

Calallen ISD 2025-2026
Syllabus - Robotics

Campus: Middle School

Course and/or Grade Level: Robotics 8th Grade

Course Description: Robotics will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful robotic programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve problems in designing and programming robots. Through data analysis, students will identify task requirements, plan search strategies, and use robotic concepts to access, analyze, and evaluate information needed to solve problems. By using robotic knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results.

Semester 1: August 13 – December 19, 2025

1st Quarter Topics	2nd Quarter Topics
Unit 01: Tool Safety Unit 02: Measurement - Reading a tape measure - Adding and subtracting fractions Unit 03: Engineering design Unit 04: AI - Dream Bots	Unit 05: Coding - Types of coding - Block coding - Sphero mini Unit 06: Sphero Bolt + - Introduction Challenges

Semester 2: January 5 – May 29, 2026

3rd Quarter Topics	4th Quarter Topics
Unit 07: Shero Rovers Unit 08: Sphero V5 - Build - Code - Competition	Unit 09: SeaPerch Robots - Build - Code - Present

**Minor adjustment to the schedule may be made based on campus schedules and student needs.*