## WELDING

### WELDING FUNDAMENTALS
- Basic Measurement: Walking and Working Surfaces, Fire Safety and Prevention
- Calibration Fundamentals: Flammable/Combustible Liquids, Safety for Lifting Devices
- Personal Protective Equipment: Powered Industrial Truck Safety, Safety for Metal Cutting
- Noise Reduction/Hearing Conservation: Ergonomics, Confined Spaces, Environmental Safety Hazards, intro to CAD and CAM for Machining
- Lockout/Tagout Procedures: Lockout/Tagout Procedures, Safety for Metal Cutting
- SDS and Hazard Communication: SDS and Hazard Communication, Powered Industrial Truck Safety
- Locating Devices: Safety for Metal Cutting, Powered Industrial Truck Safety
- Locating Devices: Safety for Metal Cutting, Powered Industrial Truck Safety
- Supporting and Locating Principles: Safety for Metal Cutting, Powered Industrial Truck Safety
- Introduction to Workholding: Safety for Metal Cutting, Powered Industrial Truck Safety

### WELDING FUNDAMENTALS
- Units of Measurement: Lockout/Tagout Procedures, SDS and Hazard Communication
- Blueprint Reading: Bloodborne Pathogens, Walking and Working Surfaces
- Intro to OSHA: Walking and Working Surfaces, Bloodborne Pathogens
- Personal Protective Equipment: Walking and Working Surfaces, Bloodborne Pathogens
- Noise Reduction and Hearing Conservation: Walking and Working Surfaces, Bloodborne Pathogens
- Conservation: Flammable/Combustible Liquids, Confined Spaces, Environmental Safety Hazards, intro to CAD and CAM for Machining
- Respiratory Safety: Ergonomics, Confined Spaces, Environmental Safety Hazards, intro to CAD and CAM for Machining

### SMAW
- Introduction to Physical Properties: Total Productive Maintenance, Troubleshooting
- Introduction to Mechanical Properties: Electrical Units, Safety for Electrical Work
- Introduction to Metals: DC Circuit Components, Introduction to Magnetism
- Classification of Steel: AC Power Sources, Conductor Selection
- Ferrous Metals: Electrical Power for Arc Welding, Overview of Weld Types
- Nonferrous Metals: Overview of Weld Types, Personal Effectiveness
- Approaches to Maintenance: Overview of Weld Types, Personal Effectiveness

### GTAW
- Introduction to Physical Properties: Total Productive Maintenance, Troubleshooting
- Introduction to Mechanical Properties: Electrical Units, Safety for Electrical Work
- Introduction to Metals: DC Circuit Components, Introduction to Magnetism
- Classification of Steel: AC Power Sources, Conductor Selection
- Ferrous Metals: Electrical Power for Arc Welding, Overview of Weld Types
- Nonferrous Metals: Overview of Weld Types, Personal Effectiveness
- Approaches to Maintenance: Overview of Weld Types, Personal Effectiveness

### FABRICATION AND REPAIR
- Introduction to Workholding: Math: Fractions and Decimals, Algebra Fundamentals
- Supporting and Locating Principles: Geometry: Lines and Angles, Geometry: Triangles
- Fixture Body Construction: Trigonometry: The Pythagorean Theorem, Band Saw Operation
- Fixture Design Basics: Trigonometry: Sine, Cosine, Tangent, Statistics
- Math Fundamentals: Trigonometry: Sine Bar Applications, Classification of Steel
- Fabrication Process: Fabrication Process, Applied and Engineering Sciences
- Conflict Resolution Principles: Team Leadership