

## CFISD Project-based Research in Agriculture, Food, and Natural Resources Focused on Advanced Ag Mechanics Scope and Sequence

**Course Description:**

This course is a supervised research study/project-based class where students will apply knowledge and skills from previous ag mechanics courses in a related advanced/specialized field of study. Students are required to submit a formal project plan within two weeks after enrollment in the course. The plan should specify the additional concepts and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- 1 credit, Grades 11-12
- Required prerequisite: Ag Mechanics
- Lab supplies or fee may be required.

[TEKS](#)

Program of Study: Applied Ag Engineering

Cluster: Agriculture, Food, and Natural Resources

Endorsement: Business & Industry

- Meets advanced course requirement (Y/N): Y
- Meets foundation requirement for math, science, fine arts, English, LOTE (Y/N-area): N

Industry Certification/Credentials: **OSHA 30-Houst Card & American Welding Society D9.1 and D1.1**

Instructional Units	Pacing
1 <sup>st</sup> Semester Personal & Occupational Health & Safety Project Brainstorming Project Planning Cost Analysis	1 <sup>st</sup> Grading Period
Project Building Project Documentation Building Project Portfolio	2 <sup>nd</sup> Grading Period
2 <sup>nd</sup> Semester Project Completion Project Presentation Project Revisions and Improvements Portfolio Presentation	3 <sup>rd</sup> Grading Period
Project Marketing Project Reflections Projected Cost vs Actual Cost Project Comparison to Real World Marking and Application	4 <sup>th</sup> Grading Period

Primary Instructional Materials: varies, based on project