



Energy, Electrical Engineering



SCANDINAVIAN ACADEMY
Training and Development

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Course: Electrical Switchgear for Engineers

Code	City	hotel	Start	End	price	Hours
753	Munich (Germany)	Hotel Meeting Room	2024-06-03	2024-06-07	5450 €	25

Objective

This scope includes material that enables attendees to have in-depth understanding of theory of operation of electrical switchgear and essential issues relevant to daily operation and maintenance of motor control centers and low-voltage, medium-voltage and high-voltage switchgear

Who should Attend

- Electrical Engineers.
- Senior technicians who work in the electrical control and power utilities.
- Technicians who would like to refresh their knowledge.
- Mechanical and chemical Engineers who are interested in control subjects.

Outline

- **Introduction to Electrical Switchgear:**
 - General information about switchgear.
 - Switchgear use.
 - Switchgear requirements.
 - Codes and Standards.
- **Types of Switchgear:**
 - Classification of switchgear.
 - Switchgear construction:
 - The switchgear assembly.
 - Switchgear enclosures.
 - Mechanical degree of protection.
 - Busbars.
- **Switchgear Earthing System**
 - Switchgear Earthing Requirements
 - Components Earthing
- **Medium Voltage Circuit Breakers, Fused Contactors and Load Break Switch**
 - Description for Each Item
 - Differences
- **Switchgear Arc Extinction Media and Theory**
 - Types of Arc Extinction Media



- Advantages
- Differences
- **Switchgear Protection and Control**
 - Switchgear Protection Scheme
 - Control requirements
- **Switchgear Metering**
 - Metering specifications
 - Metering requirements
- **Current Transformers**
 - Types
 - Accuracy
- **Potential Transformers**
 - Types
 - Requirements.
- **Factory Acceptance Test (FAT)**
 - Type test
 - Routine tests
- **Handling and Storage**
 - Handling procedures
 - Storage requirements
- **Erection**
 - Safety
 - Erection Preparations
- **Site Acceptance Test (SAT)**
 - Description
 - Requirements
- **Commissioning and Start-up.**
 - Procedures
 - Hand over system
- **Trouble Shooting**
 - How to deal with
 - Requirements



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:**
 - 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.