ERP for Manufacturing: Discrete/Process Focus Training Course

Professional Development Training Course Outline

Category	Enterprise Resource Planning (ERP)	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today’s Industry 4.0 landscape, manufacturing enterprises are rapidly embracing ERP (Enterprise Resource Planning) systems to streamline operations, integrate production processes, and optimize real-time decision-making. ERP for Manufacturing: Discrete/Process Focus Training Course equips professionals with hands-on skills to implement, configure, and manage ERP systems tailored to discrete and process manufacturing environments. Learners will explore critical modules including production planning, supply chain management, materials management, quality control, and financial integration.

This training emphasizes digital transformation, smart factory principles, and data-driven manufacturing strategies. Participants will gain insights into ERP platforms like SAP, Oracle ERP Cloud, and Microsoft Dynamics 365, supported by practical case studies that illustrate successful ERP adoption in both discrete and process industries. By mastering ERP tools and workflows, professionals will be empowered to drive operational excellence, cost reduction, and sustainable growth across global manufacturing enterprises.

Programme Curriculum

ERP for Manufacturing: Discrete/Process Focus Training Course

Introduction

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Course Duration

5 days

Course Objectives

1. Understand the core concepts of ERP systems in manufacturing.
2. Differentiate between discrete and process manufacturing workflows.
3. Configure ERP modules for production planning and control.
4. Integrate ERP with supply chain and inventory management.
5. Apply lean manufacturing and just-in-time (JIT) principles using ERP tools.
6. Analyze real-time data for production optimization and predictive maintenance.
7. Implement ERP-based quality assurance and compliance tracking.
8. Streamline procurement and materials management through ERP.
9. Leverage ERP analytics for cost control and financial visibility.
10. Evaluate cloud-based ERP deployment and security strategies.
11. Manage ERP project implementation using agile and DevOps methodologies.
12. Enhance collaboration between engineering, operations, and finance teams.
13. Examine industry case studies on successful ERP transformation projects.

Target Audience

1. Manufacturing engineers and production managers
2. ERP consultants and business analysts
3. Supply chain and logistics professionals
4. Quality assurance and process improvement specialists
5. IT and systems integration managers
6. Financial controllers in manufacturing firms
7. Project managers overseeing ERP implementation
8. Graduate students in industrial and operations management

Course Modules

Module 1: ERP Fundamentals for Manufacturing

- Overview of ERP architecture and frameworks
- Discrete and Process manufacturing models
- Core ERP components and integration
- ERP lifecycle and system selection
- Case Study: SAP ERP deployment in automotive manufacturing

Module 2: Production Planning and Control

- Master production scheduling
- Material Requirements Planning
- Capacity planning and shop floor control

- Demand forecasting integration
- Case Study: Optimizing production flow at a food processing plant

Module 3: Supply Chain and Inventory Management

- Supplier relationship management (SRM)
- Warehouse management and logistics
- Lot tracking and batch control
- Inventory optimization using AI and IoT
- Case Study: Oracle ERP in discrete electronics manufacturing

Module 4: Quality Management and Compliance

- Quality inspection and audit trails
- Non-conformance management
- ISO 9001 and GMP compliance tracking
- Corrective and preventive actions (CAPA)
- Case Study: ERP-driven quality excellence in a pharma plant

Module 5: Financials and Cost Control

- Standard, Activity-based, and Process costing
- Budgeting and variance analysis
- ERP financial integration and reporting
- Asset management and depreciation
- Case Study: Financial visibility improvement in a steel manufacturer

Module 6: Data Analytics and Business Intelligence

- KPI dashboards and performance monitoring
- Predictive maintenance analytics
- AI-driven decision support systems
- Data visualization with Power BI / Tableau
- Case Study: Predictive analytics for downtime reduction in packaging industry

Module 7: ERP Implementation and Change Management

- ERP project lifecycle and phases
- Risk management and change adoption strategies
- End-user training and support models
- Post-implementation optimization
- Case Study: Microsoft Dynamics 365 rollout in a beverage company

Module 8: Future Trends and Smart Manufacturing

- Cloud ERP and SaaS adoption
- Integration with IoT and digital twins
- Blockchain for supply chain transparency
- Sustainability and circular economy via ERP
- Case Study: Smart factory transformation in a chemical manufacturer

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

Start Date	End Date	Location	Price
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:

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