

# Mastering Operations & Supply Chain Management

Unlock your potential in the dynamic world of Operations and Supply Chain Management. This program provides a comprehensive journey from foundational concepts to practical, real-world application.



# Program Overview: Structure & Goals

## Program Duration:

**2 Months Online** (Foundational & Core Concepts)

**1 Month Offline** (Industry Immersion & Integrated Project)

## Program Goal:

Gain a comprehensive understanding of supply chain fundamentals, logistics, distribution, inventory control, forecasting, scheduling, quality management, ERP systems, and lean methodologies.



Key Outcome:

# Core Topics Covered

Our curriculum blends essential theoretical knowledge with practical applications, preparing you for real-world challenges in operations.

1

## Supply Chain Fundamentals

- SCM, Logistics, Distribution

2

## Inventory Control

- EOQ, ABC Analysis, MRP, JIT

3

## Forecasting & Quality

- Demand Planning, Six Sigma Basics

4

## ERP & Lean Systems

- SAP, Oracle, TQM, Kaizen

The program culminates in a mini-project where you'll design a complete supply chain plan for a retail business, integrating all learned concepts.

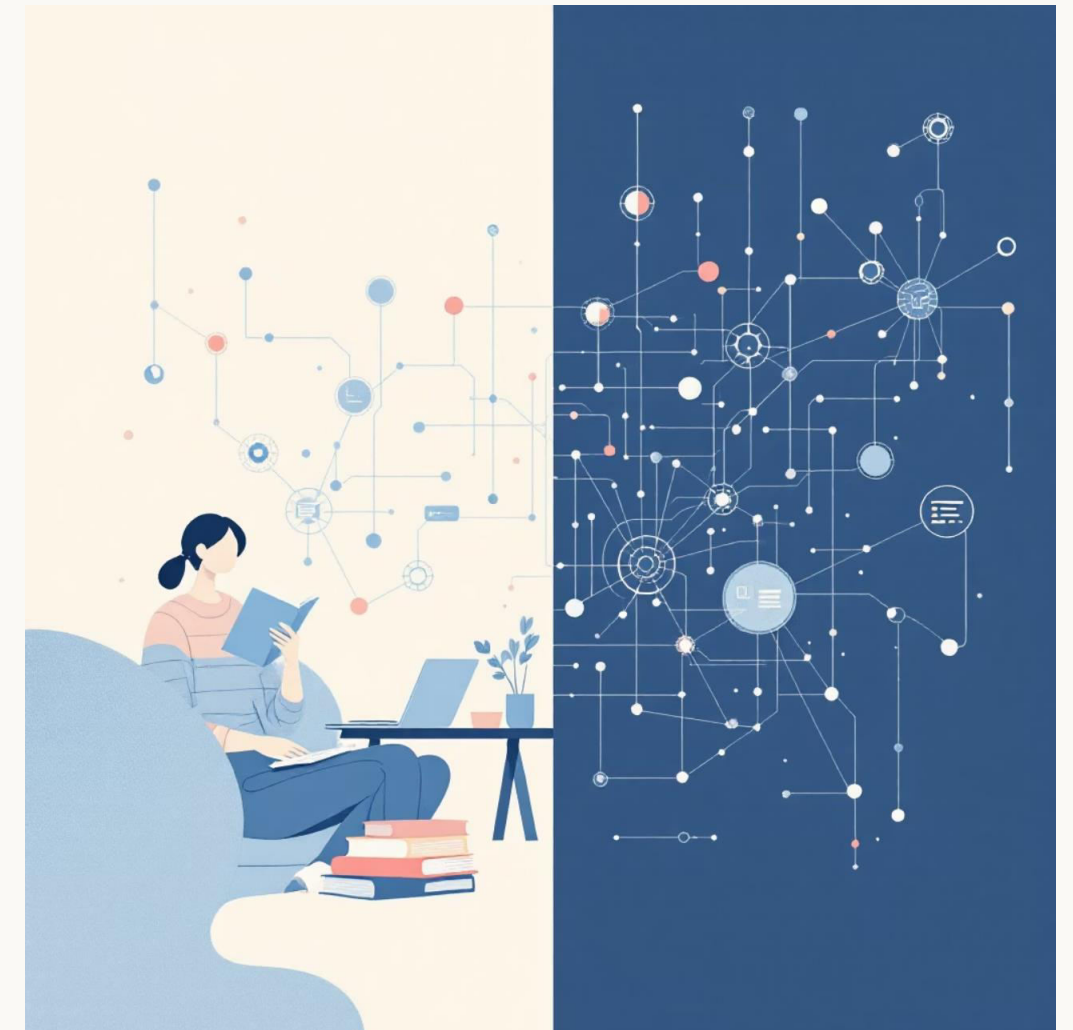
# Phase 1: Foundational & Core Concepts (Online)

## Months 1 & 2: Online Intensive

This online phase establishes a strong theoretical foundation in supply chain principles, operational strategies, and key planning techniques. You'll engage in conceptual problem-solving, analytical calculations, and an introduction to relevant planning tools.

### Month 1: Fundamentals & Inventory

- **Week 1:** SCM & Logistics Fundamentals, Case Studies (Apple, Amazon)
- **Week 2:** Distribution & Network Design, Transportation Modes
- **Week 3:** Inventory Control (EOQ, ROP, Safety Stock)
- **Week 4:** Advanced Inventory (ABC, Cycle Counting, MRP, JIT)



# Month 2: Planning, Quality & Systems (Online)

## Mastering Strategic Tools

Building on foundational knowledge, Month 2 focuses on advanced planning, quality control, and an overview of enterprise systems crucial for modern supply chain management.

- Week 5: Forecasting & Demand Planning

Explore qualitative and quantitative forecasting methods and master demand planning techniques, including CPFR. Hands-on exercises will focus on measuring forecast accuracy.

- Week 7: Quality Management & Six Sigma

Delve into Total Quality Management (TQM), Quality Control Tools, Statistical Process Control (SPC), and the basics of Six Sigma's DMAIC methodology.

- Week 6: Production Planning & Scheduling

Learn aggregate planning, Master Production Schedule (MPS), and various scheduling principles and sequencing rules. Develop simple aggregate plans and apply scheduling rules.

- Week 8: ERP Systems & Lean Methodologies

Gain an overview of leading ERP systems (SAP, Oracle), understand Lean principles (7 Wastes), Total Productive Maintenance (TPM), and Kaizen for continuous improvement.



# Phase 2: Industry Immersion & Integrated Project (Offline)

## Month 3: Practical Application



This intensive offline phase is where theory meets practice. You'll apply all learned Operations & Supply Chain Management concepts to design a comprehensive supply chain plan for a retail business.

- **Project-Based Learning:** Simulate a real-world SCM task under direct mentorship.
- **Team Collaboration:** Work in teams to tackle complex supply chain challenges.
- **Real-World Scenarios:** Focus on a specific hypothetical retail business, analyzing its unique demand characteristics and challenges.

# Capstone Mini Project: Retail Supply Chain Plan

## Week 9: Project Kick-off & Business Analysis

Upon arrival, teams are formed and assigned mentors. A specific hypothetical retail business (e.g., online fashion boutique, organic grocery) will be provided as a case study.

- **Business & Product Analysis:** Deep dive into the retail model, target market, product types, and demand characteristics (seasonality, variability).
- **Identify Challenges:** Pinpoint typical SCM challenges for the chosen retail sector (e.g., stockouts, excess inventory, long lead times).



# Supplier Management & Logistics Strategy

## Week 10: Building the Supply Network

### Supplier Identification & Selection

Identify potential supplier types (local, overseas) based on product categories and design a preliminary supplier matrix. Define key criteria like cost, quality, lead time, and flexibility.

### Supplier Matrix Design

Create a comprehensive matrix for key product categories, including risk assessment for supply chain disruption and quality issues, ensuring robust sourcing.

### Inbound Logistics Strategy

Plan product transportation from suppliers to the retail business's facilities, considering direct shipping, cross-docking, and consolidation centers. Evaluate warehousing needs.



# Inventory Strategy & Operations Process Design

## Week 11: Optimizing Flow & Quality

This week focuses on crucial aspects of inventory management and operational processes, ensuring efficient product flow and quality control from order to delivery.

- **Inventory Strategy:** Develop a tailored inventory control strategy for product types using ABC, EOQ/ROP, JIT/Lean, and safety stock calculations.
- **Order Fulfillment:** Design the entire process from customer order to final delivery, including picking, packing, and shipping.



# Final Project & Career Development

## Week 12: Capstone & Beyond

**Supply Chain Plan Finalization:** Consolidate all elements into a comprehensive plan, including technology overview (SCM software, analytics), key performance indicators (KPIs), and risk mitigation strategies.

**Project Presentation:** Present your plan to a panel of mentors and industry guests, simulating a professional review.

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**Career Development Workshops:** Focus on resume building, LinkedIn optimization, networking strategies, and mock interviews tailored for supply chain roles.

