



**Energy, Electrical Engineering**



**SCANDINAVIAN ACADEMY**  
Training and Development

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# Course: Grounding and Bonding of Electrical Systems

| Code | City             | hotel         | Start      | End        | price  | Hours |
|------|------------------|---------------|------------|------------|--------|-------|
| 332  | Hurghada (Egypt) | Hotel Meeting | 2024-06-02 | 2024-06-06 | 3450 € | 25    |

## OVERVIEW

After participating in this course, you will be able to:

- Identify and prevent safety hazards to personnel who come in contact with electrical systems
- Prevent equipment failures and malfunctions by employing proper grounding techniques
- Interpret codes and standards related to grounding
- Ensure proper operation of communication, computer and control systems by proper grounding and bonding
- Apply to your projects lightning protection methods

## Description

Grounding and bonding systems ensure that electrical systems are safe from electric shock and fires by limiting the voltage imposed by lightning, line surges, or unintentional contact with high voltage lines as well as a ground-fault. An integrated approach of theory and practice will ensure you have a firm foundation of knowledge when you begin your next design or construction project, or when you encounter problems in your electrical system which must be corrected for safety, operational or power quality reasons.

Case studies will be presented to discuss grounding and bonding applications in a variety of areas (industrial and substation) in order to reinforce fundamental grounding principles common to a variety of applications.

## Course Outline



- Grounding
- Grounding vs. bonding
- Electrical code requirements and standards
- Grounding resistance and resistivity
- Substation grounding
- Electronic equipment
- Lightning protection
- Measurement techniques

## Who Should Attend

- Electrical Engineers
- Design Engineers • Managers
- Project Managers
- Power Quality Specialists
- Maintenance Managers • Consultants
- Electronics and Controls personnel
- Traffic Signal Designers and Operators



- Technologists



**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.