

**Team 4334** 







## Who are we?

Team 4334 Alberta Tech Alliance is a community robotics team formed by high school students in Calgary, Alberta.

We are participating in our fifth yearly *FIRST* Robotics Competition in which students build 120 pound robots to compete against teams from all around the world. "The varsity sport for the mind," FRC combines the excitement of sport with the rigors of science and technology. Under strict rules, limited resources, and limited time, our team of approximately 25 is challenged to raise funds, design a team brand, hone teamwork skills in addition to designing, fabricating, building and programming a robot to perform predetermined set of competitive tasks against a field of similar robots.

Every year, the team is given a 6 week period starting in January to build a robot for competition against other robotics high school teams at regional tournaments. If we are successful at the regional level, as we have been in our past three years, we qualify for the FIRST World Championships FRC World Championships, which take place April in Houston Texas, where we compete against some of the best teams in the world.

All of this is done through the time investments of mentors and students and the financial contributions of corporate sponsors like you.









## Why Should You Sponsor Us?

- Use the team as training for new employees by having them mentor on the team and put their management skill to the test
- Invest in future employees for your company
- Get exposure to thousands of students, teachers, and industry professionals
- Promote the growth of Science, Technology, Engineering and Math (STEM) in Calgary
- Get access to VIP areas at the Calgary regional

FOR INSPIRATION AND RECOGNITION OF SCIENCE AND TECHNOLOGY

### What is FIRST?

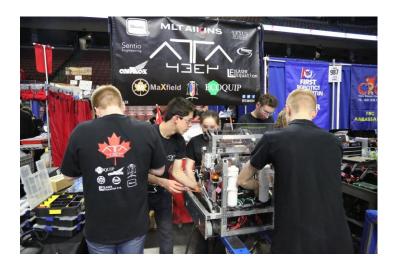
FIRST (For Inspiration and Recognition of Science and Technology) was founded in 1989 to inspire young people's interest and participation in science and technology. Based in Manchester, NH, the not-for-profit public charity engages youth in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

## **Our Mission**

"We build people"

Team 4334 is dedicated to:

- Inspiring youth, mentors, parents and community to become active and engaged in STEM fields.
- Spreading understanding and appreciation for science, technology, engineering, and mathematics (STEM) in our community.
- 3. Developing our students into the skilled workers and leaders of tomorrow.







### **Achievements**

#### Western Canada FRC Regional 2017

- Award for Quality
- Regional Winners

### Western Canada FRC Regional 2016

- Award for creativity
- Regional Winners

### **Utah FRC Regional 2016**

- Award for Excellence in Engineering
- Regional Winners

### Western Canada FRC Regional 2015

Innovation in Control Award

### **Utah FRC Regional 2015**

Regional Winners

### Western Canada FRC Regional 2014

- Chairman's Award Award for most community impact
- Regional Winners

### **Utah FRC Regional 2014**

Judges Award - Award for notable community achievements

### Western Canada FRC Regional 2013

- Woodie Flowers Finalist Award (Craig Maynard) Award for best mentor
- FIRST Dean's List Finalist (Alexander Rodrigues) Award for best student
- Regional Winners
- Innovation in Control Award sponsored by Rockwell Automation

#### **Greater Toronto East Regional 2012**

- Rookie All Star Award Best Rookie Team at Event
- Highest Rookie Seed Highest Ranked Rookie at Event

### **Archimedes Division 2012 (World Division)**

- Division Winners Proceed to Einstein Championship
- Top 0.8% of teams in the world

#### Indianapolis Robotics Invitational 2012 (Off-Season Event)

Event Winners

## **Team Organization**





### **Public Relations**

Team 4334 participates in many local events around Calgary, to promote our mission of science and technology. The public relations team is in charge of this effort, organizing events, publishing promotional material, contacting sponsors and reaching out to the community.



### **Electrical**

The electrical team wires, solders and tests all electrical components of the robot. These mechanisms provide the power for motors and sensors on the robot. The team expands



on their skills with circuitry, signals and sensors.

### **Programming**

The programming team writes code for the robot that will run on its roboRIO controller. This code gives the robot instructions, and enables it to perform given tasks. The team explores concepts in computer science, math, and artificial intelligence to create the functionality of the robot.

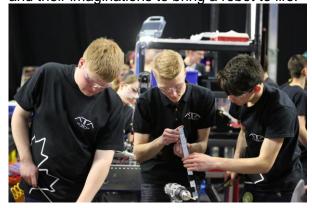
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### **Mechanical**

The mechanical team designs mechanisms in Computer Assisted Design software. These mechanisms are prototyped, tested and machined into working elements of the robot. Then, parts are assembled together into a fully functioning robot. The team uses CAD, 3D printing, precision machining, hand tools and their imaginations to bring a robot to life.



# The 2017 Robotics Season



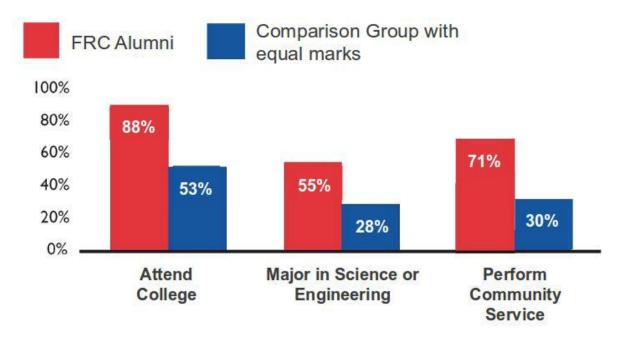


Kickoff January 7, 2017	Teams from all over Calgary gather for the unveiling of the 2017 game. After the game is released, teams each begin designing and prototyping robots.
Build Season January 7, 2017 - February 20, 2017	The 6 week period which teams have design, build, and refine their robots. Team 4334 works 7 days a week during this period.
Stop Build Day February 21, 2017	This is the final deadline for teams to finish working on their robots. Robots are placed in a sealed bag and sent to their first competition.
Competition Season March 1, 2017 - April 15, 2017	This is the part of the season in which teams' hard work is put to the test at they compete in up to 3 regionals. Alberta Tech Alliance is scheduled to compete in 2 regionals with the prospects of attending the World Championships.
World Championships April 19, 2017 - April 22, 2017	Eligible competition winners are invited to compete in Houston, TX (for Eastern teams) or St. Louis, MO (for Western teams). During the World Championships the <i>FIRST</i> community comes together to compete for the world title and other awards.
Off-Season May - September	During this period our team attends outreach events and other non-official competitions.

# **Student Benefits**

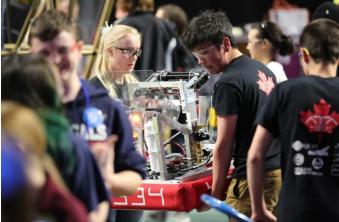






All students can participate and benefit from the *FIRST* Robotics Competition, even those that are not partial to Science, Technology, Engineering and Mathematics. The roles students can fill include everything from fabrication to design, fundraising, programming, and public relations. Throughout their membership students build self-confidence and maturity, learn teamwork, and gain an understanding of professionalism. These skills help them obtain exciting careers in order to become entrepreneurs of their own. FIRST students are much more likely to attend college and major in science and engineering than their matched comparison groups. This program motivates today's youth to to be innovative and strive for success.











## **Sponsorship Benefits**

FIRST competitions are attended by thousands of students, teachers, and industry professionals – the World Championships will be attended by even more – ensuring exposure for your company's name!

Competitions are free and open to the public, and your brand will be associated with young bright people. We will also be exhibiting our team at various community events. For example, Maker Faire, as well as Beakerhead. You can also further incorporate our team into your brand by using us in your promotional materials.

### Some other sponsorship benefits include:

- Employee training and volunteering opportunities
- Strengthen company reputation in the community
- Inspiration for company engineers and employees

## **Sponsorship**

### The Cost of a Robot

Western Canada	\$5,000
Second Regional	\$4,000
Championships	\$5,000
Framing	\$500
Parts	\$2,000
Machining	\$5,000
Extras	\$500
Tools	\$1,000
Build Space	\$10,000
Field	\$1,000
Promotional	\$700
Travel Expenses	\$15,000
Total	\$49,700

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## What Your Sponsorship Gets Us

\$1000	\$2000	\$3000	\$4000	\$5000
All of our tools	Our robot parts	3D Printer and material	Second competition	A complete robot

# **Sponsorship Levels**

Sponsorship Level	Bronze \$1000+	Silver \$2500+	Gold \$5000+	Platinum \$7500+	Title \$10000+
Website (your logo with a link to your website)	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
T-Shirts (your logo on every team member t-shirt)		<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>
Pits (promotional material in our maintenance area)			<b>✓</b>	<b>√</b>	<b>✓</b>
Robot (your logo clearly displayed on our robot)				<b>√</b>	<b>✓</b>
Title (your name is closely related to ours)					<b>✓</b>

We understand that sponsoring a team is a big decision. If you have any questions, please contact us! FRC Team 4334 would be happy to meet with you or your representative and present more information on our team. We can also arrange a live robot demonstration.





FRC Team 4334 Alberta Tech Alliance

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Cell: (403) 971-7534

### Check out 2017 year's game:





https://www.youtube.com/watch?v=EMiNmJW7enI



