



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. On average, employees can progress through a job role in one year with as little as 4 hours a month spent online.

Online Training offers:

- Predefined curriculum for each job role
- Engaging and interactive online classes
- Supplemental videos and a reinforcement task for each class
- Pre- or post-training knowledge assessments
- Access to Tooling U-SME's LMS
- Guidance from our Client Success team, including advice, insights, and ideas built on best practices and years of experience

ADDITIVE MANUFACTURING CLASSES

- Adopting & Optimizing Additive Manufacturing
- Additive Manufacturing (3D Printing) Overview
- Introduction to Additive Manufacturing
- Additive Manufacturing Safety
- The Basic Additive Manufacturing Process
- Additive Manufacturing Methods and Materials
- Introduction to Hybrid Manufacturing
- Rapid Prototyping
- Additive Manufacturing: Prototype to Production
- Design for Additive Manufacturing
- Metrology for Additive Manufacturing
- Introduction to Additive Manufacturing Software
- Additive Manufacturing Materials Science
- Integrating Additive Manufacturing with Traditional Manufacturing
- Additive Manufacturing as a Secondary Process
- Nondestructive Testing for Additive Manufacturing
- Reverse Engineering for Additive Manufacturing
- The Additive Manufacturing Supply Chain
- Managing the Additive Manufacturing Supply Chain
- Hybrid Manufacturing with Directed Energy Deposition
- Lightweighting with Additive Manufacturing
- Additive Manufacturing Qualification
- Design for Fused Deposition Modeling
- Design for Material Jetting
- Design for Directed Energy Deposition
- Design for Laser Powder Bed Fusion
- Design for Vat Photopolymerization
- Design for Binder Jetting
- Design for Sheet Lamination
- Setup for FDM
- Maintenance for FDM
- Basic Measurement
- Calibration Fundamentals
- Basics of Tolerance
- Blueprint Reading
- Hole Standards and Inspection
- Thread Standards and Inspection
- Surface Texture and Inspection
- Introduction to GD&T
- Inspecting with CMMs
- Lean Manufacturing Overview
- Continuous Process Improvement: Managing Flow
- Continuous Process Improvement: Identifying and Eliminating Waste
- Total Productive Maintenance
- Introduction to Physical Properties
- Introduction to Mechanical Properties
- Introduction to Metals
- Classification of Steel
- Essentials of Heat Treatment of Steel
- Hardness Testing
- Ferrous Metals
- Nonferrous Metals
- Exotic Alloys
- Approaches to Maintenance
- Math Fundamentals
- Math: Fractions and Decimals
- Units of Measurement
- Manufacturing Process Applications: Part I

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