

LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

ISO 22237-3 — Data Centre Environmental Control

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-22237-3 • ISO IT & Related Technologies

UKPRN 10067351 • Registered in England and Wales, company 4984798

AT A GLANCE

REFERENCE	IIT-DTC-22237-3
AWARD	Certificate
ASSESSMENT	430 marks — 258 to pass (60%)
PREREQUISITES	None
VALIDITY	Lifetime
AWARDING BODY	LAPT — London Academy of Professional Training

CURRICULUM

1 Data Centre Operations Management 0 chapters65 marks	
2 Energy Efficiency Strategies 5 chapters · 30 classes85 marks	
• 1 Understanding Energy Efficiency in Data Centres — 6 classes › 1.1 Define Energy Efficiency in Data Centres › 1.2 Identify Key Components Impacting Energy Consumption › 1.3 Analyze Current Energy Usage Patterns in Data Centres › 1.4 Explore Best Practices for Improving Energy Efficiency › 1.5 Assess Technologies for Enhanced Energy Management › 1.6 Develop an Energy Efficiency Action Plan for Data Centres • 2 Energy Consumption and Measurement Techniques — 6 classes › 2.1 Identify Key Metrics for Energy Consumption in Data Centres › 2.2 Analyze Different Methods of Energy Measurement Techniques › 2.3 Compare Energy Consumption Patterns Across Various Data Centre Designs › 2.4 Implement Energy Monitoring Tools and Technologies › 2.5 Evaluate the Impact of Environmental Controls on Energy Efficiency › 2.6 Develop Strategies for Reducing Energy Consumption in Data Centres • 3 Implementing Energy-Efficient Technologies — 6 classes › 3.1 Assess Current Energy Consumption Metrics › 3.2 Identify Potential Energy-Efficient Technologies › 3.3 Analyze Cost-Benefit of Energy-Efficient Implementations › 3.4 Develop a Strategic Plan for Technology Integration › 3.5 Monitor and Evaluate Energy Savings Outcomes › 3.6 Optimize Continuous Improvement in Energy Efficiency	• 4 Designing for Energy Efficiency: Layout and Cooling Systems — 6 classes › 4.1 Analyze the Impact of Data Centre Layout on Energy Efficiency › 4.2 Identify Key Cooling Systems for Optimal Energy Performance › 4.3 Evaluate Energy Consumption Patterns in Data Centre Designs › 4.4 Implement Best Practices for Airflow Management in Cooling › 4.5 Assess the Role of Renewable Energy Sources in Cooling Solutions › 4.6 Develop a Case Study on Effective Energy Efficiency Strategies • 5 Monitoring and Continuous Improvement in Energy Management — 6 classes › 5.1 Assess Current Energy Management Practices › 5.2 Identify Key Performance Indicators for Energy Efficiency › 5.3 Implement Monitoring Tools for Data Collection › 5.4 Analyze Data to Identify Improvement Opportunities › 5.5 Develop an Action Plan for Energy Management Enhancements › 5.6 Review and Refine Strategies for Continuous Improvement

3

Environmental Standards and Compliance

5 chapters · 30 classes 105 marks

• 1 Introduction to ISO 22237-3 and Data Centre Environmental Standards — 6 classes

- › 1.1 Understand the Purpose of ISO 22237-3 in Data Centres
- › 1.2 Identify Key Environmental Standards in Data Centre Management
- › 1.3 Explore the Benefits of Compliance with ISO 22237-3
- › 1.4 Analyze the Role of Leadership in Implementing Environmental Controls
- › 1.5 Evaluate Case Studies of Successful ISO 22237-3 Implementations
- › 1.6 Develop an Action Plan for ISO 22237-3 Compliance in Your Organisation

• 2 Key Environmental Controls in Data Centre Design — 6 classes

- › 2.1 Identify Key Environmental Controls in Data Centre Design
- › 2.2 Analyze the Impact of Temperature and Humidity on Data Centre Performance
- › 2.3 Evaluate Energy Efficiency Measures for Environmental Compliance
- › 2.4 Implement Best Practices for Airflow Management in Data Centres
- › 2.5 Assess Water Usage and Drainage Solutions in Data Centre Operations
- › 2.6 Develop a Maintenance Plan for Environmental Control Systems

• 3 Monitoring and Measuring Environmental Performance — 6 classes

- › 3.1 Assess Environmental Metrics for Data Centres
- › 3.2 Implement Real-Time Environmental Monitoring Systems
- › 3.3 Evaluate Data Collection Methods for Compliance
- › 3.4 Analyze Environmental Performance Data Trends
- › 3.5 Develop Reporting Protocols for Environmental Standards
- › 3.6 Optimize Environmental Controls Based on Measurement Outcomes

• 4 Compliance Audit Processes and Best Practices — 6 classes

- › 4.1 Identify Compliance Requirements for Data Centre Environmental Standards
- › 4.2 Analyze the Role of Compliance Audits in Data Centre Operations
- › 4.3 Develop an Effective Compliance Audit Checklist for ISO 22237-3
- › 4.4 Assess Common Challenges in Compliance Auditing for Environmental Controls
- › 4.5 Implement Best Practices for Conducting a Compliance Audit
- › 4.6 Evaluate Audit Results and Formulate Improvement Plans for Compliance

• 5 Future Trends and Innovations in Data Centre Environmental Management — 6 classes

- › 5.1 Explore Emerging Technologies in Data Centre Management
- › 5.2 Analyze the Impact of Renewable Energy on Data Centres
- › 5.3 Assess Innovations in Cooling Solutions and Their Benefits
- › 5.4 Investigate Sustainable Materials for Data Centre Construction
- › 5.5 Evaluate Smart Grid Integration in Data Centre Operations
- › 5.6 Develop a Roadmap for Implementing Future Trends in Your Facility

4

Leading Environmental Control Initiatives

0 chapters 65 marks

5

Performance Evaluation and Reporting

0 chapters 45 marks

6

Risk Management and Mitigation

5 chapters · 18 classes 65 marks

• 1 Fundamentals of Risk Management in Data Centres — 6 classes

- › 1.1 Define Key Risk Management Terminology in Data Centres
- › 1.2 Identify Common Risks Faced by Data Centres
- › 1.3 Assess the Impact of Environmental Factors on Data Centre Operations
- › 1.4 Analyze Case Studies of Failed Risk Management in Data Centres
- › 1.5 Develop a Risk Mitigation Plan for Data Centre Scenarios
- › 1.6 Implement Continuous Risk Monitoring Strategies in Data Centres

• 2 Identifying Critical Risks in Environmental Control — 6 classes

- › 2.1 Analyze Environmental Control Components for Risk Identification
- › 2.2 Evaluate Potential Environmental Risks Affecting Data Centres
- › 2.3 Identify Critical Failure Points in Environmental Systems
- › 2.4 Assess the Impact of Environmental Risks on Data Centre Operations
- › 2.5 Develop a Risk Prioritization Matrix for Environmental Controls
- › 2.6 Formulate Action Plans for Mitigating Identified Risks

• 3 Risk Assessment Techniques for Data Centres — 6 classes

- › 3.1 Identify Key Risk Assessment Techniques for Data Centres
- › 3.2 Evaluate Environmental Risks Affecting Data Centre Operations
- › 3.3 Analyze Historical Data to Predict Possible Risks
- › 3.4 Implement Qualitative Risk Assessment Methods
- › 3.5 Conduct Quantitative Risk Analysis for Data Centre Scenarios
- › 3.6 Develop a Risk Mitigation Strategy Based on Assessment Findings

• 4 Developing Mitigation Strategies for Data Centre Risks

• 5 Monitoring and Reviewing Risk Management Processes

