Rev for Fall 2024

CFISD Robotics I

Scope and Sequence

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.

- **1 credit**
- Grades 9 – 12
- Required prerequisite: Principles of Applied Engineering
- **Lab fee will be required**

TEKS

Program of Study: *Engineering Foundations*

Cluster: *Engineering*

Endorsement: *STEM*

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

Industry Certification/Credentials: *n/a*

Instructional Units	Pacing
1st Semester	
Safety History of Robotics and Automation Resource Career Paths Professionalism and Employability Skills	**1st Grading Pd**
Automated systems Teamwork Technological Systems	**2nd Grading Pd**
2nd Semester	
Engineering principles and operations Teamwork	**3rd Grading pd**
Tools and equipment used on robots Project Management	**4th Grading Pd**

Primary Instructional Materials: *REC Modules, Vex Cortex kits*