Strategic Operations Management in Manufacturing Training Course

Professional Development Training Course Outline

Category	Manufacturing	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Strategic Operations Management in Manufacturing is a high-impact, industry-aligned training program designed to equip professionals with advanced capabilities in lean manufacturing, production optimization, supply chain resilience, Industry 4.0 integration, and operational excellence strategy. In today's highly competitive global manufacturing landscape, organizations must continuously improve efficiency, productivity, quality control, cost reduction, and digital transformation readiness to remain profitable and sustainable. Strategic Operations Management in Manufacturing Training Course delivers practical frameworks for aligning operational execution with corporate strategy while leveraging modern tools such as AI-driven analytics, smart factories, IoT-enabled production systems, and predictive maintenance models.

The program focuses on building strong decision-making capabilities in operations planning, capacity management, workflow optimization, Six Sigma quality systems, and agile manufacturing strategies. Participants will gain hands-on knowledge of how to design resilient manufacturing systems that respond effectively to disruptions, demand fluctuations, and global supply chain risks. By integrating continuous improvement methodologies, operational KPIs, and strategic process engineering, this training ensures professionals can lead manufacturing transformation initiatives and drive measurable business performance improvements.

Programme Curriculum

Strategic Operations Management in Manufacturing Training Course

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Course Duration

5 days

Course Objectives

1. Master Strategic Operations Planning for modern manufacturing ecosystems
2. Implement Lean Manufacturing and Waste Reduction Strategies
3. Optimize Production Scheduling and Capacity Utilization Models
4. Develop expertise in Supply Chain Resilience and Risk Management
5. Apply Six Sigma Quality Improvement Methodologies (DMAIC, DMADV)
6. Integrate Industry 4.0 and Smart Factory Technologies
7. Enhance Operational Efficiency through Process Re-engineering
8. Improve Inventory Optimization and Demand Forecasting Accuracy
9. Strengthen Total Productive Maintenance (TPM) Systems
10. Leverage AI and Data Analytics for Operational Decision-Making
11. Build capability in Cost Optimization and Value Stream Mapping
12. Design Agile Manufacturing Systems for Market Responsiveness
13. Lead Continuous Improvement and Operational Excellence Programs

Target Audience

1. Manufacturing Operations Managers
2. Production Supervisors and Plant Managers
3. Industrial Engineers and Process Engineers
4. Supply Chain and Logistics Professionals
5. Quality Assurance and Quality Control Managers
6. Lean Six Sigma Practitioners
7. Operations Strategy Consultants
8. Engineering and Manufacturing Graduates entering industry roles

Course Modules

Module 1: Strategic Operations Management Foundations

- Core principles of operations strategy alignment

- Manufacturing value chain analysis
- Competitive advantage through operations
- KPIs for manufacturing performance
- Strategic vs tactical operations decisions
- **Case Study:** Toyota Production System and global manufacturing excellence model

Module 2: Lean Manufacturing and Waste Elimination

- Lean principles and 7+1 wastes
- Kaizen continuous improvement culture
- Just-in-Time (JIT) production systems
- Value Stream Mapping (VSM) techniques
- 5S workplace organization system
- **Case Study:** Boeing lean transformation in aircraft assembly

Module 3: Production Planning and Control Systems

- Master production scheduling (MPS)
- Material Requirements Planning (MRP)
- Capacity planning and load balancing
- Shop floor control systems
- Real-time production tracking systems
- **Case Study:** Samsung electronics production scheduling optimization

Module 4: Supply Chain Strategy and Resilience

- End-to-end supply chain design
- Risk management in global sourcing
- Supplier relationship management
- Demand forecasting and responsiveness
- Logistics optimization strategies
- **Case Study:** Apple global supply chain resilience during disruption

Module 5: Quality Management and Six Sigma Systems

- Statistical process control (SPC)
- DMAIC methodology implementation
- Defect reduction strategies
- Root cause analysis tools
- Quality audit systems
- **Case Study:** Motorola Six Sigma implementation success story

Module 6: Industry 4.0 and Smart Manufacturing

- IoT-enabled manufacturing systems
- Digital twin technology applications
- Robotics and automation integration
- AI-powered predictive maintenance
- Cyber-physical production systems
- **Case Study:** Siemens smart factory transformation in Germany

Module 7: Operations Analytics and Performance Optimization

- Data-driven decision-making models
- OEE (Overall Equipment Effectiveness) improvement
- Predictive analytics in manufacturing
- Dashboarding and KPI tracking systems
- Cost-performance analysis techniques
- **Case Study:** General Electric digital industrial analytics transformation

Module 8: Operational Excellence and Continuous Improvement

- Continuous improvement frameworks
- Change management in manufacturing
- Benchmarking best practices
- Employee engagement in operations
- Sustainability in manufacturing operations
- **Case Study:** Danaher Business System operational excellence model

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com