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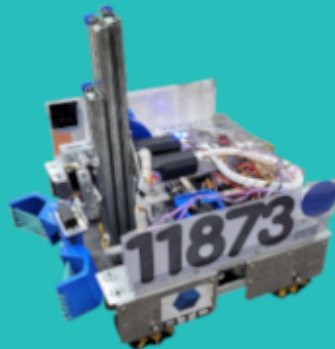
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Sponsorship
Packet





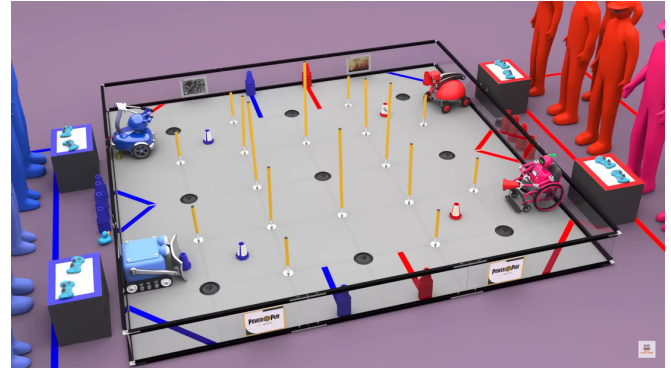
Element Unknown FTC Team 11837

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FTC and Our Mission

What is FTC?

FTC (short for FIRST® Tech Challenge) is an immersive robotics program that strives to teach teams meaningful skills that will be used throughout their lifetimes. It revolves around a robot and a competition field, the image to the right is the field from our previous season. Each year in early September, a new season is released, including new challenges, new obstacles, and new coding projects. Teams must engineer their own robot, program both driver-controlled and autonomous robot actions, reach out to their community, and document their journey.



This past year, a major portion of the challenge is the need for a lifting mechanism to deliver cones to poles with different heights. FTC is very competitive, and during early fall and mid-winter, our team competes in several tournaments. The competition not only involves the points scored on the field, but also the ingenuity displayed by the team in the design of the robot and community outreach.

Our Team

Our Mission Statement:

We strive to experience, learn, and explore different mechanical, electrical, coding, design, and business aspects of engineering activities as well as spreading the word of FTC by encouraging others to join robotics and learn with us.

Our team, Element Unknown, is run out of the Lakeville North FTC robotics program. We are the senior team and we help recruit and train incoming teams. This is our team's 5th year in FTC, although many of our team members had previously been on the same First Lego League team, and we have and will work together well.

Our team has 4 members each with our own roles and interests.

Braxton Lebaron- builder, second driver, future coder

Kaden Kandler- lead builder, 3D modeling, outreach, driver

Garrett Siefken- building, lead outreach, autonomous coding

Mason Pade- teleop coding, autonomous coding





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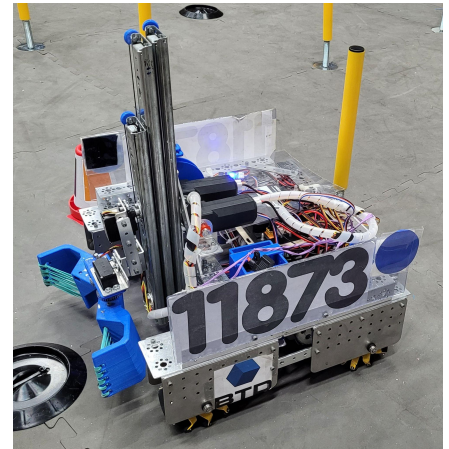
FTC Team 11837

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Our Robot



Every year a new set of rules and goals are released for the upcoming season. Last year's challenge was based on the delivery of cones to goals with varying heights on the playing field. Our team developed a drawer slide mechanism, which reaches 42 inches off the ground, along with a claw system, with an individual horizontal pivot system, to maneuver the cone. In order to maneuver our robot and its mechanisms well, we used Mecanum omni-directional wheels. You may also notice many 3D printed parts on our robot, courtesy of Kaden's CAD software designs, which produced many custom parts, such as our cone grabber, which is perfectly fit to grab the scoring elements, even with minimal surface area.



How You Can Help

Despite FTC being a school operated activity, much of the costs for it are not paid for by the school. Things like tournament registration, custom parts, tools, materials, computers, and other expensive yet necessary items are needed to make a successful team and season, but are not provided by the school. For our team to continue operating and inspiring more engineering students in our community, we rely on generous donations from organizations to cover these costs. This is where you can help, sponsorships help run teams like us in FTC, no matter how big or small. Our fundraising goal for the 2023/24 season is \$3,000. Every dollar or non-monetary contribution greatly impacts our team as a whole and helps us to continue exploring science and technology in a fun learning environment. Below is a financial plan for our upcoming year, including registration fees, and new materials.



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FTC Team 11837

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Product	Reason Our Team Needs This Product	Cost of this Product
FIRST Registration	Payment in order to participate in this year's season.	\$295
Minnesota State qualifier tournament	In order to make it to state we participate in state qualifier meets.	\$220
Minnesota League Tournaments	Our team participates in regular meets throughout the season, which we must register and pay for.	\$350
Minnesota State Tournament	Our team hopes to perform well in the qualifying meets in order to make it to state.	\$320
NeveRest Orbital Gearbox 263.7:1	To make our double reverse 4 bar we need high torque motors. (three were purchased, one for use, two for backup)	\$72
REV DUO Drivers Hub	Connections between our controllers, and our control hub on our robot require either a phone or this REV hub, the REV hub is faster, and more reliable.	\$250
Tri-Fold Poster	Presentations in order to introduce new people to FTC robotics are better done with visual aides	\$16
USB - C Charger	USB-C to USB-C cable is used for code downloading,	\$20
Hex Key Combo Set	Tool replacement	\$13
RGB LED lights	Displays on our robot for both robotic presentation and display during tournaments	\$7
Internal Hex Socket Screws	Replacing stripped or misplaced set screws	\$6
JST-XHP-4 to Split Connect 0.1 in. Pins Cable	Replacing drawing cables for motor encoding	\$2.50
#6-32 x 7/8 in. Hex Socket Head Socket Cap Screw (2-Pack)	Replacing worn down or lost screws (five two packs)	\$13.75
3D Printing Filament	3D printing is a versatile way to create custom parts for our robot (3 Spools)	\$60
Total		\$1645.25



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FTC Team 11837

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Sponsorship Packages:

\$100+ earns a logo on our website

\$300+ earns a small logo on our robot and on our website

\$600+ earns a large logo on our robot and a small logo on our team shirts

\$900+ earns a large logo on our robot, team shirts, and our website

You can donate by sending a tax-deductible donation to:

Lakeville Robotics

P.O. Box 606

Lakeville, MN 55044

(Please designate "Element Unknown #11873" in the memo field.)

Contact Us:

