LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

Six Sigma Yellow Belt Professional

LAPT — London Academy of Professional Training

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Reference MSPC-SS-02 • Management Centres

UKPRN 10067351 • Registered in England and Wales, company 4984798

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

AT A GLANCE

REFERENCE	**MSPC-SS-02**
AWARD	**Certificate**
ASSESSMENT	**430 marks — 258 to pass (60%)**
PREREQUISITES	**None**
VALIDITY	**Lifetime**
AWARDING BODY	**LAPT — London Academy of Professional Training**

CURRICULUM

1 Data Analysis Techniques

5 chapters · 30 classes **105 marks**

- **1 Understanding Data Types and Sources** — 6 classes
  - 1.1 Identify Different Types of Data: Qualitative vs Quantitative
  - 1.2 Classify Continuous and Discrete Data Types
  - 1.3 Understand Sources of Primary and Secondary Data
  - 1.4 Analyze the Reliability of Different Data Sources
  - 1.5 Apply Data Type Knowledge to Select Appropriate Collection Methods
  - 1.6 Evaluate Real-World Case Studies Based on Data Types
- **2 Descriptive Statistics and Data Visualization** — 6 classes
  - 2.1 Understand Descriptive Statistics Basics
  - 2.2 Identify Key Measures of Central Tendency
  - 2.3 Explore Measures of Dispersion and Variability
  - 2.4 Visualize Data with Charts and Graphs
  - 2.5 Interpret and Analyze Data Visualizations
  - 2.6 Apply Descriptive Statistics to Real-World Scenarios
- **3 Introduction to Inferential Statistics** — 6 classes
  - 3.1 Understand Key Concepts of Inferential Statistics
  - 3.2 Explore Probability Distributions and Their Applications
  - 3.3 Analyze Sampling Methods and Their Impact on Data
  - 3.4 Conduct Hypothesis Testing Using Real-World Examples
  - 3.5 Interpret p-Values and Confidence Intervals in Data Analysis
  - 3.6 Apply Inferential Statistics Techniques to Business Scenarios
- **4 Correlation and Regression Analysis** — 6 classes
  - 4.1 Define Correlation and Its Importance in Data Analysis
  - 4.2 Identify Types of Correlation: Positive, Negative, and No Correlation
  - 4.3 Calculate Pearson's Correlation Coefficient Using Sample Data
  - 4.4 Differentiate Between Correlation and Causation in Case Studies
  - 4.5 Introduce Simple Linear Regression and Its Components
  - 4.6 Apply Regression Analysis to Predict Outcomes Using Real Data
- **5 Data-Driven Decision Making in Six Sigma** — 6 classes
  - 5.1 Understand the Importance of Data-Driven Decision Making
  - 5.2 Identify Key Data Sources for Six Sigma Projects
  - 5.3 Analyze Data Using Statistical Tools in Six Sigma
  - 5.4 Interpret Data Trends and Patterns Effectively
  - 5.5 Apply Data Analysis Techniques to Real-World Scenarios
  - 5.6 Evaluate Decision Outcomes and Continuous Improvement

2 Implementing Quality Improvements

5 chapters · 30 classes **45 marks**

- **1 Understanding the Fundamentals of Quality Improvement** — 6 classes
  - 1.1 Define Quality Improvement Concepts and Terms
  - 1.2 Identify Key Principles of Quality Improvement Methodologies
  - 1.3 Analyze the Role of Data in Measuring Quality Performance
  - 1.4 Explore Techniques for Identifying Improvement Opportunities
  - 1.5 Develop a Quality Improvement Action Plan
  - 1.6 Implement and Evaluate Quality Improvement Initiatives
- **2 Identifying Areas for Improvement using DMAIC** — 6 classes
  - 2.1 Define the Problem: Understanding DMAIC Fundamentals
  - 2.2 Measure Current Performance: Data Collection Techniques
  - 2.3 Analyze Root Causes: Tools for Identifying Issues
  - 2.4 Improve Processes: Generating Effective Solutions
  - 2.5 Control Changes: Establishing Monitoring Mechanisms
  - 2.6 Apply DMAIC: Case Study Workshop and Real-World Application
- **3 Data Collection and Analysis Techniques** — 6 classes
  - 3.1 Identify Key Data Collection Methods in Quality Improvement
  - 3.2 Design Effective Surveys for Data Gathering
  - 3.3 Apply Statistical Techniques to Analyze Data
  - 3.4 Utilize Control Charts to Monitor Quality Trends
  - 3.5 Interpret Data to Drive Improvement Decisions
  - 3.6 Present Data Analysis Findings to Stakeholders
- **4 Developing and Implementing Improvement Strategies** — 6 classes
  - 4.1 Identify Key Areas for Improvement
  - 4.2 Analyze Root Causes of Quality Issues
  - 4.3 Design Effective Improvement Strategies
  - 4.4 Develop Implementation Plans for Strategies
  - 4.5 Measure and Monitor Progress of Improvements
  - 4.6 Review and Adjust Improvement Strategies as Needed
- **5 Sustaining Quality Improvements through Control Systems** — 6 classes
  - 5.1 Identify Key Control Systems for Quality Improvement
  - 5.2 Analyze the Role of Data in Sustaining Quality
  - 5.3 Develop Effective Monitoring Techniques for Quality Control
  - 5.4 Implement Continuous Feedback Loops in Quality Systems
  - 5.5 Evaluate the Effectiveness of Control Systems
  - 5.6 Create an Action Plan for Long-Term Quality Sustainability

3 Introduction to Six Sigma

5 chapters · 30 classes **85 marks**

- **1 Understanding Six Sigma Methodology** — 6 classes
  - 1.1 Define Six Sigma and Its Importance in Quality Management
  - 1.2 Explore the Core Principles of Six Sigma Methodology
  - 1.3 Identify the Key Components of the DMAIC Process
  - 1.4 Discuss the Role of Data in Six Sigma Decision-Making
  - 1.5 Analyze Common Six Sigma Tools and Techniques
  - 1.6 Apply Six Sigma Concepts to a Real-World Case Study
- **2 Key Concepts and Terminology in Six Sigma** — 6 classes
  - 2.1 Define Core Six Sigma Concepts
  - 2.2 Identify Key Terminology in Six Sigma
  - 2.3 Explain the Importance of Process Improvement
  - 2.4 Differentiate Between Six Sigma Levels
  - 2.5 Explore the DMAIC Framework in Detail
  - 2.6 Apply Six Sigma Terminology in Real-World Scenarios
- **3 The DMAIC Framework: Define, Measure, Analyze, Improve, Control** — 6 classes
  - 3.1 Define the Problem: Identifying Core Issues in Processes
  - 3.2 Measure Current Performance: Gathering and Analyzing Data
  - 3.3 Analyze Root Causes: Using Tools to Diagnose Issues
  - 3.4 Improve Processes: Developing Effective Solutions
  - 3.5 Control Standards: Implementing Monitoring Systems
  - 3.6 Apply DMAIC: Integrating the Framework into Real-World Projects
- **4 Data Analysis Techniques in Six Sigma** — 6 classes
  - 4.1 Identify Key Data Types in Six Sigma
  - 4.2 Collect and Organize Data for Analysis
  - 4.3 Apply Descriptive Statistics in Six Sigma Projects
  - 4.4 Create and Interpret Histograms for Data Visualization
  - 4.5 Utilize Control Charts to Monitor Processes
  - 4.6 Conduct Basic Hypothesis Testing for Decision Making
- **5 Roles and Responsibilities in Six Sigma Projects** — 6 classes
  - 5.1 Identify Key Roles in Six Sigma Projects
  - 5.2 Define the Responsibilities of a Six Sigma Green Belt
  - 5.3 Explore the Role of a Six Sigma Black Belt in Project Management
  - 5.4 Analyze the Contributions of Project Sponsors and Champions
  - 5.5 Discuss Team Dynamics and Collaboration in Six Sigma Initiatives
  - 5.6 Apply Roles and Responsibilities to Create an Effective Six Sigma Team

4 Process Mapping and Measurement

5 chapters · 30 classes **65 marks**

- **1 Foundations of Process Mapping** — 6 classes
  - 1.1 Define Process Mapping and Its Importance
  - 1.2 Identify Key Components of a Process Map
  - 1.3 Explore Different Types of Process Maps
  - 1.4 Analyze the Role of Measurement in Process Improvement
  - 1.5 Develop a Basic Process Map for a Familiar Activity
  - 1.6 Evaluate Process Mapping Techniques for Effective Leadership
- **2 Types of Process Maps** — 6 classes
  - 2.1 Identify the Purpose of Process Mapping
  - 2.2 Describe Different Types of Process Maps
  - 2.3 Construct a Basic Flowchart for Process Representation
  - 2.4 Analyze Swimlane Diagrams for Role Clarity
  - 2.5 Utilize Value Stream Mapping for Process Efficiency
  - 2.6 Apply Process Maps to Real-World Scenarios
- **3 Gathering Data for Process Mapping** — 6 classes
  - 3.1 Identify Key Processes for Mapping
  - 3.2 Define Data Requirements for Process Mapping
  - 3.3 Collect Qualitative Data Effectively
  - 3.4 Utilize Quantitative Data for Analysis
  - 3.5 Assess Data Quality and Reliability
  - 3.6 Apply Data to Create Effective Process Maps
- **4 Analyzing Process Maps for Improvement** — 6 classes
  - 4.1 Identify Key Elements of Process Maps
  - 4.2 Analyze Workflows for Inefficiencies
  - 4.3 Utilize Measurement Techniques for Process Evaluation
  - 4.4 Conduct a Root Cause Analysis on Process Deficiencies
  - 4.5 Develop Improvement Strategies Based on Data Insights
  - 4.6 Create an Action Plan for Process Optimization
- **5 Measuring Process Performance and Success** — 6 classes
  - 5.1 Identify Key Performance Indicators (KPIs) for Process Measurement
  - 5.2 Analyze Current Process Performance Data
  - 5.3 Establish Baseline Metrics for Process Improvement
  - 5.4 Utilize Process Mapping Techniques to Visualize Workflows
  - 5.5 Implement Tools for Real-Time Process Monitoring
  - 5.6 Evaluate Success Through Data-Driven Decision Making

5 Project Management Fundamentals

5 chapters · 30 classes **65 marks**

- **1 Understanding Project Management Basics and Terminology** — 6 classes
  - 1.1 Define Key Project Management Terms
  - 1.2 Identify the Phases of Project Management
  - 1.3 Explore the Role of a Project Manager
  - 1.4 Analyze Project Stakeholders and Their Influence
  - 1.5 Discuss Project Constraints: Scope, Time, and Cost
  - 1.6 Apply Basic Project Management Tools for Planning
- **2 Project Life Cycle: Phases and Key Activities** — 6 classes
  - 2.1 Define the Project Life Cycle and Its Importance
  - 2.2 Identify the Phases of the Project Life Cycle
  - 2.3 Key Activities in the Initiation Phase: Setting the Foundation
  - 2.4 Planning Phase Essentials: Crafting a Roadmap
  - 2.5 Executing and Monitoring: Driving Project Success
  - 2.6 Closing the Project: Ensuring a Successful Transition and Lessons Learned
- **3 Defining Project Scope and Objectives** — 6 classes
  - 3.1 Identify Key Stakeholders for Project Success
  - 3.2 Analyze Project Requirements and Constraints
  - 3.3 Develop a Clear Project Vision Statement
  - 3.4 Define Specific Project Objectives and Outcomes
  - 3.5 Create a Detailed Project Scope Statement
  - 3.6 Validate Scope and Objectives with Stakeholders
- **4 Project Planning: Tools and Techniques** — 6 classes
  - 4.1 Define Project Scope using SMART Goals
  - 4.2 Identify Stakeholders and their Roles
  - 4.3 Develop a Work Breakdown Structure (WBS)
  - 4.4 Create a Project Timeline with Gantt Charts
  - 4.5 Assess Risks and Develop Mitigation Strategies
  - 4.6 Utilize Project Management Software for Planning
- **5 Monitoring and Controlling Projects for Success** — 6 classes
  - 5.1 Identify Key Performance Indicators for Project Success
  - 5.2 Implement Effective Monitoring Techniques in Projects
  - 5.3 Conduct Regular Performance Reviews and Assessments
  - 5.4 Analyze Variance and Adjust Project Plans Accordingly
  - 5.5 Utilize Tools for Real-time Project Tracking and Reporting
  - 5.6 Develop Action Plans for Continuous Improvement and Control

6 Team Dynamics and Leadership

5 chapters · 30 classes **65 marks**

- **1 Understanding Team Dynamics in Six Sigma Projects** — 6 classes
  - 1.1 Define Key Concepts of Team Dynamics
  - 1.2 Identify Roles and Responsibilities in a Team
  - 1.3 Analyze Stages of Team Development
  - 1.4 Explore Communication Styles within Teams
  - 1.5 Assess Conflict Resolution Techniques in Team Settings
  - 1.6 Apply Team Dynamics Strategies to Six Sigma Projects
- **2 Roles and Responsibilities Within a Six Sigma Team** — 6 classes
  - 2.1 Identify Key Roles in a Six Sigma Team
  - 2.2 Explain Responsibilities Associated with Each Role
  - 2.3 Analyze Interactions Between Team Roles
  - 2.4 Assess the Impact of Roles on Team Performance
  - 2.5 Develop Strategies for Role Clarity in Teams
  - 2.6 Apply Role-Defined Actions in a Team Simulation
- **3 Building Effective Communication in Team Settings** — 6 classes
  - 3.1 Identify Key Components of Effective Communication
  - 3.2 Analyze Barriers to Communication in Teams
  - 3.3 Develop Active Listening Skills for Better Team Interaction
  - 3.4 Practice Non-Verbal Communication Techniques in Group Settings
  - 3.5 Construct Clear and Concise Messages for Team Clarity
  - 3.6 Implement Feedback Mechanisms to Enhance Team Communication
- **4 Conflict Resolution Strategies for Team Leaders** — 6 classes
  - 4.1 Identify Common Sources of Conflict in Teams
  - 4.2 Understand Different Conflict Resolution Styles
  - 4.3 Analyze the Impact of Conflict on Team Dynamics
  - 4.4 Develop Active Listening Skills for Conflict Resolution
  - 4.5 Implement Collaborative Problem-Solving Techniques
  - 4.6 Create a Personal Action Plan for Effective Conflict Management
- **5 Motivation and Engagement Techniques for Six Sigma Teams** — 6 classes
  - 5.1 Identify Key Motivational Drivers for Team Success
  - 5.2 Implement Recognition Strategies to Boost Team Morale
  - 5.3 Analyze the Impact of Team Engagement on Six Sigma Projects
  - 5.4 Develop Collaborative Goal-Setting Techniques for Teams
  - 5.5 Apply Feedback Mechanisms to Enhance Team Performance
  - 5.6 Design Action Plans for Sustained Team Motivation and Engagement