Transportation Systems with Intelligence

Creating the Future's Path

Introduction

The topics of discussion in this Course Transportation Systems with Intelligence (TSI) training event include applications and developments in ITS as well as methods for assessing TSI characteristics.

People's mobility has become an essential part of daily life. As parking lots and roads get busier, infrastructure investment is shifting from basic infrastructure to intelligent infrastructure. This is because basic infrastructure, which is built to have the highest capacity, is largely underutilized outside of peak hours and typically goes underutilized for the majority of the time.

Instead of expanding physical infrastructure, Transportation Systems with Intelligence (TSI) employ electronics, information, and communications technologies to improve transportation while lowering costs, boosting return on investment, and lessening environmental impact.

The foundation of Transportation Systems with Intelligence (TSI) is a multitude of data on transportation, users, participants, and vehicles.

Additionally, the Transportation Systems with Intelligence (TSI) systems have a wide range of applications. They can be used on vehicles to improve safety, shorten travel times, cut down on emissions, simplify ticketing and payment, and provide better information; they can be applied to infrastructure to improve road network management and productivity; and they can be used to connect all of the transportation sectors to improve mobility and accessibility. Additionally, they can serve as the foundation for simulations.

The main points of this Course N Carry training lecture are:

- Applications of Transportation Systems with Intelligence (TSI) Principles and Techniques
- The architecture of Transportation Systems with Intelligence (TSI)
- Project management for Transportation Systems with Intelligence (TSI)
- Design and modernization of transportation management centres
- Transportation Systems with Intelligence (TSI) technology and communication between vehicles
- Self-driving vehicles

- Traffic simulation and Transportation Systems with Intelligence (TSI) integrated
- Application of Transportation Systems with Intelligence (TSI)
- Risks associated with Transportation Systems with Intelligence (TSI) and ways to mitigate them

Objectives

By the time this Course N Carry training course ends, you'll know how to:

- Determine the Transportation Systems with Intelligence (TSI) project management tenets.
- Discover the specifics of the design of Transportation Systems with Intelligence (TSI).
- Obtain the expertise required to carry out Transportation Systems with Intelligence (TSI) inspections and to implement ITS projects.
- Find out how to reduce risk when working on Transportation Systems with Intelligence (TSI) projects.
- Adopt the use of simulation for prediction and control of traffic and transportation
- Utilize both new and current technology to raise the standard of service for transportation and traffic.

Training Methodology

In-depth instruction on the topics included in the seminar outline will be provided to participants, and the teacher will employ a range of effective adult learning teaching and facilitation strategies with an emphasis on practical examples. The planning of Transportation Systems with Intelligence (TSI) projects, conducting the infrastructure assessment of ITS, and providing an introduction to traffic simulation programs are all part of the seminar approach.

Organizational impacts

Understanding the guiding principles of urban mobility and transport sector improvement will be beneficial to the firm since delays in traffic and transportation have a cascading effect on the industry as a whole. Attending this course will assist enterprises, governments, and institutions who wish to adopt Industry 4.0 or are currently applying its principles to colliding with an accident if they do not enhance their transportation systems.

Attendees of this Course N Carry training program will:

- Hone their intellectual abilities

- Discover how to implement infrastructure for the adoption of Transportation Systems with Intelligence (TSI).
- Capable of optimizing the administration of Transportation Systems with Intelligence (TSI) and adjusting to novel developments,
- Introduce more affordable new technology,
- Reduce investment and raise the quality of service in the transportation industry.
- Run traffic and transportation project simulations.
- The organization will become more cost-effective and adaptive while providing the best possible service to its stakeholders and the general public.

Personal Imapct

The following will help the participants better grasp data science and data analytics:

- Recognizing the hazards associated with implementing Transportation Systems with Intelligence (TSI) projects
- Acquiring the necessary knowledge to implement the Transportation Systems with Intelligence (TSI) architecture
- Recognizing how to integrate TSI improvements with current architecture
- Discover how to use mobility data for transportation and traffic prediction.
- Recognize the project lifecycle of Transportation Systems with Intelligence (TSI)
- Utilize simulation tools to solve Transportation Systems with Intelligence (TSI) challenges.
- Acknowledge how applicable new trends are
- Get ready for the era of autonomous automobiles

Who should attend?

This Course N Carry training course is intended for everyone working in the fields of urban development, traffic and transportation planning and organization, IT specialists, and management, analytics, optimization, project management, and transportation optimization researchers and consultants.

A wide range of professionals can benefit from this Course N Carry training course, but the following are particularly noteworthy:

- Scholars and Experts in Traffic Engineering
- Experts in Urban Planning
- Architects working in urban planning
- Supervisors of Projects
- Chief Information Officers (CIOs), Chief Technology Officers (CTOs), and Technology Engineers
- Personnel for Strategic Development

- Researchers and Engineers in Transportation

Course Outline

Day 1

Transportation Systems with Intelligence (TSI) Overview

- The History of Intelligent Transport Systems (ITS)
- Design Principles for Transportation Systems with Intelligence (TSI)
- Architecture of Transportation Systems with Intelligence (TSI)
- Transportation Systems with Intelligence (TSI)) based on Infrastructure
- Vehicle-based Transportation Systems with Intelligence (TSI)
- Based on transport mode, Transportation Systems with Intelligence (TSI)

Day 2

Project Management for Transportation Systems with Intelligence (TSI)

- Determining the Needs and Status of Transportation Systems with Intelligence (TSI)
- Project Lifecycle for Transportation Systems with Intelligence (TSI)
- Transportation Systems with Intelligence (TSI) Projects, both ongoing and on-demand
- Risk Assessment for Transportation Systems with Intelligence (TSI) Projects
- Development and Modernization of Transportation Systems with Intelligence (TSI)
- Inspection and Quality Control of Transportation Systems with Intelligence (TSI) Systems

Day 3

Design of Transportation Systems with Intelligence (TSI)

- Flow of Traffic
- Traffic jams
- Repeated Traffic Jams
- Congestion Relating to Incidents
- The Road Rehabilitation Project Caused Traffic Jams
- Transportation Systems with Intelligence (TSI)) Information
- Data for Response Services and Controllers
- Details for Users

Day 4

Centres for Transport and Traffic Management

- Functions of the Transport and Traffic Management Centre
- Structure of the Transport and Traffic Management Centre
- Collecting and Analysing Data
- Infrastructure for Adaptive Transportation Systems with Intelligence (TSI)
- Using Simulation to Implement Transportation Systems with Intelligence (TSI): Active Traffic Management

Day 5

Trends and New Technologies in Transportation Systems with Intelligence (TSI)

- Hyperloop
- Communication between Vehicles
- Self-driving vehicles
- Utilizing Mobility Data in Urban Development and Planning
- Transportation Systems with Intelligence (TSI) with Social Media