## WELDING



### **PROFESSIONAL DEVELOPMENT**

#### LEARNING PLANS FOR MANUFACTURING JOB ROLES

Training Packages from Tooling U-SME offer quickstart, 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 WELDING JOB ROLES

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

### WELDING

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GMAW/FCAW/ SUBMERGED ARC/ GTAW/SMAW WELDING

> GTAW WELDING

> > SMAW

WELDING

FABRICATION

AND REPAIR

WELDING FUNDAMENTALS

> GMAW/FCAW/ SUBMERGED ARC WELDING

**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

SOUTHERN COMMUNITY C Contact Amy McClellan amcclellan@sscc.edu (937) 393-3431 ext. 3510 Ergonomics

Intro to OSHA

Electrical Units

NFC(R) Overview

Electrical Units

NEC(R) Overview

Introduction to Circuits

Introduction to Magnetism

Parallel Circuit Calculations

Safety for Electrical Work

Series Circuit Calculations

Introduction to Circuits

Introduction to Magnetism

Parallel Circuit Calculations

Safety for Electrical Work

Series Circuit Calculations

Machine Guarding

Fire Safety and Prevention

Hand and Power Tool Safety

Lockout/Tagout Procedures

Flammable/Combustible Liquids

# WELDING

Walking and Working Surfaces

Electrical Safety for Welding

Overview of Weld Defects

Oxyfuel Cutting Applications

Geometry Fundamentals for Welding

Math Fundamentals for Welding

Units of Measurement

### WELDING FUNDAMENTALS

Introduction to CAD and CAM for Machining Blueprint Reading Safety for Metal Cutting Bloodborne Pathogens Confined Spaces Environmental Safety Hazards

### GMAW FCAW SUB ARC

AC Fundamentals AC Power Sources Battery Selection Conductor Selection DC Circuit Components DC Power Sources Electrical Instruments Electrical Print Reading

### GTAW

AC Fundamentals AC Power Sources Battery Selection Conductor Selection DC Circuit Components DC Power Sources Electrical Instruments Electrical Print Reading

### SMAW

- AC Fundamentals AC Power Sources Battery Selection Conductor Selection DC Circuit Components DC Power Sources Electrical Instruments
- Electrical Print Reading Electrical Units Introduction to Circuits Introduction to Magnetism NEC(R) Overview Parallel Circuit Calculations Safety for Electrical Work

### FABRICATION AND REPAIR

- Introduction to Assembly Safety for Assembly Classification of Steel Essentials of Heat Treatment of Steel Band Saw Operation Algebra Fundamentals
- Applied and Engineering Sciences Geometry: Circles and Polygons Geometry: Lines and Angles Geometry: Triangles Math Fundamentals Math: Fractions and Decimals
- Statistics Trigonometry: Sine Bar Applications Trigonometry: Sine, Cosine, Tangent Trigonometry: The Pythagorean Theorem Conflict Resolution for Different Groups

Essentials of Communication Personal Effectiveness Electrical Power for Arc Welding Introduction to SMAW

Conflict Resolution Principles

Essentials of Leadership

Fixture Body Construction

Team Leadership

Eabrication Process

Fixture Design Basics

Introduction to Welding Introduction to Welding Processes Material Tests for Welding Overview of Weld Types **SMAW Applications** Welding Ferrous Metals Welding Nonferrous Metals

Plasma Cutting PPE for Welding Thermal Cutting Overview Welding Fumes and Gases Safety Welding Safety Essentials Welding Symbols and Codes

Total Productive Maintenance Introduction to Metals Nonferrous Metals Safety for Mechanical Work Approaches to Maintenance

Noise Reduction and Hearing

Personal Protective Equipment

Powered Industrial Truck Safety

SDS and Hazard Communication

Total Productive Maintenance

Introduction to Mechanical Properties

Troubleshooting

Exotic Allovs

Ferrous Metals

Classification of Steel

Introduction to Metals

Series Circuit Calculations

Troubleshooting

Ferrous Metals

Introduction to Metals

Total Productive Maintenance

Introduction to Mechanical Properties

Introduction to Physical Properties

Conservation

Respiratory Safety

Troubleshooting

Ferrous Metals

Safety for Lifting Devices

Essentials of Communication Personal Effectiveness Advanced GMAW Applications Electrical Power for Arc Welding FCAW Applications **GMAW** Applications Introduction to FCAW

Introduction to Physical Properties

Safety for Mechanical Work

Approaches to Maintenance

Essentials of Communication

Personal Effectiveness

**GTAW** Applications

Nonferrous Metals

Safety for Mechanical Work

Approaches to Maintenance

Nonferrous Metals

Introduction to GMAW Introduction to Welding Introduction to Welding Processes Material Tests for Welding Overview of Weld Types Welding Ferrous Metals Welding Nonferrous Metals

Introduction to GTAW Introduction to Welding Introduction to Welding Processes Material Tests for Welding Overview of Weld Types Welding Ferrous Metals Welding Nonferrous Metals

Introduction to Workholding Locating Devices

Supporting and Locating Principles

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

SOUTHERN STATE



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