South Dakota CTE

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 pr de Su	1	**Develop an individual project plan with goals and timeline.** FAM 7.1
		xplore opportunities within AFNR industries. FAM 7.2

Skip to main content

Experience/Work based Experience. FAM 7

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