Robotics ll 2024- 2025

Robotics ll TEKS

Course Description: 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. This course satisfies a high school mathematics graduation requirement and will be counted in the GPA as an academic elective.

Scope and Sequence 2024-2025

Semester One August 14-December 19, 2024	
First 9 Weeks (40 Days) - August 14- October 11, 2024	TEKS Covered **130.409. (c) Knowledge and skills**
Unit 1: Career Exploration	1 A ,B, C, D, E, F, G, H, I, J , K
Unit 2: Real-World Mathematical Processes	2 A ,B, C, D, E, F, G
Unit 3: Safety Precautions	5 A ,B, C, D, E, F, G, H
Unit 4: Teamwork in STEM	3 A ,B, C, D, E
Second 9 Weeks (42 Days) - October 14-December 19, 2024	
Unit 5: Project Management	4 A ,B, C, D

Review and Final Exam (6 Days) **December 12 - December 19**	
Semester Two January 8-May 21, 2025	
Third 9 Weeks (40 Days) - January 8-March 7, 2025	
Unit 7: Advanced Mathematics & Physics in Robotics Systems	7 A ,B, C, D, E, F, G, H, I, J
Unit 8: Programming a Robot	8 A ,B, C, D, E, F, G, H
Unit 9 : Components Required for Robotic Function	9 A, B, C
Fourth 9 Weeks (46 Days) - March 18-May 21, 2025	
Unit 10 : Maintain Technological Products, Processes, and Systems	6 A, B, C, D
Unit 11: Design Methodologies	10 A ,B, C, D, E, F, G, H
Unit 12: Extended Learning Experience	12 A ,B, C, D, E, F, G, H
Spring Review and Final (5 Days) **May 15 - May 21**	