



# CEC Fort Collins Robotics Team



Sponsorship Guide 2024-2025



#### Dear Potential Sponsor,

The Colorado Early Colleges Fort Collins High School (CECFC HS) 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 in competitions 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, nationwide, and internationally 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 2024-25 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 as the VEX program is student centered.

The success of this robotics program has been increasing steadily over the last eight years. From starting as a club to now having back-to-back 2<sup>nd</sup> place State Championship finalists while also having multiple teams qualify for Worlds, 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 local 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 2024-25 game field, and registration and travel fees for each of our eight 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 for your consideration to support the CECFC Robotics Teams!

Regards,

Evan Mesh, Robotics Coach/STEM Instructor



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Make a Gift to CEC Robotics Here

## Sponsorship

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

	<b>Wolf Pup</b> \$100	<b>Beta Wolf</b> \$200	Alpha Wolf \$500	<b>Wolf Pack</b> \$500+
Thank-You Card	w V	√E×	√E×	<b>√</b> E×
Sponsor Plaque		√E×	√E×	√E×
Company Logo or Family Name included on Robotics Team Shirts			√E×	√E×
Robotics Demonstration as Requested				√E×

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 share more details about how your gift benefits our incredible students in CECFC Robotics.

Thank you!

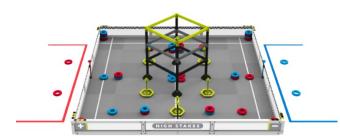
# **Budget**

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 2024-25 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 High School expects to have 8 teams competing this year and is needing around \$20,000 total for the season to provide opportunities for our students.

Item	Description	Budget		
Competitions				
Team Registrations	Team registration for VRC	\$200		
Local Events	Event registration cost ~\$75 per team with ~4 events per team (Varies per event)	\$300		
State*	Team registration \$200 per team	\$200*		
US Open*	Team registration \$600 per team	\$600*		
World Championships*	Team registration \$1,800 per team	\$1800*		
Facilities				
Game Elements	Game and Field Element Kit for the High Stakes Game	\$590		
Tools	Drivers, wrenches, pliers, wire strippers, hacksaw, drill and bits, dremels, safety glasses, blades for tools	\$250		
Robot Parts				
Metal and Hardware	Aluminum Kits (Varies) and Hardware Kits (Varies)			
Motors (8 / robot)	V5 Motors at (\$47 each); Motor Cartridge (\$13)	~\$1200		
Pneumatic (2 / robot)	Full Kits with 1 tank, 3 pistons, and accessories (\$300)	-		
Sensors	Vision, Inertial, Distance, Rotation, GPS Sensors (\$40-\$200)	~\$2400		
Microcontrollers	V5 Robot Brains (\$363) and 2 Controllers (\$130/each)			
US Open and World Championships (if qualified)				
US Open and World	Travel expenses for 4 students & 2 mentors ~\$5000	~\$5600		
Championships	US Open Team Registration \$600	•		
Dallas, TX	Worlds Team Registration \$1800	~\$6800		

### The 2024-25 Game





### **Scoring**

Autonomous Bonus	6 Points
Each Ring Scored on a Stake	1 Point
Each Top Ring on a Stake	3 Points
Climb - Level 1	3 Points
Climb - Level 2	6 Points
Climb - Level 3	12 Points
Each Ring Scored on a Mobile Goal that has been Placed in a Corner	See the Game Manual!

#### 24-25 Over/Under Video



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 2024-2025 game is *High Stakes*.

### The Details:

There are forty-eight (48) **Rings** on a V5RC High Stakes Field.

There are nine (9) **Stakes** located around the field. Five (5) on **Mobile Goals**, four (4) **Wall Stakes**, one (1) per Alliance and two (2) neutral, and one (1) on top of the **Ladder**.

Each Ring scored on a Stake is worth one (1) point. The **Top Ring** on each Stake is worth three (3) points.

Mobile Goals can be **Placed** into **Positive Corners** or **Negative Corners** to change the values of the Rings on that Goal.

The V5RC High Stakes field also includes a Ladder in the center of the field. Robots climb the Ladder at the end of the Match to receive additional points. The higher the Robot climbs, the more points it will receive!

The Alliance that scores more points in the Autonomous period is awarded with six (6) 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 assigned tasks. This additional Win Point can be earned by both Alliances, regardless of who wins the Autonomous Bonus

### Contact



# CEC Fort Collins Robotics Team



Make a Gift to CEC Robotics Here

https://coloradoearlycolleges.org/give/give-to-cecfc/cecfc-robotics-fund/

#### **Faculty Sponsors:**

<u>Evan.Mesh@coloradoearlycolleges.org</u> – High School Robotics Teacher/Coach <u>Charles.Englar@coloradoearlycollegs.org</u> – Middle School Robotics Teacher/Coach

<u>Kathleen.Kingdom@coloradoearlycollegs.org</u> – STEM Development Coordinator <u>Kenny.Smikahl@coloradoearlycolleges.org</u> – High School STEM and Innovation Coordinator

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