

GARNET SQUADRON

“Inspiration is on our radar, is it on yours?”

4-H Garnet Squadron Robotics is an exciting program that brings robotics competition programs to middle and high school students in the Midlands. Here, our high school students compete in the *FIRST* Robotics Competition and *FIRST* Tech Challenge.

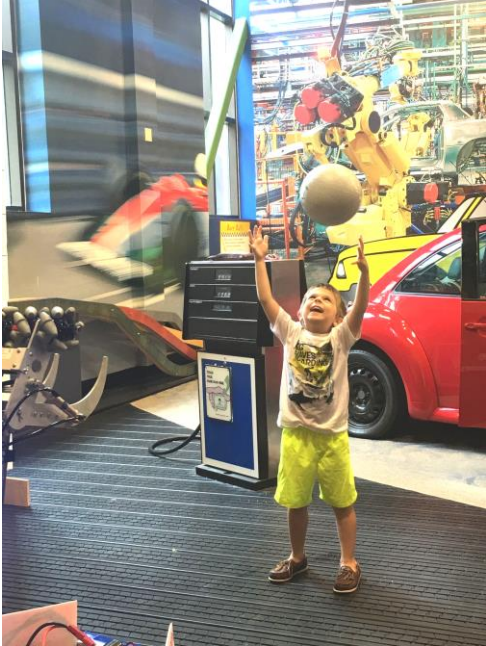


FIRST (For Inspiration and Recognition of Science & Technology) is an organization devoted to helping students discover and develop a passion for engineering and technology. Founded in 1989 by inventor Dean Kamen, *FIRST* has attracted more than 300,000 youth and over 120,000 mentors and volunteers from over 70 countries. The annual programs culminate in an international robotics competition and celebration where teams win recognition, gain self-confidence, develop social and life skills, make new life-long friends, and perhaps discover an unforeseen career path.



Garnet Squadron is a partnership of middle school, high school, college students, government, industry, and local businesses including Richland County 4-H, FLOUR, Intel, Bosch Rexroth, and the University of South Carolina College of Engineering & Computing. Our students come from schools across the Midlands, with mentors primarily being USC students and alumni.

Our vision is to create a pipeline that excites the students to pursue careers in engineering as students, develop their leadership skills while at USC, and ultimately connect our local industry partners with experienced engineers and professionals.



Even though our team started in the fall of 2013 with just ten students, we achieved incredible results. Our *FIRST* LEGO League team qualified for the South Carolina state championship, holding the state's highest score for over a month, while our *FIRST* Robotics Competition team became the first rookie team in a decade to win the notoriously difficult Orlando Regional, earning a place at the worldwide championship. Only 400 of the 2,700 teams reach this level, and to do it as a rookie is exceptionally impressive.

In 2016, we will be expanding into the *FIRST* Tech Challenge, with our rookie team, Garnet Squadron Bravo. In this competition we have 5 months to build an 18"x18"x18" sized robot to compete in the game challenge. We have the previous South Carolina FTC Championship winners and a FTC World Championship winner as mentors to help us on the road to success. The size and build schedule that the FTC program uses makes for a much more experimental and "battle-tested" robot come competition time compared to FRC.

FIRST participants are much more likely to attend colleges, major in STEM fields, volunteer in their communities, secure internships, mentor other students, and become outstanding citizens. Colleges and organizations offer over \$22,000,000 in scholarships to *FIRST* participants because they know these students are future leaders and innovators, and are capable of tackling the world's toughest problems.



USC sees the value in supporting future Gamecocks and provides space and expertise to support us, but they cannot fund the entire team budget themselves. It takes a large amount of support make everything run smoothly:

FRC Competition Registration (1-3 events)	\$5,000-\$14,000
FTC Competition Registration & Kits (1-3 events)	\$5000
Materials & Tools	\$3,000
FRC Playing Field Elements	\$3,000
Event travel expenses (hotels, gas, buses, robot transport, etc.)	\$15,000
Recognition and giveaway items	up to \$1,000
Prototyping and training materials	\$7,000

Operating costs for one season can reach up to \$48,000

Meeting our desired budget means all of our team members can participate in this program and travel to regionals and championships. These events allow us to demonstrate our abilities and hard work, connect with other teams, and partner with other STEM leaders. It also means we can fill all the positions a top team requires, increasing our chances of success, and an even more rewarding experience. We are looking for your help to make our team a success and that can come in many different forms from monetary sponsorship, to mentorship, to machining and parts donation. On the last page, you will find a table of benefits we commonly offer to those businesses and individuals that wish to support us.

For any inquiries, contact us at GarnetSquadron@gmail.com

Connect with us on social media

Twitter: @GarnetSq
Facebook: 4-H Garnet Squadron Robotics
Instagram: @frc4901

Visit our website: garnetsquadron.com

Levels of recognition for supporters

Level	Recognition	Check
Bronze (\$1.00-\$499)	<ul style="list-style-type: none"> • Recognition on our website's sponsor page • Social media recognition, including Twitter and Facebook • Recognition at regional and events 	
Silver (\$500-\$2,000)	Bronze recognition, plus: <ul style="list-style-type: none"> • Special supporter plaque after the season • Your name or logo on the back of our team T-shirt (and we will send you one, too!) 	
Gold (\$2,000-\$5,000)	Silver recognition, plus: <ul style="list-style-type: none"> • Prime placement in the footer of our website and email newsletters 	
Platinum (\$5000+)	Gold recognition, plus: <ul style="list-style-type: none"> • Your logo on a panel of our robot • Your name announced as part of our official team name at competitions during introductions and awards 	

Name/Business: _____

Address: _____

Phone & Email: _____

Website/Facebook/Twitter: _____

A fund exists to help with donations for our team with the University of South Carolina University Foundations, a 501c3 non-profit organization. Make your check payable to the University of South Carolina Foundation; in the memo, note Account A31584 (Gamecock FIRSTers). Mail it to:

Lori Ann Summers
Swearingen Engineering Center, Suite 1A08
301 Main Street Columbia SC 29208

Please return this to us no later than January 15 to ensure we meet our printing deadlines with you included!

Donate Online: <http://garnetsquadron.com/support-us/donate/>