Routings, Work Centers and Capacity Planning 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 dynamic manufacturing landscape, efficient production planning and resource optimization are critical for business competitiveness. Routings, Work Centers and Capacity Planning Training Course equips participants with advanced strategies to streamline manufacturing processes, reduce lead times, and maximize operational efficiency. This training integrates practical ERP applications, real-world case studies, and hands-on exercises, enabling participants to master production workflows, resource allocation, and capacity management effectively.

Participants will gain the skills to optimize work centers, design accurate routings, and forecast production capacity, enhancing overall productivity and aligning operations with organizational goals. By leveraging trend-driven methodologies, including digital manufacturing, smart scheduling, and AI-based capacity planning, this course ensures that learners are prepared to meet modern manufacturing challenges with data-driven insights and operational excellence.

Programme Curriculum

Routings, Work Centers and Capacity Planning Training Course

Introduction

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Course Duration

5 days

Course Objectives

By the end of this training, participants will be able to:

1. Understand and create efficient production routings.
2. Configure and optimize work centers for peak performance.
3. Implement capacity planning techniques to avoid bottlenecks.
4. Analyze resource utilization and load balancing for manufacturing efficiency.
5. Apply ERP-based scheduling for real-time production monitoring.
6. Develop strategies for lead time reduction in production cycles.
7. Forecast production capacity using predictive analytics.
8. Improve workflow management through process standardization.
9. Evaluate bottlenecks and resource constraints using data-driven methods.
10. Integrate lean manufacturing principles into routings and work centers.
11. Enhance production flexibility with smart scheduling tools.
12. Implement continuous improvement methodologies in capacity planning.
13. Apply case study insights for practical decision-making in real-world scenarios.

Target Audience

1. Production Planners
2. Manufacturing Managers
3. Operations Analysts
4. ERP Consultants
5. Supply Chain Professionals
6. Industrial Engineers
7. Process Improvement Specialists
8. Production Supervisors

Course Modules

Module 1: Introduction to Routings

- Definition and significance of routings in manufacturing
- Types of routings and routing elements
- Setting up routing in ERP systems
- Routing optimization for production efficiency
- Case Study: Reducing production lead time using optimized routing

Module 2: Work Centers Fundamentals

- Definition and types of work centers

- Configuring work centers in ERP
- Evaluating work center efficiency and utilization
- Work center capacity analysis
- Case Study: Improving resource allocation in a medium-sized factory

Module 3: Capacity Planning Concepts

- Understanding capacity planning principles
- Short-term vs. long-term capacity planning
- Capacity planning techniques and tools
- Planning for variable demand
- Case Study: Implementing capacity planning to reduce overtime costs

Module 4: Resource Allocation & Load Balancing

- Resource allocation strategies
- Load balancing across work centers
- Prioritization techniques in production scheduling
- Managing constraints and bottlenecks
- Case Study: Optimizing work center loads for a multi-product plant

Module 5: ERP-Based Scheduling

- ERP integration for production scheduling
- Creating and managing production orders
- Real-time scheduling and monitoring
- Reporting and dashboards for efficiency tracking
- Case Study: ERP-based scheduling implementation in automotive manufacturing

Module 6: Workflow & Process Optimization

- Mapping production workflows
- Identifying inefficiencies and redundancies
- Streamlining processes for better throughput
- Workflow simulation tools
- Case Study: Lean workflow transformation in electronics manufacturing

Module 7: Predictive Analytics & Forecasting

- Forecasting demand and production capacity
- Utilizing predictive analytics in manufacturing
- Data-driven decision-making for capacity planning
- KPI monitoring for production performance
- Case Study: Predictive analytics improving production planning accuracy

Module 8: Continuous Improvement & Best Practices

- Lean manufacturing and Six Sigma integration
- Continuous improvement in routings and work centers
- Benchmarking and performance evaluation
- Developing a culture of operational excellence
- Case Study: Continuous improvement leading to 20% efficiency gains in production

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

Start Date	End Date	Location	Price
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:

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