

## Multimodal Transportation Systems

**No of Sessions-** 30 hours course || 20 Sessions

**Target Audience-** Mid Level managers and frontline executives

### Introduction

The unprecedented modernization and expansion of Multimodal Transportation Systems will require substantial new knowledge and understanding of field-deployable technologies. The course aims to provide mid-level managers and frontline executives insights into modern concepts and management of Multimodal Transportation Systems. The course promotes the exchange of the latest scientific and technological innovations in Multimodal Transportation Systems, and to advance the state-of-the-art management and practices for various types of Multimodal based transportation systems.

### Objectives-

- To help professionals to streamline decision-making to minimize errors that can lead to longer transit times, increased costs of transit, unnecessary inventory carrying costs, fines for non-compliance, and increased handling and damage
- To help professionals to understand the safety and sustainability aspects of multimodal transportation system

**Pre-Requisite:** Basic understanding about Multimodal Transportation Systems

**Pedagogy/Teaching Method:** Lectures, Case Studies, Field visits and Group exercises and Discussion in the class

### Reference Materials:

- Claus Hyldager; Ceo, Nisomar. Logistics And Multi-Modal Transport: Isbn: 978-1 - 908833-61-7. (Recent edition)
- Slim Hammad. Multimodal Transport Systems. Wiley publication (Recent edition)

## Session Plan:

Title	Topics	Videos	Reading Material / Case Study
<b>Introduction to Multi-Modal Transport</b>	Concept of Multi-Modal Transport, Multi model network and transportation and multi modes transport planning. Rail, Road, Air, Ship and container transportation	<p><b>Video 1-</b> Transportation Planning: The Role of Transportation Systems in Social and Economic Life.</p> <p><b>Video 2-</b> Intermodal Transportation   Supply Chain Manufacturing Principles</p> <p><b>video 3-</b> what is intermodal freight transport? what does intermodal freight transport mean?</p>	<p><b>Case 1:</b> Transport Corporation of India (A): The Cross-selling Conundrum. By: V.G. Narayanan; Saloni Chaturvedi (HBR Case).</p> <p><b>Case 2:</b> Highly Confident Transportation: Dynamics of IT Application in Supply Chain Management. By: Isabella Chan; James Lin; Benjamin Yen (HBR Case).</p>
<b>Parking and cargo Management</b>	Parking and cargo management of train, truck and container. Design, network and space utilization during container and cargo management and vehicle scheduling	<p><b>video-1:</b> what is containerization?</p> <p><b>video 2:</b> how container ports work: logistics of intermodal transport</p>	
<b>Financial and costing in multimodal transportation system</b>	Documentation and Custom Procedures. Costing & Pricing of Multimodal Transport Services		
<b>Logistics &amp; Sustainable Supply Chain Management</b>	Transportation Sustainability, Dangerous good transportation risk and safety	<p><b>Video 1:</b> Supply Chain &amp; Logistics Management Transportation: Network and Decision   AKTU Digital Education</p>	

<b>Role of IT in Transportation systems</b>	Intelligent Transportation Systems	<b>Video 1:</b> Information Technology in Logistics	
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### Learning outcomes:

- Understand and capitalize on the comparative efficiencies of various modes of transportation and the procedures and documentation required for each
- Streamline the process of getting products to market, optimizing the secondary transportation services that complement intra-modal and inter-modal supply chain operations.
- Optimize the use of specialized intermediaries (freight forwarders, transportation brokers, customs brokers), knowing when to use them, how to evaluate their cost and quality and learn ways to minimize the time spent coordinating their services.
- Apply operational insight to negotiate more effectively and confidently with all stakeholder groups.
- Reduce or avoid personal and corporate exposure to fines, seizure of goods, environmental damage and criminal charges by recognizing relevant safety standards and transportation legislation, including the Transportation of hazardous materials.