



# How to start a robotics Team

## **A robotics team needs the following:**

1. Coach
2. A laptop
3. 3-10 student team members (High school students or younger)
4. Team registration
5. Robotics equipment
6. Knowledge of this years challenge
7. Registration into one or more tournament(s)

## **Coach:**

A coach can be a parent, teacher or any adult. Although helpful it does NOT require a person with robotics experience or even a technical background. The students are amazing at picking up on the technology and you can get help along the way.

## **Laptop:**

Most schools/organizations have an older laptop which can be used for this. It will not require a new or extremely powerful laptop. Any laptop up to 3-4 years old will work fine. Laptops are preferred over desktops because you will need to take your computer to the tournaments in case you need to make some last minute changes or reload your program.

## **Team size:**

Teams range anywhere from 3-10 students. Team size varies and 3-10 students is a guideline. They can be any age as long as they are still in high school (have not graduated). Some teams are as small as 1 and some are larger than 10 (NOTE: all awards, entrance in the pit, etc. are geared toward 10 members max). Our experience has been that teams of 3-5 work best. However larger teams can perform very well too.

## **Registration:**



Team registration is required to become part of the participating robotics community. You must be registered to participate in official competitions which allow you to qualify for larger international competitions. Registration has no deadline, when you organize a team the first step is to register them. To register follow the instructions on the following web page: <http://robotevents.com/vex-2009-2010-team-registration-plus-welcome-kit.html>.

You will be sent an official license plate with your team number. Attach the license plate to your robot and know your team number at every tournament. Registration cost is \$75 for the first team from a school/organization and \$25 for each team thereafter. Last year there were 1,326 teams that registered worldwide (many teams come from outside the U.S.). This year we expect over 2,000 teams.

### **Registering for events/tournaments:**

Registration for all events/tournaments is done at the Robot Events website. [www.robotevents.com](http://www.robotevents.com)

### **Equipment:**

What to get? That somewhat depends upon your design. However to build a robot that can compete in all of the challenges, alliances, drivers challenge and the autonomous challenge your team will need to have a enough metal, wheels and sensors to build a robot that is multi-functional . Start with a kit, add sensors (if the kit you selected has none/few), add a metal add on package, extra battery and many/most teams now have at least one set of omni-wheels. Make sure you have a battery charger and NiCad rechargeable batteries. (These are required for competitions).

Robotics equipment can be purchased from Innovation First at [www.vexrobotics.com](http://www.vexrobotics.com). Occasionally you can get some deals online on eBay, Craigslist, or on the forums.

### **The game:**

All the information about this years challenge can be found at: <http://www.vexrobotics.com/vex-clean-sweep.shtml>

### **Here are some important Web Sites:**

[www.CREATE-Found.org](http://www.CREATE-Found.org)



- CREATE Foundation - [www.CREATE-Found.org](http://www.CREATE-Found.org) Home of the Championship of the Americas Tournament and Team/Event Organizers assistance.
- Innovation First - [www.vexrobotics.com/](http://www.vexrobotics.com/) Innovation First has launched several Web sites supporting the advancement of the robotics industry. IFI is the company that makes the robotics equipment used in these competitions.
- Robot Events - [robotevents.com/](http://robotevents.com/) - This is the official clearing house for registering teams for robotics tournaments. Here you can find a list of all events worldwide, or events in your area.
- VEX Forums - <http://www.vexforum.com/> Here you can find a lot of useful information including official answers to VRC game questions.
- Wiki index - The following Wiki type site has a great deal of useful technical information: [www.vexforum.com/wiki/index.php/Main\\_Page](http://www.vexforum.com/wiki/index.php/Main_Page)