



**SCANDINAVIAN ACADEMY**  
Training and Development

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# Course: Fundamentals of Electrical Equipment

Code	City	Hotel	Start	End	Price	Language - Hours
EE-755	Cairo (Egypt)	Hotel Meeting Room	2026-08-09	2026-08-13	3050 €	En - 25

## Description

This course covers the fundamentals of electrical equipment, such as power generation, power distribution, transformers, circuit breakers, switches, safety with electrical equipment, motor fundamentals, AC motor fundamentals, AC motor parts and functions, AC motor controllers, AC motor startup and operating checks, DC motors and motor controllers

## Objective

- Understand power generation and distribution.
- Understand transformers operation, components, and responsibilities.
- Be familiar with circuit breakers.
- Be familiar with switches.
- Be familiar with safety with electrical equipment.
- Understand motor fundamentals.
- Understand motor controllers

## Outline

### Power Generation.

- Off-site power generation.
- On-site power generation.
- Power Distribution.



## **Transformers.**

- Transformer operation.
- Transformer components.
- Operator responsibilities.
- Transformer Protection

## **Circuit Breakers.**

- Circuit breaker operation.
- Resetting a tripped breaker.
- Racking out a breaker.
- Switches.
- Pushbutton switches.
- Rotatory switches.

## **Safety with Electrical Equipment.**

- Electrical hazards.
- Electrical shock.
- Electrical fires.

## **Motor Fundamentals.**

- AC Motor Fundamentals.
- AC Motor Parts and Functions.
- AC Motor Controllers.
- Motor controllers and motor control centers.
- Motor controller operation.



The Scandinavian Academy for Training and Development 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 will receive comprehensive training materials, including theoretical content, practical exercises, and supporting resources, provided in both printed and digital formats. 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 and Development.

### **Program Timings:**

- 9:00 AM to 2:00 PM in Arab cities.
- 10:00 AM to 3:00 PM in European and Asian cities.

### **The program includes:**

- A daily Coffee Break provided during the sessions to ensure participants comfort.