout/Tagout six-step process
- Define the term "Zero Energy State"

**Length:** 4 Hours

**Recommended Prerequisites.** None.

**Audience.** Any individual who will be required to apply a lock, tag, or sign onto a LOTO system, or one who will be required to work on equipment, machinery, processes, or electric circuits.



## Fundamentals of NFPA 70E

This course provides information and guidance for individuals who will have responsibilities for implementing, training and enforcing the safety-related work practices of the NFPA 70E consensus standard.

### Objectives

- Explain shock and arc flash hazard analysis
- Define requirements to train employees
- Outline employer and employee responsibilities
- Understand requirements for work/maintenance practices
- Explain procedures to select appropriate Personal Protective Equipment
- Define qualified individuals

**Length:** 4 Hours

**Recommended Prerequisites.** None

**Audience.** Environment, Health and Safety professionals, plant personnel, and those individuals who will be implementing NFPA 70E requirements at their facility.



To learn more about this offering, contact your GE Energy sales representative or visit [www.ge-energy.com/training](http://www.ge-energy.com/training).