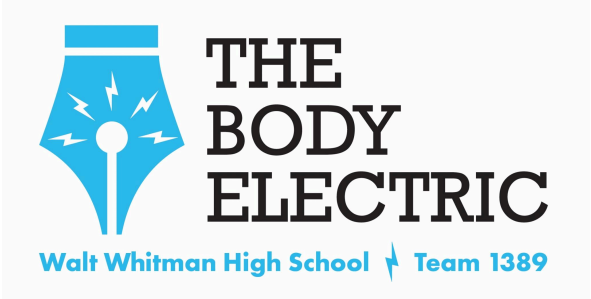

TEAM 1389 HANDBOOK

July 2026

Many thanks to FRC Team 900 The Zebracorns, and FRC Team 1923 The Midknight Inventors, whose team handbooks served as the basis for this guide

Introduction to FIRST

FIRST® stands for For Inspiration and Recognition of Science and Technology. It was created in 1989 by inventor Dean Kamen as a way to inspire passion for science and technology in students. Along with promoting Science, Technology, Engineering, and Mathematics (STEM), FIRST® also promotes the ideas of Gracious Professionalism®, Coopertition®, and good sportsmanship among teams even in the heat of fierce competition. Over time, FIRST® has grown to support competitions across four divisions: FIRST® Lego League Jr. (FLL Jr.), FIRST® Lego League (FLL), FIRST® Tech Challenge (FTC), and FIRST® Robotics Competition (FRC).

FRC is an outlet for collaboratively building a ~150-pound competitive robot. Beginning in January, FRC students and mentors work together to design, build, and compete with a robot in the yearly challenge presented to them. Beyond building a robot, students learn to spread their passion for science and technology in the community, raise funds to support our efforts, decision making skills, risk management, how to work as a team and more.

FRC helps students to find their passions and exposes them to a variety of interests: computer science, engineering, physics, community engagement, marketing, communications and a whole lot more. No matter where your interests are, there is something waiting for you on your team.

For more information about FIRST®, visit http://firstinspires.org.

About The Body Electric

FRC Team 1389 - The Body Electric, had it's rookie year in 2004. The team started with only a few students and one teacher as an after school extra-curricular activity. Since then, the team has grown to over 50 students and 10 mentors, running as an after-school extra-curricular activity, August through May, open to students at Walt Whitman High.

The Body Electric follows through on the mission of FIRST; to increase the awareness and appreciation for STEM in our community and to encourage STEM education in a positive, inclusive and engaging environment for all students.

The team not only works through the technical challenges of building a competition robot each year, but also sparks enthusiasm for robotics through our various outreach events with the community. Becoming a member of the team will offer students exposure to multiple aspects of the organization: fundraising and sponsor engagement, project management, community service, and of course to STEM skills such as programming, mechanical design, and technical documentation.

Teamwork and leadership skills are a key part of the FIRST experience, and something the Body Electric aims to instill in every student participant through their time on the team.

Team Structure & Procedures

Lead Coaches

Every FRC team has two lead coaches who oversee the day-to-day activities of the team. On The Body Electric, they oversee team membership, safety, logistics, and administration. They also focus on the sustainability and continuity of the team. The lead coaches are responsible for maintaining a welcoming team environment and managing team dynamics in accordance with FIRST Core Values (page 13)).

Mentors

FIRST is a mentor-driven program made possible by dedicated adult volunteers from the community who invest significant time and energy into supporting The Body Electric. Our mentors contribute a wide range of technical and professional expertise, working closely with students throughout the season as they design, build, and refine a competition-ready robot. Beyond engineering, they also guide team members in business development, outreach initiatives, communications and awards. Their mentorship plays an essential role in both the team's achievements and the personal growth of its students.

Youth Protection

Protecting students is a primary concern for all coaches and mentors. Our coaches and mentors adhere to a policy of no one-on-one contact with students. We require all coaches and mentors to go through the FIRST provided Youth Protection Policy (YPP, available at: https://www.firstinspires.org/resource-library/youth-protection-policy) training as well as MCPS' online training for volunteers. Additionally, all of our coaches and mentors have completed fingerprinting and a background check with MCPS.

Subteams

The Body Electric consists of different subteams that each work on specialized areas of the team or robot. Membership to a single subteam is not exclusive and students may participate in multiple subteams throughout the year. However, we advise that as students progress with their time and experience on the team that they hone their focus and expertise to a particular subteam. No prior experience is required to join any of the subteams.

All team members, regardless of their subteam, are expected to participate in the team's outreach efforts.

Mechanical

This subteam leads the design, development, and construction of the robot's mechanical systems, using CAD (Computer-Aided Design) to turn ideas into designs. Members brainstorm and research designs, prototype mechanisms, fabricate and select parts, and assemble the complete robot. They build and refine mechanisms such as drivetrains, manipulators, and structural components. They also construct game field elements for realistic testing. Through this work, team members develop skills in CAD (using Onshape), machining, and the use of hand and power tools.

Electrical

This subteam manages all of the robot's electrical systems, ensuring safe, reliable power distribution and clean signal flow throughout the robot. Members design electrical layouts in CAD, carefully plan wire routing, and select appropriate components such as motor controllers, sensors, and protection devices. They handle wiring, soldering, and integration of all electrical hardware, followed by testing and troubleshooting to maintain consistent performance.

Programming

This subteam develops and maintains the software that controls the robot, ensuring it operates reliably in both autonomous and driver-controlled modes. Working in JAVA, their responsibilities include writing and testing code for motors, sensors, and actuators; implementing control systems and driver interfaces; and developing vision-based detection and targeting capabilities. Beyond robot code, they make sure team laptops are up to date with the necessary development tools, software libraries, and configuration settings required for consistent and efficient programming across the team.

The three technical subteams listed above work closely with each other, ensuring all robot systems fit together seamlessly and perform reliably as a cohesive whole. Additionally, they are responsible for maintaining and repairing the robot throughout the season, especially during competitions where quick, effective fixes are critical.

Business

This subteam is responsible for managing the team's awards submissions, community outreach initiatives, and communications, including social media presence. Their work ensures the team is effectively represented both within the robotics community and to the public. Typical responsibilities include researching, drafting, and submitting award applications, as well as preparing and delivering award presentations during competitions. The subteam also plans and executes, with other team members, robot demonstrations at outreach events to engage the community and promote STEM education. In addition, they develop and schedule social media content to highlight team activities throughout the season. The team is responsible for collecting

and organizing data, photos, and narratives to maintain a comprehensive team portfolio and support documentation for awards and sponsorships.

Strategy & Scouting

This subteam plays a key role in both the design direction of the robot and the real-time decision making that happens during competitions. On the strategic side, the subteam helps define goals and priorities at the beginning of the season, using game analysis and performance objectives to guide design choices. During competitions, the subteam focuses on match strategy and opponent scouting by collecting and analyzing data on other teams' robots, identifying strengths, weaknesses, and play styles. This information is then used to support alliance selection, develop match plans, and adapt strategy throughout the event to maximize the team's overall performance.

Competition Drive Team

The drive team (3-4 ppl) is responsible for working together to operate the robot during competition matches. In 2025/2026 it consisted of the driver, manipulator, human player and coach. Drive team tryouts are held in January and consist of a practical and written test. Drive team members must be available to attend all drive team practices and competitions. Students can be on the drive team and an additional subteam.

Team Leads

Each subteam on The Body Electric has at least one team lead and in some cases a sublead(s). Leadership requires a high level of commitment in responsibility as well as time. Leaders are held to a high standard. They are expected to be skilled and knowledgeable in their areas of expertise and effective project managers, as well as role models and teachers to other team members. They lead team member training in the pre-season, and guide their subteams through the build season and competitions.

During build season, FRC is a fast-paced, deadline-driven environment where a small number of missed commitments can cascade into major problems. Being a team lead isn't just about skill — they're responsible for keeping their entire subteams on track while being models of FIRST Core Values.

Team leads are expected to communicate clearly and consistently with mentors, other leads, and their subteam members. This includes setting realistic goals, tracking progress, and identifying potential risks early. When challenges arise — and they will — leaders must be proactive in seeking help, adjusting plans, and ensuring that setbacks do not stall overall team progress.

Leads are also responsible for fostering a positive, inclusive, and productive team culture. They should actively support newer members, delegate tasks effectively, and ensure that all voices

are heard. Strong leadership means balancing technical execution with team development — prioritizing not just what the team builds, but how the team works together to build it.

Ultimately, leadership on The Body Electric is about accountability. Team leads take ownership of their subteam's outcomes, learn from mistakes, and continuously work to improve both their technical and leadership skills.

Further information on team lead expectations and job descriptions can be found in the Team Leads Handbook.

Season Overview

This section describes the general timeline of the year for our team. The year begins at the start of school with the pre-season which runs until the kickoff event at the beginning of January. Kickoff marks the start of build season which is a non-stop sprint into competitions followed by any plans the team has for the off-season.

Pre-Season

Timeframe: August/September to winter break.
The purpose of the pre-season is for everyone to learn more about FRC, practice engineering skills, learn how to communicate effectively, and develop strong team relationships. It is critical preparation for the team in the lead up to the build season and the competitions. **If a student is unable to attend the required pre-season meetings (page 16), then their participation on the team will not be possible.** We expect all team members to take the pre-season time seriously and to attend as many meetings as possible.

The pre-season consists of training sessions which are a mix of lecture-style presentations and hands-on projects. All team members will learn about FRC games, history and strategy; become familiar with how FRC robots work (basic drivetrains, mechanisms, power & controls, and programming); and learn how to safely work in the lab.

Once the foundations are firm, team members will build their core technical skills (CAD, programming, wiring, fabricating) through hands-on projects and prototyping. For example, new programmers work with Romi mini robots to learn JAVA command-based programming, sensor integration, and trajectory planning using official WPILib software, which is the basis for FRC competition robots.

Offseason Competitions

During the pre-season we may attend offseason competitions, where we compete using the game and robot from the previous year's competition. New students get to experience being a part of The Body Electric at a low-pressure competition, though it isn't quite the same as a real

competition. Experienced team members get the opportunity to train new members, build leadership skills, practice driving and refine scouting techniques.

Outreach

The pre-season is also an important time for our outreach efforts, including our hands-on Tech & Tinker day camps that serve elementary age children. More information regarding our outreach efforts can be found starting on page 11.

Kickoff

Kickoff is typically held on the first weekend in January.
In 2027 it will be held on Saturday, January 9th.
At Kickoff the team will watch the year's game release video and review the rules of the game. The team will then analyze the game as a team and start to discuss strategy, concepts and design solutions. It is essential to the design process that the team members analyze the game and fully understand the scoring system before designing our robot.

It is highly recommended that all team members watch the Kickoff event with the team and participate in the discussion, rule reading, and strategizing afterwards.

This is a full day event for the team, typically 11:30am-7:00pm. While team members do not have to be there the entire time, the more time they are there, the more involved they will be.

Build Season

Timeframe: Kickoff to our last competition.
Build season begins immediately after Kickoff and continues through the last competition in March (for regular season events), early April (for the District Championship), or late April (for the World Championship), depending on how far the team advances.

Key Phases of Build Season:

- Game analysis & strategy: The team studies the rules, scoring system, and constraints to decide what kind of robot to build. Strategy matters as much as engineering.
- Design & prototyping: Team members brainstorm, sketch, CAD model, and prototype mechanisms (like arms, shooters, or drivetrains).
- Fabrication & assembly: Parts are machined, 3D printed, or assembled. The robot frame, mechanisms, and wiring all come together.
- Programming: Programmers write software for driving, automation, sensors, and vision systems.
- Testing & iteration: Things break. A lot. The team will refine designs, fix issues, and optimize performance.

Build season isn't just about robots. It teaches:

- Engineering design under constraints
- Teamwork and leadership
- Resilience when ideas fail
- Real-world project management

Build season is fast-paced and deadline driven, but also a lot of fun. By the end, team members are not just proud of the robot they've created, but of everything that went into it: the teamwork, the persistence, and the pride in taking ideas and turning them into something real under pressure.

Competitions

Timeframe: March/April
Overlapping with build season, competition season is the time period between the first competition and the last competition. Team 1389 is part of the FIRST Chesapeake District, composed of teams from all of Maryland, DC and Virginia. We compete at two regular season district competitions. Both are full weekend events. If successful at these competitions, the team continues to the Chesapeake District Championship 3-day event, where the team competes for the chance to attend the FIRST® Championship event in late April. When not competing, team members will continue iterating on our robot design, documentation, and presentations to prepare for competitions.

Competition Schedule

Regular season district events run the entire weekend. A typical competition schedule is:

- Friday evening: A small advance crew takes everything to the site, sets up the pit, and has the robot inspected
- Saturday, all day: The team competes in multiple qualification matches throughout the day, which are livestreamed for people at home to watch.
- Sunday, all day: Qualification matches continue throughout the morning. Teams who qualify advance to the finals matches in the afternoon, culminating in one winning alliance of teams. The event ends with an awards ceremony, recognizing technical and non-technical excellence among the teams.

Matches & Gameplay

Each match is a short, fast-paced game played by two alliances (usually 3 teams vs. 3 teams). Matches typically have:

- Autonomous period: Robots run pre-programmed actions
- Teleoperated period: Drivers take control of the robots
- Endgame: Special high-value tasks in the final seconds

Teams are constantly adapting, working with different alliance partners each match and adjusting strategy on the fly.

The Pits

Off the field, teams work in the pit area, where:

- Robots get repaired and improved between matches
- Judges come by to ask questions
- Teams help each other fix problems (even competitors)

Attendance

Competitions are loud, energetic, and exciting. There's music, announcers, cheering crowds, and robots moving everywhere. Teams wear matching shirts, wave flags, and celebrate big plays. All team members are encouraged to attend the competitions, cheer on the team, and see the results of their hard work in action. It's also a great opportunity to meet and learn from other teams. Signed permission forms are required to attend each competition and will be distributed several weeks in advance.

Sometimes District events are held at a location that requires the team to travel and stay overnight. Additionally, the FIRST Chesapeake District Championship event may require travel. All events take place within VA or MD. The FIRST Championship event requires travel as it is held in Texas. Competitions that require travel will have a separate fee involved to cover travel costs.

How Do Teams Advance?

FRC teams in the FIRST Chesapeake District advance to the District Championship (DCMP) by earning points at the first two district events or winning the most prestigious awards.

Points are awarded based on qualifications performance, alliance selection, playoff performance, and awards. The top teams, along with winners of the District Impact Award, Engineering Inspiration Award, and Rookie All-Star Award, qualify to compete at DCMP.

Post-Build Season

Timeframe: Last competition to end of May
After the end of our competitions, we typically take a week off and then we resume meeting once or twice a week for a few hours to discuss the season, continue to work on the robot, plan for next year, clean up the lab, and continue to train less experienced team members. We also plan and attend outreach events, including an Open House for prospective new team members.

Awards

FRC awards are honors to recognize excellence in robot performance, engineering, design, and community impact.

The awards are grouped into three categories:

- Machine Attribute Awards - Recognizing the technical accomplishments of teams in the planning, design, construction and operation/control of their robots.
- Team Attribute Awards - Recognizing the success of teams in developing strong partnerships with their community, recruiting members, fundraising, and outreach efforts to spread the mission of FIRST.
- Submitted Awards - Among the most prestigious awards, this comprises the Impact Award, Leadership Award and Woodie Flowers Award.

Awards can either earn a team points toward competition advancement or automatically earn them a place at the next level of competition. In the 2026/2027 season, The Body Electric was awarded the Team Sustainability Award at both district competitions attended.

More information about FRC awards can be read here.

Outreach

The Body Electric's outreach initiatives are designed to spread interest in STEM and robotics, inspire curiosity in younger students, and build stronger connections between our team and the local community.

Tech & Tinker

Part outreach and part team fundraiser, Tech & Tinker is our hands-on STEM focused day camp for 3rd-5th graders. It is typically held for 4 hours on a Saturday, with 2-3 camps held each year. WIth a focus on using the Engineering Design Process, participants are led by our team members through several hands-on learning activities. From creating and launching bottle rockets, to learning about hydraulics and stored energy, we aim to spark curiosity, learn about cool topics, and have a lot of fun. We also demo our FRC robot, talking with participants about what goes into making a robot of that caliber.

Demos

The Body Electric regularly holds robot demonstrations at elementary and middle schools, and community events, where students and community members can interact with the robot and learn about robotics and FRC in an engaging way. During these events, team members explain the robot's design, functionality, and development process in a way that is age appropriate for the particular audience. Attendees are also given the opportunity to operate the robot under

supervision. These demonstrations serve as an introduction to FIRST programs, encouraging younger students to consider joining robotics teams or explore engineering-related interests.

FTC Team Support

The Body Electric provides mentor support to FTC Team 27194 Chicken Nugget Robotics at North Bethesda Middle School. Our student mentors attend weekly meetings during their build season (in the fall) to mentor the team in robot strategy, design and construction, as well as marketing strategy and design. Additionally, our student mentors support them at competitions, modeling FIRST Core Values such as Gracious Professionalism. Through this engagement, our team members gain valuable leadership skills and the satisfaction that comes with teaching the next generation of robotics enthusiasts.

Social Media

The Body Electric maintains an Instagram account (@frc.team1389), Facebook page (https://www.facebook.com/team1389/) and YouTube channel (@FIRSTRoboticsTeam1389). Over the past two seasons, the team has been focused on growing our Instagram presence by consistently documenting team events and progress. This also leaves a visual and public record of our season. Our viewership and account engagement has grown significantly in the past year, building awareness of our team in the FRC community. We look to continue this growth in future years, as well as turn more attention to developing our YouTube channel.

Team Communication

Team Member Communications

Discord

All online team communications happen via Discord. Once a student has signed up for the team they will receive an email inviting them to the team Discord server. It's important that they join immediately so that they are aware of the team schedule and happenings (and it is required that they use their real name). Not only do we share news and weekly happenings on Discord, but that is where all communications occur about the game, robot research, design and building… basically anything and everything happening with the team is communicated there. Team members are expected to check Discord regularly. During build season, it should be checked daily.

Parents do not join Discord and instead receive email communications from the team separately.

GitHub

The programming team utilizes GitHub as the primary hub for software development, collaboration, and knowledge sharing between students and mentors.

When team members create their GitHub account, they should choose an appropriate username that we can easily identify as that team member and set their profile name and profile picture accordingly.

Google Drive

The Body Electric uses Google Drive for storage of and access to all team documents and photos/videos.

Parent Communications

We maintain a parent email list through Mailchimp. During the season, emails are sent out regularly (about once per week) and will contain our weekly schedule, team activities, interesting links, and more.

In addition, we post private information such as event info registration and our team roster, in the “Parent & Team Resources” section of the web site.

Team Expectations

Code of Conduct

The Body Electric prioritizes an environment that fosters learning, mutual respect and appreciation for others. We’re here to experience science and technology teamwork in a positive, fun and supportive environment. Inherent to that are the FIRST Core Values, described below.

From the FIRST web site:

“The FIRST Core Values are fundamental to FIRST and unique to its programs. They emphasize friendly sportsmanship, respect for others’ contributions, teamwork, learning, and community involvement and are part of our commitment to fostering, cultivating, and preserving a culture of unity. Our community expresses the FIRST philosophies of Gracious Professionalism® and Coopertition® through the FIRST Core Values.

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. Through Gracious Professionalism, fierce competition and mutual gain coexist. Participants compete intensely while treating each other with respect and empathy. There is no

trash talking, nor disingenuous platitudes. Knowledge, competition, and empathy blend comfortably.

Coopertition® fosters innovation by promoting unqualified kindness and respect in the face of intense competition. At FIRST, Coopertition means teams help and cooperate with each other, even as they compete. It's about learning from teammates, teaching others, collaborating with mentors, managing, and being managed. Coopertition embodies the spirit of competing while assisting and enabling others whenever possible."

Team members are expected to always be respectful of other students and adults, adhering to the FIRST Core Values. Team members must also always follow the MCPS Student Code of Conduct.

Safety Rules

Safety is the team's top priority, especially in the lab. Students are expected to be responsible for themselves, particularly while using the team's property, tools and computers.

All new team members MUST undergo Tool & Safety Training, in its entirety! Two Tool & Safety Training sessions will be offered at the start of the pre-season. Full completion by new team members is mandatory before they are permitted to use any tools in the lab. Once tool & safety trained, team members are also responsible for knowing how to operate the tools and/or use team property appropriately with the guidance of a team lead or mentor.

There are many procedures to follow while in the lab. Some of these procedures are simple, such as wearing closed toed shoes. Other procedures are more complicated, such as using the band saw safely. The purpose of this section is not to document all the procedures that are in place, but rather to provide the general procedures that should be followed while in the lab.

- Closed-toed shoes are always required in the lab and at competitions.
- Always wear eye protection while tools are being used in the lab.
- Wear eye protection around active and moving robots.
- Wear hearing or breathing protection when necessary. When operating power tools or machinery, or turning on the robot, clearly call "Clear" **and wait until you hear a response** from those around you before activating the tool or machine.
- Notify an adult immediately of any injuries that occur in the lab.
- Pull back and secure shoulder length or longer hair before using equipment.
- Roll up long sleeves and tuck in loose clothing before using equipment.
- Examine tools to make sure they are in proper working condition before using them.
- Caution others that they are using equipment improperly if you see them doing so.
- Know the locations of the nearest eye wash station, first aid kit, and fire extinguisher.
- Question anything that does not feel safe or reasonable.
- Don't blame your failure to clean stuff up on lab elves. Lab elves aren't real.
- Understand what the robot signal light is telling you.

- Our robots are powerful machines. They are very fast and can apply forces strong enough to break steel and aluminum. It is important that team members understand how to identify if an FRC robot is enabled.
    - All FRC robots must have an orange safety light, mounted on a highly visible location on the robot.
    - The light will be solidly lit when the robot is powered on and disabled. The light will blink when the robot is enabled.

Failure to Follow Code of Conduct & Safety Rules

If a team member fails to follow these standards, a discussion with the Lead Coaches will be had with the goal of that team member learning and growing from the situation. However, if there are multiple infractions and improvements aren't seen, or if there is a situation that compromises personal safety or the safety of others, a meeting will be had with the team member and their parent(s) and that team member may be asked to take a pause from the team.

When a team member is directed to take a pause, our goal is for the team member to learn from the situation and return to the team in good standing. However, in very rare cases a team member may need to be removed from the team, as our priority is always the physical safety and mental health of the team as a whole. Those determinations will be made at the discretion of the Lead Coaches.

School Attendance & Academic Standing

While FRC is a way of life, school should be a student's main priority. In accordance with WWHS/MCPS policy, students must attend all of their scheduled classes in order to participate in Whitman High School extracurricular activities. In short, if a team member is not in school that day, they may not come to the lab.

If a student's GPA falls below a 2.0 average, or if a student has more than one failing grade (E) in a previous marking period, they will be academically ineligible to participate with The Body Electric until improvement is seen.

Lab Attendance Requirements

We have requirements for the number of meetings and the number of hours that team members are expected to attend based on the period of the year that is taking place. We use an app and team members are required to "clock in" and "clock out" as they come and go from the lab.

Please note that these are minimum requirements and team members get out of this what they put into it. A given student's standing on the team is determined not only by their attendance, but also by their participation when they are present.

Pre-Season

All team members are required to attend at least two pre-season meetings each week. However, we strongly encourage team members to attend all three meetings as important topics and hands-on activities are covered in each.

To be considered present, team members must arrive on time and stay for the entirety of the session.

The schedule for the pre-season is as follows:

- Meetings are 6:00-8:00pm, at least two nights per week, and 2:30-4:30pm, at least one afternoon per week.
- Occasional Saturday meetings might be scheduled..
- Additional meetings that will be scheduled include a 3-hour Mock Kickoff, and Tool Training sessions
    - Tool Training is held early in the pre-season and is mandatory for all new members. There will be two sessions available to choose from and team members only need to attend one.

Build Season

- **Team members (excluding Leads) are required to attend at least 30% of lab hours each week (roughly 8 hours during a typical week).**

- **Technical team leads (Mechanical, Electrical & Programming) are expected to attend at least 60% of lab hours each week.**

- **Non-technical team leads (Operations & Business) are expected to attend at least 40% of lab hours each week.**

The typical schedule for build season is as follows:

- Monday – Thursday, 2:30-8:00pm
- Saturday, 10:00am-2:00pm
- Friday meetings, 2:30-6:00pm, may be added as necessary

NOTE: Meetings can end earlier at the discretion of mentors, if attendance is minimal or no productive work is being done.

Outreach Efforts

All team members are required to participate in at at least one outreach initiative per year. This can be volunteering after school to help FTC Team 27194, volunteering at one of our weekend Tech & Tinker events, participating in one of our Adopt-A-Road cleanups, or representing the team at one of our community demos or open houses. Participation in outreach efforts will be tracked by the lead coaches.

Signing In & Out Of Lab

We track the time team members spend in the lab through an online app, Clockify, that they "clock in" and "clock out" with. Team members will be sent an email invite to Clockify once they join the team. It is important that they accept the invite before the first lab meeting they attend.

Members are responsible for keeping up with their own hours to ensure they are meeting the team's requirements. However, a member will be notified by a lead coach if they are not meeting the requirements.

Active Participation

We can't state this enough — the more team members put into the team, the more they will get out of it. Active participation is an expectation for all team members on The Body Electric. Active participation includes speaking up, sharing information and ideas, listening to others, asking questions, and helping with tasks in the lab. Members who are active participants on the team are more likely to be assigned tasks they are interested in and be given greater responsibilities.

Team members who are in the lab, but are not engaged, are on their phones, on the computers, or otherwise disruptive will be asked to "clock out" and leave.

General Notes On Attendance

- On occasion, we may need to adjust the schedule. If these times change, they will be sent out in the regular team email and Discord.
- If the school has a scheduled or weather-related closure, the lab will be closed. However, we may still be working remotely or off-site, so team members should check Discord in these cases.

Difficulties Meeting Lab Attendance Requirements

The participation requirements aren't meant to be impossible and if students take their time to plan their schedules, make participation in the team a priority, and seek proactive help when they need it, it should be obtainable.

Just like a sports team, we must all work together to perform at our best. We have modeled our hour requirements off the general time expected of a team member on a sports team at WWHS. The difference is we allow you to choose which days and times work best within your schedule.

If a team member still finds themself struggling to meet the requirements, then they should come speak to a lead coach and we will do our best to work with them. We want students to be successful as participants on the team, not to see them fail unrecoverably. That said, there are finite team resources available in terms of our mentors and lab space. The hour requirements exist to limit team participation to those students who truly want and try to be a part of the team.

Parent Participation

We are so appreciative of our incredible families who contribute their time and expertise to support The Body Electric. Critically, our build and competition seasons are a huge undertaking that require support from all of our families to run smoothly. We look for support in several ways:

Lab Shift Volunteers

The lab cannot be open during build season without two adults present, therefore all parents are needed to help with lab shifts. The more people we have, the less work it is for everyone. Lab shifts are each 2 hours long. An online signup sheet for lab shifts will be sent out in December.

All parent volunteers must complete the MCPS online volunteer training. This takes about an hour. https://www.montgomeryschoolsmd.org/childabuseandneglect/.

Additionally, one adult present at each lab shift must have completed background screening/fingerprinting with MCPS. We greatly appreciate anyone who takes this additional step as it helps relieve some of the burden from our coaches and mentors.

Dinners

We feed team members nightly from Monday through Thursday during build season. We rely on our families to provide these dinners as team funds would not be able to cover them. The team is hard at work during build season and dinner is a nice bonding time when they all pause, take a break, and share a meal. The team is always so appreciative of the meals that are provided, whether homemade or carryout.

The online signup that is sent out for lab shift volunteers in December also has spots to sign up for dinners. Guidance regarding what to provide is included in the signup.

Driving To & From Competitions

We rely on parents to transport team members to and from the competitions. This is due to: 1) the high cost of renting transportation over multiple days to convey so many team members; and, 2) our insurance does not permit students to drive themselves to team events. If the competition is not overnight, we organize carpools with multiple parent drivers that meet and return to WWHS each day. If the competition is overnight, we rent 15-person minibuses and still rely on parent drivers. We will recruit drivers as competitions approach and we greatly appreciate any time that can be given.

Organizing Team Food At Competitions

Keeping the team fed during long competition weekends is a job unto itself! We rely on parents to plan, purchase, set up and monitor team meals and snacks (typically breakfast snacks, lunch,

afternoon snacks and drinks) for each competition day. They will receive a budget and be reimbursed by the team.

Fundraising

We rely on our families to help with team fundraising efforts throughout the year. Some years, one or more parents will step up to lead an initiative, which is hugely helpful and greatly appreciated. More information on those efforts is provided on page 20. Please FRC1389@gmail.com if interested in getting involved.

Hosting Team Gatherings

The team has a welcome dinner for all families at the start of the pre-season in September, and a year-end celebration in May. Both events are potlucks, but for each, we rely on a family to provide a space to gather. An email request looking for hosts will be sent out about a month before each event.

Board Roles

As a 501c3, Team 1389 Whitman Robotics Boosters Inc (our legal name), is required to have the following board roles filled: President, Vice President, Secretary and Treasurer. While the President and Vice President roles are filled by the two lead coaches, we rely on parents to serve as Secretary and Treasurer. The board meets virtually four times a year.

Fundraising, Grants & Sponsors

Running an FRC team is expensive! We are run by a team of volunteers, and entirely self funded through donations, corporate grants and sponsorships.To give a small picture of the costs involved, we pay $6,000 to register for the two district tournaments and the competition robot tools/parts/supplies can run as much as $20,000 in a single season. This does not include the purchase of new equipment, training supplies, or administrative and logistical costs which run into several thousands of dollars. If we advance beyond the two district competitions, there are additional significant costs for the team. Registering the team for the District Championship alone is $4,000.

Fundraising

All team members are required to participate in team fundraisers throughout the year. Fundraising is an important obligation for all team members. Not only does it help the team raise money for team expenses, but it builds important partnerships with local businesses, the community, and donors. Fundraising events spread awareness of the team and FIRST in our community, and gives students experience with making presentations about the team to

potential sponsors. Fundraising will also help to reduce the cost of travel to off-site competitions. It is up to the team and its students to take the initiative on extra fundraising, so that they can minimize the cost-per-family to attend. But parents are also invited (encouraged even!) to lead fundraising efforts.

Grants

The team pursues multiple grants each year with varied results. In recent years The Body Electric received grants from Lockheed Martin and Intuitive Foundation. Assistance from parents with pursuing grants would be greatly appreciated as our resources are limited with what we have time to pursue.

Corporate Sponsors

Team 1389 loves our corporate sponsors and what they do for us. From providing funds to in-kind donations, they turn our possibilities into realities. We put their logos or names on the team shirts, on the website and pit banner, and on the robot for qualifying sponsors. If you have a contact with a potential or existing corporate sponsor, please let us know about it. Our sponsorships are divided into levels based on the amount we are receiving but we work with each donor individually to ensure proper representation for their donations.

Sponsorship levels are as follows:

- Steel Sponsors: $100-$499
- Silver Sponsors: $500-$999
- Gold Sponsors: $1000-$2,499
- Platinum Sponsors: $2,500-$4,999
- Diamond Sponsors: $5,000+

Benefits for the different sponsor levels can be seen here:
https://www.team1389.org/sponsorship-levels

If you're interested in your company becoming a team sponsor, please email FRC1389@gmail.com.

Team Registration & Costs

Membership Fee

Membership for the 2026-2027 season is $700 per team member. As The Body Electric is a 501c3 organization, donations are tax-deductible and a receipt will be provided for your records.

Fees can be sent via the Givebutter link that is shared with each year's membership package.

Or a check made payable to "Team 1389 Whitman Robotics Boosters Inc" can be mailed to:

Team 1389 The Body Electric
PO Box 669
Glen Echo, MD 20812

The Body Electric does not want the membership fee to be a barrier to team participation. If the membership fee poses a financial burden, families can speak with one of the lead coaches about possible aid.

Corporate Matching

As a 501c3 organization, donations made to the team, including team registration, are eligible for corporate matching programs. Corporate matches typically make a significant positive impact on the team's budget each year. Please reach out if you need assistance to take advantage of your corporate matching program — FRC1389@gmail.com.

Competition Travel Fees

If the team is required to travel overnight for an event, the travel costs will be priced based on distance and other expenses, such as hotel accommodation. For example, when we attended the 2026 District Championship at Virginia State University for 3 nights, it cost each team member $360, plus the cost of dinners.

Please keep in mind that attending competitions is not required, except in the case of those team members who are interested in a team leadership position or those on the drive team.

If the cost to attend an event is cost prohibitive for a member of the team, the student or parents can speak with one of the lead coaches about possible aid. We do not want to keep dedicated, committed students away because of the travel cost.

Team 1389 The Body Electric

Team Agreement 2026-2027

Team Member Agreement:

1. I understand that I am joining FIRST Robotics Competition Team 1389, The Body Electric.
2. I have read the 2026-2027 Team Handbook in its entirety.
3. I understand there are requirements for being a member of Team 1389, as outlined in the Team Handbook, and that I am responsible for meeting the requirements.
4. I understand that failure to meet the requirements may result in my removal from the team.

Team Member Printed Name:_____

Signature: _____ Date:_____

Parent/Guardian Agreement:

My child, _____ has permission to join as a participant on FIRST Robotics Competition Team 1389, The Body Electric, and agrees to abide by all the rules and consequences stated in the Team Handbook. I understand that my child's participation on a Team 1389 The Body Electric team is a privilege, not a right, and acknowledge that I have spoken with my child about my child's need to comply with the specific rules and requirements as outlined in the Team Handbook.

I understand that my child's team fee is non-refundable, regardless of my child's reason for leaving the team or the length of time spent on the team. I acknowledge that this team fee covers membership on the team but not the cost of overnight travel events.

I confirm that I have carefully read the Team Handbook as well as this form, and agree to its terms knowingly and voluntarily. I also certify that I am the parent or legal guardian of the child specified above.

Parent/Legal Guardian Printed Name:_____

Signature: _____ Date:_____

****Electronic signatures are not accepted****

FIRST® Youth Consent and Release

This must be completed at the start of each season.

Steps for Parents / Guardians new to FIRST and registering their youth for the first time through the FIRST Dashboard:

1. Visit www.firstinspires.org and click “Create An Account” in the upper-right-menu
2. Create an account with your name, date of birth, and email address (NOT your youth’s information).
3. You will receive an email to verify your account. This must be accepted within 24 hours.
4. Once your account is verified, log into your account dashboard. You will need to1) accept the FIRST policies that appear upon your first log in and 2) update your profile.
5. Next, you will choose your role as “Parent”
6. Then you will automatically be taken to “My Youth Dashboard”
7. Click the blue “Add a Youth” button
8. Enter your youth’s profile information. Please note in the school information, Walt Whitman High School is not listed in the drop down menu. Please select “Our school is not in this list” and then enter “Walt Whitman High School.” Once all is complete, continue to the consent and release.
9. Sign the consent and release by typing your name in the box. Continue to Apply to a Team
10. On the Apply to a Team Page: Step 1) Select the program as “First Robotic Challenge.” Step 2) Enter the team number as “1389”
11. Once all steps are complete, the team coaches will receive a notification from FIRST and will accept your youth to the team.

Steps for returning Parents / Guardians re-registering their youth through the FIRST Dashboard:

1. Visit www.firstinspires.org and click “My Dashboard” in the upper-right-hand corner
2. Once you are logged into your account dashboard, you will see your Youth(s) listed.
3. Click the “Sign Consent & Release Forms” next to the appropriate Youth.
4. Update all Youth Information on the page. Please note in the school information, Walt Whitman High School is not listed in the drop down menu. Please select “Our school is not in this list” and then enter “Walt Whitman High School.” Once all info is complete, click the “Save” button.
    a. Note: All fields with a red asterisk must be completed in order to save this page. This page must be complete and saved before being able to progress to the next step..
5. Click on “Acknowledgement Form” button.
6. Sign the consent and release by typing your name in the box. Continue to Apply to a Team

7. On the Apply to a Team Page: Step 1) Select the program as “First Robotic Challenge.” Step 2) Enter the team number as “1389”
8. Once all steps are complete, the team coaches will receive a notification from FIRST and will accept your youth to the team.

IMPORTANT: We do not have access to the FIRST® system to fix any issues you come across with the electronic versions, you must contact FIRST® support directly.