



Smart Urban Infrastructure Management Course

Smart Urban Infrastructure Management Course

Overview

Smart Urban Infrastructure Management Course is a five-day intermediate course for urban planners, infrastructure managers, engineers, technology and data teams, operators, consultants, and public-service leaders who leave with a Smart Urban Infrastructure Management Plan. Participants connect asset baselines, sensors, platforms, interoperability, integrated city operations, mobility, energy, water, waste, cybersecurity, resilience, procurement, lifecycle operations, and performance indicators. The course turns disconnected systems into coordinated service decisions. Agile Leaders Training Center presents smart urban infrastructure management through governance, data, and operational control.

Who Should Attend

- Teams responsible for planning and managing connected urban infrastructure assets
- Functions operating mobility, energy, water, waste, public-realm, and safety services
- Personnel governing sensors, data platforms, interoperability, cybersecurity, and privacy
- Groups procuring technology, infrastructure services, partnerships, and operations support
- Leaders monitoring city performance, resilience, service continuity, and lifecycle value

The course assumes participants can interpret service plans, asset information, performance reports, and technology proposals, and it leaves out detailed network engineering, software development, and statutory approval procedures.

Departments and Industries

The course supports departments and industries responsible for connected urban assets, digital operations, and public-service performance.

- Urban planning, infrastructure, public works, asset management, and city operations
- Transport, mobility, energy, utilities, water, waste, and environmental services
- Information technology, telecommunications, data governance, and cybersecurity
- Engineering, construction, systems integration, consulting, and managed services
- Emergency coordination, public realm, facilities, and community service delivery

Learning Objectives

By the end of this course, participants will be able to:



- Analyze smart-city services, assets, stakeholders, data, and operational dependencies
- Apply sensor, platform, interoperability, cybersecurity, and privacy governance controls
- Compare mobility, energy, water, waste, public-realm, and safety operating models
- Evaluate resilience, procurement, partnership, and lifecycle management options
- Build performance indicators, dashboards, escalation, and service review arrangements
- Develop a Smart Urban Infrastructure Management Plan

Course Agenda

Day 1: Urban Services and Asset Baselines

- Smart-City Service and Stakeholder Map
- Urban Infrastructure Asset Baseline
- Service Outcome and Demand Profile
- Connected Asset Maturity Assessment
- Governance Roles and Decision Matrix

Day 2: Sensors, Data, and Interoperability

- Sensor and IoT Asset Monitoring Architecture
- Urban Data Platform and Data Flow Map
- System Interoperability and API Requirements
- Data Quality and Ownership Register
- Cybersecurity and Privacy Governance Checklist

Day 3: Integrated City Operations

- Command and Operations Center Workflow
- Smart Mobility and Transport Service Model
- Energy, Water, and Waste Operations Matrix
- Public-Realm and Safety Interface Plan
- Incident Escalation and Cross-Service Coordination Protocol

Day 4: Resilience and Lifecycle Performance

- Urban Infrastructure Resilience Scenario Matrix
- Technology Procurement and Partnership Strategy
- Lifecycle Operations and Maintenance Plan
- ISO 37122 Smart City Indicator Map
- Service Performance Dashboard and Review Cycle



Day 5: Smart Infrastructure Management Practice

- Exercise: Map Services, Assets, and Governance Roles
- Exercise: Design Sensor, Data, and Interoperability Controls
- Exercise: Coordinate Multi-Service Urban Operations
- Exercise: Test Resilience, Lifecycle, and Performance Decisions
- Capstone Exercise: Smart Urban Infrastructure Management Plan

Practical Exercises

The course uses suggested activities to connect infrastructure assets, digital systems, operational coordination, resilience, and performance decisions.

- Suggested activity: map urban services, stakeholders, physical assets, connected systems, demand patterns, and governance responsibilities.
- Suggested activity: design sensor coverage, data flows, interoperability requirements, ownership rules, cybersecurity controls, and privacy checkpoints.
- Suggested activity: coordinate mobility, utilities, waste, public-realm, and safety responses through an integrated operations workflow.
- Suggested activity: combine resilience scenarios, procurement choices, lifecycle arrangements, indicators, dashboards, and review cycles in a Smart Urban Infrastructure Management Plan.

FAQs

Who suits the smart urban infrastructure management course and what does it assume?

It suits teams planning, governing, procuring, operating, or monitoring connected urban infrastructure and assumes they can interpret service plans, asset information, performance reports, and technology proposals.

How does smart urban infrastructure management differ from smart-city strategy?

Smart-city strategy sets direction and priorities, while smart urban infrastructure management organizes assets, systems, data, controls, operations, maintenance, resilience, and performance reviews needed for service delivery.

Why is interoperability important in smart urban infrastructure?

Interoperability allows sensors, platforms, operators, and service systems to exchange usable data, coordinate workflows, reduce isolated solutions, and support consistent operational decisions.



How is smart urban infrastructure performance measured?

Performance is measured through defined service outcomes, data ownership, indicator formulas, baselines, targets, reporting frequency, accountability, exceptions, and improvement actions across infrastructure domains.

What belongs in a Smart Urban Infrastructure Management Plan?

The plan records services, assets, stakeholders, sensors, platforms, data flows, interoperability, governance, risks, procurement, operations, maintenance, indicators, dashboards, escalation paths, and review arrangements.

Conclusion

Participants take back a Smart Urban Infrastructure Management Plan linking assets, connected systems, data governance, integrated operations, resilience, lifecycle responsibilities, and performance measures. It changes isolated technology and infrastructure initiatives into a coordinated basis for service decisions. The plan supports management without replacing detailed engineering, software architecture, security testing, or applicable approval processes.



Training Course Categories

Agile PM and Project Management Training Courses

Agribusiness & Food Security Training Courses

Certified Courses By International Bodies

Communication and Public Relations Training Courses

Data Analytics Training and Data Science Courses

Digital Government & Public Service Training Courses

Education and Learning Development Training Courses

Environment & Sustainability Training Courses

Facilities and Real Estate Training Courses

Finance and Accounting Training Courses

Governance, Risk and Compliance Training Courses

Healthcare Management Training Courses

Heritage Conservation and Museum Management
Training Courses

Hospitality and Tourism Training Courses

Human Resources Training and Development Courses

IT Security Training & IT Training Courses

Leadership and Management Training Courses

Legal Training, Procurement and Contracting Courses

Maintenance Training and Engineering Training Courses

Marketing, Customer Relations, and Sales Courses

Occupational Health, Safety and Security Training
Courses

Oil & Gas Training and Other Technical Courses

Personal & Self-Development Training Courses

Quality and Operations Management Training Courses

Secretarial and Administration Training Courses

Shipping, Maritime and Ports Training Courses



Training Cities

Abu Dhabi UAE	Accra Ghana	Amman Jordan
Amsterdam Netherlands	Athens Greece	Baku Azerbaijan
Bali Indonesia	Bangkok Thailand	Barcelona Spain
Berlin Germany	Cairo Egypt	Cape town South Africa
Casablanca Morocco	Chicago USA	Doha Qatar
Dubai UAE	Frankfurt Germany	Geneva Switzerland
Istanbul Turkey	Jakarta Indonesia	Johannesburg South Africa
Kuala Lumpur Malaysia	Kuwait Kuwait	Langkawi Malaysia
Lisbon Portugal	London UK	Madrid Spain
Manama Bahrain	Marbella Spain	Milan Italy
Montreux Switzerland	Munich Germany	Muscat Oman
Nairobi Kenya	New York USA	Nice France

Training Cities

Paris

France

Phuket

Thailand

Port Louis

Mauritius

Porto

Portugal

Prague

Czech Republic

Rome

Italy

San Diego

USA

Seoul

South Korea

Sharm El-Sheikh

Egypt

Singapore

Singapore

Tashkent

Uzbekistan

Tbilisi

Georgia

Tokyo

Japan

Toronto

Canada

Trabzon

Turkey

Vienna

Austria

Zanzibar

Tanzania

Zoom

Online Training

Zurich

Switzerland