

Introduction:

This advanced course on logistics and material management thoroughly examines the significance and influence of logistics and supply chain management within organizations. It emphasizes supplier management in purchasing, transportation models, and inventory models, focusing on cost efficiency and optimization.

The course is highly interactive, allowing participants to practice and refine essential skills in advanced logistics and materials management. It prepares attendees to strategically manage international shipping systems and inventory control.

Throughout the course, examples of global best practices are shared, enabling participants to internalize the concepts and apply them effectively in their professional roles after the training.

What is Material Management?

Material management is a fundamental element in ensuring supply chain efficiency and procuring quality goods at optimized costs. This course provides an in-depth understanding of material management, helping participants develop the competencies needed to become effective material managers or specialists.

Participants have the opportunity to earn a certification in material management, which is often necessary for career advancement in the field.

Target Audience:

- Senior professionals involved in logistics functions.
- Personnel working in purchasing, warehousing, and inventory control.
- Teams responsible for finance and materials management.

Course Objectives:

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

- Understand the impact of logistics, materials management, and purchasing functions on both internal and external organizational operations.
- Apply international logistics and freight procedures along with documentation requirements.
- Recognize the importance of effective resource planning.
- Develop optimized workflows and manage financial aspects such as cash flow and cost reduction.
- Implement selective inventory strategies to manage stock effectively.
- Create specific action plans to enhance their roles and benefit their organizations.

Targeted Competencies:

Upon completion, participants will gain skills in:

- Mapping supply chain and internal processes to achieve optimization.
- Managing risks involving both internal departments and external partners.
- Understanding the financial and customer service impacts of advanced logistics management.
- Integrating logistics forecasting with peak demand and resource planning to optimize inventory management costs.
- Using inventory models to effectively manage and reduce inventory levels.
- Applying global best practices in purchasing, inventory control, and materials management.

Course Content:

Unit 1: The Role of Logistics and Supply Chain Management in Modern Businesses:

- Assess the role of logistics within current business operations.
- Explore the evolution and dynamics of supply chain management.
- Learn to apply the Supply Chain Operations Reference Model.
- Identify various supply chain instabilities and risks including internal, political, economic, social, technological, legal, environmental, inventory, disruption, security, and procurement risks.

Unit 2: Linking Strategies and Improvement in Cost and Productivity in Procurement:

- Develop spending analysis to create purchase price indices.
- Examine total cost of ownership concepts.
- Analyze supplier portfolios using Kraljic's matrix and Porter's five forces.
- Formulate strategic purchasing plans.
- Understand the effect of order cycles and lead times on purchasing.
- Plan and organize negotiation strategies.

Unit 3: Strategic Supply in Materials Management:

- Establish formal procedures for stock decision-making.
- Review and manage safety stock levels and reorder points.
- Apply and enhance minimum and maximum inventory systems.
- Utilize material forecasting.
- Catalog materials to improve purchasing processes.
- Develop bills of material to manage parts effectively.

Unit 4: Effective Inventory Planning and Control:

- Set clear inventory goals and objectives.
- Implement rationalization strategies.
- Calculate carrying costs and apply economic order quantity theory.
- Use Pareto analysis to focus on cost-effective inventory.
- Improve material identification and coding systems.
- Establish best practices for physical control of materials.
- Enhance record accuracy and cycle counting processes.

Unit 5: Tactical and Operational Approaches in Transportation Economics:

- Understand the role of transportation within logistics.
- Recognize key strategic decisions in transportation management.
- Review types of transportation modes and intermodal systems.
- Learn international commercial terms related to transportation and liability.
- Identify considerations for transporting hazardous materials.

Conclusion:

This advanced course clarifies the core elements of materials logistics management and explains the close relationship between logistics and material management.

Participants will learn how to apply materials logistics theory to practical scenarios and understand the various roles from technician to materials and logistics manager, including their responsibilities.

This course highlights the nuances of logistics and material management, equipping professionals to manage materials efficiently within logistics operations and preparing them for further education in logistics and materials management if desired.