

Inventory, Demand Forecasting & Warehouse Optimization

COURSE OVERVIEW

This course explains how inventory management, demand forecasting, and warehouse optimization work together to improve supply chains. The curriculum elaborates on analytical tools, automation technologies, and AI-powered systems that help organizations anticipate customer demand, manage stock levels in real-time, and streamline warehouse operations for scalability and agility in an era of digital transformation, e-commerce growth, and global supply chain volatility, where precision, visibility, and adaptability are key to maintaining competitiveness. Participants will explore modern forecasting models, inventory planning techniques, and warehouse design systems that enhance operational efficiency, minimize costs, and improve service levels.

WHO SHOULD ATTEND?

This course is designed for supply chain managers, operations directors, inventory control officers, warehouse managers, procurement and Logistics Professionals, demand planners, forecasting analysts, distribution and fulfillment center supervisors. It is equally valuable for manufacturing, retail, and e-commerce operations teams, data analysts, AI Specialists in Supply Chain Functions, business consultants and continuous improvement practitioners, ERP and implementation professionals seeking to enhance efficiency and decision-making in inventory and warehouse operations.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Understand the strategic relationship between forecasting, inventory, and warehousing in supply chain performance.
- Apply quantitative and qualitative forecasting methods to anticipate market and customer demand.
- Develop dynamic inventory models to maintain the right balance between availability and cost.
- Analyze and segment inventory using ABC, VED, and XYZ classification systems.
- Design efficient warehouse layouts and workflow processes for optimized space and labor utilization.
- Integrate digital and automated warehouse systems (WMS, RFID, IoT) for real-time visibility.
- Identify and mitigate risks associated with stockouts, overstocking, and obsolescence.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- How data-driven forecasting enhances operational planning and responsiveness.
- Inventory optimization models such as EOQ, JIT, and safety stock calculation.
- The critical role of warehouse automation and robotics in efficiency and accuracy.
- Techniques to balance service level objectives with working capital constraints.
- How to design flexible warehouse networks that support omnichannel fulfillment.
- The use of AI, ML, and predictive analytics for smarter inventory planning.
- Global best practices for sustainable, technology-enabled warehouse and inventory management.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate.
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded.