



**SCANDINAVIAN ACADEMY**  
Training and Development



# Course: Maintenance & Protection of Transformer Stations

Code	City	Hotel	Start	End	Price	Language - Hours
754	Beirut (Lebanon)	Hotel Meeting Room	2025-02-16	2025-02-20	3050 €	En - 25

## Objective

- Understand transformer theory
- Tests power transformer
- Understand type of transformer
- transformer cooling systems
- Understand transformer protection procedures

## Who should Attend

- Electric power engineers.
- Supervisors and qualified technicians

## Outline

### Introduction:

- Terminal and Neutral Point Winding Rating
- Losses And No-Load Testing
- Temperature Rise
- Insulation Connections Tapping

### Transformer Theory:



- Constructional Features
- Transformer Tests
- Transformer Performance
- Three-Phase Transformer
- Other Transformer Types

## **Testing Power Transformer**

## **Transformer Cooling Systems**

## **Transformer Oil**

## **Transformer Protection:**

## **Transformer Faults**

## **Winding Connection And Earthing Effects**

## **Star Winding**

## **Delta Winding**

## **Gas and Oil Surge Protection**

## **Over-current and Earth Fault**

## **Tank Leakage Protection**

## **Typical Protection Schemes**



**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:**

- 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:**

- We provide practical cases that align with the scientific content and the participants specific needs.

• **Examinations:**

- Tests are conducted at the end of the program to assess knowledge retention.

• **Educational Materials:**

- We provide both printed and digital scientific and practical materials to participants.

• **Attendance and Final Result Reports:**

- We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.

• **Professionals and Experts:**

- The programs scientific content is prepared by the best professors and trainers in various fields.

• **Professional Completion Certificate:**

- 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.