

# LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

## ISO 17025NUC — Competence of Testing Laboratories Nuclear Testing

*ISO Certification Programme*



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### LAPT — London Academy of Professional Training

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**Reference** ENG-NUC-17025NUC • ISO Energy

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AT A GLANCE

|               |                                                |
|---------------|------------------------------------------------|
| REFERENCE     | ENG-NUC-17025NUC                               |
| AWARD         | Certificate                                    |
| ASSESSMENT    | 430 marks — 258 to pass (60%)                  |
| PREREQUISITES | None                                           |
| VALIDITY      | Lifetime                                       |
| AWARDING BODY | LAPT — London Academy of Professional Training |

CURRICULUM

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| <div>1</div> <div>Continuous Improvement and Strategic Planning</div> <div>0 chapters45 marks</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <div>2</div> <div>ISO 17025 Standards and Compliance</div> <div>5 chapters · 30 classes85 marks</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <div><div>• 1 Understanding ISO 17025: Principles and Scope — 6 classes</div><div><div>› 1.1 Explore the Core Principles of ISO 17025</div><div>› 1.2 Identify the Scope of ISO 17025 in Testing Laboratories</div><div>› 1.3 Examine Key Terminologies of ISO 17025</div><div>› 1.4 Analyze the Importance of Competence in Testing Laboratories</div><div>› 1.5 Discuss the Role of ISO 17025 in Quality Assurance</div><div>› 1.6 Apply ISO 17025 Principles to Real-World Laboratory Scenarios</div></div></div> <div><div>• 2 Key Requirements of ISO 17025: Management and Technical Competence — 6 classes</div><div><div>› 2.1 Understand ISO 17025: Overview of Key Concepts</div><div>› 2.2 Explore Management Requirements: Leadership and Organizational Structure</div><div>› 2.3 Identify Technical Competence: Skills and Knowledge Requirements</div><div>› 2.4 Assess Resource Management: Facilities and Equipment Considerations</div><div>› 2.5 Evaluate Quality Management Systems: Documentation and Procedures</div><div>› 2.6 Implement Compliance Measures: Internal Audits and Continuous Improvement</div></div></div> <div><div>• 3 Implementation of Quality Management Systems in Nuclear Testing — 6 classes</div><div><div>› 3.1 Define Quality Management in Nuclear Testing</div><div>› 3.2 Identify Key ISO 17025 Standards Requirements</div><div>› 3.3 Develop a Quality Management System Framework</div><div>› 3.4 Implement Document Control Procedures</div><div>› 3.5 Conduct Internal Audits for Compliance</div><div>› 3.6 Evaluate and Improve the Quality Management System</div></div></div> | <div><div>• 4 Internal Auditing and Continuous Improvement in Compliance — 6 classes</div><div><div>› 4.1 Understand the Role of Internal Auditing in ISO 17025 Compliance</div><div>› 4.2 Identify Key Components of an Internal Audit Process</div><div>› 4.3 Develop Effective Auditing Techniques for Testing Laboratories</div><div>› 4.4 Analyze Common Non-Conformities in Laboratory Audits</div><div>› 4.5 Implement Strategies for Continuous Improvement in Compliance</div><div>› 4.6 Evaluate the Outcomes of Internal Audits for Enhanced Laboratory Practices</div></div></div> <div><div>• 5 Preparing for ISO 17025 Accreditation: Steps and Best Practices — 6 classes</div><div><div>› 5.1 Assess Current Laboratory Practices Against ISO 17025 Standards</div><div>› 5.2 Identify Gaps in Compliance and Develop Action Plans</div><div>› 5.3 Establish Quality Management Systems for Testing Laboratories</div><div>› 5.4 Implement Training Programs for Laboratory Personnel</div><div>› 5.5 Develop Documentation and Record-Keeping Procedures</div><div>› 5.6 Conduct Internal Audits to Prepare for Accreditation</div></div></div> |

**• 1 Understanding ISO 17025NUC Standards for Nuclear Laboratories** — 6 classes

- › 1.1 Analyze ISO 17025NUC Standards for Nuclear Laboratories
- › 1.2 Identify Key Requirements for Laboratory Competence
- › 1.3 Examine the Role of Quality Management in Testing Laboratories
- › 1.4 Evaluate Evidence of Technical Competence in Laboratory Operations
- › 1.5 Implement Effective Document Control Procedures in Compliance with ISO 17025NUC
- › 1.6 Develop Strategies for Continuous Improvement in Laboratory Practices

**• 2 Implementing Quality Management Systems in Nuclear Testing Labs** — 6 classes

- › 2.1 Assessing Current Laboratory Practices to Identify Improvement Areas
- › 2.2 Understanding ISO 17025NUC Requirements for Quality Management
- › 2.3 Developing Quality Objectives and Performance Indicators
- › 2.4 Implementing Document Control in Nuclear Testing Labs
- › 2.5 Conducting Internal Audits to Measure Compliance and Effectiveness
- › 2.6 Creating a Continuous Improvement Plan for Quality Management Systems

**• 3 Optimizing Laboratory Operations and Workflow Efficiency** — 6 classes

- › 3.1 Analyze Current Laboratory Workflow for Efficiency Gaps
- › 3.2 Implement Lean Principles to Streamline Processes
- › 3.3 Develop Standard Operating Procedures for Consistency
- › 3.4 Utilize Technology for Data Management and Tracking
- › 3.5 Monitor Key Performance Indicators to Assess Improvements
- › 3.6 Conduct Team Workshops to Foster Continuous Improvement

**• 4 Risk Management and Safety Protocols in Nuclear Laboratories**

— 6 classes

- › 4.1 Identify and Assess Risks in Nuclear Laboratory Operations
- › 4.2 Develop Safety Protocols for Handling Hazardous Materials
- › 4.3 Implement Emergency Response Procedures for Nuclear Incidents
- › 4.4 Evaluate Effectiveness of Existing Safety Measures
- › 4.5 Conduct Training Sessions on Risk Management Practices
- › 4.6 Analyze Case Studies on Safety Protocol Failures in Laboratories

**• 5 Continuous Improvement and Performance Measurement in Labs**

— 6 classes

- › 5.1 Identify Key Performance Indicators for Laboratory Efficiency
- › 5.2 Analyze Current Performance Metrics and Identify Gaps
- › 5.3 Implement Continuous Improvement Strategies in Lab Processes
- › 5.4 Utilize Statistical Tools for Performance Measurement
- › 5.5 Develop an Action Plan for Addressing Performance Deficiencies
- › 5.6 Evaluate the Impact of Improvements on Laboratory Operations

**• 1 Understanding Leadership in Nuclear Testing Environments** — 6 classes

- › 1.1 Define Leadership Traits Required for Nuclear Testing
- › 1.2 Evaluate Leadership Styles Applicable in Nuclear Environments
- › 1.3 Analyze Team Dynamics in Nuclear Testing Settings
- › 1.4 Develop Communication Strategies for Effective Leadership
- › 1.5 Implement Decision-Making Processes for Nuclear Team Management
- › 1.6 Create a Leadership Development Plan for Testing Laboratories

**• 2 Building Effective Teams in Nuclear Energy** — 6 classes

- › 2.1 Establish Clear Team Objectives for Nuclear Projects
- › 2.2 Foster Open Communication Among Team Members
- › 2.3 Identify and Leverage Individual Strengths in Nuclear Teams
- › 2.4 Build Trust and Collaboration in High-Stakes Environments
- › 2.5 Implement Effective Conflict Resolution Strategies
- › 2.6 Evaluate Team Performance and Continuous Improvement in Nuclear Settings

**• 3 Communication Strategies for Nuclear Laboratory Leaders** — 6 classes

- › 3.1 Identify Key Communication Styles in Leadership
- › 3.2 Analyze the Role of Active Listening in Team Dynamics
- › 3.3 Develop Clear Messaging for Technical Information
- › 3.4 Implement Feedback Mechanisms for Continuous Improvement
- › 3.5 Create Strategies for Cross-Departmental Communication
- › 3.6 Evaluate the Impact of Effective Communication on Laboratory Performance

**• 4 Decision-Making and Problem-Solving in High-Stakes Settings****• 5 Fostering a Culture of Safety and Compliance**

**• 1 Introduction to ISO 17025 and Its Importance in Nuclear Labs** — 6 classes

- › 1.1 Define ISO 17025 and its Scope in Nuclear Testing
- › 1.2 Explain the Importance of Quality Management Systems in Nuclear Labs
- › 1.3 Identify Key Components of ISO 17025 Standards
- › 1.4 Assess the Role of Competence in Testing Laboratories
- › 1.5 Discuss the Implications of Non-Compliance with ISO 17025
- › 1.6 Implement Best Practices for Quality Management in Nuclear Labs

**• 2 Understanding the Requirements of Quality Management Systems** — 6 classes

- › 2.1 Define Key Concepts of Quality Management Systems
- › 2.2 Identify ISO 17025NUC Requirements for Nuclear Labs
- › 2.3 Analyze the Role of Leadership in Quality Management
- › 2.4 Examine Essential Components of a Quality Manual
- › 2.5 Evaluate Document Control Procedures in Testing Laboratories
- › 2.6 Implement a Continuous Improvement Plan for Quality Systems

**• 3 Implementing Quality Control and Assurance in Nuclear Testing**

— 6 classes

- › 3.1 Define Key Concepts of Quality Control in Nuclear Testing
- › 3.2 Identify Regulatory Requirements for Testing Laboratories
- › 3.3 Develop Quality Assurance Procedures for Nuclear Labs
- › 3.4 Implement Internal Audit Techniques in Quality Management
- › 3.5 Analyze Case Studies on Quality Improvements in Nuclear Testing
- › 3.6 Create a Quality Control Plan for a Nuclear Testing Laboratory

**• 4 Risk Management and Continuous Improvement in Nuclear Laboratories** — 6 classes

- › 4.1 Identify Key Risks in Nuclear Laboratory Operations
- › 4.2 Assess the Impact of Identified Risks on Quality Management
- › 4.3 Implement Risk Mitigation Strategies in Testing Processes
- › 4.4 Develop a Continuous Improvement Framework for Nuclear Labs
- › 4.5 Monitor and Evaluate the Effectiveness of Risk Management Practices
- › 4.6 Foster a Culture of Safety and Quality through Training and Engagement

**• 5 Auditing and Compliance for ISO 17025 Certification in Nuclear Labs** — 6 classes

- › 5.1 Understand ISO 17025 Requirements for Nuclear Labs
- › 5.2 Identify Key Auditing Principles in Quality Management Systems
- › 5.3 Review Documentation and Record-Keeping Practices for Compliance
- › 5.4 Conduct Internal Audits in Nuclear Laboratories
- › 5.5 Analyze Non-Conformities and Implement Corrective Actions
- › 5.6 Develop an Action Plan for Continuous Improvement in Auditing