

Course No. 1266

AI in Smart Cities Training Course

AI FOR INDUSTRY
ARTIFICIAL INTELLIGENCE & APPLICATIONS

DURATION

5 Days

DELIVERY

Classroom



Course Overview

The AI in Smart Cities Training Course is an advanced professional program designed to equip executives, managers, urban planners, technology specialists, and decision-makers with the knowledge and practical capabilities required to apply Artificial Intelligence (AI) to the development and management of smart cities. As cities increasingly adopt digital platforms, Internet of Things (IoT) technologies, connected infrastructure, and data-driven services, Artificial Intelligence has become a critical capability for improving urban efficiency, public services, resource management, sustainability, and evidence-based decision-making.

The course focuses on practical applications of Artificial Intelligence across smart mobility, traffic management, public transportation, energy and utilities, water management, municipal services, public safety, infrastructure monitoring, environmental management, and citizen services. Participants will explore Machine Learning, Predictive Analytics, Generative AI, Natural Language Processing (NLP), Computer Vision, IoT analytics, and intelligent automation, with emphasis on how these technologies can be integrated into smart city ecosystems to create more responsive, efficient, and resilient urban environments.

The program also addresses the strategic and governance requirements associated with implementing AI in smart cities, including urban data governance, cybersecurity, privacy protection, AI governance, ethical AI, interoperability, risk management, and cross-agency data integration. Participants will learn how to evaluate AI initiatives from both a technology and organizational perspective and how to develop responsible and scalable solutions that align with smart city strategies, digital transformation objectives, sustainability priorities, and public service requirements.

Combining strategic frameworks with practical workshops, case studies, and solution-design exercises, the AI in Smart Cities Training Course enables participants to identify high-value AI opportunities, evaluate urban data capabilities, design intelligent city initiatives, establish performance indicators, and develop implementation roadmaps. The course supports organizations seeking to improve quality of life, operational efficiency, infrastructure performance, resource utilization, sustainability, and the overall effectiveness of digital urban transformation.

Objectives

- Analyze smart city ecosystems to identify opportunities for applying Artificial Intelligence to urban services and operations.
- Develop a comprehensive understanding of AI technologies and their role in intelligent urban planning and management.
- Evaluate urban data sources and determine their suitability for AI-powered analytics and decision support.
- Apply Predictive Analytics and Machine Learning techniques to support transportation, energy, water, infrastructure, and public service management.
- Design AI-enabled solutions that integrate Artificial Intelligence, Internet of Things, and urban data platforms.
- Improve public and municipal services through intelligent automation, analytics, and AI-supported decision-making.
- Strengthen the use of urban data for strategic planning, resource allocation, service optimization, and operational management.
- Implement best practices in data governance, cybersecurity, privacy protection, AI governance, and responsible Artificial Intelligence.
- Assess organizational and technological readiness for implementing AI initiatives within smart city programs.
- Design an actionable roadmap for implementing Artificial Intelligence across smart city initiatives and measuring their organizational, operational, and social value.

Who Should Attend

The AI in Smart Cities Training Course is designed for executives, city and municipal managers, urban planning directors, digital transformation leaders, CIOs, IT managers, infrastructure managers, transportation managers, energy and utilities managers, sustainability leaders, public service managers, project managers, data specialists, business analysts, and professionals responsible for developing and managing smart city initiatives.

The course is particularly relevant for professionals working in ministries, government entities, municipalities, regulatory authorities, public sector organizations, utilities, transportation organizations, energy companies, telecommunications providers, infrastructure organizations, real estate and urban development organizations, and institutions involved in digital transformation and

smart city development.

It is also suitable for smart city engineers, data engineers, data analysts, AI specialists, IoT professionals, urban planners, digital transformation consultants, cybersecurity professionals, innovation managers, sustainability specialists, and decision-makers seeking strategic and practical knowledge of Artificial Intelligence applications in urban environments.

Learning Outcomes

- By the end of the AI in Smart Cities Training Course, participants will be able to:
- Explain the foundations of smart cities and the strategic role of Artificial Intelligence in urban transformation.
- Identify high-value AI use cases across transportation, energy, water, infrastructure, public safety, and municipal services.
- Analyze urban data to identify operational patterns, trends, risks, and opportunities.
- Apply Predictive Analytics to support urban planning, resource management, and public service optimization.
- Design solutions that integrate Artificial Intelligence, Internet of Things, Big Data, and connected infrastructure.
- Develop Key Performance Indicators (KPIs) for measuring smart city and AI initiative performance.
- Evaluate cybersecurity, privacy, data governance, and AI-related risks within smart city environments.
- Apply responsible AI and urban data governance principles to smart city projects.
- Develop an implementation roadmap for integrating AI into a smart city strategy.
- Evaluate the operational, strategic, sustainability, and public-service value of AI initiatives and align them with digital transformation objectives.

Course Outline

DAY 01

Foundations of Smart Cities and Artificial Intelligence

- Smart city concepts, architecture, and digital ecosystems
- The strategic role of Artificial Intelligence in urban transformation
- Big Data and Internet of Things as foundations for intelligent cities
- From traditional cities to connected and data-driven urban environments

PRACTICAL WORKSHOP

Assessing organizational and urban readiness for AI adoption

DAY 02

AI Applications in Smart City Services

- Artificial Intelligence for smart mobility and traffic management
- Predictive Analytics for energy, water, and utility management
- AI applications in government, municipal, and citizen services
- Computer Vision for public safety, infrastructure monitoring, and urban operations

PRACTICAL WORKSHOP

Identifying and prioritizing AI use cases across urban services

DAY 03

Urban Data and Intelligent Analytics

- Urban data management and smart data sources
- Real-time data analytics and Internet of Things environments
- Predictive analytics for urban planning and decision support
- Smart city dashboards, KPIs, and performance monitoring

DAY 03 — CONTINUED

PRACTICAL WORKSHOP

Designing an AI-enabled analytics model and performance dashboard for an urban service

DAY 04**Governance, Cybersecurity, and Sustainable Smart Cities**

- Data governance and AI governance for smart cities
- Cybersecurity, privacy protection, and secure urban data management
- Responsible AI, transparency, accountability, and ethical considerations
- AI applications for sustainability, energy efficiency, and resource optimization

PRACTICAL WORKSHOP

Designing a governance and risk management framework for a smart city AI project

DAY 05**Smart City AI Strategy and Implementation**

- Developing an Artificial Intelligence strategy within the smart city ecosystem
- Prioritizing AI projects and high-value urban use cases
- Measuring business, operational, social, and sustainability value from AI initiatives
- Future trends in Artificial Intelligence, Smart Cities, IoT, urban analytics, and digital transformation

FINAL WORKSHOP

Developing a comprehensive AI in Smart Cities implementation roadmap, including readiness assessment, prioritized use cases, urban data strategy, AI governance framework, cybersecurity and privacy requirements, KPI architecture, implementation plan, stakeholder engagement strategy, and impact measurement framework focused on operational efficiency, service quality, resource optimization, sustainability, and quality of life.



Register or Request More Information

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