





# **Course: Electrical Engineering for Non Electrical Engineers**

Code	City	Hotel	Start	End	Price	Language - Hours
330	Cairo (Egypt)	Hotel Meeting Room	2025-01-19	2025-01-23	3050 €	En - 25

### **OVERVIEW**

### After participating in this course you will be able to:

- Understand and apply electrical code requirements
- Design electrical systems in compliance with the code
- Broaden your knowledge of electrical equipment, wire and cable applications
- Relate electrical code to grounding and bonding requirements
- Determine the code requirements for motor applications, substations, and high voltage lines

## Description

This course focuses on basic electrical design concepts that will meet the demands of industrial and commercial design, construction, and maintenance. In addition to familiarizing participants with basic electrical circuits and circuit parameters, the course provides a general understanding of the methods used to design low voltage power distribution systems (600 volts or less).

The course will emphasize the Canadian Electrical Code while introducing the basics of electrical generation, transmission and distribution, design philosophy and procedures, construction materials, services, grounding, and power quality.

# Who Should Attend



- Non-Electrical Engineers
- Project Engineers
- Operations and Maintenance Engineers
- Managers Construction personnel
- Plant and Facility Engineers
- Inspectors and Municipal personnel
- Electrical Contractors

# **Course Outline**

- Electric power and circuit fundamentals
- Power quality
- Major electrical equipment
- Electrical power generation
- Load characteristics and conductor sizing
- Fault calculation and protection system
- Standards and codes
- Design procedures
- Motor branch circuit design
- Feeder circuit design



The Scandinavian Academy for Training and Development employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:

### • Theoretical Lectures:

 We deliver knowledge through advanced presentations such as PowerPoint and visual materials, including videos and short films.

#### • Scientific Assessment:

 $\circ\,$  We evaluate trainees skills before and after the course to ensure their progress.

### • Brainstorming and Interaction:

 We encourage active participation through brainstorming sessions and applying concepts through role play.

### • Practical Cases:

- $\circ\,$  We provide practical cases that align with the scientific content and the participants specific needs.
- Examinations:
  - $\circ\,$  Tests are conducted at the end of the program to assess knowledge retention.
- Educational Materials:
  - $\circ\,$  We provide both printed and digital scientific and practical materials to participants.
- Attendance and Final Result Reports:
  - $\circ\,$  We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.
- Professionals and Experts:
  - $\circ\,$  The programs scientific content is prepared by the best professors and trainers in various fields.
- Professional Completion Certificate:
  - $\circ~$  Participants receive a professional completion certificate issued by the Scandinavian Academy for
    - Training and Development in the Kingdom of Sweden, with the option for international authentication.
- Program Timings:
  - Training programs are held from 10:00 AM to 2:00 PM and include coffee break sessions during lectures.