
ELECTRICAL PRINCIPLES

COURSE CODE: ELECP

DURATION : 10 Days (5 Days of DC and 5 Days of AC)

LOCATION : Clapham, Derby or Customer's Own Site

WHO SHOULD ATTEND

Our course is designed for delegates who need an in-depth knowledge of electrical principles to enable them to engage in further study or apply electrical principles to their current role. It assumes no knowledge of electrical calculations or science but an aptitude for basic number skills is required.

OBJECTIVES

On completion, delegates will be able to:

- Demonstrate knowledge and practically apply the principles of AC and DC theory
- Be aware of electrical safety precautions when working on electrical equipment
- Perform electrical calculations on both AC and DC networks

CONTENT

- Electrical safety and Ohm's Law
- Scientific notation and metric prefixes
- Basic concepts of electricity
- Magnetism and electromagnetism
- Electrical generation DC and AC
- The physics of conductors and insulators
- Series and parallel networks

- Capacitors and inductors
- RC and L/R time constants
- Test equipment
- Fuse discrimination
- Power calculations
- Reactance and impedance
- Resonance, filters and transformers
- Mixed frequency AC signals
- Polyphase AC circuits

LEARNING APPROACH

Classroom sessions covering theoretical aspects with practical elements to reinforce learning objectives.

FEATURES

The course covers both AC and DC theory and looks at the main component of electrical circuits and how they behave when electrical signals are applied.

CERTIFICATION

Catalis certificate of achievement issued on successful completion of the course.
