

U-SME offers a quick-start, progressive road map that allows manufacturers to build career paths for employees. This online training is intended to enhance your existing on the job training, to create a job progression plan and requires minimal preparation. It is efficient, effective training that has

been 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 and laptops, and on tablets and phones with the Tooling U-SME app.

# CAREER PATHWAYS FOR PLASTICS PROCESSING JOB ROLES

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

PLASTICS FUNDAMENTALS Manufacturing

**Awareness** 

MOLD/ EXTRUSION OPERATOR

MOLD MAKER

### 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
- Access to Tooling U-SME's Learning Management System (LMS)
- Guidance from our Client Success team, including advice, insights, and ideas built on best practices and years of experience







To begin your training program or for more information, call Northwest State Community College at 419-267-1332 or email cts.archbold@northweststate.edu

## **PLASTICS PROCESSING**

### PLASTICS PROCESSING FUNDAMENTALS

Math Fundamentals
Math: Fractions and Decimals
Units of Measurement
Basics of Tolerance
Blueprint Reading
Geometry: Lines and Angles

Geometry: Triangles Geometry: Circles and Polygons Trigonometry: Sine, Cosine, Tangent Basic Measurement Calibration Fundamentals Hole Standards and Inspection Thread Standards and Inspection Intro to OSHA Personal Protective Equipment Noise Reduction and Hearing Conservation Lockout/Tagout Procedures SDS and Hazard Communication Bloodborne Pathogens Walking and Working Surfaces Fire Safety and Prevention Hand and Power Tool Safety Safety for Lifting Devices Powered Industrial Truck Safety Introduction to Mechanical Properties Introduction to Plastics Lean Manufacturing Overview ISO 9001:2015 Review 5S Overview

### MOLD EXTRUSION OPERATOR

Thermoplastics
Thermosets
Electrical Units
Safety for Electrical Work
Introduction to Mechanical Systems

Safety for Mechanical Work Forces of Machines The Forces of Fluid Power Safety for Hydraulics and Pneumatics Introduction to Hydraulic Components

Components Introduction to Fluid Conductors Fittings for Fluid Systems Preventative Maintenance for Fluid

Introduction to Pneumatic

Principles of Injection Molding Intro to Machine Rigging Rigging Equipment Rigging Inspection and Safety Rigging Mechanics Advanced Thermoset Resins for Composites Intro to Compression Molding Composite Inspection and Defect Prevention

### **MOLD MAKER**

Introduction to GD&T
Major Rules of GD&T
Troubleshooting
Basic Cutting Theory
Speed and Feed for the Lathe

Speed and Feed for the Mill Cutting Tool Materials Carbide Grade Selection Creating a CNC Milling Program Calculations for Programming the Mill Canned Cycles for the Mill Grinding Processes Grinding Safety Basics of the Surface Grinder Basics of the Cylindrical Grinder Setup for the Surface Grinder Setup for the Cylindrical Grinder Surface Grinder Operation Cylindrical Grinder Operation Introduction to Grinding Fluids

Grinding Variables
Grinding Wheel Materials
Grinding Wheel Geometry
Dressing and Truing
Grinding Wheel Selection







