



ITS – Intelligent Transportation Systems

PIK793-1125 UK-LDN-1



Place: London	Venue: INDUSTRIOUS (1 and 2, 245 Hammersmith Road Floors, London W6 8PW) - TBC	
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**If you can't train them,
you can't blame them!**

Short Description:

Intelligent Transportation Systems (ITS) represent a crucial field of study aimed at revolutionising the way we approach transportation challenges. This training program is meticulously designed to furnish participants with a thorough understanding of the fundamental principles surrounding the design, implementation, and architecture of ITS. By engaging with the engineering processes involved, participants will gain valuable insights into the complexities of transportation systems and how they can be effectively managed. The program emphasises the integration of technology in transportation, enabling learners to grasp the significance of data-driven solutions in enhancing system performance. Furthermore, the training equips participants with the skills necessary to develop efficient and innovative transportation solutions. By fostering a comprehensive skill set, this program not only prepares individuals to tackle current transportation issues but also encourages the exploration of new methodologies for improving safety and efficiency. The knowledge gained through this training will empower participants to contribute meaningfully to the advancement of ITS, ultimately leading to smarter, more sustainable transportation networks that benefit society as a whole.

Course Overview:

At the end of this program, participants will be able to:

- Understand the principles and components of Intelligent Transportation Systems (ITS) architecture.
- Apply engineering processes in the development and deployment of ITS.
- Comprehend the standards that govern ITS.
- Design effective ITS solutions tailored to specific needs.
- Implement ITS solutions efficiently in real-world scenarios.
- Evaluate existing ITS deployments for effectiveness and efficiency.
- Promote innovation and best practices within transportation systems.

TARGET AUDIENCE

- Transportation Engineers.
- Transportation Planners.
- ITS Professionals.
- Technicians.
- Urban Planners.
- City Managers.
- Traffic Management Specialists.

Program Outline:

DAY 1: Foundations of Intelligent Transportation Systems

1. Overview of Intelligent Transportation Systems (ITS).
2. Key Components of ITS.
3. Roles and Functions of ITS.
4. Advantages and Challenges of ITS Implementation.
5. Case Studies Highlighting Successful ITS Applications.

DAY 2: ITS Framework

1. Introduction to ITS Framework.
2. National and Regional ITS Frameworks.
3. Systems Engineering Approaches for ITS.
4. Integrating ITS with Current Infrastructure.
5. Tools and Techniques for Designing ITS Frameworks.

DAY 3: Engineering Methodologies for ITS

1. System Development Life Cycle (SDLC) in the Context of ITS.
2. Analysis and Management of Requirements.
3. Design Specifications and System Architecture.
4. Implementation and Integration Strategies for ITS.
5. Testing, Verification, and Validation Procedures for ITS.

DAY 4: Standards in ITS

1. Introduction to ITS Standards.
2. Major ITS Standards and Protocols (NTCIP, ISO, IEEE).
3. Standards for Data and Interoperability.
4. Security Protocols for ITS.
5. Processes for Compliance and Certification.

DAY 5: Innovations and Best Practices in ITS

1. Emerging Technologies in ITS (Connected Vehicles, IoT).
2. Effective Practices for ITS Deployment and Management.
3. Assessing the Performance and Effectiveness of ITS.
4. Ongoing Improvement Strategies for ITS Projects.
5. Future Directions and Innovations in ITS.