



**FRC**

FIRST Robotics Competition  
Western Canada

## How to start a FRC TEAM

So you want to start a *FIRST*® Robotics Competition (FRC®) Team and get involved in the excitement and challenge of promoting science and technology careers to today's high school students. Welcome to the most amazing program you'll ever lose sleep over. Your students will benefit from working side by side with professional engineers, gaining practical experience in construction, programming, and problem solving. Your Mentors will benefit from the opportunity to network with other engineers and educators from around the world.



## *The hardest fun you will ever have...*

### Resources:

Dual Credit Courses

APEGA Mentors

Pay It Forward Grants

The FRC Handbook  
[usfirst.org/frc/startateam/](http://usfirst.org/frc/startateam/)

Web based training for  
students, teachers and  
parents

Team support  
8:30 - 5:00 EST  
1-800-871-8326  
[FRCteams@usfirst.org](mailto:FRCteams@usfirst.org)

[www.USFIRST.org](http://www.USFIRST.org)  
[www.FRCWest.com](http://www.FRCWest.com)

### What do I need to get started?

#### **5-45 high-school-aged students**

As your team matures, you may find room for more students. More students will make it possible to participate in more aspects of the FIRST experience.

#### **1-3 engineers/skilled trades people**

Find your own or we can help connect you with a local APEGA engineer. Volunteers will guide your students through the engineering challenges inherent in the design and construction of a working robot.

**Time** – meet with your team several times a week from mid - December to the end of February.

**A meeting place** - to design, build, program, and test a working robot.

#### **Financial**

We are finalizing details on a new free Online Dual Credit High School Course. What we are working towards is when 15 of your students finish the course, the school gets your kit of parts for **free**.

Robot Kit of Parts  
\$5,000 veteran teams (reuse parts)  
\$6,500 rookie teams

Most teams budget to purchase additional materials for their robot, create team t-shirts, etc. Our foundation can offer a hand up not hand out when making the finances work for your team. Ask for details about our *Pay It Forward* program.

**Tools** – students will be designing and creating a working robot. You will need hand tools, power tools, and access to machine tools.

**Good teams build robots – Great teams build teams – Amazing teams build community**  
[www.FRCWest.com](http://www.FRCWest.com)



# Teachers & School Administrators

## Help to get started...

- Mentoring: we match all rookie teams up with an experienced FRC Team
- Training the Trainer & Robotic Boot Camp workshops
- We provide ongoing webinars from robotics experts that can be viewed anywhere
- Quick build workshop on kickoff day – your team walks away with a working moving FRC Robot



## Financial: *A hand up not a handout*

Our Pay It Forward Grants - answer 3 questions:

- why is it a good thing for us to say yes?
- how does it get paid forward to others?
- what do the students, teachers, parents have invested? (*skin in the game*)

**Tools:** If your school does not have a shop, we can supply a basic tool kit that should get you through the season. We collect a damage deposit that is returned when the tool kit is returned at the end of the season.

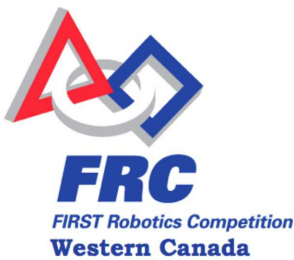
## Season Overview

**Oct / Dec** – Teams register and choose which events they want to attend. Workshops and webinars start. Students start taking online Dual Credit Robotics courses. Many teams hold strategy meetings; fundraise; hold trainings on building, programming, or other aspects of robot design; and plan for the upcoming season.

**Jan** – This year's challenge gets announced and pick up their Kit of Parts. Quick Build happens the same day where teams walk away with a working moving robot. Teams then have six weeks to build a functioning robot to compete in the game.

**Jan/ Feb** – Robot gets designed and built over the 6-week build period.

**April 3-5, 2014** – Western Canada Regional is held at the Olympic Oval. Teams compete on and off the field for awards in design, innovation, creativity and culture changing behavior.



*For Inspiration and Recognition of Science and Technology*

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