Global Horizon
TRAINING CENTER

Training Course:
Electric Power Distribution System For Industrial Plants

6 - 17 December 2026
Dubai (UAE)

Training Course:
Electric Power Distribution System For Industrial Plants

Training Course code: EN2 From: 6 - 17 December 2026 Venue: Dubai (UAE) - Training Course Fees: 9240 Euro

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Introduction

Industrial power distribution systems are critical for ensuring reliable, safe, and efficient electricity delivery within plants. These systems must handle high loads, complex equipment, and strict operational requirements while maintaining continuity and minimizing downtime.

This program, designed by Global Horizon Training Center, provides a comprehensive 10-day training that equips participants with the technical knowledge and practical skills required to design, operate, protect, and maintain electrical power distribution systems in industrial environments.

Course Objectives

By the end of this program, participants will be able to:

- Understand industrial power distribution system architecture
- Design and analyze electrical distribution networks
- Select and operate electrical equipment and components
- Apply protection and coordination strategies
- Ensure power quality and system reliability
- Manage load distribution and energy efficiency
- Perform maintenance and troubleshooting of electrical systems
- Ensure compliance with safety and industry standards

Target Audience

This program is designed for:

- Electrical and Power Engineers
- Plant and Maintenance Engineers
- Industrial Operations Personnel
- Project Engineers involved in electrical systems
- Technicians and Supervisors in power distribution
- Professionals working in industrial facilities

Outline

Day 1: Fundamentals of Industrial Power Distribution

- Overview of industrial power systems
- Distribution system components and architecture
- Voltage levels and classifications
- Power flow basics
- Safety considerations

Day 2: Electrical Equipment and Components

- Transformers and substations
- Switchgear and circuit breakers
- Cables and busbars
- Motors and drives
- Equipment selection criteria

Day 3: System Design and Load Analysis

- Load estimation and demand analysis
- System design principles
- Distribution network configurations
- Load balancing and diversity factors
- Electrical drawings and schematics

Day 4: Protection Systems and Coordination

- Types of faults and protection schemes
- Relays and protective devices
- Protection coordination and selectivity
- Grounding and earthing systems
- Safety protection mechanisms

Day 5: Power Quality and System Performance

- Power quality issues harmonics, voltage dips
- Power factor correction
- Voltage regulation and control
- Energy efficiency strategies
- Performance monitoring

Day 6: Operation and Control of Distribution Systems

- System operation procedures
- SCADA and monitoring systems
- Control strategies and automation
- Load management and demand response
- Emergency operations

Day 7: Maintenance and Reliability

- Preventive and predictive maintenance
- Condition monitoring techniques
- Asset lifecycle management
- Reliability improvement strategies
- Maintenance planning

Day 8: Troubleshooting and Fault Analysis

- Identifying system faults
- Diagnostic tools and techniques
- Root cause analysis
- System restoration procedures
- Case-based troubleshooting

Day 9: Integration and Modern Technologies

- Smart grids and digital transformation
- Integration with renewable energy sources
- Energy storage systems
- Advanced monitoring and analytics
- Future trends

Day 10: Standards, Compliance, and Case Studies

- International standards IEC, IEEE
- Regulatory compliance
- Safety and risk management
- Best practices in industrial power systems
- Case studies and real-world applications

Registration form on the Training Course: Electric Power Distribution System For Industrial Plants

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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
- ☐ Please invoice my company

Easy Ways To Register

Telephone: +201095004484 to provisionally reserve your place.	Fax your completed registration form to: +20233379764	E-mail to us : info@gh4t.com or training@gh4t.com	Complete & return the booking form with cheque to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt.