

# FORMING, FABRICATING, STAMPING



MICHIGAN

MANUFACTURING

TECHNOLOGY

CENTER

## PROFESSIONAL DEVELOPMENT

### LEARNING PLANS FOR MANUFACTURING JOB ROLES

Training Packages from Tooling U-SME offer quick-start, progressive road maps in various functional areas that allow manufacturers to build career paths for employees. They are intended to enhance your existing OJT and help you create a job progression plan. Unlike many other training programs, these packages require minimal preparation. They are efficient, effective training, developed with input from manufacturing experts.

### FLEXIBLE AND CONVENIENT

Online classes are self-paced, typically taking 60 minutes to complete. They are easily and conveniently accessible on desktops, laptops, tablets and phones.

### CAREER PATHWAYS FOR FORMING, FABRICATING AND STAMPING JOB ROLES

Combine job roles for learning pathways, or offer single job roles for targeted learning. Large comprehensive programs are also available.



### Online Training offers:

- Content developed by industry experts
- Accessible anytime, anywhere
- Self-paced
- Predefined curriculum for each job role
- Engaging and interactive content
- Pre- and post-training knowledge assessments
- Guidance from our Client Success team, including advice, insights, and ideas built on best practices and years of experience



Choose a starting point based on employee's experience or company goals for a quick-start training solution.

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## STAMPING/FORMING/FABRICATING FUNDAMENTALS

Basic Measurement  
Basics of Tolerance  
Blueprint Reading  
Calibration Fundamentals  
Hole Standards and Inspection  
Thread Standards and Inspection  
5S Overview

Lean Manufacturing Overview  
Ferrous Metals  
Introduction to Mechanical Properties  
Introduction to Physical Properties  
Band Saw Operation  
ISO 9001 Review  
Bloodborne Pathogens

Fire Safety and Prevention  
Hand and Power Tool Safety  
Intro to OSHA  
Lockout/Tagout Procedures  
Noise Reduction and Hearing Conservation  
Personal Protective Equipment

Powered Industrial Truck Safety  
Safety for Lifting Devices  
SDS and Hazard Communication  
Walking and Working Surfaces  
Geometry: Circles and Polygons  
Geometry: Lines and Angles  
Geometry: Triangles

Manufacturing Process Applications:  
Part I  
Math Fundamentals  
Math: Fractions and Decimals  
Trigonometry: Sine, Cosine, Tangent  
Units of Measurement

## PRESS OPERATOR

Electrical Units  
Introduction to Circuits  
Introduction to Hydraulic Components  
Introduction to GD&T  
Major Rules of GD&T  
Total Productive Maintenance

Troubleshooting  
Introduction to Mechanical Systems  
Bending Fundamentals  
Die Bending Operations  
Operating the Press Brake  
Press Brake Components

Press Brake Safety  
Press Brake Specifications  
Approaches to Maintenance  
Coil Handling Equipment  
Coil Loading Procedures  
Die Components

Die Cutting Variables  
Die Setting Procedures  
Monitoring Press Operations  
Press Basics  
Punch and Die Operations  
Stamping Safety

Essentials of Communication  
Essentials of Leadership  
Introduction to Workholding  
Supporting and Locating Principles

## DIEMAKER

Basic Grinding Theory  
Basics of the Cylindrical Grinder  
Basics of the Surface Grinder  
Cylindrical Grinder Operation  
Dressing and Truing  
Grinding Ferrous Metals

Grinding Nonferrous Materials  
Grinding Processes  
Grinding Safety  
Grinding Variables  
Grinding Wheel Geometry  
Grinding Wheel Materials

Introduction to Grinding Fluids  
Setup for the Cylindrical Grinder  
Setup for the Surface Grinder  
Surface Grinder Operation  
Calculations for Programming the Mill  
Canned Cycles for the Mill

Creating a CNC Milling Program  
Holemaking on the Manual Mill  
Basic Cutting Theory  
Carbide Grade Selection  
Cutting Tool Materials  
Speed and Feed for the Lathe

Speed and Feed for the Mill  
Material Tests for Welding

— New content is always being added. Check with your representative for the most current list of classes. —

