

Business & Industry Endorsement

Applied Agriculture Engineering Pathway



BUSINESS & INDUSTRY ENDORSEMENT

Recommended Level 1	Required Level 2	Level 3	Level 4
Principles of Agriculture, Food & Natural Resources	Agricultural Mechanics & Metal Technologies	Agricultural Structures Design & Fabrications/Lab	Practicum in Applied Agriculture Engineering
CERTIFICATIONS: American Welding Society - D1.1 & D1.9			

PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES

KISD #: 904018 PEIMS: 13000200
 Grades: 9-10 1.0 Credit
 Prerequisite: None

Student will be gain introductory knowledge of all aspects in agriculture including agricultural career development, leadership, communications, personal finance, mechanized agriculture, soils, plants, animals, agricultural construction, food science, and supervised agricultural experience programs.

AGRICULTURAL MECHANICS & METAL TECHNOLOGIES

KISD #: 906118 PEIMS: 130023
 Grades: 10-12 1.0 Credit
 Prerequisite: None

Students will be introduced to basic theory and gain specialized skills in agricultural mechanics. Skills to be developed include identification and safe use of tools, carpentry, electricity, plumbing, masonry, fencing, painting, hot and cold metalworking, and welding processes. Construction of projects will be included in this course.

Required Fee/Materials: Yes

AGRICULTURAL STRUCTURES DESIGN & FABRICATION/LAB

KISD #: 907918 PEIMS: 13002310
 Grades: 11-12 2.0 Credits
 Prerequisite: Agriculture Mechanics and Metal Tech

Students will learn the basic principles of agricultural mechanics, including: blueprint reading and implementation, building site location, CNC drafting and application, carpentry and construction, electrical and plumbing systems, concrete and masonry construction, metal construction and large project building.

Required Fee/Materials: Yes

PRACTICUM IN AGRICULTURAL MECHANICS

KISD #: 908618 PEIMS: 13002500
 Grades: 12 2.0 Credits
 Prerequisite: Ag Equipment Design and Ag Structures Design and Fabrication

Students will participate in a laboratory-oriented course designed teach the basic principles of agricultural mechanics, including: blueprint reading and implementation, building site location, CNC drafting and application, carpentry and construction, electrical and plumbing systems, concrete and masonry construction, metal construction and large project building.

Required Fee/Materials: Yes

Advanced Grade Points: Yes

Industry Certification: AWS D1.1 Welding