

## CFISD Robotics II Scope and Sequence

### Course Description:

In Robotics II, students will explore artificial intelligence and programming in the robotic and automation industry. Through implementation of the design process, students will transfer academic skills to component designs in a project-based environment. Students will build prototypes and use software to test their designs. (1 Credit)

- Grades 10– 12
- Required Prerequisite Robotics I
- Completing this course satisfies a math credit required for graduation.
- Lab fee will be required.

### [TEKS](#)

Program of Study: Robotics

Cluster: Science, Technology, Engineering and Mathematics

Endorsement: STEM

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

Industry Certification/Credentials: FANUC Certified Robot Operator 1

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

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