

# Smart City Mobility Applications

## INTRODUCTION

- This Smart City Mobility Applications training course is a comprehensive representation of the emerging and existing trends in one of the main pillars of the Smart City paradigm. The Mobility equates with freedom as the people are enabled to move in one, more or all of the geographies, no matter if we consider the Mobility of a person or goods, materials, information, a group of people, or a demand fulfillment process.
- Smart Mobility is not only embedded in the new Smart Cities or urban settlements and reach new heights of digitally fostered architectural and planning excellence but also to the existing decades and centuries-old cities, which also need to achieve the level of Smart Cities. The main element is there in Big Data, predictive analytics, simulation techniques, digitalization, quantum computing, edge computing, digital twins to turn traffic information into a smart traffic offering and innovative concepts such as Mobility-as-a-Service or Mobility 4.0.

This training course will highlight:

- How to achieve the design of effective, equitable, safe and secure public transport systems
- Integration of mobility-as-a-service (MaaS) and other platforms
- Incorporation and adapting to vehicle innovation
- Standards of Mobility for quality-of-life measures
- Building sustainable infrastructure
- Innovative mobility solutions from public and private sectors
- Digitalization of Mobility and creation of Mobility 4.0 in Smart Cities

## OBJECTIVES

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

- Identify the applications useful for your regions
- Learn the implementation principles of Smart Cities
- Acquire knowledge of Mobility-as-a-Service (MaaS)
- Learn the ways to implement Mobility Applications in new and existing environments
- Adopt the use of digitalization in Mobility
- Use the emerging paradigms of Smart City and Digital Economy

## TRAINING METHODOLOGY

- The participants will receive thorough training on the topics covered in the course outline with the variety of proven adult learning teaching and facilitation techniques, with the case scenarios implemented already as well as planned implementations.

## ORGANISATIONAL IMPACT

- The organization will benefit from understanding the ways of implementing mobility-as-a-service and Smart Mobility applications for the building of Smart Cities and the transformation of existing urban ecosystems into Smart Living Ecosystems.

The participants on this training course, will:

- Enhance their understanding of Smart Cities and Smart Mobility
- Learn how to implement Mobility Applications
- Be able to identify the potential uses of mobility-as-a-service in the cities
- Improve the urban mobility ecosystem
- Adopt the best in class solutions

## PERSONAL IMPACT

- Identifying urban mobility improvement opportunities
- Learning how to address urban mobility problems (delays, parking, urban transit)
- Understanding how to implement sustainable travel behavior
- Learn how to implement Intelligence Transportation System (ITS)
- Understand the issues of traffic congestion
- Apply techniques of micro-mobility management and public transport innovation
- Prepare for the Smart Mobility and review proven smart mobility solutions

## WHO SHOULD ATTEND?

- This Smart City Mobility Applications training course is designed for all the people involved in Smart City projects, mass transport projects, government policy-making, urban development, traffic and transport planning and organization, IT experts, as well as researchers and consultants.

This training course is suitable for a wide range of professionals but will significantly benefit:

- Project Managers
- Road and Transport Industry Representatives
- Professionals in Urban Planning
- Architects Involved in Urban Design
- Technology Engineers and Researchers
- Strategic Development Personnel

## Course Outline

### Smart City and Smart Mobility

- Smart City Introduction
- Smart City Pillars
- Smart Mobility
- Digitalization of Urban Mobility
- Mobility, Safety and Sustainability

### Smart Cities and Mobility Ecosystem

- Digital Ecosystems and Digital Economy
- Mobility as the Economic Growth Factor
- Traffic Management Systems
- How to Guarantee Sustainable Supply Chain System
- The Promise of New Mobility
- Mobility-as-a-Service (MaaS)
- Introduction of MaaS
- MaaS Role Model
- Transport in the Digital Era
- Enabling and Enriching MaaS Services
- Scenarios: Optimizing Routes
- Scenarios: Smart Parking
- Scenarios: Smart Logistics



### Public Transportation and Mobility

- End-To-End Rides
- Multimodal Transportation
- Intermodal Mobility
- Smart Ticketing Solutions
- Scenarios: Public-Private-Partnership in Urban Transport
- Scenarios: Usage-Based Charging

### Mobility of the Future

- Smart Mobility Building Blocks
- Smart Mobility Architecture
- Autonomous Vehicles
- Self-explaining and Self-governing Roads
- Actions to Move to the Future