

# 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
<b>1<sup>st</sup> Semester</b>	
Safety History of Robotics and Automation Resource Career Paths Professionalism and Employability Skills	<b>1<sup>st</sup> Grading Pd</b>
Automated systems Teamwork Technological Systems	<b>2<sup>nd</sup> Grading Pd</b>
<b>2<sup>nd</sup> Semester</b>	
Engineering principles and operations Teamwork	<b>3<sup>rd</sup> Grading pd</b>
Tools and equipment used on robots Project Management	<b>4<sup>th</sup> Grading Pd</b>

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