

LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

ISO 37122 — Indicators for Smart Cities

ISO Certification Programme



LAPT — London Academy of Professional Training

Address 85 Great Portland Street, W1W 7LT, London, United Kingdom

Email info@lapt.org

Telephone +44 7513 283044

Web lapt.org

Reference MGT-SMC-37122 • ISO Management & Services

UKPRN 10067351 • Registered in England and Wales, company 4984798

AT A GLANCE

REFERENCE	MGT-SMC-37122
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 for Smart City Performance

5 chapters · 30 classes 85 marks

• 1 Introduction to Smart City Data Environments — 6 classes

› 1.1 Define Smart City Data Environments

› 1.2 Identify Key Indicators in Smart Cities

› 1.3 Explain the Role of Data in Urban Decision-Making

› 1.4 Analyze Types of Data Sources for Smart Cities

› 1.5 Assess Challenges in Smart City Data Integration

› 1.6 Develop a Simple Data Collection Plan for Smart Initiatives

• 2 Best Practices in Data Collection for Smart Cities — 6 classes

› 2.1 Identify Key Data Sources for Smart City Metrics

› 2.2 Evaluate Data Quality and Reliability for Urban Analysis

› 2.3 Implement Data Collection Techniques for Smart Infrastructure

› 2.4 Design Effective Surveys and Questionnaires for Citizen Engagement

› 2.5 Analyze Collected Data to Measure Performance Indicators

› 2.6 Develop Actionable Insights from Data Analysis for City Planning

• 3 Data Analysis Techniques for Urban Performance Metrics — 6 classes

› 3.1 Identify Key Urban Performance Metrics for Smart Cities

› 3.2 Analyze Data Sources for Urban Metrics Collection

› 3.3 Apply Statistical Methods to Urban Performance Data

› 3.4 Visualize Urban Data Insights Using Graphical Tools

› 3.5 Evaluate Urban Performance Metrics for Decision-Making

› 3.6 Develop Action Plans Based on Data Analysis Outcomes

• 4 Visualizing Data for Enhanced Decision Making — 6 classes

› 4.1 Identify Key Data Types for Smart City Performance

› 4.2 Explore Data Visualization Tools and Techniques

› 4.3 Analyze Trends Using Graphical Representations

› 4.4 Develop Custom Dashboards for Real-Time Decision Making

› 4.5 Interpret Data Visualizations for Stakeholder Insights

› 4.6 Present Data Visualization Findings Effectively

• 5 Case Studies in Smart City Data Application — 6 classes

› 5.1 Analyze Successful Smart City Case Studies

› 5.2 Identify Key Data Indicators in Smart Cities

› 5.3 Explore Data-Driven Decision Making in Urban Planning

› 5.4 Evaluate the Impact of Technology on Smart City Initiatives

› 5.5 Develop Metrics for Measuring Smart City Performance

› 5.6 Present Findings: Lessons Learned from Smart City Applications

• 1 Understanding ISO 37122 Framework and Its Importance in Smart Cities — 6 classes

- › 1.1 Explore the ISO 37122 Framework and Its Key Components
- › 1.2 Analyze the Importance of Smart City Indicators in Urban Development
- › 1.3 Examine the Role of Leadership in Implementing ISO 37122
- › 1.4 Identify Best Practices for Measuring Smart City Performance
- › 1.5 Assess the Impact of Continuous Improvement on Smart City Initiatives
- › 1.6 Develop an Action Plan for Integrating ISO 37122 into Local Governance

• 2 Key Metrics and Indicators for Evaluating Smart City Performance — 6 classes

- › 2.1 Identify Key Metrics for Smart City Evaluation
- › 2.2 Understand the Role of Indicators in Performance Measurement
- › 2.3 Analyze Current Smart City Performance Indicators
- › 2.4 Develop a Framework for Continuous Improvement
- › 2.5 Implement Best Practices for Data Collection and Analysis
- › 2.6 Present Findings and Recommendations for Smart City Enhancements

• 3 Data Collection and Analysis Techniques in Smart Cities — 6 classes

- › 3.1 Identify Key Data Sources for Smart City Evaluation
- › 3.2 Explore Quantitative Data Collection Methods in Urban Environments
- › 3.3 Analyze Qualitative Data Techniques for Community Engagement
- › 3.4 Implement Data Visualization Tools for Smart City Insights
- › 3.5 Assess Data Quality and Reliability for Urban Decision-Making
- › 3.6 Develop Continuous Improvement Strategies Based on Data Analysis

• 4 Implementing Continuous Improvement Strategies Based on Evaluation Findings — 6 classes

- › 4.1 Analyze Evaluation Findings to Identify Improvement Areas
- › 4.2 Develop SMART Goals for Continuous Improvement
- › 4.3 Design Action Plans Based on Identified Needs
- › 4.4 Engage Stakeholders in Continuous Improvement Initiatives
- › 4.5 Monitor and Measure Progress of Improvement Strategies
- › 4.6 Reflect on Outcomes and Adjust Strategies for Future Success

• 5 Case Studies in Smart City Evaluation and Best Practices — 6 classes

- › 5.1 Analyze Successful Case Studies of Smart City Evaluations
- › 5.2 Identify Key Performance Indicators Used in Smart Cities
- › 5.3 Compare Best Practices for Data Collection in Urban Environments
- › 5.4 Assess Stakeholder Engagement Strategies in Smart City Projects
- › 5.5 Evaluate the Impact of Smart Technologies on Urban Sustainability
- › 5.6 Develop a Continuous Improvement Framework for Smart City Initiatives

• 1 Fundamentals of Smart Cities: Concepts and Characteristics — 6 classes

- › 1.1 Define Smart Cities: Key Concepts and Innovations
- › 1.2 Identify Characteristics of Smart Cities: Elements and Features
- › 1.3 Analyze the Role of Technology in Smart City Development
- › 1.4 Explore Stakeholder Engagement in Smart City Initiatives
- › 1.5 Examine Global Examples of Successful Smart Cities
- › 1.6 Assess the Impact of Smart Cities on Sustainable Development

• 2 Key Technologies Driving Smart Cities — 6 classes

- › 2.1 Identify Key Technologies in Smart Cities
- › 2.2 Analyze the Role of IoT in Urban Management
- › 2.3 Explore Data Analytics for Enhanced City Services
- › 2.4 Evaluate the Impact of Renewable Energy Solutions
- › 2.5 Examine the Importance of Connectivity and 5G Networks
- › 2.6 Apply Smart Technology Solutions to Real-World Scenarios

• 3 ISO 37122: Understanding the Framework and Principles — 6 classes

- › 3.1 Identify Key Principles of Smart Cities
- › 3.2 Explore the ISO 37122 Framework Components
- › 3.3 Analyze the Importance of Indicators in Smart City Development
- › 3.4 Evaluate Case Studies Implementing ISO 37122 Standards
- › 3.5 Develop a Strategic Plan for Smart City Implementation
- › 3.6 Present a Smart City Initiative Using ISO 37122 Metrics

• 4 Assessment Indicators and Metrics for Smart City Performance — 6 classes

- › 4.1 Identify Key Assessment Indicators for Smart Cities
- › 4.2 Analyze the Role of Metrics in Smart City Performance
- › 4.3 Evaluate Existing Smart City Case Studies Using ISO 37122 Indicators
- › 4.4 Develop a Framework for Assessing Smart City Projects
- › 4.5 Create Performance Measurement Tools for Urban Development
- › 4.6 Propose Improvements Based on Indicator Analysis and Metrics

• 5 Strategic Leadership in Smart City Initiatives — 6 classes

- › 5.1 Analyze the Role of Strategic Leadership in Smart Cities
- › 5.2 Identify Key Challenges in Implementing Smart City Initiatives
- › 5.3 Evaluate Leadership Models for Smart City Development
- › 5.4 Develop Stakeholder Engagement Strategies for Smart Cities
- › 5.5 Design Metrics for Measuring Success in Smart City Leadership
- › 5.6 Formulate a Strategic Action Plan for a Smart City Initiative

• 1 Introduction to ISO 37122 and Smart City Concepts — 6 classes

- › 1.1 Explore the Definition of Smart Cities and Their Importance
- › 1.2 Understand the Objectives of ISO 37122 Standards
- › 1.3 Identify Key Indicators for Measuring Smart City Performance
- › 1.4 Analyze the Role of Stakeholders in Smart City Development
- › 1.5 Evaluate Case Studies of Successful Smart Cities Using ISO 37122
- › 1.6 Implement Basic SMART Goals Aligned with ISO 37122 Standards

• 2 Core Indicators of ISO 37122 — 6 classes

- › 2.1 Identify Key Core Indicators of ISO 37122
- › 2.2 Analyze the Importance of Core Indicators in Smart Cities
- › 2.3 Explore Data Sources for Collecting Core Indicator Metrics
- › 2.4 Evaluate Challenges in Implementing Core Indicators
- › 2.5 Develop Strategies for Enhancing Core Indicator Performance
- › 2.6 Present Case Studies of Successful Core Indicator Applications

• 3 Data Collection and Analysis for Smart Cities — 6 classes

- › 3.1 Identify Key Data Sources for Smart City Indicators
- › 3.2 Understand Data Collection Methods in Urban Environments
- › 3.3 Analyze the Importance of Data Quality and Reliability
- › 3.4 Explore Tools and Technologies for Data Analysis
- › 3.5 Evaluate Case Studies of Data-Driven Decision Making
- › 3.6 Develop a Data Collection and Analysis Plan for a Smart City Initiative

• 4 Implementing ISO 37122 in Urban Planning — 6 classes

- › 4.1 Identify Key Principles of ISO 37122 for Urban Planning
- › 4.2 Analyze the Role of Smart Indicators in Urban Development
- › 4.3 Assess Current Urban Planning Practices Against ISO 37122 Standards
- › 4.4 Develop a Framework for Implementing Smart City Indicators
- › 4.5 Create an Action Plan for Stakeholder Engagement in ISO 37122 Integration
- › 4.6 Evaluate the Impact of ISO 37122 on Sustainable Urban Growth

• 5 Evaluating and Reporting on Smart City Performance — 6 classes

- › 5.1 Understand Key Metrics for Smart City Performance
- › 5.2 Analyze Data Sources for Evaluation
- › 5.3 Conduct Performance Assessments Using ISO 37122
- › 5.4 Compare Smart City Initiatives Using Indicators
- › 5.5 Develop Reporting Frameworks for Transparency
- › 5.6 Present Findings to Stakeholders Effectively

• 1 Understanding Smart Cities: Definitions and Frameworks — 6 classes

- › 1.1 Define Smart Cities: Core Concepts and Characteristics
- › 1.2 Explore the Global Frameworks for Smart City Development
- › 1.3 Identify Key Indicators for Measuring Smart City Performance
- › 1.4 Compare Smart City Models: Success Stories and Challenges
- › 1.5 Analyze the Role of Leadership in Smart City Initiatives
- › 1.6 Apply ISO 37122 Standards to Evaluate Local Smart City Projects

• 2 ISO 37122: Overview and Key Indicators for Smart Cities — 6 classes

- › 2.1 Define Smart Cities: Concepts and Characteristics
- › 2.2 Explore ISO 37122: Understanding the Certification Framework
- › 2.3 Identify Key Indicators: Metrics for Urban Management
- › 2.4 Analyze the Importance of Leadership in Smart City Development
- › 2.5 Evaluate Case Studies: Successful ISO 37122 Implementations
- › 2.6 Develop a Smart City Action Plan: Applying Key Indicators

• 3 Strategic Leadership Practices for Effective Urban Management — 6 classes

- › 3.1 Analyze Urban Leadership Theories and Their Implications
- › 3.2 Identify Key Characteristics of Effective Urban Managers
- › 3.3 Develop Strategic Visioning Techniques for Cities
- › 3.4 Implement Collaborative Decision-Making Processes in Urban Settings
- › 3.5 Evaluate the Role of Data-Driven Decision Making in Urban Leadership
- › 3.6 Create Action Plans for Enhancing Community Engagement in Urban Management

• 4 Stakeholder Engagement and Collaboration in Smart Cities — 6 classes

- › 4.1 Identify Key Stakeholders in Smart City Development
- › 4.2 Analyze Stakeholder Needs and Priorities
- › 4.3 Develop Effective Communication Strategies for Engagement
- › 4.4 Facilitate Collaborative Decision-Making Processes
- › 4.5 Evaluate the Impact of Stakeholder Engagement Initiatives
- › 4.6 Create an Action Plan for Ongoing Collaboration in Urban Management

• 5 Monitoring, Evaluation, and Continuous Improvement in Urban Leadership — 6 classes

- › 5.1 Define Key Performance Indicators for Smart Cities
- › 5.2 Assess the Importance of Data Collection in Urban Leadership
- › 5.3 Analyze Evaluation Techniques for Urban Projects
- › 5.4 Explore Continuous Improvement Strategies in Urban Management
- › 5.5 Implement Feedback Mechanisms for Leadership Effectiveness
- › 5.6 Develop an Action Plan for Monitoring Urban Initiatives

• 1 Introduction to ISO 37122 and Smart City Indicators — 6 classes

- › 1.1 Define Smart Cities and Their Importance in Modern Society
- › 1.2 Introduce ISO 37122 and Its Purpose in Smart City Development
- › 1.3 Explore Key Indicators Outlined in ISO 37122 for Smart Cities
- › 1.4 Analyze How Indicators Facilitate Strategic Decision-Making
- › 1.5 Identify Challenges in Implementing ISO 37122 Indicators
- › 1.6 Develop a Mini-Action Plan for Applying Indicators in a Local Context

• 2 Key Performance Indicators and Their Role in Smart Cities — 6 classes

- › 2.1 Define Key Performance Indicators in the Context of Smart Cities
- › 2.2 Analyze the Purpose and Benefits of KPIs for Urban Development
- › 2.3 Identify Common Indicators Used in Smart City Frameworks
- › 2.4 Evaluate the Impact of KPIs on Policy Decision-Making
- › 2.5 Develop a KPI Dashboard for Monitoring Smart City Initiatives
- › 2.6 Integrate Stakeholder Feedback into KPI Selection and Implementation

• 3 Data Collection and Analysis for Smart City Indicators — 6 classes

- › 3.1 Identify Key Data Sources for Smart City Indicators
- › 3.2 Develop a Data Collection Strategy for Effective Analysis
- › 3.3 Employ Quantitative and Qualitative Methods for Data Analysis
- › 3.4 Analyze Results to Measure Smart City Performance
- › 3.5 Visualize Data Insights for Stakeholder Engagement
- › 3.6 Implement Feedback Mechanisms for Continuous Improvement

• 4 Integrating Smart City Indicators into Strategic Planning — 6 classes

- › 4.1 Define Smart City Indicators and Their Relevance
- › 4.2 Identify Core Components of Strategic Planning for Smart Cities
- › 4.3 Analyze the Relationship Between Indicators and Urban Strategy
- › 4.4 Develop a Framework for Integrating Indicators into Existing Plans
- › 4.5 Create a Stakeholder Engagement Plan for Indicator Implementation
- › 4.6 Assess the Impact of Indicators on Strategic Decision-Making

• 5 Evaluating and Reporting on Smart City Indicator Performance — 6 classes

- › 5.1 Understand Key Indicators for Smart City Performance
- › 5.2 Analyze Current Trends in Smart City Evaluation
- › 5.3 Assess Data Collection Methods for Indicator Reporting
- › 5.4 Develop Strategies for Effective Indicator Measurement
- › 5.5 Create a Framework for Reporting Performance Outcomes
- › 5.6 Implement Feedback Mechanisms for Continuous Improvement