

# Ag Metal Fabrication Technology (18404) (2022)

Apply safety practices in metal fabrication. AMF 1

**1 Demonstrate safe operation and knowledge of metal fabrication tools and equipment.** AMF 1.1

**2 Demonstrate workplace/worksite safety procedures and protocols.** AMF 1.2

Demonstrate the basics of metal fabrication. AMF 2

**1 Demonstrate knowledge of metal fabrication techniques and related technologies.** AMF 2.1

**2 Prepare various metals for welding.** AMF 2.2

**3 Create plans for a metal project.** AMF 2.3

**4 Create a metal fabrication project.** AMF 2.4

Demonstrate the principles of Shielded Metal Arc Welding (SMAW) and the correct operation of SMAW equipment. AMF 3

**1 Perform Shielded Metal Arc Welding (SMAW) techniques.** AMF 3.1

Demonstrate the principles of Metal Inert Gas (MIG) welding, also known as Gas Metal Arc Welding (GMAW), and the correct operation of MIG equipment. AMF 4

**1 Perform metal inert gas (MIG) welding techniques.** AMF 4.1

Understand the correct operation of oxyacetylene equipment. AMF 5

**1 Explore oxyacetylene welding, cutting, and brazing.** AMF 5.1

Explore advanced welding processes. AMF 6

**1 Investigate and explain principles of advanced welding processes (e.g. Tungsten Inert Gas (TIG) welding, plasma cutting (hand or table))** AMF 6.1

**Develop employability skills related to the Power, Structural, and Technical Systems Pathway.** AMF 7

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- 1 Develop soft skills to enhance employability.** AMF 7.1
  - 2 Investigate careers related to metal fabrication.** AMF 7.2
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**Implement an individual project for career development through a Supervised Agriculture Experience/Work based Experience.** AMF 8

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- 1 Develop an individual project plan with goals and timeline.** AMF 8.1
- 2 Explore opportunities within AFNR industries.** AMF 8.2
- 3 Apply concepts of financial management appropriate to agricultural projects and personal finances.** AMF 8.3
- 4 Develop and document knowledge and skills to ensure workplace safety regarding personal health and environmental management.** AMF 8.4
- 5 Research and analyze how public policy, laws, and advocacy impact agricultural systems and agricultural literacy.** AMF 8.5