



*Training Course:
Essentials of Data Center Operations: Uptime,
Safety, and Efficiency*

*11 - 15 August 2025
Madrid (Spain)
Pestana CR7 Gran Vía*

Training Course: Essentials of Data Center Operations: Uptime, Safety, and Efficiency

Training Course code: IT236102 From: 11 - 15 August 2025 Venue: Madrid (Spain) - Pestana CR7 Gran Vía Training Course Fees: 6000 € Euro

Introduction

This training program, designed by Global Horizon Training Center, is tailored to provide participants with a solid foundation in the core operational aspects of data center management. With the ever-growing demand for uninterrupted digital services, the efficiency, uptime, and safety of data centers have become mission-critical. This program offers a comprehensive understanding of day-to-day operations, critical facility management, safety protocols, and best practices to ensure smooth, efficient, and secure data center environments. Participants will gain hands-on insights into maintaining operational excellence while ensuring compliance with global standards.

Objectives

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

- Understand the key components and functions of modern data center operations.
- Apply best practices to ensure maximum uptime and operational reliability.
- Implement effective safety protocols and incident response procedures.
- Manage power, cooling, and facility systems efficiently.
- Conduct routine monitoring, inspection, and maintenance to prevent failures.
- Optimize data center workflow, capacity planning, and resource usage.
- Align operations with international data center standards and frameworks.

Course Methodology

The course combines:

- Instructor-led presentations
- Real-world case studies
- Interactive workshops and exercises
- Video demonstrations
- Group discussions
- Quizzes and performance evaluations

Organizational Impact

Organizations will benefit from:

- Improved resilience and reliability of data center services.
- Reduced downtime and operational risks.
- Enhanced efficiency in maintenance and energy usage.
- Better alignment with safety standards and compliance.
- Strengthened team capacity to handle emergencies and critical situations.
- A more structured and proactive operations model within the data center.

Target Audience

This training is ideal for:

- Data Center Operations Staff and Technicians
- Facility and Infrastructure Engineers
- IT Operations Managers
- System Administrators and Network Engineers
- Data Center Supervisors and Shift Leads
- Health and Safety Officers working in technical environments
- Anyone responsible for managing uptime, safety, or operations in data centers

Course Outline

Day 1: Introduction to Data Center Operations and Infrastructure

- Overview of data center types and architectures
- Roles and responsibilities in data center operations
- Critical systems: Power, cooling, networking, and security
- Understanding the data center lifecycle

- Key performance metrics: Uptime, PUE, SLA

Day 2: Ensuring Uptime and Business Continuity

- Uptime Institute Tier Standards and design principles
- Redundancy levels N, N+1, 2N and high availability planning
- Routine maintenance and preventive strategies
- Monitoring systems and alarm protocols
- Business continuity planning and DR alignment

Day 3: Safety and Risk Management in Data Centers

- Health & safety standards in critical environments
- Fire detection and suppression systems
- Access control and physical security
- Electrical hazards, ESD control, and personal protective equipment PPE
- Incident management and emergency response protocols

Day 4: Power, Cooling, and Environmental Control

- Understanding UPS systems, generators, and backup power
- Cooling strategies: CRAC units, hot/cold aisle containment, liquid cooling
- Environmental monitoring temperature, humidity, airflow
- Energy efficiency and green data center practices
- Maintenance of electrical and HVAC systems

Day 5: Operational Excellence and Compliance

- Daily checklists and operations documentation
- Capacity planning and resource management
- Change management and service continuity
- Industry standards: ISO 27001, TIA-942, ANSI/BICSI

- Final group activity: Simulating a fault scenario and recovery

Registration form on the Training Course: Essentials of Data Center Operations: Uptime, Safety, and Efficiency

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

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Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
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