Logo

Description automatically generated**Introduction to Robotics Parent Guide**

|  |  |
| --- | --- |
| This course exposes students to some of the major concepts and technologies that they will encounter as they investigate engineering, robotic, and high-tech careers. Students will employ science, technology, engineering, and mathematical concepts in the solution of real-world challenging situations. VEX EDR and multiple coding styles and languages will be utilized in this course. | |
| 1st 6 Weeks: Introduction to Robotics  Rotation and Torque  Center of Gravity & Lifting Mechanisms | 4th 6 Weeks: Physics Concepts Demonstration  Design Specification  Engineering Notebooks & CAD |
| 2nd 6 Weeks: Engineering Notebooks & Schematics  Functional Specifications  Intro to Programming  Circuit Parts, Kit Builds and Basic Soldering | 5th 6 Weeks: Engineering Notebooks & CAD  Circuits, Soldering, & VEX build  Material Analysis  Sensors & Autonomy |
| 3rd 6 Weeks:Sensors - Vision Speed, Velocity, Acceleration & Vectors | 6th 6 Weeks: Drivetrains & Gearboxes  Robot Challenges  Engineering Notebook and Inventories |

**Questions?** Please contact your course science teacher.