



**SCANDINAVIAN ACADEMY**  
Training and Development

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# Course: Electrical Switchgear for Engineers

Code	City	Hotel	Start	End	Price	Language - Hours
EE-753	Cairo (Egypt)	Hotel Meeting Room	2027-04-11	2027-04-15	3050 €	En - 25

## Objective

This scope includes material that enables attendees to have in-depth understanding of theory of operation of electrical switchgear and essential issues relevant to daily operation and maintenance of motor control centers and low-voltage, medium-voltage and high-voltage switchgear

## Who should Attend

- Electrical Engineers.
- Senior technicians who work in the electrical control and power utilities.
- Technicians who would like to refresh their knowledge.
- Mechanical and chemical Engineers who are interested in control subjects.

## Outline

### Introduction to Electrical Switchgear:

- General information about switchgear.
- Switchgear use.
- Switchgear requirements.
- Codes and Standards.

### Types of Switchgear:

- Classification of switchgear.



- Switchgear construction:
- The switchgear assembly.
- Switchgear enclosures.
- Mechanical degree of protection.
- Busbars.

## **Switchgear Earthing System**

- Switchgear Earthing Requirements
- Components Earthing

## **Medium Voltage Circuit Breakers, Fused Contactors and Load Break Switch**

- Description for Each Item
- Differences

## **Switchgear Arc Extinction Media and Theory**

- Types of Arc Extinction Media
- Advantages
- Differences

## **Switchgear Protection and Control**

- Switchgear Protection Scheme
- Control requirements

## **Switchgear Metering**

- Metering specifications
- Metering requirements

## **Current Transformers**



- Types
- Accuracy

## **Potential Transformers**

- Types
- Requirements.

## **Factory Acceptance Test (FAT)**

- Type test
- Routine tests
- Handling and Storage

## **Handling procedures**

- Storage requirements

## **Erection**

- Safety
- Erection Preparations

## **Site Acceptance Test (SAT)**

- Description
- Requirements

## **Commissioning and Start-up.**

- Procedures
- Hand over system



## Trouble Shooting

- How to deal with
- Requirements



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.