



**Energy, Electrical Engineering**



**SCANDINAVIAN ACADEMY**  
Training and Development

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# Course: Fundamentals of Electrical Equipment

Code	City	hotel	Start	End	price	Hours
755	Toronto (Canada)	Hotel Meeting Room	2024-06-10	2024-06-14	6450 €	25

## Description

This course covers the fundamentals of electrical equipment, such as power generation, power distribution, transformers, circuit breakers, switches, safety with electrical equipment, motor fundamentals, AC motor fundamentals, AC motor parts and functions, AC motor controllers, AC motor startup and operating checks, DC motors and motor controllers

## Objective

- Understand power generation and distribution.
- Understand transformers operation, components, and responsibilities.
- Be familiar with circuit breakers.
- Be familiar with switches.
- Be familiar with safety with electrical equipment.
- Understand motor fundamentals.
- Understand motor controllers

## Outline

- **Power Generation.**
  - Off-site power generation.
  - On-site power generation.
  - Power Distribution.
- **Transformers.**
  - Transformer operation.
  - Transformer components.
  - Operator responsibilities.
  - Transformer Protection
- **Circuit Breakers.**
  - Circuit breaker operation.
  - Resetting a tripped breaker.
  - Racking out a breaker.
  - Switches.
  - Pushbutton switches.
  - Rotatory switches.



- **Safety with Electrical Equipment.**

- Electrical hazards.
- Electrical shock.
- Electrical fires.

- **Motor Fundamentals.**

- AC Motor Fundamentals.
- AC Motor Parts and Functions.
- AC Motor Controllers.
- Motor controllers and motor control centers.
- Motor controller operation.



**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.