





## **Course: Maintenance & Protection of Transformer Stations**

Code	City	hotel	Start	End	price	Hours
754	Munich (Germany)	Hotel Meeting Room	2024-07-22	2024-07-26	5950 €	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 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 buffet sessions for light meals during lectures.