



**SCANDINAVIAN ACADEMY**  
Training and Development

Mobile : +46700414979 | Mobile : +46700414979 | phone : +46114759991

Email : [info.en@scandinavianacademy.net](mailto:info.en@scandinavianacademy.net) | Web site : <https://scandinavianacademy.net/en>

location : Sweden - Norrköping - Timmermansgatan100 | P.O.BOX : 60359



# Course: Maintenance & Protection of Transformer Stations

| Code | City             | Hotel              | Start      | End        | Price  | Language - Hours |
|------|------------------|--------------------|------------|------------|--------|------------------|
| 754  | Manama (Bahrain) | Hotel Meeting Room | 2025-08-24 | 2025-08-28 | 3450 € | 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 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 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 buffet provided during the sessions to ensure participants comfort.