

COURSE CONTENT OVERVIEW

# Electrical Safety



Every workplace and person at work makes use of electricity every day. Electricity provides lighting, power, communications, controls and safety features, yet if it is not carefully assessed and controlled, electricity has the potential to cause serious injury.

This Electrical Safety course helps you to recognise the main risks when working with electrical equipment or near to electrical installations. The course explains your legal responsibilities, how to carry out a suitable risk assessment, and how to ensure that the right safety controls are in place to keep workers safe from harm.

### **Module One - Introduction to Electrical Safety**

This module explains the importance of electrical safety training and highlights some of the most common injuries that occur from unsafe working practices. The module outlines the legal responsibilities of employers and employees.

- What is electrical safety?
- Statistics for electrical accidents
- Types of accidents and injuries
- Common causes of accidents and injuries
- Employer duties
- The Health and Safety at Work Act and the Management of Health and Safety at Work Regulations
- The Electricity at Work Regulations 1989
- Employee responsibilities

### **Module Two - Risk Assessment**

This module looks at each element of an electrical risk assessment and will help you to understand the basic requirements of a good risk assessment for the safe use and maintenance of electrical installations and equipment.

- What is a risk assessment?
- Key definitions
- Who should carry out a risk assessment?
- Identifying electrical hazards
- The fire triangle
- Deciding who may be harmed and how
- Evaluating risks
- The hierarchy of control
- Recording findings
- Reviewing the risk assessment

### **Module Three - Controlling Hazards**

This module explains how to ensure that electrical equipment is installed and used safely, including the selection of safe equipment, arrangements for switching off and isolating equipment, safety aids, and safe maintenance practices.

- Safe installations
- Safe electrical equipment
- Duties on manufacturers, importers or distributors
- Electrical controls and isolation
- Harsh work environments
- Portable electrical equipment
- Residual current devices
- Warning signs
- Fire safety
- Safe maintenance
- Pre-use checks, inspections and combined inspections and tests

### **Module Four - Working Safely with Electrical Equipment**

This module highlights some of the most common risks encountered by anyone working with or near electrically powered equipment, including work near overhead and underground cables, fire and explosion risks, and risks when working on machinery.

- Working near electrical installations, equipment and wiring
- Risk assessments and safe systems of work
- Overhead power lines
- Underground cables
- Working on equipment, machinery or installations
- Explosive atmospheres
- Competency requirements for working on or near live electrical equipment
- Instruction, information and training
- Safe methods of working - PPE
- Duties on manufacturers and suppliers of PPE
- Safe methods of working - first aid

## Aims of the training

By the end of this course, learners will:

- Understand why training in electrical safety is essential for maintaining health and safety.
- Have knowledge of their employer's, and their own, responsibilities under electrical safety legislation.
- Understand what is involved in carrying out a risk assessment of the workplace.
- Understand the importance of maintaining and inspecting electrical equipment.
- Have knowledge of the controls that can be used to help make working with electricity safer.
- Understand the best practices when working with electricity, including overhead power lines, underground cables and indoor work near to a source of electricity.