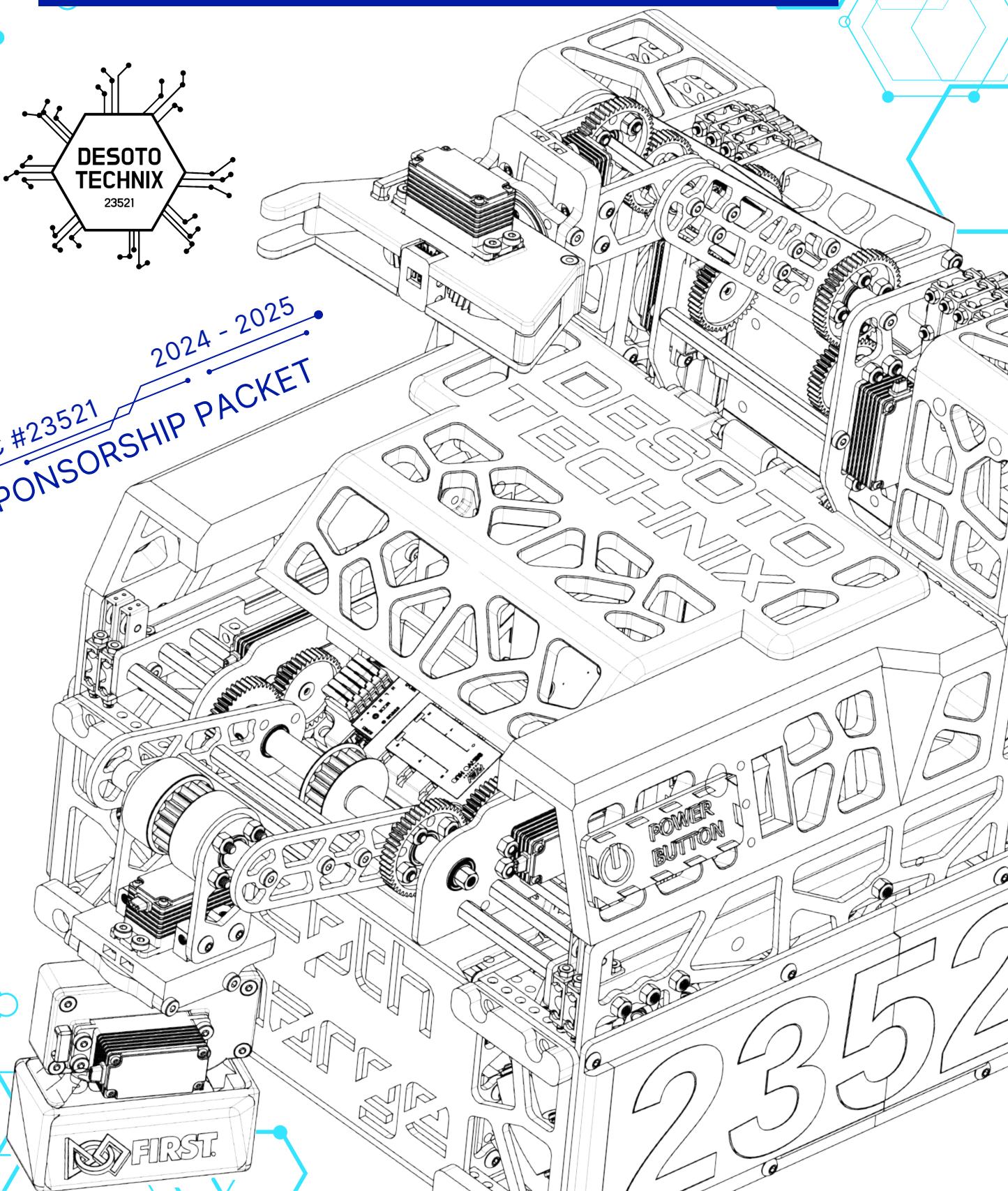


# DESOTO TECHNIX



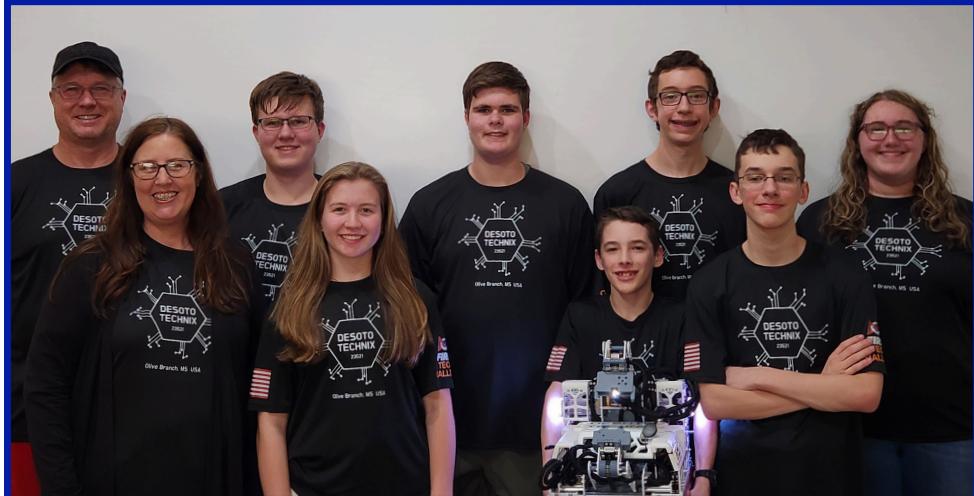
FTC #23521  
2024 - 2025  
SPONSORSHIP PACKET



# Who Are We?

## Who Are We?

We are a second-year middle and high school robotics team that is based in Olive Branch, DeSoto County, Mississippi. We are participating in FIRST Tech Challenge (or FTC), a program of FIRST, which is a global robotics community that prepares young people for the future. A student-led community team, we have seven student members and two coaches. Each one of our members focuses on one component of our robot's presentation while learning and gaining experience in all aspects of creating it. We formed last year with no previous robotics experience, overcame challenges, and made it all the way to the *FIRST®* Championship, setting the Mississippi state record three different times along the way. With all that we learned and all that we're still learning, we hope to have another great year!



## Team Accomplishments

- **Emelia** has led the portfolio team and has begun to learn coding.
- **Hudson** has done all of the programming for Depth Charge.
- **Jayden** has contributed to the writing of the portfolio and the building of the robot.
- **Nathan** has designed most of both robots and is teaching the build and design team how he did it.
- **Raymond** learned how to drive the robot, and is now one of the main members of our drive team.
- **Sebastian** learned CAD and designed some key parts of the robot including the outtake claw and modified the intake claw so it could passively align samples better.
- **Stephen** has written parts of the portfolio and learned CAD.



**Alison Ricker**  
Co-Coach & Admin.



**Joe Ricker**  
Coach & Mentor



**Nathan**  
Team Captain



**Hudson**  
Coding & CAD



**Sebastian**  
Building & CAD



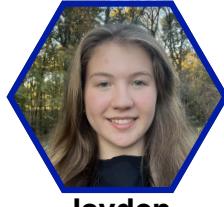
**Raymond**  
Building



**Emelia**  
Portfolio & Coding



**Stephen**  
Portfolio



**Jayden**  
Portfolio & Building



# What is FIRST?

FIRST (For Inspiration and Recognition of Science and Technology) is a nonprofit organization that was founded in 1989 by Dean Kamen. It hosts a number of robotics programs for youth aged four through eighteen, providing them with challenges to boost their self-confidence, collaboration skills, learn problem-solving abilities, and encourage interest in STEM. All of this is done using the *FIRST* Core Values:

- Discovery
- Innovation
- Impact
- Inclusion
- Teamwork
- Fun



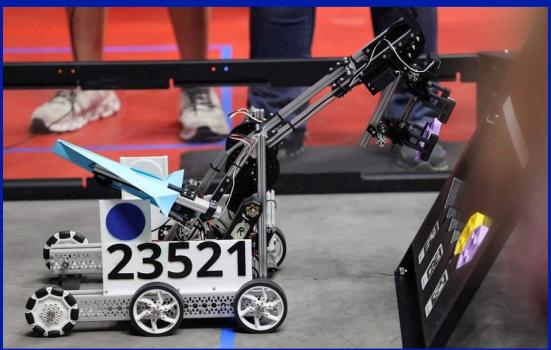
## FIRST Tech Challenge

*FIRST* Tech Challenge is an yearly event geared towards middle and high school students where teams of up to fifteen people design, build, program, and operate robots with the guidance of their experienced mentors and coaches. These robots are then put to the test in themed competitions to win points and move up through the rankings. This year's theme is "Into the Deep." *FIRST* Tech Challenge teams will dive their robots into the depths of the ocean to explore the unknown and reveal its wonders.

# CENTERSTAGE

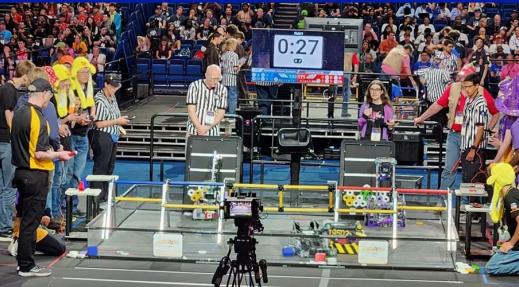
## The Game Challenge

For last year's CENTERSTAGE Season, robots were tasked with picking up hexagonal "pixels" and placing them on angled boards to score points. Robots also had the option to autonomously place pixels next to stage props, or launch paper airplanes at a wall, scoring additional points for their teams.



## Achievements

As CENTERSTAGE was our first season, we began with no robotics experience whatsoever and had a lot to learn. Despite this, our robot, Fred, was able to advance to state, being both the best competing robot and winning the most prestigious award in FTC on the way. Similarly, high performance brought us to the world championship.



## FIRST World Championships

We learned tremendously from our experience at the World Champs. This was an amazing opportunity for us to learn from other teams.

<b>Qualifier #1</b>	Winning Alliance First Pick, Innovate Award (for creativity and innovation in robot design)
<b>Qualifier #2</b>	Winning Alliance Captain, Inspire Award (the highest award given in FTC)
<b>Mississippi Championship</b>	Winning Alliance Captain, Control Award (for innovative problem-solving)
<b>FIRST Championship</b>	Judge's Choice Award named the Rising Star Award

"This rookie team wowed the judges with their accomplishments, humility and vision. Setting clear goals. They advanced well beyond expectations in every area of first. Design principles in action led to a consistent robot. The key for these lucky ducks. The Rising Star award goes to team 23521, DeSoto Technix."

-FIRST World Championship Judges



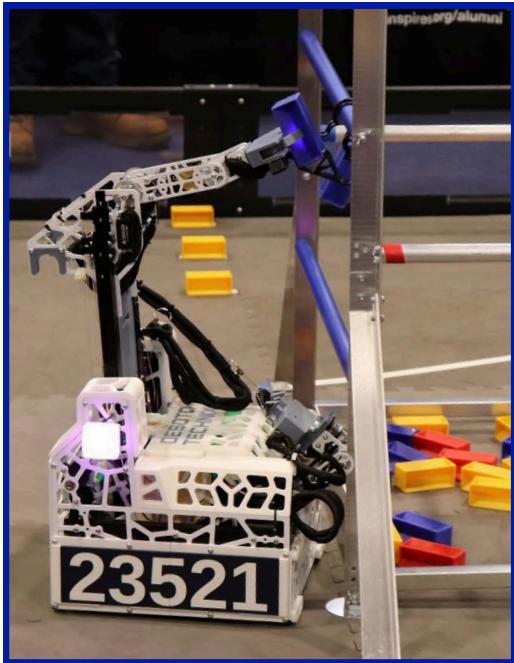
# Into the Deep

## The Game Challenge

This year, the challenge is to move samples to designated zones. Samples can be put into the net zone, the low basket, or high basket. If samples are put into the observation zone, they may be clipped to become specimens. These may be clipped onto the low bar or high bar. At the end of the game, hanging the robot on a bar may earn extra points.



PRESENTED BY



## Depth Charge

Depth Charge is our robot for Into the Deep. We took everything we learned last season and built on it to create a better robot. Unlike Fred, which was built from a kit, we fully designed Depth Charge using CAD (Computer Aided Design). This allowed us to create a very optimized and refined robot. Because of that, almost all of our robot is custom. Depth Charge has a combination of metal plates and 3D printed parts that work together to make up our robot. We have put a lot of work into Depth Charge and we need a fair amount of funds to do it. Contributions of our sponsors help us to create more competitive robots like Depth Charge.

<b>Qualifier #1</b>	Winning Alliance Captain, Inspire Award (the highest award given in FTC)	
<b>Qualifier #2</b>	Winning Alliance Captain, Think Award (the second highest award given in FTC, as we were exempt from Inspire)	
<b>Mississippi Championship</b>	Winning Alliance First Pick, Inspire Award (the highest award given in FTC)	

# Community Outreach

In this season thus far, we have done outreaches with three different homeschool co-ops and a Trail Life Troop in our area. At each of these, we gave a presentation about STEM and different aspects of robotics such as CAD, coding, and portfolio work. In addition to these, we had the honor of presenting our robot, community outreach efforts, and the impact of our work to the City of Olive Branch's Mayor and Board of Aldermen. As a result of this, a post was made on the city's Facebook page, causing a local mother to contact us with interest in her son joining our team this upcoming year as well as a local robotics company showing interest in supporting our team. We are thrilled to see our efforts inspiring individuals and organizations in our community to get involved and support STEM education.



In addition to our community outreach efforts outside of the *FIRST* community, we have also mentored five other FTC teams. One from Texas, one from Missouri, two from California, and even one from Romania

# Our Needs

## Monetary Donations & Sponsorship

Designing, building, and programming robots is expensive. As great of a team as we are, we're both student-led and a community team. This means that we need help from generous donors and businesses to help fund our journey in robotics. All monetary donations we receive will be put toward robot parts, competitions, registration, team apparel, community outreach, and team travel. Your giving is greatly appreciated, no matter how large or small. If you or your business is willing to provide us with \$250 or more, you will join our family of benefactors and receive official recognition as one of our sponsors. All donations are tax-deductible. Our Federal Tax ID/EIN is 47-4469083.

## In-Kind Donations

In-Kind Donations are donations of items or services that we may need. Some examples include, laptops, 3D printer filament, robotic parts, tools, laser-cutting services, or even meals and snacks for the team. Anything you or your company may be able to supply, we will gladly accept. If you choose to donate this way and provide proof of what you spent, we will also apply that to your sponsorship tier ranking. Donations of all kinds are very appreciated.

## Mentorship

We are looking for mentors with experience in engineering, marketing, and programming. These mentors will provide advice and suggestions to the members of the team, as well as having the opportunity to encourage our students and teach them more about the fields of STEM. This may provide a unique insight into different prospective careers for their futures.

## Season Expenses

Field Setup	\$1,000
Season Registration	\$295
MS Qualifier/State Tournaments	\$360
Robot Parts (motors, servos, electronics, control systems, etc.)	\$9,500
3D Printing Supplies (Printers, filament, parts, dryers, etc.)	\$500
Promotional Items (Banners, Team Shirts, Buttons, etc.)	\$500
Competition Supplies	\$500
Competition Travel	\$500
FIRST Championship Registration	\$2,500
FIRST Championship Travel & Lodging	\$5,000
<b>Total Expenses: \$20,655</b>	



# Benefits of Sponsorship

Sponsorship Tier	Donation Amount	Sponsorship Benefits
Bronze Tier	\$250	Name/Logo is featured in Engineering Portfolio
Silver Tier	\$500	Name/Logo featured on team FaceBook as well as all previous benefits.
Gold Tier	\$1,000	Name/Logo on team banner in the pit as well as all previous benefits.
Platinum Tier	\$1,500	Name/Logo 3D printed on team robot as well as all previous benefits.
Diamond Tier	\$2,000	Name/Logo on team shirts as well as all previous benefits.



Thank you so much for your time and consideration. Both our sponsorship and mentorship forms are on the following pages. If you have any questions, email us at [desototechnix662@gmail.com](mailto:desototechnix662@gmail.com). If you would like to learn more about FIRST, please visit [www.firstinspires.org](http://www.firstinspires.org)

# FTC Team #23521 - DeSoto Technix

## Sponsorship/Donation Form

**Business or Name:** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **ZIP Code:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Amount Donated:** \$\_\_\_\_\_ **Check #** \_\_\_\_\_ **Cash:** \_\_\_\_\_

**Material Donation:** \_\_\_\_\_  
\_\_\_\_\_

Checks may be payable to **Northwest Mississippi Robotics** (in memo write "FTC Team #23521").

Checks can be mailed to:

DeSoto Technix #23521  
Attn: Joe Ricker  
3937 Woodcrest Drive  
Olive Branch, MS 38654



Olive Branch, MS, USA

Donations can also be made online at [bit.ly/23521-donate](https://bit.ly/23521-donate)

**Thank you so much for your support!**

If your donation is of \$250 or more, please email an image of your name or logo to [desototechnix662@gmail.com](mailto:desototechnix662@gmail.com)

# FTC Team #23521 - DeSoto Technix

## Prospective Mentorship Form

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

**Experience (ie: past or present STEM, engineering, or marketing jobs):**

---

---

---

---

This printed and completed form can be mailed to:

DeSoto Technix #23521  
Attn: Joe Ricker  
3937 Woodcrest Drive  
Olive Branch, MS 38654

Once this form is received by our team, you should receive an email from [desototechnix662@gmail.com](mailto:desototechnix662@gmail.com) within the next week or so.



Olive Branch, MS, USA

**Thank you for your interest in mentoring our team!**

If you have any questions, please email [desototechnix662@gmail.com](mailto:desototechnix662@gmail.com)