



PROFESSIONAL DEVELOPMENT

LEARNING PLANS FOR MANUFACTURING JOB ROLES

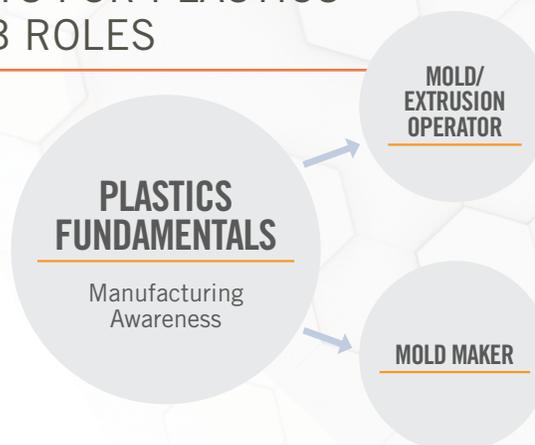
Online Training from Columbus State Community College and Tooling U-SME offers a quick-start, progressive road map that allows manufacturers to build career paths for employees. This online training is intended to enhance your existing on the job training, to create a job progression plan and requires 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.



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

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

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

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

Basics of G Code Programming
Basics of the CNC Lathe
Basics of the CNC Mill
Benchwork and Layout Operations
Chucks, Collets, and Vises
Clamping Basics

Classification of Steel
Control Panel Functions for the CNC Lathe
Control Panel Functions for the CNC Mill
Coordinates for the CNC Lathe
Coordinates for the CNC Mill

Engine Lathe Basics
Engine Lathe Operation
Engine Lathe Setup
Holmaking on the Manual Mill
Intro to EDM
Intro to Fastener Threads

Introduction to CNC Machines
Locating Devices
Machine Guarding
Manual Mill Basics
Manual Mill Operation
Manual Mill Setup

Offsets on the CNC Lathe
Offsets on the CNC Mill
Safety for Metal Cutting
SPC Overview
Supporting and Locating Principles
Surface Texture and Inspection

