MERCURY

Production and Inventory Management

2 – 6 August 2027
Boston (USA)



Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

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Production and Inventory Management

Ref: 121238_1071753 **Date:** 2 – 6 August 2027 **Location:** Boston (USA) **Fees:** 7500 Euro

Introduction

The Production and Inventory Management course provides professionals with essential knowledge to optimize manufacturing processes and inventory control. It focuses on improving operational efficiency, reducing costs, and maintaining quality standards. Participants will explore production planning, inventory strategies, and demand forecasting. The course emphasizes practical applications and decision-making tools. It integrates modern methodologies to streamline production workflows. By the end, participants will be equipped to manage resources effectively and support organizational growth.

Targeted Groups

This Production and Inventory Management course targets professionals seeking specialized knowledge and skills:

- Production managers are seeking efficiency improvements.
- Inventory controllers aim for accurate stock management.
- Supply chain coordinators are improving workflow.
- Operations supervisors are enhancing production planning.
- Logistics managers optimize material handling.
- Quality assurance personnel ensure consistency.
- Business analysts focus on cost reduction.
- Entrepreneurs seeking inventory optimization techniques.

Course Objectives

Participants will achieve the following objectives by the Production and Inventory Management course:

- Understand production planning fundamentals.
- Analyze inventory types and control methods.
- Apply demand forecasting techniques.
- Implement efficient stock management strategies.
- Reduce operational costs through optimization.
- Monitor production processes effectively.
- Align inventory levels with business needs.
- Improve decision-making in manufacturing operations.
- Integrate supply chain principles with production.
- Enhance overall operational efficiency and resource utilization.

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Targeted Competencies

Participants will gain the following competencies during the program:

- Efficient production scheduling skills.
- Inventory tracking and control proficiency.
- Demand forecasting and planning ability.
- Knowledge of cost management techniques.
- Ability to optimize resource allocation.
- Skill in monitoring production performance.
- Expertise in supply chain coordination.
- The capability to reduce waste and excess inventory.
- Analytical skills for operational decision-making.
- Practical application of production and inventory tools.

Studying Scenarios

In this training, participants will develop their skills through the analysis of the following scenarios:

- Production bottleneck identification and solutions.
- Inventory shortage and overstock management.
- Demand forecasting adjustments for seasonal trends.
- Resource allocation for optimal production output.
- Supplier delays and contingency planning.
- Cost reduction strategies in production workflows.
- Workflow improvement in manufacturing processes.

Course Content

Unit 1: Fundamentals of Production Management

- Introduction to production systems and operations.
- Overview of manufacturing workflows.
- Types of production methods and processes.
- Key performance indicators in production.
- Resource allocation strategies.
- Role of technology in production optimization.

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Unit 2: Inventory Management Essentials

- Definition and importance of inventory control.
- Types of inventory and classification methods.
- Stock level monitoring techniques.
- Safety stock and reorder point calculations.
- Inventory turnover analysis.
- Inventory cost management.
- Common inventory challenges and solutions.

Unit 3: Demand Forecasting and Planning

- Introduction to demand forecasting techniques.
- Quantitative vs. qualitative forecasting methods.
- Historical data analysis for forecasting.
- Seasonal and trend adjustments.
- Sales and operations planning integration.
- Forecast accuracy measurement.

Unit 4: Production Scheduling and Workflow Optimization

- Principles of production scheduling.
- Job sequencing and prioritization methods.
- Capacity planning and resource allocation.
- Lean manufacturing concepts for efficiency.
- Reducing production bottlenecks.
- Scheduling software and tools overview.

Unit 5: Integrated Supply Chain and Cost Control

- Supply chain fundamentals and coordination.
- Vendor management and procurement strategies.
- Just-in-time inventory principles.
- Cost control techniques in production.
- Risk management in inventory and production.
- Continuous improvement and performance monitoring.

Final Insights & Key Takeaways

Participants will be able to optimize production workflows and manage inventory efficiently. They will apply practical strategies to enhance operational performance and cost-effectiveness.