

## Business & Industry Endorsement



# Agriculture Technology & Mechanical Systems

## Agriculture, Food, and Natural Resources (AFNR)

The Agricultural Technology and Mechanical Systems program of study focuses on occupational and educational opportunities associated with applying engineering technology and biological science to agricultural problems related to power and machinery, electrification, structures, soil and water use, and processing agricultural products. This program of study includes diagnosing, repairing, or overhauling farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.

### Course 1



**Principles of Agriculture, Food, and Natural Resources**

### Course 2



**Agriculture Equipment Design and Fabrication**

### Course 3

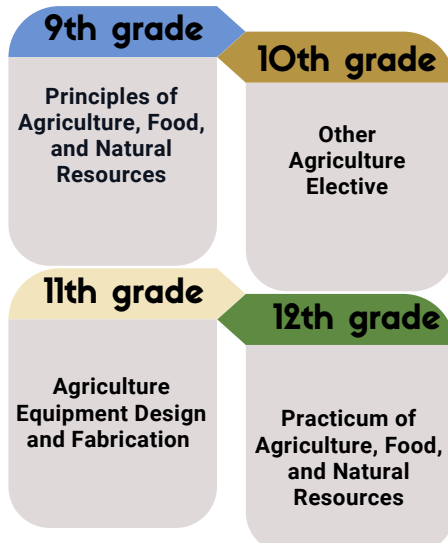


**Practicum of Agriculture, Food, and Natural Resources**

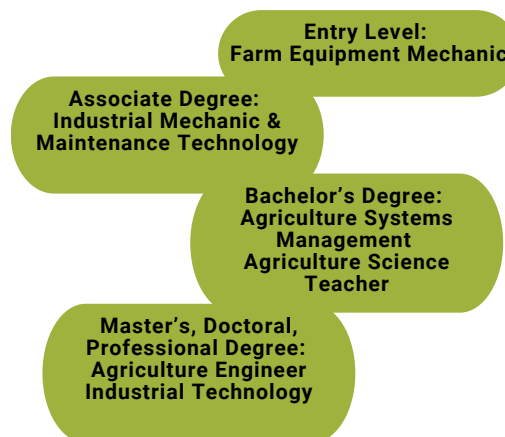
### Industry Based Certifications:

- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding
- NCCER Core

Recommended Course Sequence:



### Postsecondary Opportunities:



**Example Aligned Occupations:**

**Farm Equipment Mechanics and Service Technicians**  
Median Wage: \$46,582  
Annual Openings: 350

**Farmers, Ranchers, and Other Agricultural Managers**  
Median Wage: \$65,490  
Annual Openings: 2,500

**Agriculture Science Teacher**  
Median Wage: \$59,296  
Annual Openings: 150