



Fairport Robotics

Team Handbook

Version	Date	Description
1.0	2018	Initial release of the team handbook.
2.0	1/11/2025	<ul style="list-style-type: none"> • Major overhaul of original document including following updates: <ul style="list-style-type: none"> ○ Team Name ○ Cross Functional Teams ○ Team development standards
2.01	8/22/2025	<ul style="list-style-type: none"> • Updates based on district feedback
2.10	9/03/2025	<ul style="list-style-type: none"> • District approval received
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3.1	8/28/2026	<ul style="list-style-type: none"> • District approval received

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All About Fairport Robotics

Fairport Robotics

Fairport Robotics, Team 578, is comprised of high school students from Fairport High School who choose to participate in the FIRST Robotics Competition. The purpose of Fairport Robotics is to introduce students to careers in Science, Technology, Engineering and Math (STEM). This is accomplished by having the students work side-by-side with mentors from a wide variety of technological and business disciplines. These mentors are experts in their fields and bring a wealth of information, guidance and expertise to all team activities. Engineers, skilled craftsmen, computer professionals and others provide direct guidance to the students so that the students can confidently complete the tasks that they are given.

While building a robot seems to be the centerpiece of the team's efforts, it is not the sole focus. During the fall, spring & summer seasons, students volunteer for numerous community service activities and mentoring opportunities to help support our community. Additionally, workshops are held so that students can fine-tune their skills and participate in one or more sub-teams to contribute to the overall success of the team. These sub-teams include exposure to physics, computer-aided design (CAD), computer graphics, 3-D animation, journalism, marketing, community service, fundraising and many others. Students increase their confidence and skill base in personal communication, interpersonal relationships, teamwork, networking, outreach, strategy development, critical thinking and problem solving. The skills the students learn are the most sought after and highly regarded in the global community we live in today.

Fairport Robotics is a not-for-profit organization that receives financial support through the Fairport Central School District. The District provides the team with use of district facilities, transportation of equipment and students, as well as faculty support from Fairport High School. Additionally, the Fairport community, local business and the Rochester community provide mentors to the team, passing on their expertise to the students.

The team receives additional funding from local corporations and businesses to help defray the costs that the school district does not cover. These costs include competition entry fees, robot construction costs, etc. However, the team also participates in numerous fundraising activities throughout the year as well as community service projects to support local programs.

Fairport Robotics Mission Statement

- To advance respect for science, technology, engineering and math within our school and community.
- To give students the opportunity to work with adults in engineering, marketing, public relations, problem solving, software engineering, etc., to foster student learning and help them to explore a career path in a real-world setting.
- To spread the Core Values of FIRST within the Fairport Central School District and the community at large.
- To build positive relationships through volunteering, community service and providing a medium of education through mentoring.
- To make a positive impact on the Fairport & surrounding communities through outreach efforts both related and not related to FIRST.
- To inspire students to find their true passion.

Fairport Robotics History

Founded at Fairport High School in 1997, Fairport Robotics has worked hard to continuously improve in every aspect of the FIRST program. Though the team has changed since its inception; name changes, sponsor changes and philosophical shifts over the years, Fairport Robotics has always built on their experience and knowledge from the previous year to create a competitive robot.

Proudly sponsored by numerous businesses & corporations as well as local suppliers, the team would not be able to have its successes without the generous support of the Fairport Central School District and the Fairport community. Together, we “Explore, Discover & Create” by fostering creative thinking, engineering, and problem solving. Additionally, our efforts mentoring LEGO teams, community service, demo events and creating partnerships with other FIRST teams, we continue to grow, develop and embrace all that comes our way!

Fairport Robotics Awards & Accolades

Year	Event	Outcome
2025	Finger Lakes Regional	Dean's List Finalist – Tyler Hignett
	NY Tech Valley	Team Spirit Award
2024	Finger Lakes Regional	Regional Winner
	Worlds @ Houston	Attended
	Rah-Cha-Cha Ruckus	Crypt Keeper "Imagery", Trick or Treat: Most Donated Items
2023	Finger Lakes Regional	Judge's Award
	NY Tech Valley	Imagery Award, 8th place Alliance Captain (semifinalist)
2022	Finger Lakes Regional	Winner & Imagery Award,
	Buckeye Regional	8th place Alliance Captain and Quarter Finalist 
2021	Rah-Cha-Cha-Ruckus	Innovation Challenge Semi Finalist, Creativity Award – Game Design Challenge, "Restless Spirit" Award
	At Home Challenges	Semi-finalist – Innovation Challenge, Creativity Award – Game Design Challenge
2019	Buckeye Regional	Quarterfinalist & 8th place Alliance Captain
	Rah-Cha-Cha Ruckus	FIRST Mega Donation Drive Winner
2018	Finger Lakes Regional	Finalist, Wild Card Winner
		Judge's Award
	Midwest Regional	Finalist & Alliance Captain, Wild Card Winner
	World Champs @ Detroit	Quarterfinalist
	Rah-Cha-Cha Ruckus	FIRST Mega Donation Drive Winner
2017	Finger Lakes Regional	Quarterfinalist
	Buckeye Regional	Quarterfinalist
	Rah-Cha-Cha Ruckus	FIRST Mega Donation Drive Winner
2016	NYC Regional	Finalist
		Team Spirit Award Winner
	Finger Lakes Regional	Semifinalist
	Rah-Cha-Cha Ruckus	FIRST Mega Donation Drive Winner

Year	Event	Outcome
2015	Greater Toronto East Regional	Quarterfinalist
	Finger Lakes Regional	Quarterfinalist
	Rah-Cha-Cha Ruckus	FIRST Mega Donation Drive Winner
2014	Tech Valley Regional	Quarterfinalist
2012	Finger Lakes Regional	Quarterfinalists
	Buckeye Regional	Quarterfinalists &
		Gracious Professionalism Award
2011	Finger Lakes Regional	Dean's List Finalist – John Herb
		Engineering Inspiration Award
	DC Regional	Quarterfinalists
2010	Finger Lakes Regional	Dean's List Finalist – Carly Buchanan
		Buckeye Regional – Judge's Award
2009	Finger Lakes Regional	Judge's Award
2008	Boston Regional	Best Website Award
2007	Finger Lakes Regional	Woodie Flowers Finalist - Dr. Edward Hensel
2007	Finger Lakes Regional	DaimlerChrysler Team Spirit Award
2006	Finger Lakes Regional	General Motors Industrial Design Award
	Boston Regional	Best Website Award
2004	Buckeye Regional	Semifinalist
		Leadership in Control
	Pittsburgh Regional	Finalist
2003	Canada Regional	Johnson & Johnson Sportsmanship Award
2001	NASA Langley-VCU Regional	Winner
2000	Philadelphia Regional	Winner
1997	Mid-Atlantic Regional	Johnson & Johnson Judge's Award

FIRST

About FIRST

FIRST is an international organization founded in 1989 to promote student interest in math and science. FIRST is an acronym for “For Inspiration and Recognition of Science and Technology.” The program was founded by Dean Kamen. FIRST seeks to stimulate interest in science, technology and mathematics through fun, and engaging problem-solving programs including FIRST Robotics Competition (FRC), FIRST Tech Challenge (FTC), FIRST LEGO League (FLL) and Junior FIRST LEGO League (JFLL). Each program is designed to meet different developmental age levels and continuously promotes FIRST Core Values and Gracious Professionalism. These programs promote the possibilities and challenges of technology and provide an opportunity for success.

The four main divisions in the FIRST organization are:

- FIRST LEGO League Explore is a program for elementary students to create a presentation and build a model to demonstrate and expositions to increase their problem-solving skills.
- FIRST LEGO League Challenge is a LEGO robotics competition for 4th grade through middle school students. The competition involves building a robot using LEGO Mindstorms around a central theme. We currently have four FLL teams at the middle school level; three at Martha Brown and one at Johanna Perrin.
- FIRST Tech Challenge (FTC) is a robotics competition for high school students. In this competition students create a smaller, more affordable robot.
- FIRST Robotics Competition (FRC) is for high school students. This is the division Team 578 competes in. In this division students create a robot alongside adult mentors to compete with other FRC teams.

The FIRST Robotics Competition (FRC)

The initial FIRST Robotics Competition was held in 1992. In its inaugural year, teams from 13 states participated. Since then, the program has grown to include thousands of teams from all over the world. This competition is as exciting if not more exciting than any sporting event complete with referees, time clocks and teams cheering their robot on to victory. FIRST competitions have been featured in major television markets including segments on ABC, ESPN, Discovery, The Science Channel and A&E.

Each year the “game” changes, so students start from scratch to produce a robot to compete with. The rules and the challenge of the game to be played remain secret until the kick-off event on the first Saturday of January. From that point, teams spend the next six weeks conceptualizing, designing, prototyping, fabricating, building, and field-testing their robot. A standard kit of parts is provided to each team containing a variety of motors, sensors, pneumatic components, fasteners, a highly sophisticated control system and other materials teams may want to use on their robot. Within the size and weight constraints prescribed by FIRST, teams are free to design their best solution for the game. Teams can choose to use the kit of parts and/or any other materials approved by FIRST. This six-week build season is a very intense, labor-intensive time of the year for the team.

A comprehensive FRC rule manual is posted on the Internet. During robot design, the team’s game strategy must be considered and factored into the robot solution. Executing the requirements for that particular game can appear to be simple on the surface but are most often very difficult and quite challenging.

FIRST also offers a competition that rewards excellence in content, creativity and master of multimedia. As with the robotics competition, the theme of the animation challenge is announced in January. Completed 30-second computer animation projects are submitted six weeks later. Animations are judged by peers at regional competitions. Regional winners and others selected by Autodesk are advanced to the championship competition for judging by peers and industry professionals.

FIRST redefines the term “Winning”. Teams are rewarded for excellence in design, demonstrated team spirit, *Gracious Professionalism*, Core Values, maturity and the ability to overcome obstacles. Scoring the most points is a secondary goal. “Winning” means learning, being inspired, and building partnerships that last.

Fairport Robotics Team Information

Team Members

Students who attend Fairport High School are eligible to participate. Students must be in good standing both academically and behaviorally in order to participate on the team. All students who have an interest in being involved and have a willingness to actively participate in all team activities in a constructive, positive manner are encouraged to join.

The team consists of mentors who share their knowledge with students. College students & professors, engineers & skilled craftsmen, parents and others from the community with an interest and applicable skills may serve as mentors. Additionally, team alumni work with the team as “Apprentors” or Apprentice-Mentors to pass their knowledge on to the next generation of Fairport Robotics. Upon graduation, apprentors can become full team mentors.

Student Expectations Section

In order to remain a member of Fairport Robotics, all students are expected to follow the listed student expectations:

- Students must adhere to the [Fairport Central School District Extracurricular Eligibility Standards](#) as well as the [FCSD Code of Conduct, Character & Support](#).
- Team Uniform
 - Team t-shirt and pants are to be worn to any team event or demo. The team logo **MUST** be visible at all times.
- Team Collaboration Tools
 - Microsoft Teams App is installed on student’s phone. The app is configured with notifications and students are expected to monitor the app at least once a day. All activities such as Forms, Attendance and collaboration amongst teammates are completed in a timely manner.
 - Each student is provided with a Microsoft 365 license. Fairportrobotics.org email is to be configured on student’s phone. Email is to be monitored on a daily basis.
 - Team members will bring their school provisioned device or personal laptop.
- STIMS
 - Students must register online with STIMS. This includes the FIRST Consent and Release form to be signed by a parent if the student is under 18.

- Grades
 - Students are expected to balance their team responsibilities with schoolwork. Schoolwork is a first priority, even before robotics. Students must adhere to the [Fairport Central School District Extracurricular Eligibility Standards](#).
- Outreach Requirements
 - Students are required to volunteer for outreach activities during each season.
 - A variety of outreach activities are available. Students have choices on what events they participate in throughout the year.



Attendance Policy

Students must adhere to the [Fairport Central School District Extracurricular Eligibility Standards](#). While in attendance, students are expected to be fully present, attentive, and actively engaged during every team meeting, workshop, and outreach event.

For any anticipated late arrivals or absences—whether due to school activities such as concerts, sports practices, or other commitments—students should notify their subteam or CFT leads and coaches via Microsoft Teams as early as possible, ideally at least 24 hours in advance, and provide relevant schedules to the head coach at the beginning of the year.

When absences are properly communicated, students may make up missed assignments by independently studying the material and requesting makeup work from their team leaders; this proactive approach will positively affect their attendance record.

All unnotified absences will be addressed at the coach's discretion after considering all extenuating circumstances. Coaches reserve the right to contact parents for early pick-up or send students home when necessary.

Team Member Evaluations & Reviews

At the end of each month, the team roster will be re-evaluated by the coaches. Students must meet the expectations as detailed in the [Fairport Central School District Extracurricular Eligibility Standards](#).

Dismissal from the team will also take into consideration issues outside of attendance. Dismissal for reasons other than attendance will be handled using the procedure outlined in the [FCSD Code of Conduct, Character & Support](#).

Reasons for dismissal may include, but is not limited to:

- Behavior in and outside of team events
- Initiative
- Work ethic
- Contribution to team environment

Coaches will talk to students that are not meeting the requirements necessary to stay on the team or have exhibited behavior that puts them at risk of being removed from the team. Upon repeated instances, coaches will also reach out to communicate to the parents to develop an action plan. If it is found that a student should be removed from the team at the end of the month, the student and their parents will receive notification explaining the reason for the removal and will be removed from Microsoft Teams.

Reviews will be completed with the students by the lead mentor (based on feedback from coaches and mentors) twice per year at a minimum (once before build, another after). In addition to introducing the concept of industry standard reviews, this will provide a structured way to recognize achievements and provide constructive feedback to help them improve. It will help foster a culture of accountability and motivation among the team, encouraging them to set and achieve personal and team goals.

During Team Meetings

Cell phones are to follow the district policy of “Off and Away All Day” unless otherwise approved by the coach or a mentor. Students must adhere to the policies detailed in the [FCSD Code of Conduct, Character & Support](#)

Varsity Letter Requirements

A FCSD Robotics Varsity letter can be earned for the Robotics Team. The letter recognizes the team member for their Teamwork, Excellence, Achievement and Commitment. Students who earn a varsity letter work together to excel, achieve goals through commitment and represent their team with all of the characteristics expected from Fairport High School and FIRST. Students who meet the following requirements will be awarded a Varsity Letter:

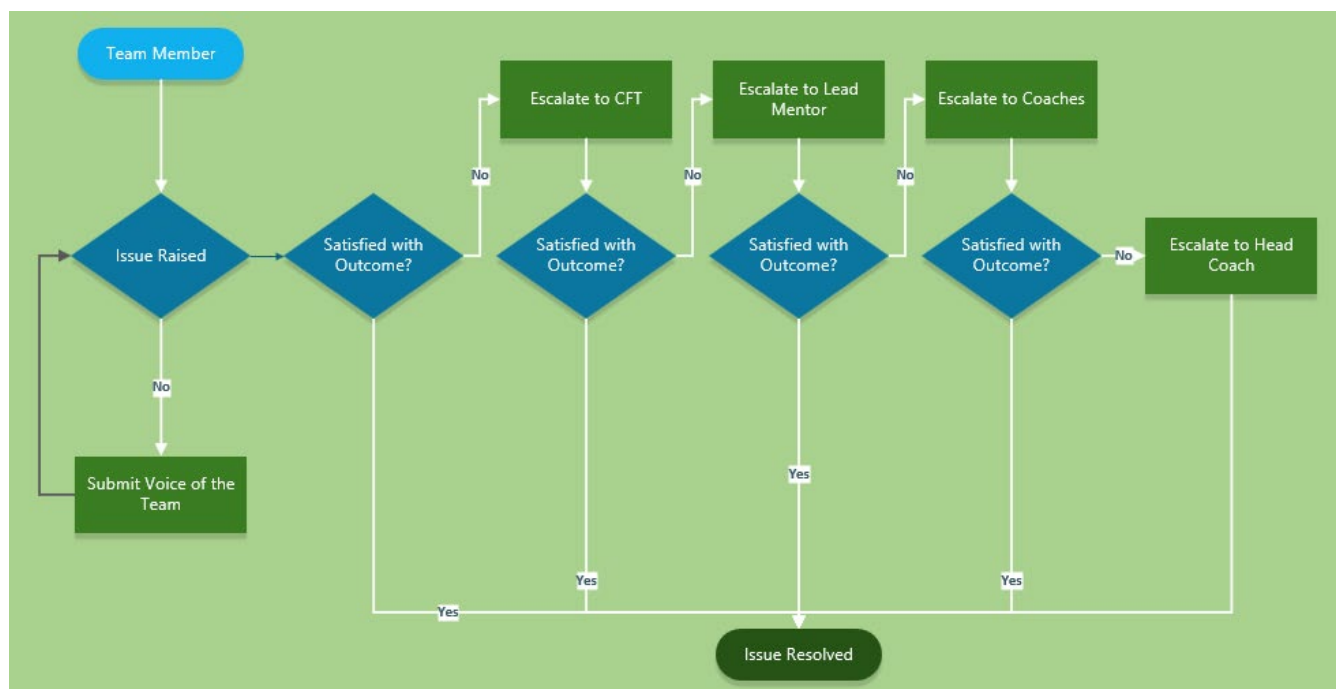
1. Participation
 - Two complete years of active participation on the team (September to May)
 - Includes attendance and productive contribution at team meetings/workshops, support activities, competitions and fundraising
 - A first-year team member who is a senior is eligible for the Varsity Letter if they meet all other requirements.
2. Academics
 - Must be in good academic standing
3. Attendance
 - Must attend a minimum of 80% of the total team meetings/workshops/outreach events and 1 competition per year
4. Fundraising
 - Must attend all scheduled fundraisers unless written request for excused absence is received and approved by Lead Mentor and Head Coach.
5. Leadership
 - Must hold a leadership position for a minimum of 1 year or lead a special project as approved by the Lead Mentor and Head Coach
 - Leadership positions include team positions such as Flagship, CFT Leaders, Safety Captain, etc.
 - Special projects include outreach, fundraising, training, etc.
6. Safety
 - Must successfully complete (pass with a grade of 80% or higher) the team's Safety Test each year
7. Discipline
 - Must adhere to the [FCSD Code of Conduct, Character & Support](#)
 - No disciplinary actions
8. Recommendation/Approval
 - Team member must be recommended by a team mentor and approved by the Lead Mentor and Head Coach

Team Safety

- During the first month of the season (September) a safety procedures and rules review will be led by the Safety Captain- **all students are required to attend this meeting.**
- Students must be aware of and take action to protect themselves against the dangers of making the robot. Examples include working with power tools, carrying heavy equipment, etc.
- Students will ask a mentor if they do not know how to use a machine and receive safety instructions on how to operate each specific tool and machine.
- Students will not put other students or mentors at risk of injury by distracting them while they are in a build area.
- Students will always have a pair of safety glasses on them and must wear them in build areas (pit area at competitions, demos & workshops).
- Students must wear closed toe/closed heel shoes in the build area, pit area at competitions, and demos (no Crocs or sandals).
- Students must tie their hair back when using machines to avoid getting hair caught.
- Students will use machines (including laptops) for productive tasks which benefit the team and not use machines for personal tasks.

Team Escalations

The process for escalating an issue within the team will follow a set path where a student can raise their concern, issue or feedback through the Voice of the Team survey. If the issue/concern is of a critical nature, the student should escalate directly to their CFT Lead Mentor. If unsatisfied with the outcome, the next escalation will be to the Lead Mentor, followed by the Assistant Coaches and finally to the Head Coach.



Team Consequences

Levels of behavior concerns, infractions, interventions & responses will follow the [FCSD Code of Conduct, Character & Support](#). This supports the use of a *leveled system of responses* in addressing inappropriate or unacceptable behaviors, with the ultimate goal of teaching positive behaviors and strengthening students' personal, social and academic efficacy.

The following examples of unacceptable behaviors is not inclusive of all Level 1, 2, 3 or 4 behaviors. Please see the [Behavior Infractions Chart & Glossary](#) for more detailed behavior descriptions. The interventions and consequences that are aligned with each level represent a menu of responses. Coaches can select one or more responses in each level.

Coaches are not expected to select and use all interventions at each level and may also use a lower-level intervention when it's appropriate. They will strive to match students with interventions that are the least intensive while being the most effective. Interventions will be progress-monitored and adjusted based on student response.

Parents will be made aware of all interventions.

Travel Team Criteria

Academic

- Student must be in good academic standing

Attendance

- Follow the Teams Attendance Policy
- Meet necessary expectations for participation in outreach events

Behavior

- Show initiative and be actively engaged in moving our team forward
- Take personal responsibility to stay focused and productive
- Act respectfully and safely during team meetings and when representing our team at events

Performance

- Take initiative in learning material required of their subteam/CFT tasks
- Show unique aptitude at completing subteam/CFT projects and tasks
- Excel in fulfilling the specified competitive role.

Travel Team Roles

The Travel Team is made up of several predefined roles. Depending on the nature of roles involved, one person may fill multiple roles. The travel team consists of at least 20 students and can grow to accommodate the entire team.

The qualities below will be used when assessing members to fill competition roles. The team aims to send students who best qualify for each role to events. For every role on the Travel Team, members must also exhibit commitment, focus, solid communication and good performance.

Drive Team: Coach/Driver/Operator/Technician/Human Player (5)

- Responsibilities
 - Be dedicated and committed to their role at competition and committed to attending Coach/Driver/Operator/Technician/Human Player practice
 - Assist the Pit Crew in diagnosing and fixing problems with the robot between matches
- Qualities
 - Enthusiasm for working closely with the Drive Coach and following their instructions
 - Willing to put in extra time and effort to be competitive and to work closely with other Drive Team members
 - Ability to solve problems on field before matches

Pit Crew: Mechanical/Electrical/Programming (3+)

- Responsibilities
 - Work as a team to diagnose and fix problems with the robot and be prepared to help teams who come to our pit
- Qualities
 - Exceptional knowledge of robot functions
 - Willingness to go above and beyond to ensure robot competitiveness

Match/Pit Lead Technician (1)

- Responsibilities
 - Diagnose and fix problems with the robot between matches
 - Know who to call for specific issues if can't be resolved by themselves (i.e. mechanical, electrical, software, etc)
- Qualities
 - Exceptional knowledge of robot functions
 - Willingness to go above and beyond to ensure robot competitiveness
 - Ability to solve problems in stressful situations

Match/Pit Strategist (1)

- Responsibilities
 - Prepare match strategy for every match by communicating with other teams regarding robot abilities
 - Relay match strategy to the Drive Coach
- Qualities
 - Exceptional communication skills
 - Ability to quickly coordinate with other teams and make decisions and compromises based on their abilities preferences

Stand Strategist(s)

- Responsibilities
 - Analyze and observe matches qualitatively
 - Contribute to creating a team picklist
 - Advise the match strategist
- Qualities
 - Extensive knowledge of other teams, game rules, and strategies
 - Thoroughness and attentiveness while watching matches

Lead Scout (1)

- Responsibilities
 - Manage logistics for scouts, scouting system, and Travel Team as needed
- Qualities
 - Exceptional managerial skills, attentiveness, and familiarity with the scouting system and competition rules
 - Adaptability and the ability to handle stressful situations

Scouts (enough to fill the travel team)

- Responsibilities
 - Collect and upload accurate and consistent scouting data during qualification matches 21
 - Be available to scout when needed and talk to other teams when not
 - Commit to and attend scout training as requested
- Qualities
 - Ability to stay focused, attentive, and positive during long periods of time
 - Enthusiastically follows instructions given by various team leaders
 - Asks questions for clarification

Impact Award Presenters (3-4)

- Responsibilities
 - Be prepared and on time for Impact Award Presentation and be team ambassadors
 - Fill additional roles as qualified
- Qualities
 - Committed to team and presentation rehearsal schedule
 - Experience presenting and/or willingness to learn and improve
 - Able to take criticism

Travel Team Selection Process

The selection process is based on the observations of subteam/CFT leads, mentors and the coaching team.

Before each competition, subteam/CFT leads create a list of students they consider suitable for competition roles. They may supplement their selections with descriptions or examples of how each student best fits various competition roles. Following this, the Coaching Team meets to decide on a list of students who would best complete the required competition tasks and fulfill the above Travel Team Criteria.

All team positions will be selected by the Head Coach.

Team Regionals

Finger Lakes Regional

Dates TBD

Because the FLR is held locally at RIT and we do not have to deal with the associated travel costs, all team members may attend given that they meet all requirements. Because this is our “home” regional, all students are expected to attend.



Travel Regionals

Dates TBD

In addition to the Finger Lakes Regional, we attend other regionals. We do not know which regionals we will be able to attend until late winter/early spring, but information will be shared as we receive it.

FIRST Championship

The team will attend the FIRST Championship if we qualify at one of our Regional events. To be eligible to attend, team members must again be selected as a part of the Travel Team and turn in all the field trip forms.

Finances

Team Expenses

The FRC program is a well-organized operation that culminates in competitions that rival any professional sporting event. Our team's operating budget is approximately \$36,000/year. The costs for teams to participate are substantial. The entry for one event, including the kit of parts, is approximately \$6,500; additional competition fees are \$4,000 - \$5,000 per event.

The costs to individual teams for materials, tools and the professional services needed to build a robot are also significant. Generous donations of materials and services from local companies and the skills of our mentors have helped minimize costs.

In past seasons, corporate and FCSD contributions have covered many of the costs incurred by the Team. In these financially challenging times, continued support from our large corporate supporters is uncertain and can change from year to year. While Team leadership will continue to seek corporate support from a broad range of companies, it will be necessary for students to conduct fundraising activities to help cover costs.

Participant Costs

There is no fee for students to participate on the Team. However, each student will be required to purchase their own pair of safety glasses. These are a requirement to work on the robot and in the pits at regional competitions. Each new member will be given two (2) team t-shirts and veteran members will be given one (1) team t-shirt at the beginning of each season. Fairport Robotics cargo pants are also required and must be purchased by the student. These are requirements for each student to have and should be considered as your team "uniform" to participate in team events. Additional items will be available for purchase from a Team "store" at the expense of the student, mentors and family members.

The only other expense that may be incurred is for transportation, food and lodging if students choose to attend a competition. Typically, a student can expect to pay \$200 to \$300 to participate in an "away" competition. Travel costs are dependent upon distance travelled and duration of the trip. If a team member has financial struggles, the team will provide a "sponsorship" from the team funds to include that student in team activities.

Team Purchase Orders

Throughout the year, the team will need to make purchases. This includes (but not limited to) materials for the robot, supplies for activities such as stem kits and tools for the workshop. For all team purchases, the following process needs to be followed:

- Student researches item needed. The following information is required to submit a purchase order:
 - Item Description
 - Reason for need
 - Item Unit Cost
 - Quantity needed
 - Direct web link to the item
 - Subteam making the request
 - Indication if this should be included on the Bill of Materials and if so has the CAD been updated
- Student submits the request to Flagship using the request form found in the General Channel in Teams
- Flagship discusses and disposes the request (i.e. approve or reject)
- The team treasurer approves/rejects the request in Teams
- The Lead mentor places order if approved

Based on current arrangements with local vendors, students should first attempt to purchase from Ace Hardware, followed by Amazon. Only if unavailable in those two locations should alternatives be submitted.

Fairport Robotics Leadership Structure

Flagship Board

The Flagship Board consists of a team of students and mentors that make decisions and set the guidelines for the team. Flagship meets with the Head Coach and Assistant Coaches weekly before the team workshop. No Flagship member is automatically granted a spot on the Travel Team. All Flagship positions must be students who will be in the 10th-12th grade and were a team member in the previous year. If no such person is suitable for the position, it will be dealt with on a case-by-case basis with the final decision being the Coach's. Team members apply for each position and an interview process will be held by the head coach, lead mentor and other coaches/mentors when appropriate.

The Head Coach and Lead Mentor, in consultation with other assistant coaches, may remove a student from a leadership position for repeated or egregious violations of team rules or standards, or when a student is unable to fulfill their responsibilities as a member of Flagship.

The positions that make up the Flagship Board are:

President

- *FIRST* contact and face of the team
- Works with Coaches and Student Leadership to manage and run team
- Coordinates presentations to the Board of Education, sponsors, etc.
- Reviews FIRST awards submissions

Vice President

- Assists the President
- Fills in for the President at events if the president can not be present
- Will work with Safety Captain to ensure all safety rules are followed during tournaments as well as during competitions. Additionally, will work together to train all team members and pit safety captains.

Chief of Engineering

- Oversees Engineering Disciplines; Drive Train, Electronics, Software, and Structures
- Delegates tasks to CFT captains
- Facilitates communication between CFTs, understands “big picture” of robot
- Ensures space allocation on the robot
- Works with mentors and CFT Captains to organize and run training
- Owns adherence to a status reporting of project schedule

Vice President of Outreach

- Oversees all Marketing activities
- Assigns students to lead events, fundraisers, and community service
- Works with President and leader of Marketing sub-team to ensure documentation of team through written and social media
- Ensures positive sponsor relationships
- Coordinates award submissions (Chairman's Award and others)

Treasurer

-  Creates robot Bill of Materials for regional competitions
- Works with President to manage sponsor relationship funds
- Works with VP of Outreach to coordinate fundraisers
-  Oversees team business plan and business award submission
- Balances team budget and accounts
- Deposits funds into school club account and maintains documentation of funds

Communication Specialist

- Works with President to maintain relationships with school district, mentors, community members and corporate/business sponsors
- Partners with coaches to update social media and website
- Records and maintains documentation of team member's hours for the year
- Records attendance at meetings and team events
- Records minutes of all meetings and shares with the entire team
- Responsible for correspondence with sponsors, District, etc.
- Responsible for publishing bi-annual team newsletter, team yearbook, etc.

FLL Coordinator

- Is a liaison between Fairport Robotics and FLL Coaches
- Organizes Fairport Robotics team members to serve as mentors to FLL Teams
- Works with coaches to plan an FLL Qualifier Tournament to be held in Fairport
- Ensures all team members have signed up to work at the FLL Qualifier Tournament and are trained for their position
- Serves as the lead student at the FLL Qualifier Tournament working with the Tournament Director to ensure event runs smoothly
- Works with coaches to plan an FLL Informational Meeting in August to recruit FLL team members and coaches

Engineering Disciplines

Fairport Robotics divides the work each year among several different Engineering Disciplines. Training sessions are held over the summer and during the fall through evening workshops. Students are encouraged to investigate many different engineering disciplines and learn as much as possible about what each discipline does before committing to work on a discipline team. Generally, students are able to be on the

engineering discipline team of their choice. Team leadership and mentors may shift students to different disciplines if needed.

- **Structures - Design:**
 - Designs the mechanisms of the robot that play the game and oversees the building of those mechanisms
-  **Structures – Manufacturing:**
 - Builds the mechanisms of the robot under the guidance of the design team.
- **Drive Train:**
 - Builds the basic frame and designs/assembles the components that allow the robot to move. Also designs and makes the bumpers to protect the robot.
- **Electronics:**
 - Wires semiconductors and logic controllers along with drive system sensors.
- **Software:**
 - Designs and creates code (in Java) that controls the robot in both autonomous and wireless modes.
- **Spirit:**
 - Maintain and improve the team so that it functions cohesively, works on maintaining relationships with other FIRST teams, creates cheers & dances, etc.
- **Marketing:**
 - Creates and maintains the team's media, such as the team website, social networking, photos, etc. Oversees sponsor relationships and team branding.
- **Game Management:**
 - Analyze and develops game strategies, organizes scouting of other teams, and helps the drive team with alliance selections based upon data.
- **Safety:**
 - Makes sure that the team is OSHA and FCSD compliant in all work areas and monitors team members/mentors for safe practices and emergency preparedness. Tasks include maintaining inventory of first aid kit(s), issuing safety reminders and monitoring the pit during competitions for safety and crowd issues.

Cross Functional Teams

After the game is presented at kickoff, the team is organized into Cross Functional Teams (CFTs) based on the requirements of the game. A cross functional team is comprised of team members from a variety of Engineering Disciplines to complete a required function of the robot. Typically, there are 3 cross functional teams as defined below, but this may vary based on the composition of the team and the requirements of the robot to play the game.

- **DriveTrain and Endgame:**
 - This team is responsible for designing, building, and programming the drive base of the robot and the necessary mechanisms to perform the end game functions.
- **GamePiece Acquisition (Intake):**

- This team is responsible for designing, building, and programming the mechanism for acquiring the game piece.
- **GamePiece Delivery (Scoring):**
 - This team is responsible for designing, building and programming the mechanisms to deliver the game piece according to the scoring objectives.

Flagship Selection Process

All selection to official leadership positions for Fairport Robotics occur through a nomination and interview process. Flagship board members selections will take place in April of the current school year.

At the start of the leadership selection process, students will be able to apply for leadership positions and/or to nominate others who they believe are deserving of a position through a Microsoft Teams Form. All members and mentors of the team are encouraged and expected to provide their input via the form.

After collecting the nominations, the Coaches and Lead Mentor will confirm that each nominee would like to be considered as a candidate for each of the positions they have been nominated for.

Candidates will be interviewed by the Coaches/Lead Mentor with a mentor from the relevant subteam as needed. Each interview will be 10-15 minutes in length, depending on the position and interview schedule.

After all candidates have been interviewed, the Coaches/Lead Mentor will discuss and select a suitable lead for each leadership position based on many factors, including:

- Past experience
- Dedication and contributions to the team
- Technical competency, where applicable
- Leadership, management and organizational skills
- Ability to serve as an outstanding representative of the team
- Ability to complete duties listed in the position's Job Description
- Interview performance and substance
- Nominations submitted by past subteam leads, fellow team members and mentors

Students may only hold one leadership position at a time, except under extenuating circumstances. After leadership positions have been selected, the Coaching team will send an offer message to each student selected. If a student does not accept a position offered, the Coaching team will review and send an offer to another candidate. After all open leadership positions have been filled with accepted offers, the Head Coach will announce the results of the leadership selection process to the team.

Fairport Robotics Team Handbook Acceptance

This document provides an overview of participation on the team, including general expectations, roles and responsibilities, criteria for selection—including but not limited to leadership positions—conduct guidelines, and the processes for assigning roles. It also outlines the procedures for offering and accepting positions, as well as the responsibilities of both students and the coaching staff. All team members and their families are expected to read and understand these policies and procedures.

By signing below, both the student and their parent/guardian acknowledge that they have read, understood, and agree to the information and policies described in this document.

Student Name: _____

Student Signature: _____ Date: _____

Parent/Guardian Signature: _____ Date: _____