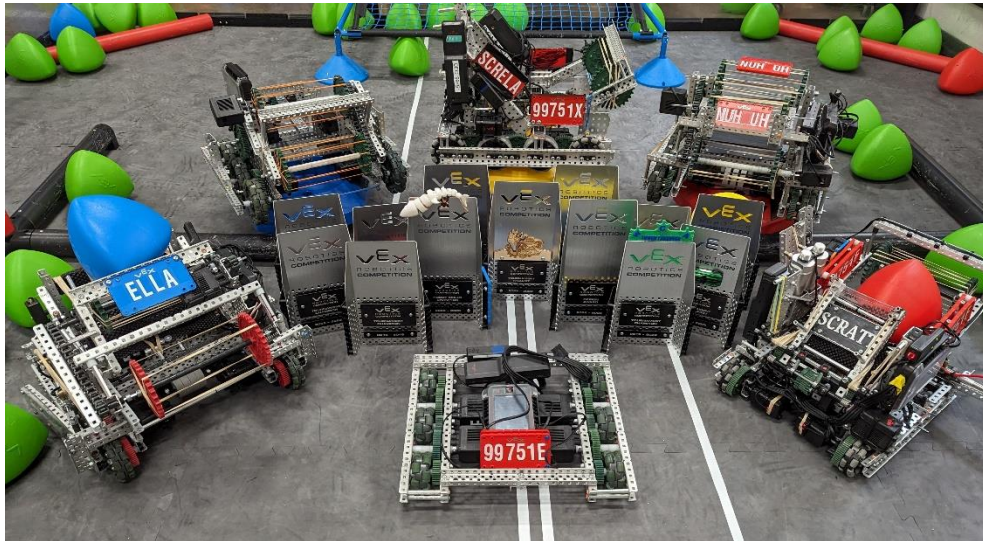




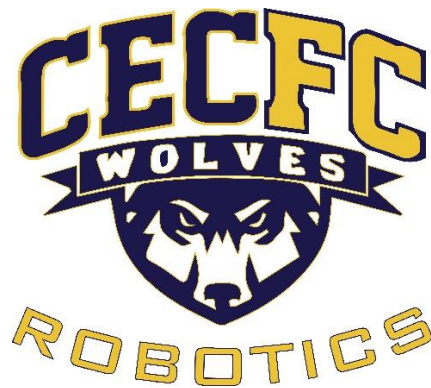
COLORADO
Early Colleges
Fort Collins



CEC Fort Collins Robotics Team



Sponsorship Guide
2023-2024



Dear Potential Sponsor,

The Colorado Early Colleges Fort Collins (CECFC) Robotics Team is an interdisciplinary group of dedicated students working to design and build a variety of robots for competition. Our program aims to compete at a high level while also providing students with a rich environment for hands-on learning. Through solid construction and programming of the VEX-EDR controls, we will compete in several VEX Robotics Competitions (VRC) throughout the year.

The VEX Robotic Competitions occur locally throughout the year and culminate with state, US open and world championships in the spring. Competition teams design, build, and program robots to compete in the current year's game. There is a summary and video QR code of the 2023-24 game included in this packet. This competitive opportunity allows students to work in teams while building technically challenging robots. Students gain valuable academic and life skills along the way such as: teamwork, leadership, project management techniques, strategy development, technical design skills and written and oral communication. These skills largely benefit our students by preparing them for professional workplace expectations.

The success of this robotics program has been increasing steadily over the last seven years. From starting as a club to now having multiple teams qualify for Worlds at the middle school and high school level, these students have grown and learned real world applications of their efforts and teamwork. Currently, the program is focused on growing our space and giving the students ample opportunities to pursue knowledge and experience through in-state competitions, signature events, and milestone events such as the US Open in Iowa, and the Worlds Championships in Texas. This year, our teams will be striving to win a State Championship for the program.

CECFC Robotics wouldn't exist without the generous financial and volunteer support of our business, community and individual sponsors. Your gift will provide parts and tools to build the robots, equipment to set up the 2023-24 game field, and registration and travel fees for each of our competition teams. We ask for your support towards accomplishing our goals of learning, competing and giving back to the community by building innovative robots. Your support is an investment in the next generation of STEM career leaders in the areas of computer programming, Artificial Intelligence, engineering and other innovative sectors of technology. Thank you so much for supporting the CECFC Robotics Teams!

Regards,

Evan Mesh, Robotics Coach/STEM Instructor













Colorado Early Colleges Fort Collins
Phone: 970.377.0044 • Fax: 970.377.1144
Evan.Mesh@coloradoearlycolleges.org
4424 Innovation Drive • Fort Collins, CO 80525
<http://fortcollins.coloradoearlycolleges.org/>



Sponsorship

We greatly appreciate any contribution to the CECFC Wolves Robotics Team and would like to show our appreciation for these gifts based on the sponsorship table below.

	<i>Wolf Pup</i> \$100	<i>Beta Wolf</i> \$200	<i>Alpha Wolf</i> \$500	<i>Wolf Pack</i> \$500+
<i>Thank You Card</i>				
<i>Sponsor Plaque</i>				
<i>Company Logo or Family Name included on Robotics Team Shirts</i>				
<i>Invite to appreciation mixer and Robotics Demonstration</i>				

The success of the CECFC Robotics Team is dependent upon the contributions from generous donors and sponsors. Your contribution is an investment for the future of our CECFC students who aspire to become engineers, technicians, programmers, and leaders in industry that will tackle some of the world's most challenging problems.

Please feel free to contact us at any time. We will be happy to answer any questions or to share more details about how your gift benefits our incredible students in CECFC Robotics.

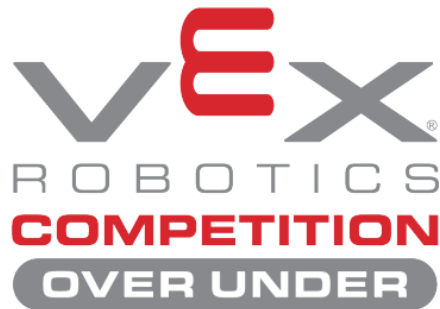
Thank you!

Budget

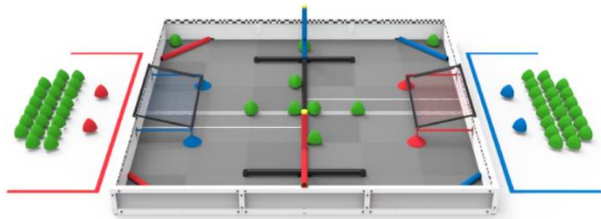
CECFC Robotics takes great pride in being responsible and transparent with how every financial gift received is spent. The table below provides an itemized list of expected costs for the 2023-24 season. The amounts listed are an estimate based upon last season and may vary depending on robot design and performance. The costs below are per team except for the facilities expenses. CECFC expects to have 7-8 teams competing this year.

Item	Description	Budget
Competitions		
Team Registrations	Team registration for VRC	\$150
Local Events	Event registration cost ~\$70 per team with ~4 events per team (Varies per event)	\$280
State*	Team registration \$150 per team	\$150*
US Open*	Team registration \$600 per team	\$600*
World Championships*	Team registration \$1800 per team	\$1800*
Facilities		
Game Elements	Game and Field Element Kit for the new Over Under Game	\$575
Tools	Drivers, wrenches, pliers, wire strippers, hacksaw, drill and bits	\$250
Robot Parts		
Metal and Hardware	Aluminum Kits (Varies) and Hardware Kits (Varies)	~\$1200 - ~\$2400
Motors (8 / robot)	V5 Motors at (\$45 each) ; Motor Cartridge (\$12)	
Pneumatic (2 / robot)	Full Kits with 1 tank, 3 pistons, and accessories (\$300)	
Sensors	Vision, Inertial, Distance, Rotation, GPS Sensors (\$40-\$200)	
Microcontrollers	V5 Robot Brains (\$350) and 2 Controllers (\$125/each)	
US Open and World Championships (if qualified)		
US Open and World Championships Dallas, TX	Travel expenses for 4 students & 2 mentors ~ \$5000	~\$5600
	US Open Team Registration \$600	-
	Worlds Team Registration \$1800	~\$6800

The 2023-24 Game



2023 - 2024



Scoring

Autonomous Bonus	8 Points
Each Triball Scored in a Goal	5 Points
Each Triball Scored in an Offensive Zone	2 Points
Elevation - Top Tier	20 Points
Elevation - 2nd Tier	15 Points
Elevation - 3rd Tier	10 Points
Elevation - 4th Tier	5 Points

23-24 Over/Under Video



SCAN ME!

Each year a new game is presented for teams to play. The rules and object of the games vary significantly between years, which provides teams with new challenges to design and build creative and innovative robots to play the game. The 2023-2024 game is *Over Under*.

The Details:

There are sixty (60) **Triballs** on a VRC Over Under Field.

There are two netted **Goals** on opposite sides of the field. A 2" PVC **Barrier** divides the field into a Red **Offensive Zone** and a Blue Offensive Zone.

Each Triball scored in a Goal is worth five (5) points, and each Triball which makes it into an Offensive Zone is worth two (2) points.

The VRC Over Under Field also includes two sets of Alliance-specific pipes on either side of the Barrier. These are called **Elevation Bars** and are used at the end of the Match for **Elevating** Robots.

At the end of the Match, each Robot's height off the ground will be measured to determine their **Elevation Tier**. Elevation Points will then be awarded based on each Robot's Tier *relative* to all other Robots. For example, getting to Tier E could be worth as many as twenty (20) points OR as few as five (5). Elevation Tiers begin at the floor, and they end above the Elevation Bar!

The Alliance that scores more points in the Autonomous period is awarded with eight (8) bonus points, added to the final score at the end of the match. Each Alliance also has the opportunity to earn an **Autonomous Win Point** by completing three assigned tasks. This Bonus can be earned by both Alliances, regardless of who wins the Autonomous Bonus

Contact



CEC Fort Collins Robotics Team



Faculty Sponsors:

Evan.Mesh@coloradoearlycolleges.org - High School Robotics Teacher/Coach
Charles.Englar@coloradoearlycolleges.org - Middle School Robotics Teacher/Coach

Kathleen.Kingdom@coloradoearlycolleges.org - STEM Development Coordinator
Kenny.Smikahl@coloradoearlycolleges.org - High School STEM and Innovation Coordinator

CECFC Robotics Team
Colorado Early Colleges Fort Collins
4424 Innovation Drive,
Fort Collins, CO 80525
970-377-0044 ext: 10135