

Certified Data Centre Facilities Operations Manager

Course Duration:24 Hours

Course code: CDFOS

1. Course Overview

This course prepares managers and senior personnel responsible for overseeing data center facilities operations. Participants will learn to manage teams, optimize resources, ensure reliability, and maintain compliance with industry standards, all while driving operational efficiency and sustainability initiatives.

2. What you'll learn?

By the end of the course, learners should be able to:

- Lead and manage data center facilities operations teams effectively
- Oversee power, cooling, and environmental systems for optimal performance
- Plan and manage preventive maintenance and lifecycle management
- Implement safety, security, and compliance strategies
- Monitor and report operational KPIs for informed decision-making
- Manage budgets, vendor contracts, and operational resources
- Plan for scalability, resilience, and business continuity

3. Target Audience

- Data center facilities managers and senior operations personnel
- IT infrastructure and operations leaders
- Compliance and safety officers responsible for facilities
- Engineering and maintenance team leads

4. Pre-Requisites

Familiarity with:

- Data center infrastructure and facility operations
- IT operations management
- Safety, security, and regulatory compliance standards

- Basic financial and resource management concepts

5. Course content

Module 1: Course Introduction

- Introduction
- Course contents

Module 2: Data Center Facilities Management Overview

- Roles and responsibilities of facilities operations managers
- Key performance indicators (KPIs) and benchmarking
- Industry standards and best practices (TIA-942, Uptime Institute, ISO 50001)

Module 3: Strategic Planning and Operations Management

- Resource planning and allocation
- Operational budgeting and cost management
- Vendor and service contract management
- Performance monitoring and reporting

Module 4: Power Systems Oversight

- Power supply architecture, redundancy, and reliability
- UPS and generator management
- Energy efficiency and sustainability initiatives
- Monitoring and reporting power usage effectiveness (PUE)

Module 5: Cooling and Environmental Systems Management

- HVAC systems and CRAC/CRAH management
- Environmental monitoring (temperature, humidity, airflow)
- Energy-efficient cooling strategies and sustainability metrics
- Planning for capacity growth and resilience

Module 6: Preventive Maintenance and Lifecycle Management

- Maintenance strategy and scheduling
- Asset lifecycle planning and upgrades
- Risk assessment and mitigation for critical infrastructure
- Documentation and compliance tracking

Module 7: Safety, Security, and Compliance Management

- Physical security protocols and access control
- Fire detection and suppression systems
- Health, safety, and environmental compliance (HSE)
- Audit preparation and reporting

Module 8: Team Leadership and Operations Coordination

- Managing facilities operations teams
- Task delegation and performance evaluation
- Training and skill development for operations staff
- Collaboration with IT, security, and compliance teams

Module 9: Incident and Risk Management

- Incident response and root cause analysis
- Risk assessment and mitigation strategies
- Business continuity and disaster recovery planning
- Reporting and lessons learned

Module 10: Sustainability and Green Data Center Practices

- Energy efficiency and carbon footprint reduction
- Water and resource management
- Corporate sustainability initiatives
- Benchmarking and continuous improvement

Module 11: Advanced Monitoring and Metrics

- Operational dashboards and KPI tracking
- Predictive analytics for maintenance and capacity

- Data-driven decision-making
- Continuous improvement strategies

Module 12: Course Wrap-Up and Certification Preparation

- Summary of key concepts
- Recommended resources for further learning

