Global Horizon
TRAINING CENTER

Training Course:
Power Management Systems (PMS)

4 - 15 October 2026
Dubai (UAE)

Training Course:
Power Management Systems (PMS)

Training Course code: EN235637 From: 4 - 15 October 2026 Venue: Dubai (UAE) - Training Course Fees: 9240 Euro

Introduction

Power Management Systems PMS are essential for ensuring the safe, reliable, and efficient operation of electrical power systems in industries such as oil & gas, marine, utilities, and large industrial facilities. PMS enables real-time monitoring, load balancing, protection coordination, and automated control of power generation and distribution systems.

This 10-day advanced training program, developed by Global Horizon Training Center, provides a comprehensive and practical approach to PMS, covering system design, load management, protection strategies, automation, and performance optimization.

Participants will gain in-depth knowledge and hands-on understanding of PMS applications, enabling them to operate, maintain, and optimize electrical power systems effectively.

Course Objectives

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

- Understand PMS architecture and system components
- Design and analyze electrical power management systems
- Apply load sharing and load shedding strategies
- Implement protection and control schemes
- Integrate PMS with SCADA/DCS systems
- Monitor and optimize system performance
- Diagnose and troubleshoot system faults
- Improve reliability and energy efficiency

Target Audience

- Electrical and Power Engineers
- Control and Automation Engineers
- Maintenance and Reliability Engineers
- Marine and Offshore Engineers
- Plant Operators and Supervisors
- Energy and Utility Professionals

Outline

Day 1: Fundamentals of Power Systems and PMS

- Overview of electrical power systems
- Introduction to PMS concepts and applications
- Components: generators, transformers, switchgear
- System configurations

Day 2: PMS Architecture and Communication Systems

- PMS hardware and software architecture
- Communication protocols Modbus, IEC 61850
- Network design and redundancy
- Integration with control systems

Day 3: Load Management and Power Distribution

- Load characteristics and demand analysis
- Load sharing among generators
- Power distribution strategies
- Power factor correction

Day 4: Load Shedding and Blackout Prevention

- Automatic load shedding schemes
- Priority load classification
- Blackout prevention strategies
- System restoration procedures

Day 5: Electrical Protection and Coordination

- Protection devices relays, breakers
- Overcurrent, differential, and distance protection
- Coordination and selectivity
- Fault analysis

Day 6: Control Strategies and Automation

- PMS control logic and algorithms
- Generator control synchronization, load sharing
- Automation systems integration
- SCADA/DCS interface

Day 7: Monitoring, Diagnostics, and Data Analysis

- Real-time monitoring systems
- Data logging and trending
- Performance indicators KPIs
- Fault detection and diagnostics

Day 8: Maintenance and Reliability Engineering

- Preventive and predictive maintenance
- Reliability-centered maintenance RCM
- Asset management strategies
- System lifecycle management

Day 9: Energy Optimization and Efficiency

- Energy management strategies
- Reducing losses and improving efficiency
- Demand-side management
- Integration of renewable energy

Day 10: Integrated PMS Design & Final Workshop

- Designing a complete PMS solution
- Case studies and real-world applications
- Troubleshooting and optimization scenarios
- Group project and presentation
- Final review and evaluation

Registration form on the Training Course: Power Management Systems (PMS)

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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: .....
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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.