

Aim of the programme

This course will provide participants with an appreciation of electrical engineering principles and the ability to interact effectively with colleagues regarding electrical issues. Within the course participants will have the opportunity to analyse basic electrical components and their features and benefits. Course participants will also gain an understanding of their responsibilities under the Electricity at Work Regulations.

As a result of attending this course, delegates will be able to:

- Understand the basic concepts of electrical engineering
- Appreciate their responsibilities under current health and safety legislation
- Understand the terminology used in electrical engineering
- Appreciate the dangers and safety procedures associated with electrical engineering
- Effectively converse on electrical topics with electrical personal
- Develop your own understanding of electrical systems in your work environment

Who is the course for?

This course is deigned for:

- Those with responsibility for management of engineering workshops and maintenance functions
- Those responsible for the day to day running of workshops and maintenance functions
- Those with involvement in engineering projects with an electrical element
- Engineering managers
- Maintenance managers
- Workshop supervisors
- Project managers, production mangers and engineers
- Newly qualified mechanical engineers and engineering technicians
- Personnel whose job function requires an overview of electrical engineering

Content – 1 day

The course includes the following core themes:

- **Fundamentals of electricity**
 - Ohms law, Kirchoffs law
 - Distribution of electricity
 - Electrical safety
- **Types, function, and use of electrical components**
 - Relays, solenoids, contactors,
 - The PLC
 - Motors and motor control
 - Stepper motors
 - Protection devices
- **BS 7671 Requirements for Electrical Installation (IEE Wiring Regulations)**
 - Use of and areas of application
 - The structure of the standard
 - Legislation Electricity at Work Regulation

Structure

This is one day course will consist of presentations, led discussion and short workshop sessions.