



LM030: Material Requirement Planning Technique

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
- ✓ Create forecasts for the expected demand on an aggregate level and use them as a basis for all future planning and scheduling
- ✓ Estimate and control capacity requirements and utilization
- ✓ Assemble and manage sales and operations plans using time phased grids
- ✓ Identify optimum inventory and production quantities
- ✓ 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

Target Competencies

- Forecasting
- Strategy planning
- Decision making
- Scheduling
- Inventory management
- Production management
- Material requirement planning
- Performance measurements

Training Designed for:

This training course intended for Professionals involved in the following functions: production, operations, inventory planning, purchasing, procurement and supply chain management. Contract Professionals and Administrators.

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 and Planning Control (PPC)**
 - Defining production planning and control
 - Areas of influence on PPC
 - A framework for a PPC system
 - PPC systems activities
 - Productivity in production environment
- ❖ **Demand Management**
 - Demand management in PPC systems
 - Independent and dependent demand
 - Impact of PPC environment on demand management:
 - The Make-to-Stock
 - The Assemble-to-Order
 - The Make-to-Order
 - 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
 - Reorder point
 - Economic production quantity

- Multi criteria ABC analysis

DAY FOUR:

❖ Requirements of Planning and Scheduling

- Master production scheduling activities
- Master production scheduling techniques:
 - The time phased record
 - Available to promise
- Material Requirements Planning (MRP)
- Bill of material
- MRP processing
- The basic MRP record
- Material planning for:
 - Lot-for-Lot
 - Different lot sizes

DAY FIVE:

❖ Performance Measurement

- Key performance indicators
- Benchmarking and standards
- 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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