

# Professional Training

## Electrical Maintenance Worker

50 days

### Teaching aims

To know:

- the basics of industrial maintenance
- how electrical equipment operates
- rules for the design of an electrical installation.

To be able to:

- perform diagnostics using an appropriate methodology
- carry out first- and second-level electrical maintenance work in complete safety.

### Target personnel - Prerequisites

Personnel working in an industrial context or with equivalent initial experience. The training will provide the necessary means for staff to progress to second-level electricity-specific maintenance work.

### Teaching methods

Various audiovisual materials.  
Role-play using a teaching pilot unit, models and simulators.

### Course leaders

Performed by qualified trainers, Apave engineers or technicians, with a background in the chemicals and petrochemicals industry, who also work as technical advisers to industry.

### Number of trainees

Maximum recommended: 8 people.

## COURSE CONTENT

### 1. Industrial knowledge:

This set of modules is aimed at providing the minimum level of general knowledge required to become familiar with and operate the equipment within the suggested situations.

- Introduction to instrumentation
- Introduction to automated systems
- Introduction to CAMM using software developed by APAVE
- Presentation or reinforcement of key points to enable reading of plans and diagrams.

### 2. Job-specific:

This set of modules is aimed at teaching professional techniques and practices directly linked to job-specific activities.

- Basic electricity
- Industrial LV and HV electricity
- Awareness and maintenance of electrical power sources (alternators, inverters, batteries, chargers etc.)

- Awareness and maintenance of electrical consumers (motors, lighting etc..)
- Control and adjustment of motor speeds
- Electrical qualifications required for work described above

### 3. Safety and Process Control:

This set of modules is aimed at teaching knowledge and general practices associated with maintenance.

- Methodology and maintenance
- Failure analysis
- Analysis of risks in the workplace
- Operational monitoring

### 4. Getting on in the workplace environment

This set of modules is aimed at making people aware of their role within a team and the importance of communication.

- Roles and procedures
- Communication in daily working life