



MANUFACTURING - ENTERPRISE RESOURCE PLANNING MRPII FOR SMALL MEDIUM ENTERPRISES SYLLABUS

MODULE 1. COURSE OVERVIEW

- Welcome
- Instructor/Participant Introductions
- Course Objectives
- Course Curriculum
- Pre-Assessment Questionnaire
- Manufacturing and Distribution Objectives
- Manufacturing Resource Planning
- History and Development of MRP II
- Comparison of Discrete and Process Manufacturers
- Manufacturing Systems Implementation

MODULE 2. HIGH LEVEL PLANNING

- Introduction to planning
- Strategic Planning
- Business Planning
- Sales and Operation Planning
- Sales & Marketing Plans
- Production Plans
- Resource Planning
- Financial Planning

MODULE 3. INVENTORY MANAGEMENT

- Inventory fundamentals
- Physical management of materials
- Replenishment techniques
- Inventory record accuracy
- ABC analysis
- Cycle counting
- Lot tracking

MODULE 4. BILLS OF MATERIAL

- What is a Bill of Material?
- Forms of BOM display
- Structuring BOM's
- Co-products and by-products
- Change management
- Geography/Seasonality/Substitutes

MODULE 5. WORK CENTRES AND ROUTINGS

- Work centre definition



- Sizing work centres
- Work centre files
- Routings
- Routing purposes
- Routing files
- Lead times

MODULE 6. FORECASTING

- Why forecast?
- Forecasting fundamentals
- Forecasting techniques
- Measuring forecast accuracy
- Problems in forecasting

MODULE 7. DISTRIBUTION RESOURCE PLANNING (DRP)

- The need for DRP
- DRP overview
- DRP fundamentals
- DRP integration with manufacturing
- Using DRP for special distribution situations
- Financial planning and simulation activities
- Transportation planning
- Implementing DRP
- Summary

MODULE 8. MASTER PRODUCTION SCHEDULING

- What is the MPS?
- Basic calculations
- Order promising
- Timing considerations
- Controlling the MPS
- The MPS/MRP link
- Monitoring MPS effectiveness

MODULE 9. ROUGH CUT CAPACITY PLANNING (RCCP)

- What is RCCP?
- How do we plan capacity?
- Capacity planning tools?

MODULE 10. MATERIAL REQUIREMENTS PLANNING

- What is MRP?
- Terms and concepts
- Mechanics of MRP
- Lead times, lot sizes and safety stock
- Replanning using MRP
- MRP and the computer



MODULE 11. CAPACITY REQUIREMENTS PLANNING

- What is Capacity Requirements Planning?
- How do we measure capacity?
- How can we change capacity?

MODULE 12. PURCHASING

- Objectives
- Purchasing Activities
- The procurement cycle
- Computer-aided purchasing
- Blanket purchase orders
- Vendor performance measurement
- Purchasing performance measurement

MODULE 13. PRODUCTION ACTIVITY CONTROL

- Introduction to PAC
- Scheduling production
- Order release
- Production reporting and status control
- Keeping on schedule
- Feedback and performance measurement

MODULE 14. MANUFACTURING COST ACCOUNTING

- Overview
- Functions of cost accounting systems
- Cost accounting terminology
- Inventory valuation
- Collecting and tracking costs
- Performance measurement systems

MODULE 15. THE ROAD TO SUCCESS

- First-cut education
- Cost justification and commitment
- User-controlled project team
- Full-time project leader
- Executive steering committee
- Professional guidance
- Education of the critical mass
- Pilot approach to MPS/MRP
- Close the loop
- Finance and simulation
- Dedication to continuous improvement

MODULE 16. MRP II PERFORMANCE MEASUREMENT

- Class A



- Class B
- Class C
- ABCD Checklist

MODULE 17. ERP HISTORY- FROMMRP to MRP II to ERP to ERP II

MODULE 18. SUPPLY CHAIN & ERP

- Introduction
- The Dream: The Extended Supply Chain
- The Reality: The Failure of ERP
- Today's Supply Chain Solution - Assembly Required
- Evolution of the Supply Chain Packaged Apps Market
- Impact on Users

MODULE 19. 16 STEPS TO ERP SUCCESS

MODULE 20. ABCD CHECKLIST

MODULE 21. COST BENEFIT ANALYSIS

MODULE 22. IMPLEMENTATION GUIDELINES

- Introduction
- Systems Development Approach
- Organization
- Management and User Commitment
- Education and Training
- Work plans
- Performance Measurement
- Preparation
- Strategy for Implementation

MODULE 23. DATA ACCURACY