

Fundamental Ag Mechanical Technologies (18401) (2022)

Apply safety practices in mechanical applications. **FAM 1**

- 1 Explain the safe operation and servicing of machinery and equipment. **FAM 1.1****
- 2 Demonstrate safe operation and knowledge of ag mechanical tools. **FAM 1.2****
- 3 Demonstrate workplace/worksite safety procedures and protocols. **FAM 1.3****

Identify maintenance procedures & schedules for mechanical equipment, power and agricultural technology. **FAM 2**

- 1 Identify parts and explain functions of various mechanical systems. **FAM 2.1****
- 2 Investigate common maintenance schedules and practices for equipment. **FAM 2.2****
- 3 Troubleshoot problems in mechanical systems. **FAM 2.3****

Demonstrate basic skills in project planning and metal fabrication. **FAM 3**

- 1 Create designs of metal projects. **FAM 3.1****
- 2 Demonstrate basic welding principles and techniques. **FAM 3.2****
- 3 Employ metal fabrication principles to create a metal project. **FAM 3.3****

Apply electrical principles in agricultural applications. **FAM 4**

- 1 Recognize the components and functions of electrical systems. **FAM 4.1****
- 2 Demonstrate fundamental principles of electricity. **FAM 4.2****

Investigate emerging agricultural technologies. **FAM 5**

- 1 Investigate new and/or existing technology in agriculture. **FAM 5.1****

Develop employability skills related to the Power, Structural, and Technical Systems Pathway. **FAM 6**

- 1 Develop soft skills to enhance employability. **FAM 6.1****

Implement an individual project for career development through a Supervised Agriculture

- 1 Develop an individual project plan with goals and timeline. **FAM 7.1****
- 2 Explore opportunities within AFNR industries. **FAM 7.2****

**Experience/Work based
Experience.** FAM 7

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- 3 Apply concepts of financial management appropriate to agricultural projects and personal finances.** FAM 7.3

 - 4 Develop and document knowledge and skills to ensure workplace safety regarding personal health and environmental management.** FAM 7.4

 - 5 Research and analyze how public policy, laws, and advocacy impact agricultural systems and agricultural literacy.** FAM 7.5