

LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

ISO 22237-1 — Data Centre Facilities and Infrastructures General Concepts

ISO Certification Programme



LAPT — London Academy of Professional Training

Address 85 Great Portland Street, W1W 7LT, London, United Kingdom

Email info@lapt.org

Telephone +44 7513 283044

Web lapt.org

Reference IIT-DTC-22237-1 • ISO IT & Related Technologies

UKPRN 10067351 • Registered in England and Wales, company 4984798

AT A GLANCE

REFERENCE	IIT-DTC-22237-1
AWARD	Certificate
ASSESSMENT	430 marks — 258 to pass (60%)
PREREQUISITES	None
VALIDITY	Lifetime
AWARDING BODY	LAPT — London Academy of Professional Training

CURRICULUM

1	Change Management and Leadership 0 chapters85 marks	
2	Compliance and Standards 0 chapters65 marks	
3	Data Centre Fundamentals 5 chapters · 30 classes85 marks	

• 1 Overview of Data Centre Types and Functions — 6 classes

› 1.1 Identify Different Types of Data Centres

› 1.2 Describe the Key Functions of Data Centres

› 1.3 Analyze the Role of Data Centres in Modern Business

› 1.4 Compare and Contrast Tier Levels of Data Centres

› 1.5 Assess the Impact of Data Centre Design on Operations

› 1.6 Apply Best Practices for Data Centre Management

• 2 Core Infrastructure Components of Data Centres — 6 classes

› 2.1 Identify Key Components of Data Centre Infrastructure

› 2.2 Describe Power Supply Systems in Data Centres

› 2.3 Explain Cooling Technologies Used in Data Centres

› 2.4 Analyze Data Centre Network Architecture

› 2.5 Evaluate Fire Protection and Safety Measures

› 2.6 Apply Best Practices for Data Centre Design and Management

• 3 Data Centre Design Principles and Best Practices — 6 classes

› 3.1 Understand Key Data Centre Design Principles

› 3.2 Identify Critical Infrastructure Components

› 3.3 Evaluate Energy Efficiency Strategies

› 3.4 Assess Space Utilization Best Practices

› 3.5 Implement Effective Cooling Solutions

› 3.6 Develop a Comprehensive Data Centre Design Plan

• 4 Operational Management and Maintenance of Data Centres — 6 classes

› 4.1 Understand Key Components of Data Centre Management

› 4.2 Analyze Operational Challenges in Data Centres

› 4.3 Implement Routine Maintenance Procedures

› 4.4 Evaluate the Role of Environmental Controls

› 4.5 Develop Incident Response Strategies for Data Centres

› 4.6 Integrate Best Practices for Continuous Improvement

• 5 Emerging Technologies and Trends in Data Centres — 6 classes

› 5.1 Explore Emerging Technologies in Data Centres

› 5.2 Analyze Trends Influencing Data Centre Design

› 5.3 Evaluate the Impact of Edge Computing on Infrastructure

› 5.4 Investigate Sustainable Practices in Data Centre Operations

› 5.5 Discuss the Role of Artificial Intelligence in Data Management

› 5.6 Apply Concepts of Automation to Enhance Data Centre Efficiency

• **1 Fundamentals of Data Centre Infrastructure Design** — 6 classes

- › 1.1 Define Key Concepts of Data Centre Infrastructure
- › 1.2 Identify Essential Components of Data Centre Design
- › 1.3 Explore Best Practices for Data Centre Layout Planning
- › 1.4 Analyze Energy Efficiency Considerations in Design
- › 1.5 Examine Redundancy and Reliability Strategies
- › 1.6 Assess Implementation Challenges and Solutions in Data Centres

• **2 Standards and Best Practices in Data Centre Management** — 6 classes

- › 2.1 Identify Key Standards in Data Centre Management
- › 2.2 Analyze the Importance of ISO 22237-1 in Infrastructure Design
- › 2.3 Evaluate Best Practices for Energy Efficiency in Data Centres
- › 2.4 Implement Risk Management Strategies in Data Centre Operations
- › 2.5 Develop a Maintenance Plan Based on Industry Standards
- › 2.6 Create a Checklist for Compliance with ISO 22237-1

• **3 Risk Assessment and Mitigation in Data Centres** — 6 classes

- › 3.1 Identify Key Risks in Data Centre Operations
- › 3.2 Analyze Vulnerabilities in Data Centre Infrastructure
- › 3.3 Evaluate Impact of Risks on Data Centre Performance
- › 3.4 Develop Risk Mitigation Strategies for Critical Assets
- › 3.5 Implement Monitoring Techniques for Risk Management
- › 3.6 Review and Update Risk Assessment Protocols Regularly

• **4 Advanced Data Centre Design Strategies** — 6 classes

- › 4.1 Analyze Core Components of Advanced Data Centre Design
- › 4.2 Evaluate Energy Efficiency Techniques in Data Centres
- › 4.3 Implement Redundancy and Resilience Strategies
- › 4.4 Explore Thermal Management Solutions for Optimized Performance
- › 4.5 Assess Scalability and Flexibility in Infrastructure Planning
- › 4.6 Develop a Comprehensive Data Centre Management Plan

• **5 Future Trends in Data Centre Infrastructure Management** — 6 classes

- › 5.1 Analyze Emerging Technologies Impacting Data Centres
- › 5.2 Evaluate Sustainability Practices in Data Centre Design
- › 5.3 Identify Trends in Data Centre Automation and Management
- › 5.4 Explore Enhancements in Cooling and Power Systems
- › 5.5 Assess Security Innovations for Data Centre Infrastructure
- › 5.6 Develop Strategies for Future-Proofing Data Centre Operations

• **1 Understanding Operational Risk in Data Centres** — 6 classes

- › 1.1 Define Operational Risk in Data Centres
- › 1.2 Identify Key Components Impacting Operational Risk
- › 1.3 Analyze Common Threats to Data Centre Operations
- › 1.4 Assess the Impact of Operational Risks on Data Centre Performance
- › 1.5 Develop Strategies for Mitigating Data Centre Operational Risks
- › 1.6 Implement Continuous Monitoring Practices for Operational Risk Management

• **2 Identifying and Assessing Operational Risks** — 6 classes

- › 2.1 Define and Categorize Operational Risks in Data Centres
- › 2.2 Identify Sources of Operational Risks in Data Centre Operations
- › 2.3 Evaluate the Impact of Operational Risks on Data Centre Performance
- › 2.4 Analyze Probability and Frequency of Operational Risks in Data Centres
- › 2.5 Develop Risk Assessment Criteria for Operational Risks
- › 2.6 Create a Risk Assessment Matrix for Data Centre Operations

• **3 Mitigation Strategies for Operational Risks** — 6 classes

- › 3.1 Identify Key Operational Risks in Data Centre Environments
- › 3.2 Analyze the Impact of Operational Risks on Data Centre Performance
- › 3.3 Develop Risk Mitigation Strategies for Critical Infrastructure
- › 3.4 Assess Effectiveness of Current Risk Management Practices
- › 3.5 Implement Proactive Measures for Operational Risk Reduction
- › 3.6 Create a Continuous Improvement Plan for Risk Mitigation

• **4 Implementing an Operational Risk Management Framework** — 6 classes

- › 4.1 Define Operational Risk Management Concepts and Terminology
- › 4.2 Identify Key Components of an Effective Risk Management Framework
- › 4.3 Analyze the Role of Stakeholders in Risk Management Implementation
- › 4.4 Develop a Risk Assessment Strategy for Data Centre Operations
- › 4.5 Implement Monitoring and Reporting Mechanisms for Risks
- › 4.6 Evaluate and Revise the Operational Risk Management Framework

• **5 Monitoring and Reviewing Operational Risks**