

Photo taken by Troup First Robotics Team at SJND

The First Robotics Team at SJND is preparing to compete in the FIRST Tech Challenge this year. The competition is fierce and we are getting ready to crush the competition.

First Robotics is a big thing in STEM education - it is a competition designed to push a student's thinking and problem-solving skills to a new level. Students worldwide participate in First Robotics in grades ranging from middle school to college.

What is a first robotics challenge like?

A First Robotics competition involves more than just driving a robot around a box. The competition is the final stage of a two-month project. Teams are provided a base robot kit, which includes materials and instructions to get you started. The robot must be able to complete certain tasks. These tasks can range from stacking up hexagonal pixels to autonomously throwing a paper airplane into a specific landing zone. Once the base robot is built, teams add extensions like robot arms and other components to help them with the assigned tasks. All the extensions must fit in an 18" by 18" box.

How do we build a robot?

Let's break down the whole process. The first step in creating a robot is a good design. Designing a robot involves your team deciding on the best way to make your robot capable of the task assigned. The next step is to fundraise for your robot. You must raise money for your robot to add custom parts to the base model. The last step is building the robot according to the instructions. Though most people think building the robot is the hardest step, it is actually the easiest part of the whole process.

How can I join the robotics team?

To join the robotics team at SJND, all you have to do is pursue the engineering pathway. The engineering pathway is an academic track for students interested in studying engineering in college and/or a career in the field. Rubin, a current freshman and member of the robotics team shared "I joined the engineering pathway because I want to become an aerospace engineer." The engineering pathway is a great introduction to the engineering world for students who want to work in the field after college.



What is this year's First robotics competition?

This year SJND participated in the FIRST Tech Challenge. We will be competing against local teams in the Bay Area. This year we must work with another team to hexagonal pixels from one side of a swinging gate to the other.

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