

Advanced Intelligent Transportation Systems





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REF: L1943 DATE: 22 - 26 December 2024 Venue: Cairo (Egypt) - Fee: 4095 Euro

Introduction:

This program is designed to prepare participants for the certification exam only.

This training program is designed to provide professionals with in-depth knowledge and skills in the development, implementation, and management of advanced intelligent transportation systems ITS. It empowers them to lead innovative transportation initiatives within their organizations.

Program Objectives:

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

- Understand the principles and components of intelligent transportation systems.
- Develop and implement advanced ITS solutions to improve transportation operations.
- Utilize data analytics and technologies for effective traffic management.
- Enhance transportation safety and sustainability through ITS applications.
- · Integrate ITS with existing infrastructure and future technologies.
- Prepare for successful completion for the Certification Exam.

Targeted Audience:

- Transportation planners and engineers.
- ITS professionals and project managers.
- Urban planners and city officials.
- Traffic management and control personnel.
- Consultants and advisors in transportation and infrastructure.

Program Outlines:

Unit 1:

Introduction to Intelligent Transportation Systems:

Overview of ITS: Definition, scope, and objectives.



- Key components and technologies in ITS.
- The role of ITS in modern transportation networks.
- Benefits and challenges of implementing ITS.
- Case studies on successful ITS projects.

Unit 2:

ITS Technologies and Applications:

- Advanced traffic management systems ATMS.
- Intelligent vehicle technologies and connected vehicles.
- Public transportation systems and smart transit solutions.
- Freight and logistics management using ITS.
- Emerging technologies in ITS, such as AI and IoT.

Unit 3:

Data Analytics and Traffic Management:

- Data collection and analysis techniques for ITS.
- Utilizing big data and real-time analytics in traffic management.
- Traffic prediction and modeling tools.
- Incident detection and management using ITS.
- Implementing adaptive traffic control systems.

Unit 4:

Enhancing Transportation Safety and Sustainability:

- ITS applications for improving road safety.
- Environmental impact reduction through ITS.
- Sustainable transportation solutions and smart cities.
- Integration of renewable energy sources in ITS infrastructure.
- Policy and regulatory considerations for sustainable ITS.



Unit 5:

Integration, Future Trends, and Exam Preparation:

- Integrating ITS with existing transportation infrastructure.
- Future trends and innovations in intelligent transportation systems.
- Preparing for ITS certification exams.
- Tips for successful exam taking.
- Summary and final review.

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