



# MicroCraft Educational Products Portfolio



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## Table of Contents

<b>WORKSHOPS</b> .....	<b>1</b>
CAPACITY MANAGEMENT .....	1
COMMUNICATION AND LEADERSHIP SKILLS FOR THE WAREHOUSE SUPERVISOR .....	3
SALES & OPERATIONS PLANNING .....	4
TRAIN-THE-TRAINER .....	6
LEARNING DYNAMICS FOR INSTRUCTORS .....	7
<b>COURSES</b> .....	<b>9</b>
FUNDAMENTALS OF INVENTORY CONTROL .....	9
FUNDAMENTALS OF PLANNING .....	9
FUNDAMENTALS OF MANUFACTURING CONTROL .....	10
FUNDAMENTALS OF OPERATIONS MANAGEMENT .....	10
INVENTORY CONTROL .....	11
INTRODUCTION TO ENTERPRISE RESOURCE PLANNING .....	11
JUST-IN-TIME: LEAN OPERATING PRINCIPLES AND TECHNIQUES .....	11
LEAN MANUFACTURING .....	12
THEORY OF CONSTRAINTS .....	13
<b>INDIVIDUAL EDUCATION MODULES</b> .....	<b>14</b>
TIME MANAGEMENT .....	14

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## Workshops

### Capacity Management

Format: 2-Day Workshop  
Attendees: 6 Minimum – 12 Maximum

#### Sessions

- Capacity Control Concepts
  - Planning Levels
  - Defining Capacity
  - Capacity Planning Process
  - Determining Capacity Available
- Production Activity Control & Problem Resolution
  - Capacity Requirements Planning
  - Manufacturing Lead Time
  - Scheduling Orders
  - Planning, Executing and Controlling
  - Resolving Differences
- Planning the Use of Capacity
  - The Vicious Cycle
  - Capacity Planning Issues
  - Objectives of Capacity Planning
  - Capacity & Load
- Data Required to Perform Capacity Planning
  - Elements of Manufacturing Lead Time
  - Load Related Data
  - Routing Data
  - Capacity Relationships
  - Loading and Scheduling
- Finite versus Infinite Capacity
  - Infinite Loading
  - Finite Loading
  - Resource Availability in Finite Scheduling
  - Finite Loading Techniques
- Load Balancing
  - CRP Model
  - Imposition of Load
  - Work Center Load Report
  - Balanced Load Level
  - CRP Performance Objectives
- Executing the Capacity Plan
  - Closed-Loop System
  - Planning and Control Objectives
  - Production Activity Control
  - PAC Concepts and Techniques

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- Input / Output Control
  - Input / Output Control Techniques
  - Priority Rules
  - Disruptive Priorities
  - Bottleneck Management
- Shop Layout and Design
  - Connected Flow
  - Production Layout Characteristics
  - Cellular Manufacturing
  - Hybrids
- Push Systems
  - Push Methodology
  - Weaknesses of a Push System
  - Hidden Hurdles
  - Human Interaction in Push Systems
- Lean Capacity Concepts
  - Just-In-Time Manufacturing
  - Waste Caused by Manufacturing
  - How Lower Inventories Reduce Waste
  - Total Quality Management

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## Communication and Leadership Skills for the Warehouse Supervisor

Format: 2-Day Workshop

Attendees: 6 Minimum – 12 Maximum

This workshop will use a series of exercises and assessment tools to build the participant's relationship building skills in communications and leadership. In order to effectively lead, the participant will first learn to match particular communication methods to particular situations. In the associated exercises, the learner will develop their verbal and non-verbal communication skills as well as focus their attention on building their listening proficiency.

This workshop will also focus on amplifying other's abilities through evaluation processes, development methods, and motivational techniques. Using the core conflict model and other problem solving tools, participants will also learn to constructively resolve conflict and use it to facilitate positive growth. Finally, participants will learn to use project management techniques to effectively lead organizational transformation.

Throughout the workshop, examples of both effective and ineffective leaders will be used to illustrate habits worthy of emulation as well as pitfalls to avoid.

After this workshop you will be able to:

- Insure that your message is received and understood
- Effectively listen to others
- Use your interpersonal style to be more effective in motivating people
- Resolve conflicts using various approaches
- Lead organizational change

### Sessions

#### Communication with the Warehouse Worker

- Components of Communication
- Listening and other Communication Skills

#### Motivating the Warehouse Worker

- Developing the Warehouse Employee
- Levels of Employee Motivation
- Your Interpersonal Style
- Evaluating Performance

#### Conflict Resolution: Resolving Warehouse Worker Conflicts

- Getting to the Root of the Conflict
- Problem Solving Tools
- Conflict Resolution
- Handling Problem Situations

#### Leadership Skills for the Warehouse Supervisor

- Who are the Leaders
- Habits of Effective Leaders
- Leading Change in an Organization

#### Change Management: Implementing New Processes in the Warehouse

- Project Management Skills
- Overcoming Resistance to Change
- Change Management Tools

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## Sales & Operations Planning

Format: 2-Day Workshop

Attendees: 6 Minimum – 12 Maximum

### Sessions

- Supply Chain Management
  - The Supply Chain
  - The Value Chain
  - Cycle Time
  - Supply Chain Improvement Benefits
- Volume, Mix and Customer Families
  - Product Volume and Mix
  - Volume/Variety Relationships
  - Customer Families
- Forecasting
  - Why Forecast?
  - Forecasting Techniques and Methods
  - Demand
  - Seasonality
- Resource Planning
  - What is a Resource?
  - The Resource Planning Process
  - Bill of Resources
  - Changes in Resources
- Business Planning and Customer Service Level
  - Master Planning of Resources Model
  - Business Plan
  - Scheduling Methods
  - Defining Customer Service
- Demand, Capacity and Load
  - Objectives of Capacity Planning
  - Capacity Planning Issues
  - Capacity and Load
  - Queue Times
- Prioritization
  - Priority Rules
  - Disruptive Priorities
  - Bottleneck Management
- ABC Analysis of Customers
  - ABC Process
  - Control Based on ABC Classification
  - ABC Calculation
- Service Levels and Safety Capacity
  - The Meaning of Customer Service
  - The Normal Distribution Model
  - Service Levels vs. Safety Capacity

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- Planning Horizon and Time Fence Policies
  - Planning Horizons
  - Time Fences
- Measurement Management
  - The Closed-Loop Measurement System
  - Performance Measurement
  - Characteristics of Effective Measurement Systems
  - General Principles of Measurements
- Sales and Operations Planning Process
  - Planning for Production
  - Who Brings What to the Table
  - The Monthly S&OP Process
  - Benefits of S&OP
- Change Management
  - Stages in Individual Change
  - Guiding Others through Change
  - Transforming an Organization
  - The Four Stages of Cultural Shock
  - Checklist for Change

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## Train-The-Trainer

Format: 2 ½ Day Workshop

Attendees: 6 Minimum – 9 Maximum

### Sessions

- Introduction
  - Instructor's and Learner's Introduction
  - Mini-Lesson
  - Flip Chart Demonstration
  - Three-Minute Presentation and Critique
- The Training Process
  - The Basics of Communication
  - Stages of Interpersonal Communication
  - Interpersonal Communication Skills
  - The Training Steps
  - Overhead Projector Demonstration
  - Essentials of Effective Training
  - Providing Learning
  - Components of Learning
- Instructional Objectives
  - Components of Instructional Objectives
  - Action Terms
  - Instructional Objectives Exercise
  - Class Activity: Writing Instructional Objectives
- Lesson Plans
  - The Lesson Plan
  - Lesson Plan Form
  - Class Activity: Writing Lesson Plans
- Public Speaking
  - Components of Public Speaking
  - Practice Instruction session 1, a 5-minute training session
  - Class Critique
- Motivating Learners
  - Levels of Motivation
  - Motivating the Learner
  - Providing Human Reinforcement
  - Encouraging Effective Performance
  - Your Learning View
- Media Selection
  - Categories of Media
  - Class Activity: Media Advantages and Disadvantages
  - Media Use for Instruction
  - Meeting Room Layout
- Conclusion
  - Tips on Training
  - Checklist for Effective Instruction
  - Practice Instruction session 2, a 10-minute training session
  - Workshop Summary
  - Workshop Evaluation

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## Learning Dynamics for Instructors

Format: 2 ½ Day Workshop

Attendees: 6 Minimum – 9 Maximum

### Sessions

- Introduction
  - Who we are?
- Impromptu Speaking
  - Impromptu speaking tips
- Establishing an Adult Learning Environment
  - Kolb Learning Style Inventory
- Matching Training Methods to Learning Objectives
  - Passive vs. Active Learning
  - Retention rates after 60 days
  - Training methods
  - Criteria for selecting training methods
  - Advantages and drawbacks of training methods
  - Training method effectiveness
- Ethics
  - Defining values and ethics
  - Values as a guidepost
  - Ethical behavior
  - Values lead to ethics statements
- Interpersonal Style
  - Using interactive communication skills
  - Why is this important reason one
  - Why is this important reason two
  - Kiersey temperament sorter
  - Summary of temperaments
  - Temperaments and learning styles
- Using Interactive Communication Skills
  - Effective listening skills
  - Attending
    - Guidelines for trainers in using attending skills
  - Observing
  - Paraphrasing
  - Active listening
  - Asking questions
  - Phrasing questions
  - Directing questions
  - Handling learners' answers to questions
  - Tips for handling learners' answers
  - Responding to learners' questions
  - Effectively answering questions
- Handling Problem Situations
  - Defining problem situations
  - Key considerations in handling problem situations
  - Five-Step Process for Handling Problem Situations
  - More thoughts on problem behaviors
  - Handling a disappointing event
- Getting and Using Feedback
  - The importance of training evaluation
  - Benefits of training evaluation data
  - Consequences of not evaluating training
  - Levels of evaluation

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Evaluation tools  
Steps used to conduct training evaluations  
Developing an evaluation plan  
Tips for conducting efficient training evaluations

## Courses

### Fundamentals of Inventory Control

Format: 10 Session course / 3 Hours per session

Attendees: 5 Minimum – 15 Maximum

#### Sessions

- Fundamentals of Inventory Management
- Inventory Functions
- Order Quantities
- Perpetual Inventory Systems
- Periodic Inventory Systems
- Forecasting
- Midterm Examination and Case Study Presentation
- Warehouse Management and Distribution Requirements Planning
- Inventory Record Accuracy, Supply Chain Management, Aggregate Inventory, and Purchasing
- Just-in-Time (JIT) and Total Quality Management (TQM)-Trends in Inventory Management
- Case Study and Final Examination Review
- Final Examination

### Fundamentals of Planning

Format: 10 Session course / 3 Hours per session

Attendees: 5 Minimum – 15 Maximum

#### Sessions

- Planning Foundations (I)
- Planning Foundations (II)
- Long-Range Planning
- Forecasting
- Sales and Operations Planning
- Controlling the Sales and Operations Plan
- Midterm Examination and Making Effective Presentations
- Master Scheduling (I)
- Master Scheduling (II)
- Master Scheduling (III)
- Emerging Topics in Planning
- Final Examination

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## Fundamentals of Manufacturing Control

Format: 10 Session course / 3 Hours per session

Attendees: 5 Minimum – 15 Maximum

### Sessions

- Introduction to Material Requirements Planning (MRP) and Production Activity Control (PAC)
- Bills of Material
- MRP Basics
- Managing with MRP and Closing the Loop
- Advanced MRP Techniques
- Introduction to Capacity Management
- Midterm Examination and Capacity Management
- Production Activity Control (PAC) I
- Production Activity Control (PAC) II
- Just-in-Time (JIT) in Manufacturing
- Case Study and Course Review
- Final Examination

## Fundamentals of Operations Management

Format: 10 Session course / 3 Hours per session

Attendees: 5 Minimum – 15 Maximum

### Sessions

- Operations Management Overview
- Transforming Customer Needs
- Design and Selection of Processes (I)
- Design and Selection of Processes (II)
- Facility Selection and Layout (I)
- Facility Selection and Layout (II)
- Midterm Examination and Ordering Systems
- Distribution Systems
- Process Improvement and Optimization
- TQM and the Supply Chain
- Organizational Improvement Methods and Performance Measures
- Final Examination

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## Inventory Control

Format: 5 Session course / 4 Hours per session  
Attendees: 5 Minimum – 15 Maximum

### Sessions

- Basics of Inventory Management
- Cycle Counting
- Distribution Inventory Management
- Material Requirements Planning and Bills of Material
- Physical Inventory

## Introduction to Enterprise Resource Planning

Format: 8 Session course / 3 Hours per session  
Attendees: 5 Minimum – 15 Maximum

### Sessions

- Introduction to ERP and the Benefits of Implementation
- Developing a Business Case to Justify an ERP Implementation
- Business Process Alignment
- The Value Chain Process
- Technology and International Considerations
- Change Management and ERP Implementation
- Implementing ERP
- Expanding on ERP

## Just-In-Time: Lean Operating Principles and Techniques

Format: 9 Session course / 3 Hours per session  
Attendees: 5 Minimum – 15 Maximum

### Sessions

- Introduction to JIT Concepts
- Continuous Improvement Methodologies and Techniques
- Statistical Process Control and Pull Signals
- Production Considerations and Material Logistics
- Planning and Scheduling and Paperwork/Transaction Reduction
- Human Resource Development and Involvement
- Integrating and Applying Different Techniques to Business Processes
- Implementation Considerations

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## Lean Manufacturing

Format: 7 Session course / 4 Hours per session

Attendees: 5 Minimum – 15 Maximum

### Sessions

- Introduction to Lean Manufacturing
  - Basics of Lean
  - The Elements of Lean
  - The Eight Deadly Waste
- People in the Lean Enterprise
  - Employee Involvement
  - Interactions with processes and machinery
  - Autonomation
  - Poke-Yoke
  - Separating people from machines
- Value Stream Mapping and Lean Principles
  - Value stream mapping and lean principles
  - Constructing the current state
- Value Stream Stability
  - Types of stability
  - Profile of value stream variability
  - Process stability
  - Eliminate or reduce process waste and non value-adding activities
- Just-In-Time
  - Takt and pitch
  - Standard work
  - Production flow
  - Setup time reduction
  - Pull systems and kanbans
  - MRP II traditional framework
  - Lean maste4r scheduling
  - Detailed single card kanban
  - Traditional vs. lean inventory
- Measuring for Lean
  - Measurements
  - The value stream box score
  - Value stream costing
  - Measuring lead time
  - Measuring capacity
  - Basics of lean accounting
- Sustaining the Lean Enterprise
  - Designing products for lean
  - Quality management
  - ERP framework for lean
  - Sustaining success

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## Theory of Constraints

Format: 6 Session course / 4 Hours per session

Attendees: 5 Minimum – 15 Maximum

### Sessions

- Constraints Management Overview
- Critical Chain Project Management
- Performance Measures
- Production Management
- Supply Chain Management
- Thinking Processes

## Individual Education Modules

### Time Management

Format: 1 Session / 4 Hours

Attendees: 6 Minimum – 12 Maximum

#### Sessions

- Successful Time Management
  - Focusing your time and energy onto your most important task
- Four Rules of Time Management
  - Rule #1: Time is perishable
  - Rule #2: Time is indispensable
  - Rule #3: Time is irreplaceable
  - Rule #4: Time is essential for accomplishment
- Time Management Skills
  - Life Management
  - Managing yourself
  - How you respect yourself
  - The law of reversibility
  - Learning time management skills
- Requirements of Time Management
  - Self-discipline
  - Self-management
  - Self-control
  - Goal achieving vs. tension relieving activities
  - Doing what is hard, difficult, and necessary
- Long Term Perspective
  - Time poverty
  - You get 24 hours every day
  - Long Term Goals and short term decisions
- Focus & Clarity
  - What do you value
  - Determining things that you value
- Priority vs. Responsibility
  - Law of the excluded alternative
  - Life and choices
- The ABCDE Method
  - Pareto's Law
  - Time Planners
  - Managing your To Do List
- Five questions to ask to make sure you're doing the most important task
  - Question #1: What are your highest value activities
  - Question #2: What are your key result areas
  - Question #3: Why are you on the payroll
  - Question #4: What can you and only you do, that if done well will make a real difference
  - Question #5: What is the most valuable use of your time right now

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