

LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

ISO 25023 — Measurement of System and Software Quality

ISO Certification Programme



LAPT — London Academy of Professional Training

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Reference IIT-COD-25023 • ISO IT & Related Technologies

UKPRN 10067351 • Registered in England and Wales, company 4984798

AT A GLANCE

REFERENCE	IIT-COD-25023
AWARD	Certificate
ASSESSMENT	430 marks — 258 to pass (60%)
PREREQUISITES	None
VALIDITY	Lifetime
AWARDING BODY	LAPT — London Academy of Professional Training

CURRICULUM

1 Case Studies in Software Quality 0 chapters65 marks	
2 Data Analysis for Quality Improvement 5 chapters · 18 classes65 marks	
• 1 Understanding Data Quality Metrics in Software Systems — 6 classes › 1.1 Define Key Data Quality Metrics for Software Systems › 1.2 Analyze the Importance of Data Quality in Software Development › 1.3 Identify Common Data Quality Issues and Their Impact › 1.4 Evaluate Methods for Measuring Data Quality › 1.5 Develop Strategies for Improving Data Quality in Software Systems › 1.6 Apply Data Quality Metrics to Case Studies in Software Projects • 2 Data Collection Techniques for Quality Improvement — 6 classes › 2.1 Identify Key Data Collection Techniques for Quality Improvement › 2.2 Evaluate the Effectiveness of Quantitative Data Collection Methods › 2.3 Explore Qualitative Data Collection Approaches in Quality Assessment › 2.4 Design a Data Collection Plan for a Quality Improvement Project › 2.5 Analyze Data Collection Tools and Their Suitability for Various Contexts › 2.6 Implement a Pilot Data Collection Process for Quality Improvement • 3 Statistical Analysis Tools for Quality Assessment — 6 classes › 3.1 Introduce Statistical Analysis Tools for Quality Assessment › 3.2 Explore Descriptive Statistics for Data Profiling › 3.3 Analyze Variance Using Statistical Methods › 3.4 Apply Control Charts for Monitoring Quality › 3.5 Implement Hypothesis Testing for Decision Making › 3.6 Evaluate Quality Improvement Through Data-Driven Insights	• 4 Interpreting Data Insights for Software Quality Enhancement • 5 Implementing Continuous Improvement Strategies through Data Analysis

• 1 Understanding ISO 25023: Framework and Objectives — 6 classes

- › 1.1 Explore the Purpose and Importance of ISO 25023
- › 1.2 Identify Key Concepts and Definitions in ISO 25023
- › 1.3 Analyze the Framework Structure of ISO 25023
- › 1.4 Discuss Objectives and Goals in Software Quality Measurement
- › 1.5 Evaluate Compliance and Implementation Challenges of ISO 25023
- › 1.6 Apply ISO 25023 Principles to Real-World Software Scenarios

• 2 Key Concepts of Software Quality Measurement — 6 classes

- › 2.1 Define Software Quality: Key Attributes and Metrics
- › 2.2 Explore ISO 25023 Framework: Overview of Quality Measurement Standards
- › 2.3 Identify Quality Characteristics: Functionality, Reliability, and Usability
- › 2.4 Analyze Measurement Techniques: Quantitative vs Qualitative Approaches
- › 2.5 Evaluate Case Studies: Real-World Applications of ISO 25023 Principles
- › 2.6 Develop a Quality Measurement Plan: Implementation Strategies and Best Practices

• 3 Developing Metrics for Quality Assessment — 6 classes

- › 3.1 Identify Key Quality Attributes in Software
- › 3.2 Analyze Existing Metrics for Quality Assessment
- › 3.3 Develop New Metrics Aligned with ISO 25023
- › 3.4 Establish Benchmarking Standards for Quality Metrics
- › 3.5 Implement Metrics in Quality Assurance Processes
- › 3.6 Evaluate Effectiveness of Quality Metrics over Time

• 4 Integration of ISO 25023 with Software Development Processes — 6 classes

- › 4.1 Understand the Principles of ISO 25023 for Software Quality
- › 4.2 Identify Key Measurements and Metrics in ISO 25023
- › 4.3 Explore the Integration of ISO 25023 into Agile Development Practices
- › 4.4 Assess the Impact of ISO 25023 on Software Development Lifecycle Phases
- › 4.5 Develop Strategies for Implementing ISO 25023 in Teams
- › 4.6 Evaluate Software Projects Using ISO 25023 Compliance Criteria

• 5 Auditing and Reporting on Quality Compliance — 6 classes

- › 5.1 Understand the Fundamentals of ISO 25023 Compliance
- › 5.2 Identify Key Auditing Techniques for Quality Assessment
- › 5.3 Develop Effective Reporting Strategies for Quality Audits
- › 5.4 Analyze Case Studies on Quality Compliance Failures
- › 5.5 Create a Quality Compliance Checklist for Auditing
- › 5.6 Evaluate Audit Results and Recommend Improvements

• 1 Fundamentals of Quality Assurance in Software Development — 6 classes

- › 1.1 Define Key Concepts of Quality Assurance in Software Development
- › 1.2 Explore the ISO 25023 Standards for Measuring Software Quality
- › 1.3 Assess Different Quality Assurance Techniques in Software Processes
- › 1.4 Identify Common Quality Metrics and Their Applications
- › 1.5 Implement Quality Assurance Strategies in Real-world Scenarios
- › 1.6 Evaluate the Impact of Quality Assurance on Software Project Success

• 2 Quality Metrics and Measurements — 6 classes

- › 2.1 Define Key Quality Metrics in Software Development
- › 2.2 Analyze the Importance of Measurement in Quality Assurance
- › 2.3 Identify Industry Standards for Software Quality Metrics
- › 2.4 Develop a Quality Measurement Framework for Projects
- › 2.5 Apply Quality Metrics to Assess Software Performance
- › 2.6 Create a Reporting System for Continuous Quality Improvement

• 3 Testing Techniques and Tools for Quality Assurance — 6 classes

- › 3.1 Identify Key Testing Techniques for Quality Assurance
- › 3.2 Compare Manual vs Automated Testing Approaches
- › 3.3 Explore Different Types of Testing Tools Available
- › 3.4 Analyze the Role of Test Planning in Quality Assurance
- › 3.5 Implement Test Cases and Execute Testing Scenarios
- › 3.6 Evaluate Testing Outcomes and Report Quality Metrics

• 4 Best Practices in Quality Assurance Processes — 6 classes

- › 4.1 Identify Key Quality Assurance Principles
- › 4.2 Analyze Common Quality Assurance Challenges
- › 4.3 Develop Effective Quality Assurance Strategies
- › 4.4 Implement Quality Assurance Tools and Techniques
- › 4.5 Evaluate the Impact of Quality Assurance on Software Projects
- › 4.6 Create a Quality Assurance Process Improvement Plan

• 5 Continuous Improvement and Quality Assurance Strategies — 6 classes

- › 5.1 Identify Continuous Improvement Challenges in Quality Assurance
- › 5.2 Analyze Key Metrics for Measuring Software Quality
- › 5.3 Implement Effective Quality Assurance Techniques in Projects
- › 5.4 Develop a Continuous Improvement Plan for Software Processes
- › 5.5 Assess the Impact of Quality Assurance Strategies on Performance
- › 5.6 Create a Quality Assurance Culture within Your Team

• 1 Fundamentals of Software Quality Measurement — 6 classes

- › 1.1 Define Key Concepts in Software Quality
- › 1.2 Explore the Importance of Quality Measurement
- › 1.3 Identify Metrics for Assessing Software Quality
- › 1.4 Examine Quality Measurement Frameworks
- › 1.5 Analyze Case Studies of Quality Measurement in Action
- › 1.6 Apply Quality Metrics to Real-World Scenarios

• 2 Understanding ISO 25023: Framework and Principles — 6 classes

- › 2.1 Define Key Concepts of ISO 25023
- › 2.2 Explore the Framework Components of ISO 25023
- › 2.3 Identify Principles of Quality Measurement in Software
- › 2.4 Analyze the Importance of Measurement in Software Quality
- › 2.5 Evaluate Real-World Applications of ISO 25023
- › 2.6 Develop a Basic Quality Measurement Plan Using ISO 25023

• 3 Key Quality Attributes and Metrics — 6 classes

- › 3.1 Define Key Quality Attributes in Software Systems
- › 3.2 Identify Relevant Metrics for Quality Assessment
- › 3.3 Analyze the Relationship Between Attributes and Metrics
- › 3.4 Explore Industry Standards for Quality Measurement
- › 3.5 Apply Quality Metrics to Real-World Scenarios
- › 3.6 Evaluate the Effectiveness of Quality Measurement Frameworks

• 4 Implementing Quality Measurement in Development Processes —

6 classes

- › 4.1 Define Key Quality Measurement Concepts
- › 4.2 Identify Quality Metrics Relevant to Development Processes
- › 4.3 Establish a Quality Measurement Framework for Software Projects
- › 4.4 Integrate Quality Measurements into Development Workflows
- › 4.5 Analyze Quality Measurement Data to Drive Improvement
- › 4.6 Communicate Quality Insights to Stakeholders Effectively

• 5 Analyzing and Interpreting Quality Measurement Data — 6 classes

- › 5.1 Identify Key Quality Metrics in Software Development
- › 5.2 Collect and Organize Quality Measurement Data Effectively
- › 5.3 Analyze Quality Measurement Data Using Statistical Techniques
- › 5.4 Interpret Trends and Patterns in Quality Data
- › 5.5 Evaluate Quality Data Against Industry Standards
- › 5.6 Present Findings and Recommendations for Quality Improvement