

LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

Adv Certificate in Concert Lighting & Visual Tech

Practitioner Level



LAPT — London Academy of Professional Training

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Reference MU-LSE-P • Music and Performing Arts Centres

UKPRN 10067351 • Registered in England and Wales, company 4984798

AT A GLANCE

REFERENCE	MU-LSE-P
AWARD	Certificate
ASSESSMENT	445 marks — 267 to pass (60%)
PREREQUISITES	None
VALIDITY	Lifetime
AWARDING BODY	LAPT — London Academy of Professional Training

CURRICULUM

1 Audience Engagement Analysis 0 chapters65 marks	
2 Concert Lighting Design 5 chapters · 30 classes90 marks	• 1 Fundamentals of Concert Lighting Design — 6 classes › 1.1 Understanding the Role of Concert Lighting › 1.2 Exploring Essential Lighting Equipment and Tools › 1.3 Analyzing Different Types of Lighting Fixtures › 1.4 Examining Basic Lighting Design Principles › 1.5 Creating Dynamic Light Plots for Live Performances › 1.6 Applying Color Theory in Concert Lighting Design • 2 Technical Aspects of Lighting Equipment — 6 classes › 2.1 Understanding Types of Concert Lighting Equipment › 2.2 Exploring the Functions of Lighting Consoles › 2.3 Identifying Key Components of a Lighting Rig › 2.4 Mastering DMX Protocols in Concert Settings › 2.5 Implementing Safe Rigging Practices for Lighting › 2.6 Optimizing Lighting Equipment for Live Performances • 3 Creating Mood and Atmosphere with Lighting — 6 classes › 3.1 Understanding the Basics of Mood Creation with Lighting › 3.2 Analyzing Different Lighting Techniques for Atmosphere › 3.3 Exploring Colour Theory and Its Impact on Mood › 3.4 Experimenting with Intensity and Contrast for Dramatic Effect › 3.5 Applying Lighting Angles and Positions to Enhance Emotion › 3.6 Designing a Lighting Plan to Evoke Specific Atmospheres • 4 Advanced Techniques in Lighting Design — 6 classes › 4.1 Exploring the Principles of Advanced Lighting Design › 4.2 Analyzing Color Theory and Its Impact on Mood › 4.3 Implementing Intelligent Lighting for Dynamic Shows › 4.4 Synchronizing Lighting with Music and Performances › 4.5 Utilizing Software for Complex Lighting Control › 4.6 Evaluating Real-World Applications and Case Studies • 5 Integration of Visual Technologies — 6 classes › 5.1 Understanding Visual Technologies in Concert Lighting › 5.2 Exploring the Role of Video Mapping in Live Performances › 5.3 Integrating Interactive Visuals with Lighting Systems › 5.4 Utilizing Projection Techniques for Concert Environments › 5.5 Synchronizing Visuals with Audio Elements in Concerts › 5.6 Applying Augmented Reality in Concert Visual Designs

• 1 Understanding Basic Lighting Equipment — 6 classes

- › 1.1 Identifying Essential Lighting Fixtures
- › 1.2 Understanding Lighting Control Systems
- › 1.3 Exploring Different Types of Bulbs and Lamps
- › 1.4 Analyzing Power Requirements and Connections
- › 1.5 Operating Basic Lighting Consoles
- › 1.6 Troubleshooting Common Equipment Issues

• 2 Safety Protocols and Maintenance — 6 classes

- › 2.1 Understanding Safety Regulations in Lighting Environments
- › 2.2 Identifying Common Hazards and Risk Factors
- › 2.3 Implementing Proper Safety Measures and Protocols
- › 2.4 Conducting Routine Equipment Inspections
- › 2.5 Performing Preventative Maintenance on Lighting Equipment
- › 2.6 Developing a Maintenance and Safety Checklist

• 3 Advanced Lighting Technologies — 6 classes

- › 3.1 Understanding Advanced Lighting Technologies
- › 3.2 Exploring Intelligent Lighting Fixtures
- › 3.3 Harnessing LED Technology in Concert Lighting
- › 3.4 Integrating Control Systems for Dynamic Lighting Effects
- › 3.5 Utilizing Automated Lighting for Complex Shows
- › 3.6 Implementing Wireless DMX Protocols in Lighting Setups

• 4 Programming and Operation of Lighting Consoles — 6 classes

- › 4.1 Navigating Lighting Console Interfaces
- › 4.2 Understanding Key Functions and Controls
- › 4.3 Configuring Basic Lighting Cues
- › 4.4 Programming Advanced Cue Sequences
- › 4.5 Managing Real-Time Operation Challenges
- › 4.6 Integrating and Synchronizing with Other Systems

• 5 Design and Implementation of Lighting Plans — 6 classes

- › 5.1 Understanding the Fundamentals of Lighting Design
- › 5.2 Identifying Key Lighting Equipment for Design Plans
- › 5.3 Creating Effective Lighting Plots
- › 5.4 Analyzing Venue Requirements for Lighting Implementation
- › 5.5 Implementing a Lighting Plan in a Live Environment
- › 5.6 Evaluating the Success of Lighting Design Execution

• 1 Introduction to Lighting Control Systems — 6 classes

- › 1.1 Understanding Lighting Control Basics
- › 1.2 Exploring Different Types of Lighting Systems
- › 1.3 Identifying Core Components of Control Systems
- › 1.4 Navigating Lighting Control Interfaces
- › 1.5 Programming Basic Scenes and Cues
- › 1.6 Troubleshooting Common Lighting Control Issues

• 2 Programming Fixtures and Effects — 6 classes

- › 2.1 Understanding Fixture Types and Control Protocols
- › 2.2 Configuring DMX Channels and Addressing
- › 2.3 Building Basic Lighting Cues with Software
- › 2.4 Integrating Effects with Dynamic Changes
- › 2.5 Troubleshooting Common Programming Issues
- › 2.6 Optimizing Visual Impact through Programmable Elements

• 3 Advanced DMX Protocols and Integration — 6 classes

- › 3.1 Understanding Advanced DMX Protocols
- › 3.2 Exploring DMX Signal Structures
- › 3.3 Analyzing Advanced DMX Control Techniques
- › 3.4 Integrating Multiple DMX Universes
- › 3.5 Implementing Wireless DMX Solutions
- › 3.6 Troubleshooting Common DMX Integration Issues

• 4 Timecode and Music Synchronization — 6 classes

- › 4.1 Understanding Timecode Basics
- › 4.2 Exploring the Role of Timecode in Show Control
- › 4.3 Introduction to Music Synchronization Techniques
- › 4.4 Integrating Timecode into Lighting Console Programming
- › 4.5 Synchronizing Lighting Cues with Music Tracks
- › 4.6 Troubleshooting Timecode and Sync Issues

• 5 Live Show Programming and Execution — 6 classes

- › 5.1 Understanding Key Concepts of Live Show Programming
- › 5.2 Configuring Lighting Consoles for Performance
- › 5.3 Creating and Managing Lighting Cues Efficiently
- › 5.4 Synchronizing Visual Effects with Musical Elements
- › 5.5 Troubleshooting Common Issues During Live Execution
- › 5.6 Evaluating Performance and Enhancing Future Shows

• 1 Foundations of Visual Technologies in Live Events — 6 classes

- › 1.1 Understanding the Role of Visual Technologies in Live Events
- › 1.2 Exploring Basic Components of Concert Lighting Systems
- › 1.3 Investigating Visual Display Technologies for Concerts
- › 1.4 Identifying Key Visual Technology Tools and Equipment
- › 1.5 Analyzing Visual Effects and Techniques in Live Settings
- › 1.6 Integrating Visual Technologies to Enhance Concert Experiences

• 2 Digital Lighting Systems and Control Protocols — 6 classes

- › 2.1 Exploring Digital Lighting Systems: An Introduction
- › 2.2 Understanding DMX Protocol: Foundations of Control
- › 2.3 Decoding RDM Protocol: Enhancing Communication
- › 2.4 Implementing Art-Net Protocol: Bridging Ethernet and Lighting
- › 2.5 Integrating sACN Protocol: Advanced Network Lighting Control
- › 2.6 Applying Control Protocols: Real-World System Configuration

• 3 Projection and LED Screen Technologies — 6 classes

- › 3.1 Understanding Projection and LED Screen Basics
- › 3.2 Exploring Projection Mapping Techniques
- › 3.3 Configuring LED Screen Displays
- › 3.4 Integrating Visual Technologies with Live Performances
- › 3.5 Troubleshooting Common Projection and LED Issues
- › 3.6 Evaluating Visual Technology Solutions for Events

• 4 Integrative Strategies for Visual and Audio Synchronization — 6 classes

- › 4.1 Understanding the Basics of Audio-Visual Synchronization
- › 4.2 Exploring Technologies for Visual and Sound Integration
- › 4.3 Analyzing the Role of Timing and Rhythm in Synchronization
- › 4.4 Implementing Software Solutions for Seamless Integration
- › 4.5 Practicing Real-time Synchronization Techniques
- › 4.6 Evaluating Synchronization in Live Concert Settings

• 5 Advanced Techniques in Visual Show Design and Execution — 6 classes

- › 5.1 Understanding Advanced Visual Technologies in Concerts
- › 5.2 Exploring Dynamic Light Mapping Techniques
- › 5.3 Integrating Visual Effects with Live Music
- › 5.4 Designing Synchronization Between Light and Sound
- › 5.5 Applying 3D Projection Mapping for Stage Design
- › 5.6 Executing Live Visual Show Design