

Training - Introduction to Industrial Electricity



ELECBA-EN-P



Face-to-face only



5 days

This course provides an overview on industrial electricity; how it is generated and distributed in petrochemical plants

Level

Awareness

Public

Operators, supervisors and engineers from any department

Objectives

Attendees will be able to implement the following skills:

- List the fundamentals of electricity
- Identify equipment used for the grid
- Recognize electric motors and generators technologies
- List the electrical safety rules

Pedagogical & technical resources

- Numerous drawings and datasheets used in the industrial plants
- Daily quiz to reactivate the key points
- Practical exercises and case studies

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsible

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

FUNDAMENTALS IN INDUSTRIAL ELECTRICITY

1 day

Characteristics of electrical power supply for industrial plants.

Principles of electrical distribution:

- Main technical characteristics of the electrical distribution and the grid. One line electric distribution diagram.
- Application: overall online diagram.

SUBSTATION EQUIPMENT & SWITCHGEAR

2 days

Purposes and use of these types of equipment.
Transformers: overall technology and troubleshooting.
Circuit breakers: technology and switchboard.
Operation and maintenance of main electrical equipment.
Electricity control system. Failures monitoring and corrective actions.
Electrical protections.

ELECTRICAL HAZARDS

1 day

Electrical shocks. Direct and indirect contacts.
Collective and personal protective equipment. Hazardous areas. Basics in safety.
Prevention against electrical shocks, Lock-Out Tag-Out procedure (LOTO).

INTRODUCTION TO MOTORS

0.5 day

Different type of motors. Operation and technology. Working principle of induction and synchronous motors.
LV & HV motors. Troubleshooting.

DESCRIPTION OF STEAM TURBINES GENERATORS

0.5 day

Electrical power generating set. Technology. Coupling.
Main technical characteristics of these types of equipment.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com