



LM043: Production Management and Material Requirements Planning

Training Description:

The overall aim of this course is to provide participants with the knowledge, skills and techniques needed to perform all the essential tasks in a production environment. The course includes important concepts such as forecasting demand, capacity planning, determining requirements and scheduling. Participants in this interactive course will learn all the critical processes, formulas and calculations required to manage production systems effectively and enable them to make the optimum decisions for their environments.

Training Objectives:

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

- ✓ Construct a framework for production planning and demonstrate how it fits within a supply chain context
- ✓ Provide forecast information to sales and operations planning, master production scheduling and use the basic form of the economic order quantity
- ✓ Estimate and control capacity requirements and utilization
- ✓ Construct and manage sales and operations plans using time-phased grids
- ✓ Identify optimum inventory and production quantities
- ✓ Construct and manage a master production schedule
- ✓ Explain where the material requirements planning system fits in the overall production planning framework and how it is used
- ✓ Develop performance measurement indicators for a production system

Training Designed for:

This course is intended for professionals involved in the following functions: production, operations, inventory planning, purchasing, procurement and supply chain management.

Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client’s learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- ❖ Pre-Test
- ❖ Production Planning and Control (PPC)
 - Defining Production Planning and Control
 - Areas of Influence on PPC
 - A Framework for a PPC System
 - PPC Systems Activities
 - Productivity
- ❖ Demand Management

- Demand Management in PPC Systems
- Independent and Dependent Demand
- Impact of PPC Environment on Demand Management:
 - The Make-to-Stock Environment
 - The Assemble-to-Order Environment
 - The Make-to-Order Environment
- Forecasting Framework
- Forecasting Techniques
- Evaluating Forecasts

DAY TWO:

❖ Capacity Planning

- Measuring Capacity
- Capacity Utilization
- Calculating Capacity Requirements
- Cost-Volume Analysis
- Break-Even Analysis
- Decision Tree

❖ Sales and Operations Planning (S&OP)

- S&OP Fundamentals
- S&OP Displays
- Time-Phased Planning
- Modifying the S&OP
- The Basic Trade-Offs in S&OP
- Evaluating Alternative Plans

DAY THREE:

❖ Inventory Management

- Types of Inventory
- Inventory Costs
- Economic Order Quantity Model
- Inventory Order Cycle
- Re-Ordering Point
- Economic Production Quantity
- Multi-Criteria ABC Analysis

DAY FOUR:

❖ Master Production Scheduling

- The Master Production Scheduling Activity
- Master Production Scheduling Techniques:
 - The Time-Phased Record
 - Available to Promise

DAY FIVE:

❖ Material Requirements Planning (MRP)

- Overview of MRP

- The Bill of Material
- MRP Processing
- The Basic MRP Record
- Material Planning For:
 - Lot-for-Lot
 - Different Lot Sizes
- ❖ **Performance Measurement**
 - Key Performance Indicators
 - Benchmarking
 - Measuring Performance
 - Improving Current Production System
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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