LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

ISO 14006CIR — Guidelines for Eco-Design

ISO Certification Programme

LAPT — London Academy of Professional Training

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Reference ENV-CIR-14006CIR • ISO Environmental Sustainability

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6	30	180	430	60%	Lifetime
SUBJECTS	CHAPTERS	CLASSES	TOTAL MARKS	PASS MARK	VALIDITY

AT A GLANCE

REFERENCE	**ENV-CIR-14006CIR**
AWARD	**Certificate**
ASSESSMENT	**430 marks — 258 to pass (60%)**
PREREQUISITES	**None**
VALIDITY	**Lifetime**
AWARDING BODY	**LAPT — London Academy of Professional Training**

CURRICULUM

1 Assessment and Evaluation Techniques

5 chapters · 30 classes · **45 marks**

- **1 Introduction to Assessment Techniques in Eco-Design** — 6 classes
  - 1.1 Define Key Concepts in Eco-Design Assessment
  - 1.2 Identify Sustainable Assessment Criteria for Products
  - 1.3 Explore Quantitative vs. Qualitative Assessment Methods
  - 1.4 Analyze Case Studies on Eco-Design Successes and Failures
  - 1.5 Develop a Framework for Eco-Design Assessments
  - 1.6 Create an Action Plan to Implement Eco-Design Assessments
- **2 Evaluating Eco-Design Strategies and Principles** — 6 classes
  - 2.1 Analyze Eco-Design Principles in Practice
  - 2.2 Identify Key Performance Indicators for Eco-Design
  - 2.3 Evaluate Life Cycle Assessment (LCA) Methodologies
  - 2.4 Compare Success Metrics of Eco-Design Strategies
  - 2.5 Assess Stakeholder Feedback on Eco-Design Implementations
  - 2.6 Develop a Framework for Continuous Improvement in Eco-Design
- **3 Tools for Measuring Environmental Impact** — 6 classes
  - 3.1 Identify Key Environmental Impact Indicators
  - 3.2 Analyze Life Cycle Assessment Tools
  - 3.3 Evaluate Carbon Footprint Measurement Techniques
  - 3.4 Utilize Eco-Design Assessment Frameworks
  - 3.5 Implement Strategies for Data Collection and Analysis
  - 3.6 Present Findings and Recommendations for Improvement
- **4 Integrating Stakeholder Feedback into Assessments** — 6 classes
  - 4.1 Identify Key Stakeholders for Effective Feedback
  - 4.2 Analyze Stakeholder Needs and Expectations
  - 4.3 Develop Structured Feedback Channels for Assessments
  - 4.4 Collect and Organize Stakeholder Feedback Data
  - 4.5 Evaluate Feedback for Integration into Assessment Criteria
  - 4.6 Implement Changes Based on Stakeholder Feedback and Assess Outcomes
- **5 Advanced Evaluation Techniques and Case Studies** — 6 classes
  - 5.1 Analyze Contemporary Case Studies in Eco-Design
  - 5.2 Evaluate the Effectiveness of Eco-Design Principles
  - 5.3 Apply Advanced Evaluation Techniques to Project Scenarios
  - 5.4 Compare Quantitative and Qualitative Assessment Methods
  - 5.5 Develop a Comprehensive Evaluation Framework
  - 5.6 Present Findings from Evaluation Techniques to Stakeholders

2 Circular Economy Strategies

5 chapters · 30 classes **85 marks**

- **1 Understanding the Circular Economy: Principles and Benefits** — 6 classes
  - 1.1 Define the Circular Economy: Key Principles and Concepts
  - 1.2 Explore the Differences Between Linear and Circular Economies
  - 1.3 Identify the Environmental Benefits of a Circular Economy
  - 1.4 Analyze Economic Impacts of Implementing Circular Practices
  - 1.5 Examine Social Benefits and Community Engagement in Circular Economies
  - 1.6 Develop a Simple Action Plan for Circular Economy Implementation
- **2 Eco-Design Frameworks: Tools and Practices** — 6 classes
  - 2.1 Identify Key Eco-Design Principles for Circular Economy
  - 2.2 Analyze Existing Eco-Design Frameworks and Their Effectiveness
  - 2.3 Evaluate Tools for Assessing Environmental Impact in Design
  - 2.4 Implement Lifecycle Assessment Techniques in Eco-Design
  - 2.5 Develop Strategies for Integrating Circular Practices in Design
  - 2.6 Create a Practical Eco-Design Project Using Selected Tools
- **3 Materials Management in Circular Economy: Selection and Sourcing** — 6 classes
  - 3.1 Identify Sustainable Materials for Circular Design
  - 3.2 Evaluate Sourcing Strategies for Eco-Friendly Procurement
  - 3.3 Analyze the Life Cycle of Materials in Circular Economy
  - 3.4 Develop Criteria for Selecting Key Suppliers in Eco-Design
  - 3.5 Implement Best Practices for Material Waste Reduction
  - 3.6 Create a Materials Management Plan Aligned with Circular Economy Principles
- **4 Lifecycle Assessment for Circular Economy Strategies** — 6 classes
  - 4.1 Understand the Principles of Lifecycle Assessment
  - 4.2 Identify Key Stages in the Lifecycle of a Product
  - 4.3 Analyze Environmental Impacts at Each Lifecycle Stage
  - 4.4 Apply Lifecycle Assessment to Evaluate Product Design
  - 4.5 Compare Traditional vs. Circular Economy Approaches
  - 4.6 Develop a Lifecycle Assessment for a Circular Economy Product
- **5 Implementing Circular Economy Strategies: Challenges and Solutions** — 6 classes
  - 5.1 Identify Key Challenges in Implementing Circular Economy Strategies
  - 5.2 Analyze Case Studies of Successful Circular Economy Implementation
  - 5.3 Explore Innovative Solutions to Overcome Circular Economy Barriers
  - 5.4 Assess the Role of Stakeholders in Circular Economy Transitions
  - 5.5 Develop Action Plans for Circular Economy Strategy Implementation
  - 5.6 Evaluate the Impact of Circular Economy Strategies on Business Practices

3 Eco-Design Principles

5 chapters · 30 classes **105 marks**

- **1 Understanding Eco-Design Principles** — 6 classes
  - 1.1 Define Eco-Design and Its Importance in Sustainability
  - 1.2 Identify Key Principles of Eco-Design
  - 1.3 Explore the Life Cycle Assessment Process
  - 1.4 Analyze Case Studies of Successful Eco-Design Implementations
  - 1.5 Develop Eco-Design Strategies for Product Development
  - 1.6 Create a Mini Eco-Design Proposal for Real-World Application
- **2 Life Cycle Assessment in Eco-Design** — 6 classes
  - 2.1 Define Life Cycle Assessment and its Importance in Eco-Design
  - 2.2 Identify the Phases of Life Cycle Assessment in Product Development
  - 2.3 Analyze Environmental Impact Categories in Life Cycle Assessment
  - 2.4 Conduct a Simple Life Cycle Assessment Case Study
  - 2.5 Evaluate Tools and Software for Performing Life Cycle Assessments
  - 2.6 Apply Life Cycle Assessment Findings to Improve Eco-Design Strategies
- **3 Material Selection and Resource Optimization** — 6 classes
  - 3.1 Identify and Evaluate Sustainable Material Options
  - 3.2 Assess Life Cycle Impacts of Material Choices
  - 3.3 Explore Renewable vs. Non-Renewable Resources
  - 3.4 Implement Techniques for Material Resource Optimization
  - 3.5 Analyze Case Studies in Eco-Friendly Material Selection
  - 3.6 Develop a Sustainable Material Selection Strategy
- **4 User-Centered Design and Eco-Innovation** — 6 classes
  - 4.1 Identify User Needs Through Empathy Mapping
  - 4.2 Analyze Eco-Design Constraints and Opportunities
  - 4.3 Explore Sustainable Materials for User-Centered Products
  - 4.4 Generate Eco-Innovation Ideas Through Brainstorming
  - 4.5 Prototype User-Centered Eco-Design Solutions
  - 4.6 Evaluate User Feedback to Enhance Eco-Design
- **5 Implementing Circular Economy Practices in Eco-Design** — 6 classes
  - 5.1 Identify Key Principles of Eco-Design
  - 5.2 Assess the Role of Circular Economy in Eco-Design
  - 5.3 Analyze Case Studies of Successful Circular Economy Implementation
  - 5.4 Develop Strategies for Integrating Circular Practices in Design
  - 5.5 Evaluate Environmental Impacts of Product Lifecycle Choices
  - 5.6 Create a Circular Design Proposal for a Real-World Product

4 Innovative Design Solutions

5 chapters · 30 classes **45 marks**

- **1 Understanding Eco-Design Principles and Circular Economy Concepts** — 6 classes
  - 1.1 Define Eco-Design and Its Importance
  - 1.2 Explore the Key Principles of Eco-Design
  - 1.3 Investigate the Concept of Circular Economy
  - 1.4 Analyze the Relationship Between Eco-Design and Circular Economy
  - 1.5 Identify Real-World Examples of Eco-Design Implementation
  - 1.6 Develop a Concept Proposal Using Eco-Design Principles
- **2 Identifying Environmental Impacts in Product Design** — 6 classes
  - 2.1 Analyze Lifecycle Stages of Products
  - 2.2 Identify Potential Environmental Impacts
  - 2.3 Evaluate Materials for Eco-Friendliness
  - 2.4 Assess Design Processes for Sustainability
  - 2.5 Implement Strategies for Reducing Footprint
  - 2.6 Create an Eco-Design Action Plan
- **3 Integrating Eco-Design Strategies into Product Development** — 6 classes
  - 3.1 Identify Key Principles of Eco-Design
  - 3.2 Assess Environmental Impacts of Product Lifecycle
  - 3.3 Develop Eco-Design Criteria for New Products
  - 3.4 Integrate Sustainable Materials into Design Process
  - 3.5 Create Prototypes Incorporating Eco-Design Features
  - 3.6 Evaluate Eco-Design Strategies through Case Studies
- **4 Tools and Techniques for Innovative Eco-Design** — 6 classes
  - 4.1 Analyze Eco-Design Principles for Sustainable Solutions
  - 4.2 Identify Tools for Conducting Eco-Design Assessments
  - 4.3 Develop Innovative Concepts Using Eco-Design Mind Mapping
  - 4.4 Implement Life Cycle Assessment (LCA) Techniques in Design
  - 4.5 Evaluate Material Selection for Enhanced Sustainability
  - 4.6 Create a Prototype Incorporating Eco-Design Strategies
- **5 Implementing and Evaluating Eco-Design Solutions** — 6 classes
  - 5.1 Define Key Principles of Eco-Design
  - 5.2 Assess Current Design Processes for Sustainability
  - 5.3 Identify Eco-Design Solutions for Innovative Projects
  - 5.4 Develop a Framework for Implementing Eco-Design Strategies
  - 5.5 Establish Metrics for Evaluating Eco-Design Effectiveness
  - 5.6 Present and Share Best Practices in Eco-Design Implementation

5 ISO Standards and Regulations

5 chapters · 30 classes **105 marks**

- **1 Understanding ISO 14006CIR: Fundamentals of Eco-Design** — 6 classes
  - 1.1 Define Eco-Design Principles and Their Importance
  - 1.2 Explore Key Concepts of ISO 14006CIR
  - 1.3 Identify the Role of Stakeholders in Eco-Design
  - 1.4 Analyze the Environmental Impact of Product Life Cycles
  - 1.5 Implement Eco-Design Strategies in Practice
  - 1.6 Evaluate Case Studies of Successful Eco-Design Applications
- **2 Key Components of the ISO 14006CIR Framework** — 6 classes
  - 2.1 Identify the Core Principles of Eco-Design in ISO 14006CIR
  - 2.2 Explore the Role of Stakeholder Engagement in Eco-Design
  - 2.3 Analyze Life Cycle Assessment as a Tool for Eco-Design
  - 2.4 Assess Environmental Impacts: Metrics and Measurement Techniques
  - 2.5 Develop Eco-Design Strategies for Product Development Processes
  - 2.6 Implement an Eco-Design Action Plan within an Organization
- **3 Integrating Eco-Design into Existing Systems** — 6 classes
  - 3.1 Assess Current Systems for Eco-Design Compatibility
  - 3.2 Identify Key Eco-Design Principles and Their Impacts
  - 3.3 Develop an Integration Strategy for Eco-Design Practices
  - 3.4 Customize Existing Processes to Incorporate Eco-Design
  - 3.5 Implement Metrics for Evaluating Eco-Design Effectiveness
  - 3.6 Present Case Studies of Successful Eco-Design Integration
- **4 Measuring and Evaluating Eco-Design Impact** — 6 classes
  - 4.1 Define Eco-Design and Its Importance in ISO Standards
  - 4.2 Identify Key Metrics for Measuring Eco-Design Impact
  - 4.3 Explore Tools and Techniques for Evaluating Eco-Design Effectiveness
  - 4.4 Analyze Case Studies of Successful Eco-Design Implementations
  - 4.5 Develop a Framework for Measuring Eco-Design Outcomes
  - 4.6 Present Findings and Recommendations for Future Eco-Design Strategies
- **5 Future Trends in Eco-Design and Circular Economy Compliance** — 6 classes
  - 5.1 Explore the Principles of Eco-Design
  - 5.2 Identify Key Components of Circular Economy Compliance
  - 5.3 Analyze Future Trends Impacting Eco-Design Practices
  - 5.4 Evaluate Case Studies on Successful Eco-Design Implementation
  - 5.5 Develop Strategies for Integrating ISO 14006CIR Standards
  - 5.6 Create an Action Plan for Adopting Circular Economy Principles

6 Sustainability Leadership

5 chapters · 30 classes **45 marks**

- **1 Understanding Eco-Design Principles** — 6 classes
  - 1.1 Define Eco-Design and Its Importance in Sustainability
  - 1.2 Explore Key Principles of Eco-Design
  - 1.3 Identify Stakeholders in Eco-Design Processes
  - 1.4 Assess Environmental Impact of Design Choices
  - 1.5 Analyze Case Studies of Successful Eco-Design Implementations
  - 1.6 Develop an Eco-Design Plan for a Product or Service
- **2 Integrating Circular Economy Concepts** — 6 classes
  - 2.1 Define Circular Economy Principles and Their Importance
  - 2.2 Identify Key Sustainable Practices in Eco-Design
  - 2.3 Assess Current Product Lifecycles for Circularity
  - 2.4 Explore Innovative Materials for Sustainable Design
  - 2.5 Develop Strategies for Stakeholder Engagement in Eco-Design
  - 2.6 Create an Action Plan for Implementing Circular Economy Concepts
- **3 Frameworks for Implementing ISO 14006 Guidelines** — 6 classes
  - 3.1 Analyze the Key Principles of ISO 14006 Guidelines
  - 3.2 Identify Stakeholders in Eco-Design Implementation
  - 3.3 Evaluate Current Practices Against ISO 14006 Standards
  - 3.4 Develop a Step-by-Step Action Plan for Eco-Design
  - 3.5 Measure the Impact of Eco-Design Initiatives
  - 3.6 Communicate Sustainability Strategies to Leadership
- **4 Leadership Strategies for Promoting Sustainability** — 6 classes
  - 4.1 Define Eco-Design Principles and Their Importance in Leadership
  - 4.2 Identify Key Stakeholders in Sustainability Initiatives
  - 4.3 Develop Strategies for Effective Communication of Sustainability Goals
  - 4.4 Analyze Case Studies of Successful Sustainability Leadership
  - 4.5 Create an Action Plan for Implementing Eco-Design Strategies
  - 4.6 Evaluate the Impact of Leadership on Sustainability Culture in Organizations
- **5 Measuring and Communicating Sustainability Impact** — 6 classes
  - 5.1 Define Key Sustainability Metrics for Impact Assessment
  - 5.2 Analyze Data Sources for Measuring Sustainability Outcomes
  - 5.3 Develop a Framework for Communicating Sustainability Impact
  - 5.4 Create Effective Sustainability Reports for Stakeholders
  - 5.5 Use Visual Tools to Communicate Sustainability Data
  - 5.6 Design a Sustainability Impact Presentation for Leadership