



*Training Course:  
Power System Training: Electrical Systems for  
Buildings*

*29 June - 3 July 2025*

*Cairo (Egypt)*

*Holiday Inn & Suites Cairo Maadi, an IHG Hotel*

## Training Course: Power System Training: Electrical Systems for Buildings

Training Course code: EW235786 From: 29 June - 3 July 2025 Venue: Cairo (Egypt) - Holiday Inn & Suites Cairo Maadi, an IHG Hotel Training Course Fees: 4200 € Euro

### Introduction:

Electrical systems are essential for the efficient operation of buildings, ensuring the supply and distribution of power for lighting, HVAC, security, and various facility functions. This **5-day training program** is designed to provide participants with a strong understanding of **power distribution, safety, maintenance, and troubleshooting techniques** to enhance their operational efficiency and reduce risks associated with electrical systems.

### Objectives:

By the end of this training, participants will:

- Understand the fundamentals of building electrical systems
- Gain knowledge of power distribution and electrical load management
- Learn best practices for electrical safety and compliance
- Develop troubleshooting techniques for common power failures
- Implement preventive and predictive maintenance strategies

### Target Audience:

This training program is designed for professionals responsible for the operation, maintenance, and safety of electrical systems in buildings, including:

- Maintenance and Operations Department staff
- Electrical engineers and technicians working in building infrastructure
- Facility managers overseeing power distribution and electrical systems
- Building management personnel responsible for electrical safety and efficiency
- Supervisors and team leaders involved in electrical maintenance and troubleshooting
- HVAC and mechanical technicians who interact with electrical components in buildings

### Outlines

Day 1:

## Fundamentals of Electrical Systems in Buildings

- Overview of electrical systems in buildings
- Key components: transformers, switchgear, circuit breakers, and panels
- Power distribution in commercial and residential buildings
- Importance of power quality and energy efficiency

### Day 2:

## Power Distribution and Load Management

- Medium and low-voltage distribution systems
- Electrical load types and demand-side management
- Cable sizing, voltage drop calculations, and protection systems
- Backup power solutions: Uninterruptible Power Supply UPS and generators

### Day 3:

## Electrical Safety and Risk Management

- Electrical hazards: shock, arc flash, and fire risks
- Safety protocols, Lockout-Tagout LOTO procedures
- Personal Protective Equipment PPE for electrical work
- Compliance with electrical codes and building regulations

### Day 4:

## Troubleshooting and Fault Diagnosis in Electrical Systems

- Identifying and diagnosing power failures
- Troubleshooting transformers, circuit breakers, and motors
- Testing equipment for electrical fault detection
- Emergency response for electrical failures

### Day 5:

### Preventive and Predictive Maintenance Strategies

- Scheduled maintenance of electrical components
- Condition monitoring and predictive maintenance techniques
- Insulation testing and thermographic inspection
- Case studies and best practices for electrical system reliability

## Registration form on the Training Course: Power System Training: Electrical Systems for Buildings

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

### Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....  
Position: .....  
Telephone / Mobile: .....  
Personal E-Mail: .....  
Official E-Mail: .....

### Company Information

Company Name: .....  
Address: .....  
City / Country: .....

### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....  
Position: .....  
Telephone / Mobile: .....  
Personal E-Mail: .....  
Official E-Mail: .....

### Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
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### Easy Ways To Register

Telephone:  
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registration  
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info@gh4t.com  
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to: Global Horizon  
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