



Robotics

Eligibility Requirements

Robotics Program

Description:

A robotics club equips students with the necessary STEM skills to prepare them for future careers in engineering (electrical, mechanical, software), business (communication, media), and automation. Through a robotics program students engage in complex projects that build their critical thinking and problem-solving skills.

Other details: Students also engage in activities that provide transferrable skills such as public speaking, formal presentations, and effective documentation.

Grades: High school, 9-12 grade.

Club: Robotics

- Program begins as a club. Mentees need to be able to commit to the program for at least 2-3 years for the program to be successful.
- Programs will need to be able to invest in (or possess) robotics kits, access to computers with sufficient software and materials. Exact computer specifications and materials needed are included in this full list of recommended equipment. Please note: program mentors will help teams decide exact specifications for electronic equipment, software and manufacturing needs for first year and beyond.
- Startup fees: To start a club it will take roughly \$10,000. Mentors will help teams will walk through the process of getting funded and identify potential funding sources.

Resources needed: To successfully launch a robotics club, these are the minimum resources needed:

- One or two instructors. Two is preferred, but one can be sufficient. Instructors must have these qualifications and skills:
 - Strong desire and willingness to invest time to learn and experience what it means to lead a robotics club. No experience necessary as Robotics can be learned.
 - Training will be provided for mentees to develop their skills in the program, mentees must be willing to attend all trainings.
- A physical space to setup, implement and facilitate the Robotics program:
 - Classroom or flexible space big enough for assembly and construction of competition robots.
- Funding: Year one of a robotics club requires at least a \$10,000 investment. This includes:
 - Startup
 - Durable equipment
 - Consumables
- High level interest and buy-in from the administration, district and community.
- A supportive administration and a district willing to invest time and money.

Note: the Mentors of this program will provide in-depth guidance to help mentees navigate funding for the classroom and program, identifying and working with community partners, and overall creating a robust robotics program for their campus and/or community.