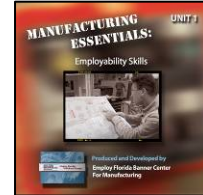


Manufacturing Essentials Curriculum Outline

62 Contact Hours - Aligned with the MSSC CPT certification to provide the fundamental skills & knowledge for Florida's diverse manufacturing sector

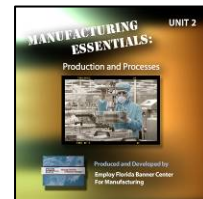
Unit 1: Employability Skills – Provides training on employability skills needed in the manufacturing community to sustain the day-to-day success of their organizations.

- Module 1: Human Behavior and Ethics
- Module 2: Communications Skills
- Module 3: Stress Management and Time Management
- Module 4: Team Building and Conflict Resolution
- Module 5: Counseling, Decision Making, and Conflict Resolution
- Module 6: Intermediate Math



Unit 2: Production and Processes – Develops existing knowledge and skills needed for the production of products to meet customer needs while ensuring the manufacturing process meets business requirements.

- Module 1: Introduction to Manufacturing and the Industry
- Module 2: The Production Process
- Module 3: Manufacturing Essentials and Instruments
- Module 4: Lean and Six Sigma Basics
- Module 5: Business Basics
- Module 6: Supply Chain



Unit 3: Maintenance Awareness – Provides the core knowledge of preventive maintenance and enhances existing skills in the identification and performance of equipment maintenance used in the production process.

- Module 1: Troubleshooting and Root Cause Analysis
- Module 2: Industrial Print Reading
- Module 3: Electrical Basics
- Module 4: Fluid Power Basics
- Module 5: Machine Basics
- Module 6: Preventive Maintenance
- Module 7: Total Productive Maintenance



Unit 4: Quality Assurance – Enhances existing knowledge and skills needed to maintain quality and implement continuous improvement processes, and ensure that product and process variances meet quality standards.

- Module 1: Introduction to Quality Management
- Module 2: Introduction to Measuring Process Quality
- Module 3: Quality Improvement Systems
- Module 4: Problem Solving



Unit 5: Safety Awareness – Provides baseline knowledge and skills needed to maintain a safe and productive work environment and ensure the safe use of equipment in the workplace.

- Module 1: OSHA Standards and Safety Inspections
- Module 2: Hazard Awareness and Communication
- Module 3: Personal Protective Equipment/Programs
- Module 4: Fire Safety and Emergency Response
- Module 5: Electrical and Tool Safety
- Module 6: Lockout/Tagout Safety
- Module 7: Ergonomics
- Module 8: Bloodborne Pathogens

