

● **Talon Robotics 2021 Talking Points**

- FIRST stands for “For Inspiration and Recognition of Science and Technology.” The program was founded with the ultimate goal of inspiring young people to be the science and technology leaders of the future.
- FIRST accomplishes this goal by challenging students to create robots that compete in fun, game-like challenges. Past challenges include games similar to Frisbee golf, soccer, and basketball. With themes ranging from medieval to science-fiction.
- The FIRST Robotics’ program progression starts in kindergarten and continues through high school. Younger students use EV3 kits, while older students build robots from scratch.
- I am on Eden Prairie High School’s Talon Robotics Team 2502. Five students started our robotics team in 2007. Since 2008 we have qualified for the World Championship 7 times and now have more than 35 members.
- This year’s game is called Infinite Recharge At Home. In this virtual game, we compete against other teams in a variety of robot skills challenges, including both autonomous and teleoperated challenges. These include having the robot shoot power cells at varying distances, having it drive a predetermined route for the fastest time, and multiple other challenges.
- We have historically mentored and provided financial support for two Jr. FLL, three FLL (FIRST Lego League), and four FTC (FIRST Tech Challenge) teams.
- In a normal year, we demonstrate our robot annually at the RoboFest, scout troop meetings, Eden Prairie 4th of July Celebrations, Minnesota State Fair, and at many of our sponsors’ locations.
- Each summer we run summer camps through community education. Students get to participate in STEM challenges and build their own robot using Arduino and Lego Mindstorms. We have 2 camps, both aimed at teaching young students the engineering basics.
- In addition to corporate sponsors, we typically raise funds to help offset travel costs through a spaghetti dinner, Krispy Kreme donut sales, and concession sales at various school events and some local car shows including our own.
- Our current robot, named Orion, was designed to shoot power cells into the outer and inner ports, nimbly weave through the obstacles for the driving portion, and autonomously navigate the field in a highly optimized route.