



# 8-BIT

TEAM HANDBOOK



# INTRODUCTION

The purpose of this handbook is to provide information about Team 8-Bit and to describe the team rules, expectations, and policies. These sections have been developed to answer questions, set clear expectations, and define the roles for team members (students and mentors) as well as parents of the team.

# WHAT IS FIRST?

FIRST (For Inspiration and Recognition of Science and Technology) is a mentor-based program that seeks to inspire young people to be inclusive, team-based innovators and technology leaders in science, by building engineering and technology skills, that can inspire innovation, self-confidence, communication, and leadership capabilities. Founded by inventor Dean Kamen over 30 years ago, FIRST helps young people discover the excitement and rewards of both science and technology. We are inspired by his vision *"to transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders."*

Each year FRC unveils a new challenge at Kickoff in January. High school aged students work alongside professional mentors to design a robot to meet the season's game challenges in just 8 weeks, then work with other teams in alliances to play the game at competition events where they are judged on design, innovation, culture changing behavior, and performance. The program is a life-changing, career-molding experience, and it's a LOT of fun.

We embrace the concepts of Gracious Professionalism, Coopertition, and the Core Values of FIRST.

# GRACIOUS PROFESSIONALISM

A large part of the success of many teams and FIRST itself is the somewhat unique emphasis and approach to teamwork. Dr. Woodie Flowers, FIRST National Advisor, coined the term "Gracious Professionalism®."

Gracious Professionalism is part of the ethos of FIRST. It's a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community.

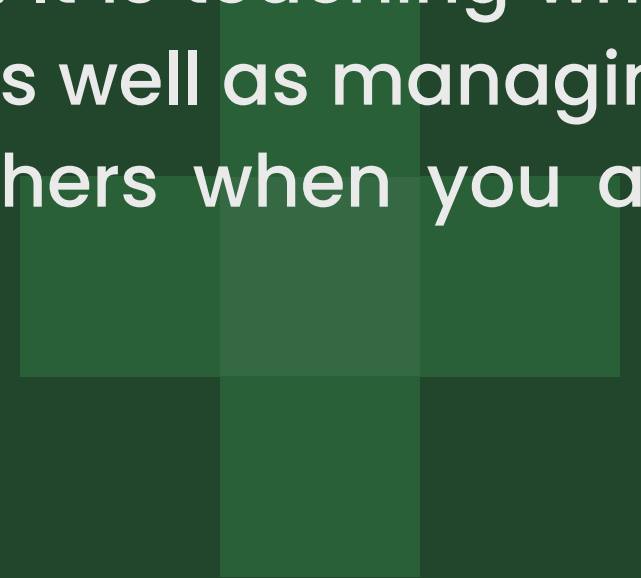
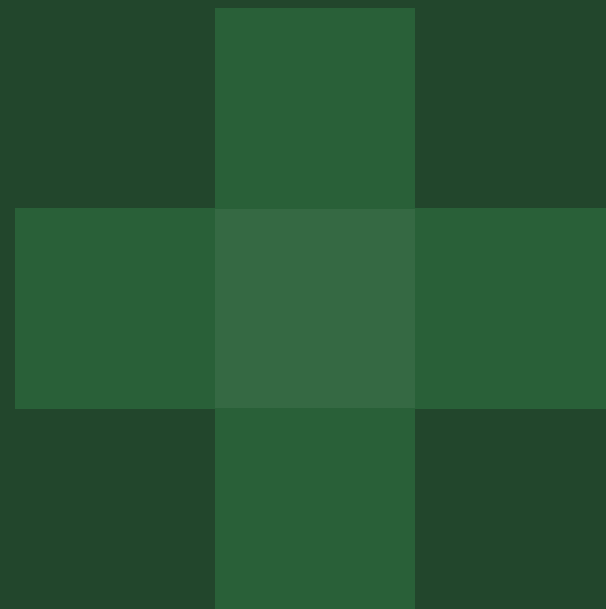
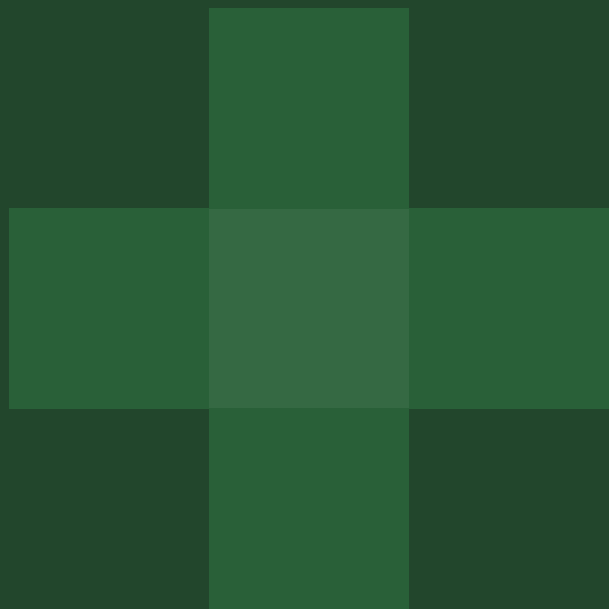
With Gracious Professionalism, fierce competition and mutual gain are not separate notions. Gracious professionals learn and compete like crazy, but treat one another with respect and kindness in the process. They avoid treating anyone like losers. No chest thumping tough talk, but no sticky-sweet platitudes either. Knowledge, competition, and empathy are comfortably blended.

In the long run, Gracious Professionalism is part of pursuing a meaningful life. One can add to society and enjoy the satisfaction of knowing one has acted with integrity and sensitivity.

# COOPERTITION

Coopertition is founded on a philosophy that teams can and should cooperate with one another even while they are competing against each other. At FIRST, Coopertition produces innovation while displaying unqualified kindness and respect while facing fierce competition.

Coopertition involves learning from mentors and teammates. It is teaching what they have learned to other teammates. It is being managed as well as managing self and others. Competing while assisting and enabling others when you are able.



# FIRST CORE VALUES

## DISCOVERY

We explore new  
skills and ideas

## IMPACT

We apply what we  
learn to improve  
our world

## TEAMWORK

We are stronger  
when we work  
together

## INNOVATION

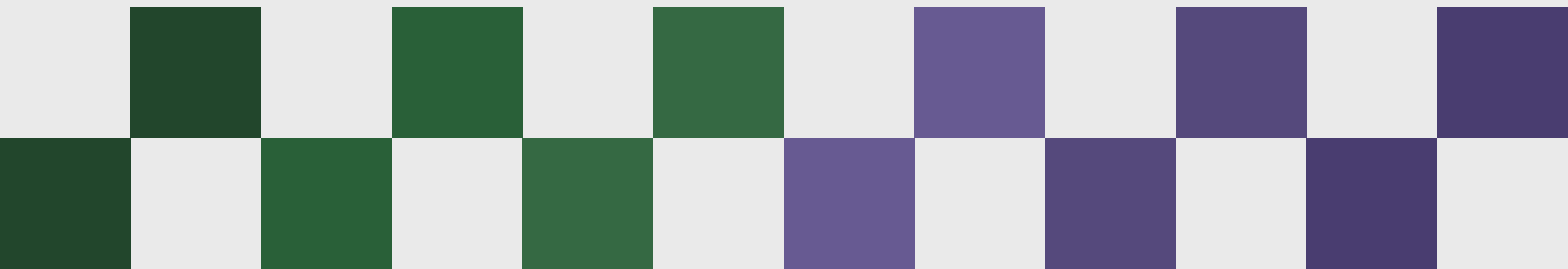
We use creativity  
and persistence to  
solve problems

## FUN

We enjoy and  
celebrate what  
we do

## INCLUSION

We respect each  
other and embrace  
our differences



# ABOUT TEAM 8-BIT

## WHAT WE DO

We use the opportunities provided by FIRST to create a fun and empowering space for students to develop the technical skills, (such as CAD, manufacturing, assembly, and programming), necessary to build and program a functional and game appropriate robot each year.

We encourage well-roundedness through the exploration of non-technical skills, such as marketing, business writing, public speaking, finance/accounting, business development, and graphic design.

Our students take ownership of and make decisions about all aspects of the team, with guidance and support from team mentors.

- Team 8-Bit is a FIRST® Robotics Competition Team, composed of 8th – 12th graders, based in Anthem, AZ. We are a student-led, mentor-guided team where everyone feels welcome, is treated as equals, and is encouraged to learn and grow.

## WHAT WE BELIEVE

We embrace the culture and values of FIRST.

We try our best and value the learning that comes from our mistakes.

We are intentional with our time and thrifty our resources.

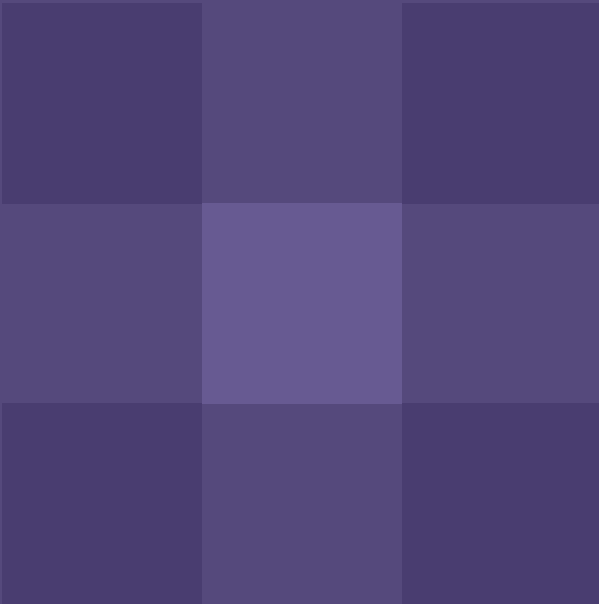
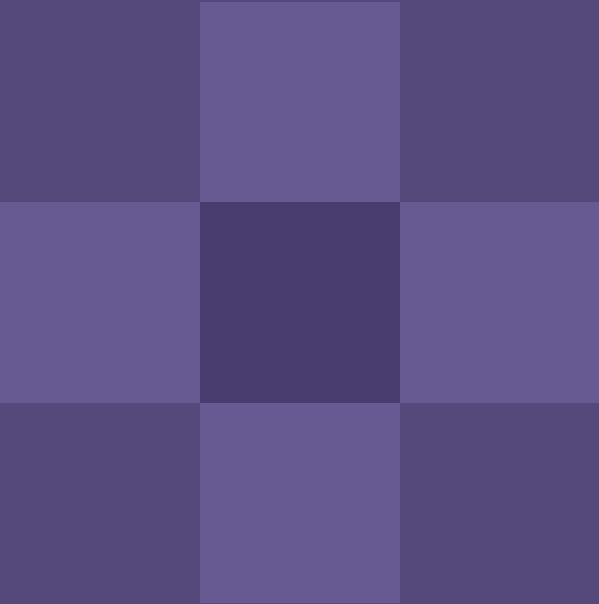
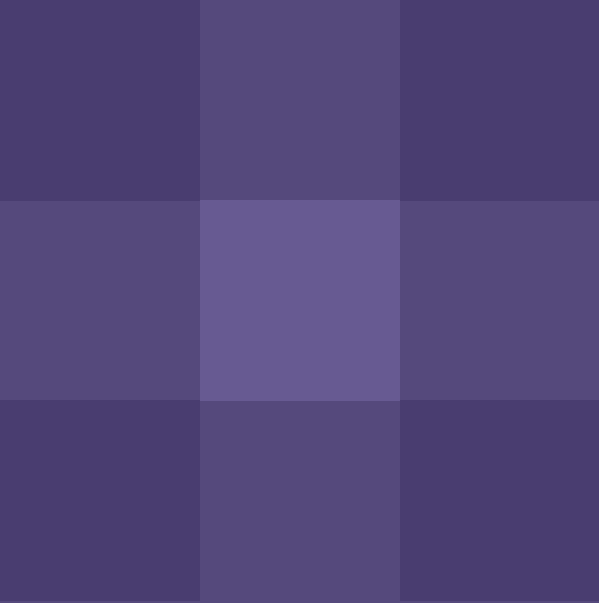
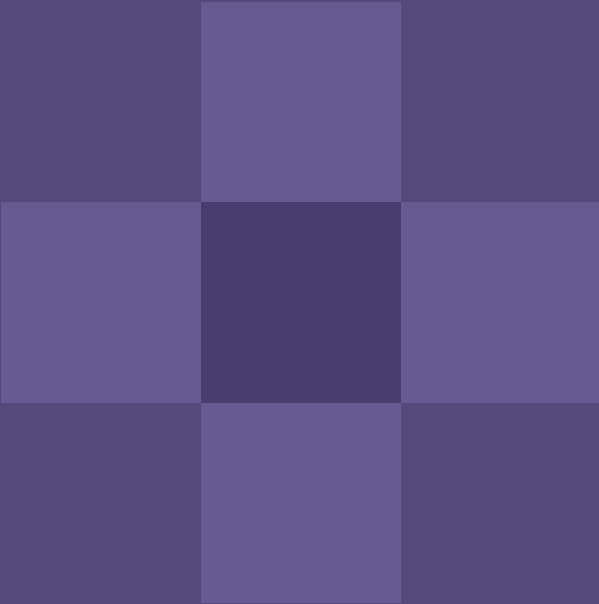
We set realistic team goals that our students are capable of achieving.

We value and take care of each other and our team tools & materials.

We are authentic. We are who we say we are; We do what we say we are going to do.

# TEAM GOALS

We set team goals at the beginning of every season and every off-season for what we want to accomplish.





# TEAM FACTS

## MAJOR SPONSORS

NASA  
Boeing  
AZ FIRST  
SOAR  
Elk Meadow Cottage  
Bubbies

## INFO

Name	Team 8-Bit
Rookie Year	2024
Location	Anthem, Arizona
Demographics	10 Members

## MENTORS

Lead Mentor	Emily Locke
Lead Mentor	Gatlin Farrington
Technical Mentor	Lee Adams

## SOCIAL MEDIA

Website	<a href="http://www.team8bit.com">www.team8bit.com</a>
Linktree	<a href="https://linktr.ee/team.8.bit">@linktr.ee/team.8.bit</a>
Facebook	<a href="https://www.facebook.com/Team.8.Bit.AZ">@Team.8.Bit.AZ</a>
Instagram	<a href="https://www.instagram.com/team.8bit">@team.8bit</a>
Twitter	<a href="#">@?</a>

# POTENTIAL TEAM MEMBERS

No prior experience is necessary. Each team member is expected to be on-time, proactive, hardworking, and respectful. FIRST is some of the hardest fun you will ever have. A huge amount of work, effort, and enthusiasm goes into a robotics team each year. There will be failures and learned lessons. It will be fun and life-changing!



## EQUITY, DIVERSITY, AND INCLUSION

We are committed to cultivating, fostering, and preserving a culture of respect, equity, diversity, and inclusion. We welcome differences in race, ethnicity, national origin, sex, gender, gender identity, gender expression, disability, age, religion, income, or any other characteristics that make our mentors and team members unique.

## BENEFITS OF PARTICIPATION

- Learn how to design, manufacture, assemble, wire, program, and drive a robot.
- Develop confidence, communication, and leadership skills.
- Be part of a community and work as a team.
- Get a head start in STEM related fields such as engineering.
- Learn how to “fail” and how to overcome obstacles.
- Gain transferable skills such as public speaking and time management.
- Access to over \$80m in scholarships available only to FIRST participants.
- Have fun!



# EXPECTATIONS OF TEAM MEMBERS

Below are our expectations of all Team 8-Bit Team Members (students, parents, & mentors.) We hold ourselves to a high standard.

1. Engage! Be proactive and hardworking. Refrain from activities that are considered disruptive.
2. The team aims to start and end meetings on time and asks that team members arrive and depart on time as well.
3. Have a good attitude.
4. Always be respectful to students, mentors, and team parents, as well as to other teams and volunteers.
5. Student voices take priority. Mentors and parents are a vital part of this team and are welcome and encouraged to share ideas, however team decisions are the responsibility of students.
6. Accept responsibility. When you make a mistake, acknowledge it and make efforts to make amends as needed.
7. Actions speak louder than words! Don't say one thing and do something else. Follow through with what you say you will do.
8. Work together as a team. FRC is not an individual pursuit.
9. Work together to build a community that is welcoming to all, including training new members of the team, and making it possible for everyone to have the best experience.
10. Support the needs of fellow team members with integrity and humility. It is the responsibility of all team members to teach new team members enabling them to take on more responsibilities on the team.
11. Conduct yourself in a professional manner. You represent our team.
12. Always perform to the best of your abilities.
13. Have a willingness to learn new things. Always seek to improve not only yourself but also the team. Every day we are given an opportunity to improve. Try new things, practice old skills, and share what you know with other team members. It is ok to be proud of what the team has accomplished but don't let that stop you from continuing to improve.
14. Work hard to rise above the competition and remember it is a "coopertition". We do not aim to win by bringing others down. Compete with integrity.
15. Conflicts are inevitable and a valuable part of organizational growth. All team members should assume "positive intent" from fellow team members and will strive to respectfully resolve any conflicts that may arise with "Gracious Professionalism." Team members will learn conflict management from the way that adults handle themselves, so please always be aware of the example you are setting.
16. Students and mentors work together side by side. Speak to each other as peers, not subordinates. Never speak to someone else in a way that you would find demeaning, offensive, or inappropriate if students were to speak the same way to you or to their peers.
17. Adhere to the 8-Bit [Dress Code](#), [Safety Rules](#), and [Communication Policy](#).

# PARENT SPECIFIC EXPECTATIONS

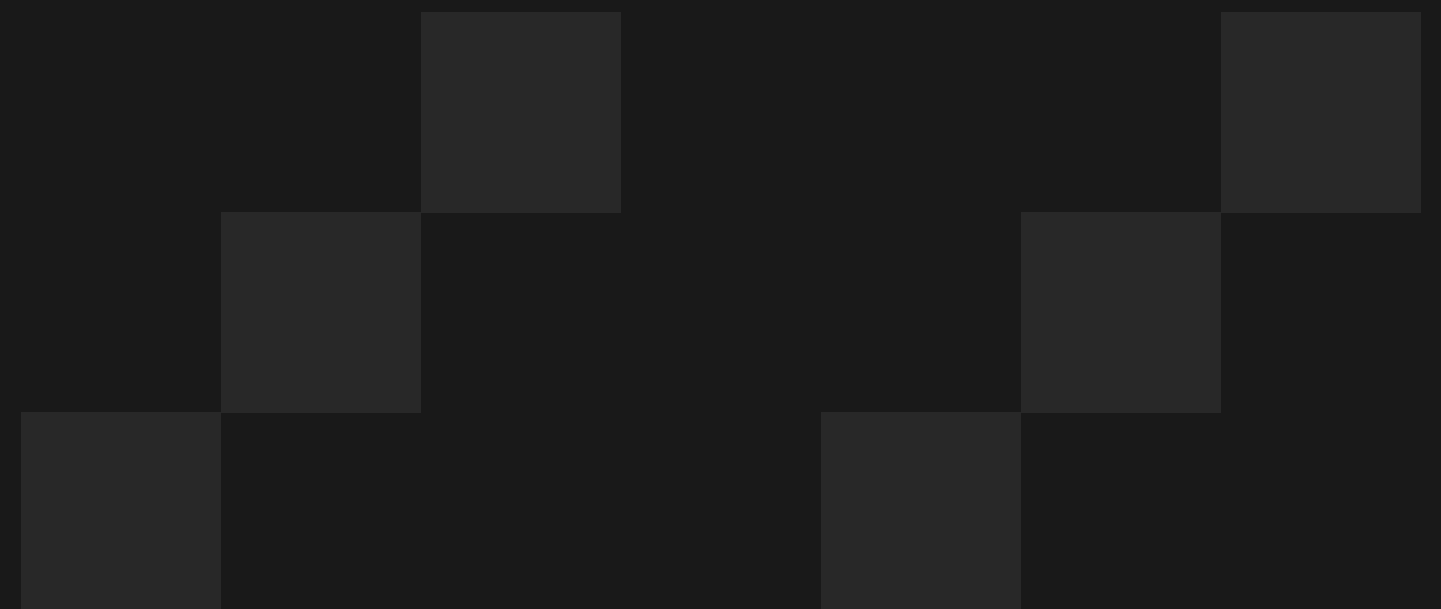
While FIRST robotics can be a highly rewarding experience with many lifelong benefits, it is also a demanding program; most students will experience greater success with parental involvement.

1. Parents are encouraged to participate in team activities whenever possible.
2. Encourage your student to be an active participant. Remind them to ask for something to do. Encourage your student to embrace the new experiences they are being offered even if it pushes them out of their comfort zone.
3. Remind your student to check team communication daily and help them remember to turn in forms and complete responsibilities on time, etc.
4. Robotics isn't for everyone – While we try to find every team member a “niche” on the team and encourage team members to try every aspect of the team, it is important not to force your student to stay on the team if they are not truly interested. It is not fair to them, the mentors, or the rest of the team to force them to keep coming if they don't want to participate.

# MENTOR SPECIFIC EXPECTATIONS

All mentors are expected to practice the techniques described in FIRST's guide to Effective Mentoring

1. Seek to teach students to step into leadership roles, encourage students to run meetings, be project managers, and to lead discussions, through your own facilitation.
2. Be in tune with student concerns and needs, and should represent these interests equally. Be a supporter of all students.
3. Monitor student behavior. Mentors are expected to follow all team and safety guidelines themselves.



# MORE WAYS TO GET INVOLVED

There are many ways that parents/families can get involved with the team.  
If you are interested in helping the team, please let us know!

## ADMINISTRATIVE

Helping to collect forms/payments, coordinate carpools, etc

## FUNDRAISING

Coordinate and organize fundraising events to raise money for the team. Encourage and mentor students in making contacts and following up. Track donations and thank you acknowledgements.

## MARKETING & SWAG

Helping with general branding and marketing, social media marketing, coordinating the ordering, purchase and distribution of T-shirts, button making, and other SWAG.

## MEALS

Coordinate team meals for the long team sessions during the build season.  
Help setup/breakdown lunch at competitions.

## TEAM OUTREACH & SERVICE

Help to facilitate team outreach by identifying and coordinating opportunities for the team to showcase our robot, be active and serve in our community, and spread our love of STEM. Ideas include the Anthem Veterans Day Parade, robot demonstrations at retirement homes, volunteering at FIRST events, a booth at Anthem Days & Oktoberfest, attendance at local sporting events, etc.

# TEAM FINANCES

It costs over \$20,000 each year to compete in the FIRST Robotics Competition. This amount includes parts, tools, competition registrations, and team gear, but does NOT include travel expenses or meals. Please refer to our [Team Budget](#) for additional detail.

## TEAM FEES

Annual Team Member Fees are \$600 per Member, which works out to only \$50/month; however, fees must be paid prior to the season starting so we have the funds available to register and build. \$200/month is due September 1, October 1, & November 1. Fees can be paid directly by families, through team fundraisers, or through sponsorships made on behalf of a student. (Receipts can be provided for ESA reimbursement.) We are happy to help with outreach or fundraising initiatives!

Our Booster Club, Anthem Robotics, Inc., is a 501c3, so payments are tax deductible. Please make checks to Anthem Robotics. For families with more than one team member, additional family members will be given a 50% sibling discount.

Financial issues should not prevent anyone from participating. Please speak to a mentor to discuss any concerns.

## FUNDRAISING

Individual fundraising is optional for team members, but can be a good way to cover the cost of team fees. Families who wish to fundraise can work together to set up team fundraisers to help offset the cost of participation.

The team as a whole may wish to fundraise for certain larger items, such as swerve drive modules or shop equipment. All students are expected to participate in team fundraisers.

Fundraisers must be approved by a Lead Mentor. Once it is approved, the organizing team members/families should proceed with organizing and running the fundraiser.

We encourage team members to find fundraising opportunities. Parents are encouraged to help their team members with finding these opportunities and running the fundraisers.

# COMPETITIONS AND TEAM TRAVEL

We will attend at least one pre-season event and at least one competition each season. We hope to attend two competitions each season, but that depends on team finances and student interest. Students are expected to attend the local competitions, which will be held in March. Competitions run Thursday – Saturday.

Team members who have been active and engaged participants during the season, with emphasis on the level of commitment during the build season, will be given the opportunity to travel with the team to remote competitions. Students and their families are responsible for the cost of all food and travel expenses, including to regional competitions. This includes transportation, airfare, hotels, and meals. Parents may be required to travel with their students to non-local events.



# COMPETITION ROLES

During the season, Team Members are encouraged to participate in as many areas as they are interested in. At competitions, team members will be asked to fill specific roles. All positions are important to the success of the team. Positions are selected by Team Leadership (a combination of student leaders and mentors.) Descriptions of Competition Roles can be found [here](#).

Before Team Leadership selects any team member for a position, they must know who is interested in the different positions. They will look at each team member that expresses desire for that position and how they have met the requirements listed below.

Positions may not be set in stone for the entire season. During the season positions may be added or removed based on the needs of the team. If a person assigned a position is no longer performing or meeting expectations, they may be replaced by another team member.

## **In order to be eligible for a key role or leadership position on the team, students must**

- Show a serious commitment to the team in all aspects of their engagement.

- Be responsive and timely with communications and tasks.

- Regularly attend and be an engaged member of team meetings

- Contribute a significant amount of time during the build season.

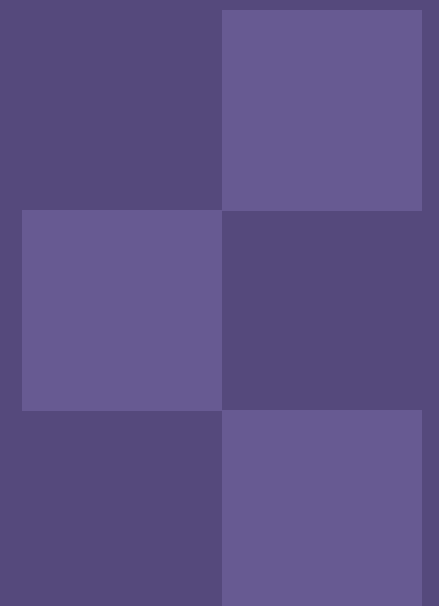
- Be “coachable” and receive feedback well.

- Work well with other teammates.

- Be able to attend ALL tournaments

- Have a solid understanding of the season specific and robot build rules.

- Show skill at the desired task.





# CONDUCT EXPECTATIONS

While at competitions and other events, team members are expected to be professional, respectful and exhibit good sportsmanship. Team members should seek behavior that inspires others while working hard to rise above the competition.

We are focused on the event and not listening to personal music devices or playing games. (There are quiet rooms available for those who need a break.)

We will keep it positive! Our team will not engage in negative behavior toward another team or team member. We will not make negative remarks to each other, no matter the situation.

Our team will not display displeasure over any decision by a referee or judge. However, if students disagree with or have questions about a decision, they can respectfully and appropriately address it.

We will stay through the awards, even if we aren't expecting to receive an award, (except in rare circumstances, which have been pre-cleared with a mentor.) During the ceremony we will applaud the teams that are winning awards. When we applaud, we stand to show our respect for what they have accomplished.

