Global Horizon
TRAINING CENTER

Training Course:
Power System Distribution Fundamentals

24 - 28 August 2026
Cape Town (South Africa)
DoubleTree by Hilton Cape Town - Upper Eastside

Training Course:
Power System Distribution Fundamentals

Training Course code: EN234883 From: 24 - 28 August 2026 Venue: Cape Town (South Africa) - DoubleTree by Hilton Cape Town - Upper Eastside Training Course Fees: 7500 Euro

Introduction

Power distribution systems are essential for delivering electricity from transmission networks to end users efficiently, safely, and reliably. Understanding distribution fundamentals is critical for managing network performance, minimizing losses, and ensuring continuity of supply in modern power systems.

This program, designed by Global Horizon Training Center, equips participants with the foundational knowledge and practical insights required to analyze, operate, and maintain power distribution systems in accordance with industry standards.

Course Objectives

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

- Understand the structure and components of power distribution systems
- Analyze distribution network configurations and performance
- Identify key equipment used in distribution systems
- Apply basic load analysis and demand management principles
- Recognize common faults and protection methods
- Improve system reliability and efficiency
- Ensure compliance with safety and operational standards
- Support distribution planning and maintenance activities

Target Audience

This program is designed for:

- Electrical and Power Engineers
- Distribution and Utility Engineers
- Maintenance and Operations Personnel
- Technicians working in power systems
- SCADA and Control Room Operators
- Professionals involved in electrical infrastructure

Outline

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Day 1: Fundamentals of Power Distribution Systems

- Overview of power distribution networks
- Distribution system structure and components
- Radial, ring, and interconnected systems
- Voltage levels and classifications
- Introduction to distribution planning

Day 2: Distribution Equipment and Components

- Transformers and substations
- Switchgear and protective devices
- Cables and overhead lines
- Capacitors and voltage regulators
- Equipment selection and operation

Day 3: Load Analysis and Network Performance

- Load types and demand characteristics
- Load forecasting and analysis
- Power losses and efficiency
- Voltage drop and power quality
- Network performance evaluation

Day 4: Protection and Fault Management

- Types of faults in distribution systems
- Protection schemes and coordination
- Relays and circuit breakers
- Fault detection and isolation
- System restoration strategies

Day 5: Operation, Maintenance, and Optimization

- Distribution system operation practices
- Maintenance strategies and planning
- Reliability improvement techniques
- Integration of distributed energy resources
- Case studies and real-world applications

Registration form on the Training Course: Power System Distribution Fundamentals

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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.