





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

Code	City	hotel	Start	End	price	Language - Hours
330	Dammam	Hotel Meeting Room	2026-02-01	2026-02-05	11450 SR	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 Center adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training Center.

### **Program Timings:**

• 9:00 AM to 2:00 PM

### The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.
- A closing ceremony on the final day to distribute certificates and celebrate participants achievements.