## **CFISD Robotics I**

## Scope and Sequence

## Course Description:

In Robotics I, 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: Robotics

Cluster: Science, Technology, Engineering and Mathematics

**Endorsement: STEM** 

Meets advanced course requirement (Y/N): N

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

Industry Certification/Credentials: n/a

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

Primary Instructional Materials: Learn-mate computer-based curriculum, REC Modules, Vex Cortex kits