

CFISD Engineering Design and Presentation II

Scope and Sequence

Course Description: Students will work on a variety of projects that will help them develop design skills including those related to team building, problem solving, time management, project design and development. Students will be encouraged to enter competitive events that lead to the completion of industry certifications, internships, and career opportunities. (2 Credits)

- Grades 10 – 12
- Required prerequisite: Engineering Design I
- Lab supplies or fee is required.

TEKS:

Cluster: STEM (*Science, Technology, Engineering and Mathematics*)

Endorsement: STEM (*Science, Technology, Engineering and Mathematics*)

- Meets advanced course requirement (Y/N): Yes
- Meets foundation requirement for math, science, fine arts, English, LOTE (Y/N-area): No

Industry Certification/Credentials: *Autodesk certified user certification*

Instructional Units	Pacing
1st Semester Career Paths in Engineering Review: Documenting the process The design process Reverse Engineering Codes and Standards Advanced CAD Software interface Prototypes Project Constraints Assemblies	1 st Grading Prd 2 nd Grading Prd
2nd Semester Multiview Projection Pictorials Auxiliary Views Sections Assemblies Design Development & Application Systems Work Team Dynamics Documentation Prototyping Application of skills Certification Testing	3 rd Grading Prd 4 th Grading Prd

Primary Instructional Materials: *Exploring Drafting- GW, Autodesk software.*