





Course: Maintenance & Protection of Transformer Stations

Code	City	hotel	Start	End	price	Hours
754	Casablanca (Morocco)	Hotel Meeting Room	2024-05-05	2024-05-09	3450 €	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
 - $\circ \ \ Insulation \ Connections \ Tapping$
- 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 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:

 $\circ\,$ 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 buffet sessions for light meals during lectures.