

LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

ISO 60780 — Nuclear Facilities Electrical Equipment

ISO Certification Programme



LAPT — London Academy of Professional Training

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Reference ENG-NUC-60780 • ISO Energy

UKPRN 10067351 • Registered in England and Wales, company 4984798

AT A GLANCE

REFERENCE	ENG-NUC-60780
AWARD	Certificate
ASSESSMENT	430 marks — 258 to pass (60%)
PREREQUISITES	None
VALIDITY	Lifetime
AWARDING BODY	LAPT — London Academy of Professional Training

CURRICULUM

1

Compliance Strategies and Implementation

5 chapters · 30 classes 65 marks

• 1 Understanding ISO 60780 Requirements in Nuclear Facilities — 6 classes

› 1.1 Identify Key ISO 60780 Standards Relevant to Nuclear Facilities

› 1.2 Analyze Compliance Requirements for Electrical Equipment

› 1.3 Evaluate Risk Assessment Processes in Line with ISO 60780

› 1.4 Develop Implementation Strategies for ISO 60780 Compliance

› 1.5 Implement Monitoring Systems to Ensure Ongoing Compliance

› 1.6 Assess Impact of Non-Compliance on Nuclear Facility Operations

• 2 Risk Assessment and Compliance Frameworks — 6 classes

› 2.1 Identify Key Components of Risk Assessment in Nuclear Facilities

› 2.2 Analyze Compliance Frameworks Relevant to ISO 60780 Standards

› 2.3 Evaluate Risk Mitigation Strategies for Electrical Equipment

› 2.4 Develop a Risk Assessment Checklist for Nuclear Facilities

› 2.5 Implement Best Practices for Compliance in Nuclear Environments

› 2.6 Assess the Effectiveness of Compliance Strategies Through Case Studies

• 3 Implementing ISO 60780 Standards in Operations — 6 classes

› 3.1 Assess Current Operations Against ISO 60780 Standards

› 3.2 Identify Key Compliance Gaps in Electrical Equipment

› 3.3 Develop a Strategic Plan for ISO 60780 Implementation

› 3.4 Engage Stakeholders in the Compliance Process

› 3.5 Monitor and Evaluate Compliance Progress and Outcomes

› 3.6 Establish Continuous Improvement Mechanisms for ISO 60780

• 4 Monitoring and Evaluation for Compliance Assurance — 6 classes

› 4.1 Understand Regulatory Framework for Compliance Monitoring

› 4.2 Identify Key Performance Indicators for Compliance Evaluation

› 4.3 Develop Monitoring Protocols for Electrical Equipment

› 4.4 Implement Data Collection Techniques for Compliance Metrics

› 4.5 Analyze Monitoring Results for Continuous Improvement

› 4.6 Create an Action Plan for Compliance Assurance Based on Evaluation

• 5 Case Studies in Compliance Strategy Success — 6 classes

› 5.1 Analyze Key Success Factors in Compliance Strategies

› 5.2 Evaluate Real-World Examples of Compliance Success

› 5.3 Identify Common Challenges in Compliance Implementation

› 5.4 Develop Solutions for Overcoming Compliance Barriers

› 5.5 Create a Compliance Strategy Framework for Nuclear Facilities

› 5.6 Present and Critique Compliance Strategy Case Studies

• 1 Fundamentals of Electrical Equipment Safety in Nuclear Facilities

— 6 classes

- › 1.1 Identify Key Principles of Electrical Safety in Nuclear Facilities
- › 1.2 Understand Regulatory Frameworks Governing Electrical Equipment
- › 1.3 Analyze Common Hazards Associated with Electrical Equipment
- › 1.4 Explore Risk Assessment Strategies for Electrical Safety
- › 1.5 Develop Safe Operating Procedures for Electrical Equipment
- › 1.6 Implement Emergency Response Plans for Electrical Failures

• 2 Risk Assessment and Safety Analysis for Electrical Systems — 6

classes

- › 2.1 Identify Key Risks in Electrical Systems
- › 2.2 Evaluate Safety Standards for Nuclear Equipment
- › 2.3 Conduct Hazard Analysis for Electrical Components
- › 2.4 Assess Impact of Electrical Failures on Safety
- › 2.5 Develop Mitigation Strategies for Identified Risks
- › 2.6 Implement Risk Management Plans for Electrical Systems

• 3 Design Standards and Best Practices for Electrical Equipment —

6 classes

- › 3.1 Explore Design Principles for Electrical Equipment in Nuclear Facilities
- › 3.2 Identify Key Safety Standards for Electrical Equipment
- › 3.3 Analyze Best Practices for Electrical Equipment Layout and Integration
- › 3.4 Evaluate Risk Management Strategies for Electrical Equipment Design
- › 3.5 Develop a Compliance Checklist for ISO 60780 Requirements
- › 3.6 Implement Continuous Improvement Practices for Electrical Safety Management

• 4 Maintenance Strategies for Nuclear Electrical Equipment — 6

classes

- › 4.1 Evaluate Maintenance Strategies for Nuclear Electrical Equipment
- › 4.2 Identify Regulatory Frameworks Impacting Maintenance Practices
- › 4.3 Analyze Risk Assessment Methods for Electrical Equipment
- › 4.4 Implement Preventive Maintenance Techniques in Nuclear Settings
- › 4.5 Develop a Predictive Maintenance Plan for Electrical Systems
- › 4.6 Assess the Effectiveness of Maintenance Strategies Through Performance Metrics

• 5 Emergency Response and Incident Management for Electrical Safety — 6 classes

- › 5.1 Identify Emergency Scenarios in Electrical Facilities
- › 5.2 Assess Risks Associated with Electrical Equipment Failures
- › 5.3 Develop an Emergency Response Plan for Electrical Incidents
- › 5.4 Implement Safety Protocols During Electrical Emergencies
- › 5.5 Conduct Training Simulations for Emergency Response Teams
- › 5.6 Review and Update Incident Management Procedures Regularly

• 1 Fundamentals of ISO Standards in Nuclear Energy — 6 classes

- › 1.1 Define ISO Standards and Their Importance in Nuclear Energy
- › 1.2 Explain Key Components of ISO 60780 for Electrical Equipment
- › 1.3 Identify the Roles and Responsibilities in ISO Compliance
- › 1.4 Assess the Impact of ISO Standards on Safety and Performance
- › 1.5 Discuss the Process of Implementing ISO 60780 in Nuclear Facilities
- › 1.6 Evaluate Real-world Case Studies of ISO 60780 Application

• 2 Overview of ISO 60780: Structure and Purpose — 6 classes

- › 2.1 Define ISO 60780 and Its Importance in Nuclear Facilities
- › 2.2 Identify the Structure of ISO 60780 Standards
- › 2.3 Explain the Purpose and Benefits of ISO 60780 Compliance
- › 2.4 Compare ISO 60780 with Other ISO Standards Relevant to Nuclear Equipment
- › 2.5 Discuss the Role of Leadership in Implementing ISO 60780
- › 2.6 Assess the Impact of ISO 60780 on Electrical Equipment Safety

• 3 Implementation of ISO 60780: Best Practices — 6 classes

- › 3.1 Identify Key Elements of ISO 60780 Standards
- › 3.2 Analyze Benefits of Implementing ISO 60780 in Nuclear Facilities
- › 3.3 Evaluate Common Challenges in ISO 60780 Implementation
- › 3.4 Develop a Step-by-Step Plan for Implementation
- › 3.5 Assess Compliance Through Internal Audits and Reviews
- › 3.6 Formulate Strategies for Continuous Improvement and Adaptation

• 4 Auditing and Assessment of ISO 60780 Compliance — 6 classes

- › 4.1 Identify Key Components of ISO 60780 Compliance
- › 4.2 Explain the Importance of Auditing in ISO 60780
- › 4.3 Outline the Audit Process for ISO 60780 Standards
- › 4.4 Assess Documentation Required for Compliance Audits
- › 4.5 Analyze Common Non-Conformities in ISO 60780 Audits
- › 4.6 Develop an Action Plan Following ISO 60780 Audit Findings

• 5 Future Trends and Developments in ISO Standards for Nuclear Facilities — 6 classes

- › 5.1 Analyze Current ISO Standards Impact on Nuclear Facility Operations
- › 5.2 Investigate Emerging Trends in ISO Standards for Safety Enhancements
- › 5.3 Discuss the Role of Technological Innovation in ISO Standard Development
- › 5.4 Evaluate Future Challenges Facing ISO Standards in Nuclear Facilities
- › 5.5 Examine Global Perspectives on ISO Standards Adoption in Nuclear Safety
- › 5.6 Propose Strategic Recommendations for Implementing Future ISO Standards

• 1 Fundamentals of Risk Management in Electrical Systems — 6

classes

- › 1.1 Define Key Concepts of Risk Management in Electrical Systems
- › 1.2 Identify Common Risks Associated with Electrical Equipment
- › 1.3 Analyze Risk Assessment Methodologies for Electrical Systems
- › 1.4 Evaluate the Impact of Failures in Electrical Equipment
- › 1.5 Develop Risk Mitigation Strategies for Nuclear Facilities
- › 1.6 Implement a Risk Management Plan in Electrical Systems

• 2 Identifying Risks in Nuclear Electrical Systems — 6 classes

- › 2.1 Define Key Risk Concepts in Nuclear Electrical Systems
- › 2.2 Identify Sources of Risk in Electrical Equipment
- › 2.3 Analyze Potential Failure Modes in Nuclear Environments
- › 2.4 Evaluate Risk Impact on System Reliability
- › 2.5 Prioritize Risks Using Risk Assessment Techniques
- › 2.6 Develop Mitigation Strategies for Identified Risks

• 3 Risk Assessment Techniques for Electrical Equipment — 6 classes

- › 3.1 Identify Key Risk Assessment Techniques for Electrical Equipment
- › 3.2 Analyze the Importance of Risk Assessment in Nuclear Facilities
- › 3.3 Evaluate Common Electrical Equipment Risks in Nuclear Environments
- › 3.4 Apply Qualitative Risk Assessment Methods for Electrical Systems
- › 3.5 Implement Quantitative Risk Assessment Tools and Metrics
- › 3.6 Develop a Risk Mitigation Strategy for Electrical Equipment Failures

• 4 Mitigation Strategies for Electrical System Risks**• 5 Monitoring and Continuous Improvement in Risk Management**