

Agricultural Mechanics II

Understand leadership qualities involved in successful employment. [AS32.1.00](#)

- 1.01** Understand the leadership qualities and career building techniques desired by the agricultural mechanics industry. [AS32.1.01](#)
- 1.02** Understand parliamentary procedure. [AS32.1.02](#)

Understand the Supervised Agricultural Experience component of the agricultural mechanics program. [AS32.2.00](#)

- 2.01** Understand SAE components and application to work-based learning. [AS32.2.01](#)
- 2.02** Understand a financial statement. [AS32.2.02](#)

Apply shop safety skills in the agriculture shop. [AS32.3.00](#)

- 3.01** Understand OSHA safety rules, color coding, and equipment safety in an agricultural mechanics shop. [AS32.3.01](#)
- 3.02** Apply safety skills when practicing cold and hot metal skills. [AS32.3.02](#)

Apply metal fabrication skills in the agricultural shop. [AS32.4.00](#)

- 4.01** Apply proper procedures for using bolts, nuts, washers, screws, and rivets. [AS32.4.01](#)
- 4.02** Apply the proper use of metal fabrication equipment such as plasma cutters, chop saws, grinders, band saws, and CNC (Computer Numerical Control). [AS32.4.02](#)
- 4.03** Apply proper procedures for using oxy-fuel equipment and materials for annealing, bending, brazing, soldering, tempering, hardening, cutting, and welding various materials. [AS32.4.03](#)
- 4.04** Apply proper procedures for using arc welding equipment and materials for SMAW, GMAW, and GTAW. [AS32.4.04](#)
- 4.05** Apply metal fabrication skills to design plans, read symbols, and construct a project. [AS32.4.05](#)

Apply the use of agricultural power in agricultural mechanics. [AS32.5.00](#)

- 5.01** Understand the principles of operation and troubleshooting techniques for air-cooled and water-cooled engines. [AS32.5.01](#)
- 5.02** Apply preventative maintenance procedures to service small engine powered tools, equipment, tractors and attachments. [AS32.5.02](#)

5.03 Apply principles and procedures for the safe use of tractors and power equipment. AS32.5.03

Apply plumbing principles used in agricultural mechanics. AS32.6.00

6.01 Understand plumbing principles and materials. AS32.6.01

6.02 Apply proper safety and industry approved techniques to install plumbing materials. AS32.6.02

Apply concrete and masonry principles to complete agricultural mechanics projects. AS32.7.00

7.01 Understand concrete and masonry principles to construct masonry projects in agricultural mechanics. AS32.7.01

7.02 Apply concrete and masonry principles to calculate materials needed and cost for a masonry project. AS32.7.02

7.03 Apply principles to construct a concrete/masonry project. AS32.7.03
