Arabian Institute For Training

Traffic and Transport Engineering Fundamentals

INTRODUCTION

- In the era of strong mobility and connection, solving some traffic and transport problems leads to the general knowledge of all traffic modes. Employees who understand the big picture can handle even more complicated issues in the transportation and transportation industry. On the other hand, organizations that can make optimum decisions and which can reliably predict future trends and behaviors can substantially enhance their ability to compete on the global stage.
- This Traffic and Transport Engineering Fundamentals training course will give comprehensive knowledge and understanding as a whole traffic and transport systems lead in understanding the traffic process, and understanding the traffic process is the first step of mobility in the world. How to solve some of the traffic issues and one of them, in general, is: "Why It's Getting Worse and What We, as Humans, Can Do?"

This training course will highlight:

- Air Traffic Engineering
- Road Traffic Engineering
- Rail Traffic Engineering
- Water Traffic Engineering
- Telecommunication Traffic Engineering
- Multimodal Transport

OBJECTIVES

- This Traffic and Transport Engineering Fundamentals training course is focused on providing the delegates with adequate knowledge of Traffic and Transports Engineering.

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

- Deal with Technical Characteristics of all Traffic Mods
- Analyze Traffic Modes and their Characteristic
- Identify Market Demand for suitable Traffic mods
- Assess and Manage Traffic Modes
- Address Key Issues Faced during Traffic Project Lifecycle
- Perform more confidently in Negotiations with other people in the Traffic and Transport Industry

TRAINING METHODOLOGY

- This Traffic and Transport Engineering Fundamentals training course will use proven adult learning techniques, with the focus on exercise, case studies, SWOT Analysis, and solving of actual problems through the guided examples combined videos, photos, and questioning. It will ensure that all learners can have the best possible chance of comprehending the required knowledge and skills.

ORGANISATIONAL IMPACT

As a result of sending their employees on this Traffic and Transport Engineering Fundamentals training seminar, organizations can expect to benefit from:

- An awareness and understanding of the traffic and transports modes and systems
- Emphasis is given to ensure that the traffic modes are appropriate to the organizations represented
- The provision of accurate solutions to complex problems
- How can new technologies assist in improving the quality and reliability of transport and traffic?
- Shared experiences of others
- Carefully selected examples and case studies used to illustrate the traffic mods discussed

PERSONAL IMPACT

- The participants will obtain fundamental knowledge of all traffic models. With the range of practices exercise that will learn all aspects of traffic and transport engineering, their differences and how to connect them. They will be able to integrate all the information about the traffic sector and will know how to solve some complex problems regarding general traffic and transport issues.

This training course will personally benefit the participants by providing:

- Confidence in conducting traffic issue
- Familiarize the characteristics of all traffic and transport modes
- The ability to recognize which types of traffic modes are relevant for particular kinds of issues
- Define the potential problems and find the solution before they show-up
- Enough situational knowledge to judge when a technique will lead to incorrect conclusions
- Improved knowledge of traffic and transport safety issues

WHO SHOULD ATTEND?

- This Traffic and Transport Engineering Fundamentals training course is designed for all decision-makers and engineers within the political, technical, traffic and transport and environmental sectors.

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

- Consultants and Contractors
- Researchers, Consultants and all Practitioners in Traffic and Transport Engineering; involving in Management, Analytics, Optimization, Project Management and Traffic Optimization
- Strategic Development Personnel in Government
- Engineering Technologist and Project Managers working for Local Government, or State and Federal Agencies
- Consultants and Contractors
- Those who need to know more about Traffic and Transport Engineering
- People involved in big corporations where comprehensive knowledge of traffic is needed

Course Outline

Air Traffic

- Introductions
- Traffic Modes
- Air Traffic
- Passenger Air traffic
- Cargo Air traffic

Road Traffic Engineering

- Traffic Planning
- Traffic Management and Control
- Traffic Design
- Traffic Safety
- SWOT Analyses: Types of Road Transport

Rail Traffic Engineering and Water Traffic Engineering
Rail Traffic Engineering

- Long-distance Trains: Cargo and Passenger Trains
- Metro
- Light Metro
- Underground Metro

Water Traffic Engineering

- Passenger and Cargo Vessels
- Container Shipping

Multimodal Transport and Telecommunication Traffic
Multimodal Transport

- Intermodal Process
- Gate to Gate Service

Telecommunication Traffic

- Transmitting the Data
- Optical Cables and Transmission
- The Connected World

Information Systems

- Traffic and Transport Management Center Structure
- Traffic and Transport Management Center Functions
- Information to Controllers and Services
- Information to Users
- Intelligent Traffic and Transport Systems
- New Technologies and Trends

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