

LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

ISO 50001DTC — Energy Management in Data Centres

ISO Certification Programme



LAPT — London Academy of Professional Training

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Reference IIT-DTC-50001DTC • ISO IT & Related Technologies

UKPRN 10067351 • Registered in England and Wales, company 4984798

AT A GLANCE

REFERENCE	IIT-DTC-50001DTC
AWARD	Certificate
ASSESSMENT	430 marks — 258 to pass (60%)
PREREQUISITES	None
VALIDITY	Lifetime
AWARDING BODY	LAPT — London Academy of Professional Training

CURRICULUM

1

Energy Auditing Techniques

5 chapters · 12 classes65 marks

• 1 Fundamentals of Energy Auditing in Data Centres — 6 classes

› 1.1 Understand Key Concepts of Energy Auditing in Data Centres

› 1.2 Identify Energy Consumption Patterns in Data Centres

› 1.3 Assess Energy Efficiency Standards and Guidelines

› 1.4 Explore Tools and Techniques for Data Centre Energy Audits

› 1.5 Evaluate Data Analysis Methods for Energy Audit Reports

› 1.6 Develop Actionable Recommendations Based on Audit Findings

• 2 Energy Consumption Metrics and Benchmarking — 6 classes

› 2.1 Define Key Energy Consumption Metrics in Data Centres

› 2.2 Identify Sources of Energy Consumption in Data Centre Operations

› 2.3 Calculate Energy Performance Indicators for Benchmarking

› 2.4 Compare Energy Consumption Metrics Against Industry Standards

› 2.5 Analyze Energy Data for Trends and Patterns in Data Centres

› 2.6 Develop Actionable Strategies for Improving Energy Efficiency Based on Benchmarking

• 3 Data Gathering Techniques for Energy Audits

• 4 Identifying Energy Efficiency Opportunities

• 5 Implementing and Reporting Audit Findings

• 1 Understanding Energy Management Principles in Data Centres —

6 classes

- › 1.1 Define Key Energy Management Concepts in Data Centres
- › 1.2 Identify Energy Consumption Patterns in Data Centre Operations
- › 1.3 Analyze the Impact of Energy Efficiency on Data Centre Performance
- › 1.4 Explore Renewable Energy Integration Strategies for Data Centres
- › 1.5 Assess the Role of Technology in Optimizing Energy Management
- › 1.6 Develop an Action Plan for Implementing Energy Management Practices

• 2 Assessing Energy Consumption: Tools and Techniques — 6

classes

- › 2.1 Identify Key Metrics for Energy Consumption Assessment
- › 2.2 Explore Energy Monitoring Tools and Technologies
- › 2.3 Analyze Data Collection Methods for Energy Consumption
- › 2.4 Evaluate Energy Performance Indicators (EnPIs) in Context
- › 2.5 Implement Energy Auditing Techniques in Data Centres
- › 2.6 Create Action Plans Based on Energy Assessment Findings

• 3 Implementing Energy Efficiency Strategies — 6 classes

- › 3.1 Identify Key Energy Efficiency Opportunities in Data Centres
- › 3.2 Assess Current Energy Consumption and Performance Metrics
- › 3.3 Develop Action Plans for Energy Efficiency Implementation
- › 3.4 Engage Stakeholders in Energy Efficiency Initiatives
- › 3.5 Monitor and Evaluate the Impact of Energy Efficiency Strategies
- › 3.6 Foster a Culture of Continuous Improvement in Energy Management

• 4 Monitoring and Reporting Energy Performance — 6 classes

- › 4.1 Identify Key Energy Performance Indicators for Data Centres
- › 4.2 Establish Baseline Energy Consumption Metrics
- › 4.3 Implement Continuous Monitoring Systems for Energy Data
- › 4.4 Analyze Data Trends to Assess Energy Efficiency
- › 4.5 Create Comprehensive Energy Performance Reports
- › 4.6 Communicate Energy Performance Findings to Stakeholders

• 5 Continuous Improvement in Energy Management Systems — 6

classes

- › 5.1 Identify Key Principles of Continuous Improvement in Energy Management
- › 5.2 Analyze Current Energy Management Systems Using the PDCA Cycle
- › 5.3 Measure Energy Performance Metrics for Continuous Improvement
- › 5.4 Develop Action Plans for Enhancing Energy Efficiency
- › 5.5 Implement Feedback Mechanisms to Support Continuous Energy Improvement
- › 5.6 Review and Optimize Continuous Improvement Strategies in Energy Management

• 1 Understanding the ISO 50001 Standard Framework — 6 classes

- › 1.1 Identify Key Components of the ISO 50001 Standard
- › 1.2 Explain the Importance of Energy Management Systems
- › 1.3 Analyze the Benefits of Implementing ISO 50001 Standards
- › 1.4 Compare ISO 50001 with Other Energy Management Standards
- › 1.5 Discuss the Role of Leadership in ISO 50001 Implementation
- › 1.6 Develop an Action Plan for Implementing ISO 50001 in Data Centres

• 2 Identifying Energy Consumption and Benchmarking — 6 classes

- › 2.1 Define Energy Consumption in Data Centres
- › 2.2 Identify Key Energy Consumption Metrics
- › 2.3 Explore Techniques for Measuring Energy Use
- › 2.4 Analyze Current Energy Consumption Patterns
- › 2.5 Establish Energy Performance Benchmarks
- › 2.6 Develop a Plan for Continuous Energy Monitoring

• 3 Developing an Energy Management System (EnMS) — 6 classes

- › 3.1 Understand the ISO 50001 Framework and Its Importance
- › 3.2 Identify Key Components of an Energy Management System
- › 3.3 Assess Current Energy Performance in Data Centres
- › 3.4 Establish Energy Objectives and Targets for Improvement
- › 3.5 Develop an Energy Management Plan with Action Steps
- › 3.6 Monitor and Review the EnMS for Continuous Improvement

• 4 Executing Energy Performance Improvement Plans — 6 classes

- › 4.1 Analyze Current Energy Performance Metrics
- › 4.2 Identify Key Areas for Improvement
- › 4.3 Develop Actionable Energy Performance Improvement Plans
- › 4.4 Implement Energy Efficiency Measures
- › 4.5 Monitor and Evaluate Energy Performance Improvements
- › 4.6 Communicate Results and Engage Stakeholders

• 5 Audit and Continuous Improvement in ISO 50001 — 6 classes

- › 5.1 Understand the Importance of Auditing in ISO 50001
- › 5.2 Identify Key Components of an Energy Audit
- › 5.3 Develop an Effective Audit Checklist for Data Centres
- › 5.4 Analyze Data and Report Findings from Energy Audits
- › 5.5 Implement Continuous Improvement Strategies in Energy Management
- › 5.6 Evaluate the Impact of Improvements on Energy Performance

