



# Electrical Safety

**HBS494**

## Course Overview

Electricity is a powerful force that can cause serious injury & death. When it comes to electrical job tasks, it only takes an instant to turn a momentary mistake into a fatality. Therefore, qualified electrical workers must understand & the hazards presented by exposed energized parts & know how to protect themselves using safe electrical work practices.

That's the purpose of this program—to explain the safety precautions these employees must always take to avoid needless tragedies while performing any type of electrical work.

Topics include the definition of a qualified worker, approach boundaries, the shock hazard of electricity, voltage-rated gloves & PPE, the arc flash boundary, PPE Levels of arc flash protection, creating & verifying an electrically safe work condition & exceptions when energized work is allowed. As per guidelines of OSHAD-SF – Code of Practice 15 – Electrical Safety CoP -24 Lockout/ Tag out (Isolation)

**Learning Objectives:** Upon successful completion of the course, participants will be able to:

- ✓ Work safely with electricity on the job.
- ✓ Find hazards like cracked wires & defective equipment.
- ✓ Follow safe, OSHA -approved practices at work.
- ✓ Use the appropriate PPE & tools.
- ✓ Prepare properly for an emergency following OSHA guidelines.

## Course Specifics

- **Who should attend this course?:** Electricians
- **Duration:** 1 Day
- **Assessment Method**
  - Written or practical assessment
- **Validity: 1 Year**
- **Delivery Options**
  - ✓ Instructor-led.
  - ✓ Doubt clarification, feedback session
- **Credentials**
  - OMCT certificate – ACTVET approved training center



## Course Outline

- ✓ Introduction to Electricity
- ✓ Avoiding Common Electrical Hazards
  - How electricity can leak or jump from a conducting wire. The method of “Controlled Grounding” & how it helps keep you safe. Ground Fault Circuit Interrupters as a life-saving device. Information on faulty wiring & the accidents that can result such as shocks, burns, fires, &more.
- ✓ Selecting Proper Equipment
  - Overloaded circuits & how to properly ground all electrical equipment. Using double-insulated tools &looking out for sparks while working with electrically powered machinery. Avoiding conductive materials. Being aware of flammable materials that do not react well with electricity. Selecting the right PPE.
- ✓ Work Environments
  - Get rid of water before you begin any electrical work. Working in confined spaces & around high voltage power lines. OSHA guidelines. Different types of equipment require.
- ✓ Electrical Accidents
  - How to react if there is a leak of a flammable gas or vapor. Handling an electrical fire, or first aid to a person who is in contact with a live wire.
- ✓ Lock-out/Tag-out Requirements
- ✓ Record Keeping, References, Document Amendment Record

