Manufacturing Execution for S/4HANA and ERP 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 the rapidly evolving landscape of digital manufacturing, mastering Manufacturing Execution Systems (MES) integrated with SAP S/4HANA and ERP platforms is crucial for businesses striving for operational excellence. Manufacturing Execution for S/4HANA and ERP Training Course empowers professionals to harness real-time data, optimize production processes, and enhance supply chain visibility. Participants will gain hands-on experience with digital manufacturing transformation, production planning, and shop floor integration, equipping them with the skills to drive efficiency, reduce operational costs, and foster innovation in smart factories.

Designed for both budding and experienced professionals, this course combines practical case studies, real-world simulations, and SAP S/4HANA best practices to ensure mastery of MES and ERP functionalities. By exploring topics such as inventory optimization, quality management, IoT-enabled production monitoring, and advanced analytics, learners will acquire the knowledge to implement cutting-edge solutions that align with Industry 4.0 standards. This course positions participants to become strategic manufacturing leaders, capable of leveraging technology to achieve lean manufacturing excellence and data-driven decision-making.

Programme Curriculum

Manufacturing Execution for S/4HANA and ERP Training Course

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Course Duration

5 days

Course Objectives

1. Understand SAP S/4HANA MES architecture and its integration with ERP systems.
2. Implement real-time production monitoring for improved operational efficiency.
3. Optimize shop floor execution using digital manufacturing tools.
4. Apply quality management and compliance strategies in manufacturing processes.
5. Leverage IoT and IIoT for predictive maintenance and machine performance.
6. Streamline inventory and material flow through ERP integration.
7. Enhance supply chain visibility using MES dashboards and analytics.
8. Design custom manufacturing workflows for process automation.
9. Integrate data-driven decision-making in daily production operations.
10. Apply lean manufacturing and operational excellence principles in SAP S/4HANA.
11. Execute production scheduling optimization for cost and time efficiency.
12. Analyze key performance indicators (KPIs) to measure manufacturing success.
13. Prepare for Industry 4.0 digital transformation initiatives in production environments.

Target Audience

1. Manufacturing engineers and production supervisors
2. ERP and SAP consultants
3. Operations managers and plant managers
4. Supply chain professionals
5. Quality assurance and compliance officers
6. IT professionals in manufacturing environments
7. Business analysts focusing on digital transformation
8. Project managers implementing MES/ERP solutions

Course Modules

Module 1: Introduction to SAP S/4HANA MES

- Overview of MES and ERP integration
- Key features of S/4HANA manufacturing modules
- Digital transformation in manufacturing
- Case Study: Successful MES implementation in automotive sector
- Navigating S/4HANA MES dashboards

Module 2: Production Planning and Scheduling

- Master production scheduling in S/4HANA
- Resource and capacity planning strategies
- Real-time shop floor monitoring
- Case Study: Reducing downtime in electronics manufacturing
- Scheduling optimization using ERP tools

Module 3: Shop Floor Execution

- Digital work instructions and operator guidance
- Material tracking and status updates
- Monitoring work centers and production lines
- Case Study: Smart factory deployment in FMCG
- Executing production orders in S/4HANA

Module 4: Quality Management & Compliance

- Quality checks and inspection planning
- Integration with ERP for traceability
- Handling non-conformances and corrective actions
- Case Study: Pharmaceutical industry compliance success
- Quality notification processing in MES

Module 5: Inventory & Material Flow Optimization

- Material requirement planning in S/4HANA
- Automated stock monitoring
- Reducing material waste using MES insights
- Case Study: Lean inventory management in automotive assembly
- Simulating material flow in ERP

Module 6: IoT and Predictive Maintenance

- Overview of IoT and IIoT in manufacturing
- Predictive maintenance using MES analytics
- Integration with machine sensors
- Case Study: Predictive maintenance implementation in heavy machinery
- Setting up IoT alerts in ERP

Module 7: Reporting, Analytics & KPI Monitoring

- Real-time dashboards and reports
- Manufacturing KPIs and performance metrics
- Data-driven decision-making strategies
- Case Study: KPI optimization in electronics production
- Generating custom reports in S/4HANA

Module 8: Industry 4.0 & Digital Transformation

- Digital twin and smart factory concepts
- MES and ERP for end-to-end manufacturing visibility

- Change management for digital initiatives
- Case Study: Industry 4.0 transformation in a global manufacturer
- Implementing Industry 4.0 processes

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

Start Date	End Date	Location	Price
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