WMEP
MANUFACTURING
SOLUTIONS

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

CAREER PATHWAYS FOR ENGINEERING JOB ROLES

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

ENGINEERING TECHNICIAN

ENGINEERING FUNDAMENTALS

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

TOOLINGU | sme | **WMEP** MANUFACTURING SOLUTIONS

To begin your training program or for more information, contact us at **608-240-1740** or **info@wmep.org**

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

ENGINEERING

ENGINEERING FUNDAMENTALS

Additive Manufacturing Methods and Materials
Additive Manufacturing Safety
Introduction to Additive Manufacturing
Introduction to CAD and CAM for Machining
AC Fundamentals

DC Circuit Components
Electrical Units
Introduction to Circuits
Introduction to Assembly
Basics of Tolerance
Blueprint Reading

Lean Manufacturing Overview
Essentials of Heat Treatment of Steel
Introduction to Ceramics
Introduction to Composites
Introduction to Mechanical Properties
Introduction to Metals

Introduction to Physical Properties
Introduction to Plastics
Cutting Processes
Algebra Fundamentals
Geometry: Circles and Polygons
Geometry: Lines and Angles

Geometry: Triangles
Statistics
Trigonometry: Sine, Cosine, Tangent
Trigonometry: The Pythagorean Theorem
Units of Measurement

ENGINEERING TECHNICIAN

Basics of G Code Programming
Parallel Circuit Calculations
Series Circuit Calculations
Introduction to Hydraulic Components
Introduction to Pneumatic Components
The Forces of Fluid Power
Introduction to GD&T
SPC Overview
Troubleshooting

Classification of Steel
Ferrous Metals
Hardness Testing
Nonferrous Metals
Thermoplastics
Thermosets
Forces of Machines
Power Transmission Components
Drill Tool Geometry
Lathe Tool Geometry

Mill Tool Geometry
Basics of Ladder Logic
Introduction to PLCs
PLC Timers and Counters
Basic Ladder Diagram Programming for Siemens PLCs
Basics of Siemens PLCs
Siemens PLC Communication
Equipment/Tool Design and Development

ISO 9001 Review
Process Design and Development
Product Design and Development
Production System Design and Development
Quality and Customer Service
Automated Systems and Control
Hand and Power Tool Safety
Applied and Engineering Sciences

Manufacturing Process Applications: Part I
Manufacturing Process Applications: Part II
Punch and Die Operations
Manufacturing Management
Personal Effectiveness
Introduction to Welding Processes
Fixture Design Basics
Supporting and Locating Principles

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