

## WELDING TECHNOLOGY

Master Plan of Instruction

- Demonstrate an understanding and apply workplace safety and workplace organization skills.
- Demonstrate basic knowledge of industrial and manufacturing processes.
- Describe and identify metals and their properties accurately.
- Demonstrate and apply basic knowledge of drawing and interpreting AWS welding symbols.
- Apply basic oxyfuel gas cutting principles and practices.
- Create a product using basic oxyfuel gas cutting principles and practices.
- Apply intermediate oxyfuel gas cutting principles and practices.
- Demonstrate plasma arc cutting principles and practices.
- Demonstrate a basic understanding of shielded metal arc welding (SMAW).
- Create a product using basic shielded metal arc welding (SMAW) principles and practices.
- Apply basic shielded metal arc welding (SMAW) skills.
- Demonstrate and apply Carbon Arc Gouging (GAC) principles and practices.
- Apply visual examination skills.
- Create a product using Carbon Arc Gouging and basic shielded metal arc welding (SMAW) principles and practices.
- Demonstrate an understanding of employability skills and career opportunities related to the welding industry.
- Apply intermediate shielded metal arc welding (SMAW) skills.
- Create a product using intermediate shielded metal arc welding (SMAW) principles and practices
- Apply basic gas metal arc welding (GMAW) skills.
- Apply intermediate gas metal arc welding (GMAW) skills.
- Apply basic flux-core arc welding (FCAW) skills.
- Apply intermediate flux-core arc welding (FCAW) skills.
- Apply basic gas tungsten arc welding (GTAW) skills.
- Apply intermediate gas tungsten arc welding (GTAW) skills.
- Demonstrate and apply basic pipe welding principles and practices.
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