





Course: Maintenance & Protection of Transformer Stations

| Code | City | Hotel | Start | End | Price | Language - Hours |
|------|----------------------|--------------------|------------|------------|-------|------------------|
| 754 | Barcelona (Spain) | Hotel Meeting Room | 2025-09-08 | 2025-09-12 | 5950€ | 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:

 $\circ\,$ 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:

- $\circ\,$ We provide practical cases that align with the scientific content and the participants specific needs.
- Examinations:
 - $\circ\,$ Tests are conducted at the end of the program to assess knowledge retention.
- Educational Materials:
 - $\circ\,$ We provide both printed and digital scientific and practical materials to participants.
- Attendance and Final Result Reports:
 - $\circ\,$ We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.
- Professionals and Experts:
 - $\circ\,$ The programs scientific content is prepared by the best professors and trainers in various fields.
- Professional Completion Certificate:
 - $\circ~$ 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.