

Lean Manufacturing Supply Chain Integration 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

Lean Manufacturing Supply Chain Integration Training Course is a high-impact, industry-aligned program designed to equip professionals with cutting-edge competencies in lean production systems, supply chain optimization, operational excellence, and end-to-end value stream integration. In today’s competitive global economy, organizations are under pressure to reduce waste, improve agility, and enhance customer value delivery through Lean Six Sigma methodologies, digital supply chain transformation, and smart manufacturing systems. Lean Manufacturing Supply Chain Integration Training Course provides a structured pathway to mastering lean tools, synchronized logistics, and integrated supply chain planning for maximum efficiency and profitability.

This training emphasizes the convergence of Lean Manufacturing principles with advanced Supply Chain Integration strategies, enabling participants to build resilient, data-driven, and demand-responsive supply networks. Through real-world applications, case studies, and simulation-based learning, learners will gain expertise in just-in-time (JIT) systems, Kaizen continuous improvement, ERP-driven supply chains, and Industry 4.0 integration. The program is tailored to develop professionals capable of driving operational excellence, cost reduction, and sustainable supply chain performance across global industries.

Programme Curriculum

Lean Manufacturing Supply Chain Integration Training Course

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Course Duration

5 days

Course Objectives

1. Master Lean Manufacturing principles for operational excellence
2. Implement end-to-end Supply Chain Integration strategies
3. Apply Lean Six Sigma tools for process optimization
4. Reduce operational waste (Muda, Mura, Muri) in production systems
5. Optimize inventory management using Just-in-Time (JIT) systems
6. Enhance demand forecasting accuracy using data analytics
7. Improve supplier relationship management and collaboration
8. Integrate ERP systems for real-time supply chain visibility
9. Design efficient value stream mapping (VSM) models
10. Strengthen logistics and distribution network efficiency
11. Apply Kaizen and continuous improvement frameworks
12. Develop risk-resilient and agile supply chain systems
13. Align manufacturing operations with Industry 4.0 technologies

Target Audience

1. Supply Chain Managers
2. Operations Managers
3. Production Supervisors
4. Procurement Specialists
5. Logistics Coordinators
6. Industrial Engineers
7. Quality Assurance Professionals
8. Business Process Improvement Consultants

Course Modules

Module 1: Lean Manufacturing Fundamentals

- Principles of Lean thinking and waste elimination
- 5S workplace organization system
- Value stream mapping techniques
- Kaizen continuous improvement culture

- Case Study: Toyota Production System transformation

Module 2: Supply Chain Integration Strategies

- End-to-end supply chain visibility
- Integration of suppliers and distributors
- Demand-supply synchronization
- Collaborative planning, forecasting & replenishment (CPFR)
- Case Study: Amazon supply chain ecosystem integration

Module 3: Lean Six Sigma in Operations

- DMAIC methodology application
- Process capability and variance reduction
- Root cause analysis tools (Fishbone, 5 Whys)
- Statistical process control (SPC)
- Case Study: GE operational excellence program

Module 4: Inventory & Demand Management

- Just-in-Time (JIT) inventory systems
- Safety stock optimization techniques
- Demand forecasting models
- ABC and XYZ inventory classification
- Case Study: Walmart inventory optimization system

Module 5: Logistics & Distribution Optimization

- Transportation network design
- Warehouse management systems (WMS)
- Route optimization strategies
- Last-mile delivery efficiency
- Case Study: DHL global logistics optimization

Module 6: ERP & Digital Supply Chain Systems

- ERP integration in manufacturing
- Real-time data tracking systems
- Cloud-based supply chain platforms
- Automation and AI in supply chain
- Case Study: SAP-driven enterprise supply chain

Module 7: Lean Supply Chain Risk Management

- Supply chain disruption analysis
- Risk mitigation strategies
- Supplier diversification models
- Business continuity planning
- Case Study: COVID-19 global supply chain resilience

Module 8: Industry 4.0 & Smart Manufacturing

- IoT-enabled production systems

- Artificial intelligence in manufacturing
- Predictive maintenance systems
- Digital twin technology
- Case Study: Siemens smart factory transformation

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

- The participant must be conversant with English.
- Upon completion of training the participant will be issued with an Authorized Training Certificate
- Course duration is flexible and the contents can be modified to fit any number of days.
- The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- One-year post-training support Consultation and Coaching provided after the course.
- 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
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21 Sep 2026	25 Sep 2026	Online	\$1,000
21 Sep 2026	25 Sep 2026	Physical	\$1,500
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0

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

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