

CFISD Robotics I

Scope and Sequence

Endorsement: Business & Industry (or STEM with required math & science)

Cluster: Engineering or Manufacturing

Program of Study: Robotics Engineering or Robotics Manufacturing

Meets advanced course requirement? **NO** ▾

Meets foundation requirement for math, science, fine arts, English, LOTE? **NO** ▾

Course Description:

Students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry.

TEKS link

- 1 credit
- Grades 9-12
- Lab supplies or fee may be required
- Required prerequisites: Principles of Applied Engineering **or** Principles of Manufacturing (depending on student's Program of Study)

Industry Certification/Credential: n/a

Instructional Units	Grading Period
Safety Careers in Robotics History of Robotics and Automation Robot Construction	N1 (fall)
Automated Systems Technological Systems	N2 (fall)
Engineering Principles and Operations	N3 (spring)
Robotics in Manufacturing Project Management	N4 (spring)

Primary Instructional Materials: REC Modules; VEX Cortex kits