



We are Hazmat Robotics: Biohazards Division. We felt that it was important to give you some background of who we are as a team and explain how your sponsorship will be used within our team.



We are Hazmat Robotics: Biohazards Division, a sixth-year robotics team at Lake Highland Preparatory School, located in downtown Orlando, FL. Our team consists of 15 hardworking students, ranging from grades 9-12. We compete within an organization called *FIRST* (For Inspiration and Recognition of Science and Technology). We build upon these fundamental values of *FIRST* by incorporating science, technology, engineering, and math into everything that we do. Hazmat takes part in one of four levels of competition in *FIRST*, being First Tech Challenge, or FTC, which includes aspects of building, programming, and business.

## Current Awards/Achievements:

2017-2018 League Champs: Winning Alliance Member

*This award will be given to the winning Alliance represented in the final match.*

2018-2019 Meet 1: 3<sup>rd</sup> Place Robot

2018-2019 Meet 2: 2<sup>nd</sup> Place Robot

2018-2019 Meet 2: Highest Match Score of the Day

2018-2019 Meet 3: 1<sup>st</sup> Place Robot

2018-2019 League Championship: 1<sup>st</sup> Place Robot

2018-2019 League Championship: Winning Alliance Captain

2018-2019 League Championship: 1<sup>st</sup> Place Design Award

*The Design Award is presented to Teams that incorporate industrial design elements into their solution.*

2018-2019 League Championship: 2<sup>nd</sup> Place Promote Award

*The Promote Award is given to the Team that is most successful in creating a compelling video message for the public designed to change our culture and celebrate science, technology, engineering and math.*

2018-2019 League Championship: 3<sup>rd</sup> Place Innovate Award

*This judged award is given to the Team that has the most innovative and creative Robot design solution to any specific components in the FIRST Tech Challenge game.*

2018-2019 Florida State Championship: 2<sup>nd</sup> Place Promote Award

2019-2020 Meet 2: Highest Match Score of the Day

2019-2020 Meet 3: Discovery and Innovation Award

2019-2020 Meet 3: TESLA Star Award

2019-2020 League Championship: Winning Alliance First Pick

2019-2020 League Championship: 2<sup>nd</sup> Place Motivate Award

*The Motivate Award celebrates the team that represents the essence of the FIRST Tech Challenge competition through team building, team spirit and displayed enthusiasm.*

2019-2020 League Championship: 3<sup>rd</sup> Place Think Award

*The Think Award is given to the Team that best reflects the journey the Team took as they experienced the engineering design process during the build season.*

2019-2020 Florida State Championship: State Semifinalists



Through Hazmat, students have the ability to:

Explore their career interests and expand upon what they are passionate about. One of our goals on Hazmat is not just doing well at competitions but to allow students to truly explore their personal interests. Although we are a robotics team, we also focus on other things such as business skills, finance, photography, design, public speaking, and outreach. Every part of our team must work together for things to run smoothly and efficiently. A goal of Hazmat is to prepare students for the real world through establishing skills such as teamwork, problem solving, and collaboration with outside teams/companies. Being on Hazmat has inspired team members to have a passion for robotics, engineering, and computer science that they hope to pursue in the future.

On top of working with robots, our team also understands the importance of giving back to our community. These past two seasons, our team participated in 14 community service events, our most notable being Go Baby Go! where we modified five electric cars for children with mobility issues. We strive to make a difference in our community in any way that we possibly can.



## Team Alumni:

Hazmat Robotics: Biohazards wants to grow as a team, but what is more important is the growth of the members. We are proud of each of our alumni and know they will use the values that they have learned from *FIRST* in everything that they do.

Bryan Fu '17 – Mechanical Aerospace (University of Florida)

Michael Glushakov '17 – Computer Science (Duke University)

Diane Xie '17 – Computer Science (New York University)

Shae Carroll '19 – Environmental Science (University of Central Florida)

Rachel Horvat '19 – Biochemistry (University of Florida)

Jenny Xie '19 – Computer Programming (University of Florida)

Armaan Shaikh '19 – Neuroscience and Psychology (University of Florida)

PJ Hughes '19 – Environmental Science (University of Southern California)

Casey Bacot '20 – Political Science (American University)

Jaydin Moskowitz '20 – Undecided (Emory University)

Halle Stewart '20 – Neuroscience and Behavioral Biology (Oxford College of Emory University)

Nick Johannesssen '20 – Mechanical and Robotics Engineering (Worcester Polytechnic Institute)

Seth Grow '20 – General Engineering (Virginia Polytechnic Institute and State University)

Tyler Martin '20 – Mechanical Engineering (Florida Atlantic University)

Core Ireland '20 – Aerospace Engineering (Ohio State University)



## Costs of running a team:

There are many costs associated with running a *FIRST* team such as robot parts, team apparel, transportation to and from competitions, and team spirit related items.

Last season, our robot's full cost was \$1,884.82. Our mechanical team worked almost non-stop all season to make this year's robot the best in our team's history. We have utilized CAD (computer-aided design) this season to strictly plan out exactly what parts would be needed for our robot's advanced mechanisms before ordering or building with them. On top of using CAD for planning, we have used it to create custom parts that are unique to our team. This cuts down on costs of specific parts and allows us to be more creative in our design process. Our robot takes up most of our budget as a team, but money also needs to be allotted to other parts of the season.

At competitions, we want to show our Hazmat pride by decorating our work area with décor and information related to our team. In the past we have effectively decorated our pit, but this season we aspire to leave a lasting impact on other teams and judges at the competitions by creating an interactive *FTC* game using a software called Synthesis. This past season we were able to make a custom banner, stickers, buttons, and handmade necklaces. We had a wonderful pit area at states, but we know we can always improve. We know that our Hazmat branding can shine at competitions with just a little bit of help!



## Other Contributions:

Because *FIRST* is about more than just robots, 10650 is also interested in learning more from trained professionals (such as you!) to act as a mentor to assist and teach in the following areas:

### Mentor Role Description

Marketing: Assist with team marketing and creating a team business plan

Finance: Help students manage and raise team funds

Mechanical: Give tips to new builders

Programming: Work with students to learn the best ways to program the robot for competition

Public Speaking: Volunteer to watch and judge presentations before competitions to help improve speaking skills

Everyone on 10650 would like to use the skills they learned in *FTC* in their future endeavors; we greatly appreciate any mentoring you can give us. Company specific sponsorships are also valuable to us. Any donations including specialty products, tools, machines, building materials, etc. that can be used to improve our workspace and robot are greatly appreciated. Our team is heavily design and engineering based, and donations such as these are just as beneficial to us as monetary funding. Our team is especially interested in expanding our milling and machining capabilities this season in order to create a more innovative robot.

## How we can help you:

Your sponsorship will be a key part of our season which is why we will make your company a key part of our team. To show our gratitude for your company's sponsorship, we will:

- Write a page about your company's generous donation in our teams engineering notebook, which is read by dozens of judges throughout the season.
- Put your logo on our sponsorship page of our team's website.
- Create a sticker of your company's logo to place directly onto our robot.

As we progress to local, state, national, and even international level competitions, your logo will travel with us. *FTC* also records and broadcasts some of its higher-level competitions on an international streaming service called *Twitch* which means that your logo will be seen by thousands of people throughout our ensuing season. We also have many social media pages where pictures of our robot, and your company's logo, will be posted frequently.

Contact/Payment Info:

Checks Made Out To: Lake Highland Preparatory School

Memo Line: Upper School Robotics Team

Address: 901 Highland Ave. Orlando, FL. 32803

Website: hazmatrobotics.us

Email: hazmat10650@gmail.com

Please send a high-resolution photo of your logo to the above email.

On behalf of every member of Hazmat Robotics: Biohazards, thank you for your interest in our team and we hope you decide to become part of the Hazmat family.

Twitter: @ftc\_hazmat10650

Instagram: @ftc\_hazmat10650

YouTube: Hazmat Robotics: Biohazards

