

# StuyPulse Team Charter

*Last updated: 2018-8-26*

## **Mission/Purpose:**

This is a club designed to promote interest in the study of robotics and STEM through the teamwork of students, parents, mentors, and sponsors. We increase robotics awareness in our community and encourage education in engineering, computer science, web design, 3D animation, business, fundraising, and marketing. The club participates in robotics competitions, including ones organized by FIRST, an international robotics organization.

## **Description:**

The Stuyvesant Robotics Team is an organization dedicated to the practical application of science, technology, and business in the field of robotics. We undergo an intensive, but enjoyable, six-week build season during which we build a robot for the FIRST Robotics Competition (FRC).

Our engineering department designs and builds the hardware of the robot, from each of the mechanical components to the electronic and pneumatic systems.

Our software engineering department develops the software used to control the robot as well as supporting software for the team.

Our marketing department provides real-world experience in corporate fundraising and advertising as well as managing the logistics of a large team.

Our strategy team, comprised of members from all three departments, offers strategic assistance regarding robot design, gameplay, and alliance selections.

Our media team, comprised of members from all three departments, is led by the marketing department and is in charge of all media related matters (e.g. videos, pictures, etc.).

Our Chairman's team, comprised of members from all three departments, is led by the marketing department and is in charge of all matters related to the Chairman's Award (e.g. presentation, essay, speech, outreach ideas, video ideas, etc.).

We require no prior experience *at all* in engineering, software engineering, marketing, strategy, media, or presenting and will teach the skills members need to be able to participate in FRC.

Membership on StuyPulse is unrestricted. The club does not restrict membership on the basis of race, gender, ethnicity, commitment to other clubs, grade, or any other such factors. It is understood that those students who enjoy the club will attend and those who do not attend will not be considered members of the club.

## **Charter Amendments:**

The amendment process will begin sometime after the last competition of the school year. It is an open meeting, with the only requirement being that there must be at least two-thirds of the Elected and Appointed Council present. All members who have paid their team dues, passed the safety test, written a

reflection, and met a specific percentage of attendance may attend and vote. This percentage will be decided by the EC and faculty advisors. In the days leading up to the meeting, a list of eligible members shall be made public. Members who would like to propose charter amendments may submit proposals to the team in order to start discussion. Amendments not proposed prior to the meeting may be discussed at the end of the meeting if there is extra time.

The presidents of the team will preside over the charter meeting. They will decide on the order in which to address emailed proposals. Each proposal will be read and must be seconded to move to an initial vote to see where people stand. If the vote is unanimous, there will be no discussion or second vote. If there are conflicting views, members will be given time to discuss their thoughts on the issue. After discussion, the presidents will call for a final vote, where the majority decides the fate of the proposal. If the faculty advisor finds any issue with a part of the charter, there will be another charter meeting to revise the problematic parts.

The Moderator(s) of the charter meeting shall appoint a minutes taker. The minutes will be made publicly available to all members of the team, present at the charter meeting or otherwise.

The new Elected Council for the next school year will update the charter amendments in a timely manner and before the next charter meeting.

#### **Elected Council (EC):**

**President of Engineering (PoE):** The President of Engineering is familiar with every part of the robot, able to explain the part to another team member or a judge, as well as able to repair any part of the robot if it is broken. They are also knowledgeable about the details of the Chairman's Award submission and other award submissions.

**President of Marketing (PoM):** The President of Marketing holds final responsibility for all outreach, logistics, and award submissions for the team. They have full knowledge of all awards and shall present the Chairman's Award or assign the presentation to someone else deemed competent. The PoM also has adequate knowledge of the other two departments.

**President of Software Engineering (PoSE):** The President of Software Engineering primarily manages the development of robot code and all related software. They also manage the design and development of all human interfaces and control systems. The PoSE is responsible for the production of documentation concerning the control system on all levels, such as pinout sheets and systems check guidelines. They work closely with the PoE to effectively manage the development of the control system alongside the hardware. The PoSE also collaborates with the strategy team to develop effective solutions for both the teleoperated and autonomous modes, as well as the marketing team to coordinate events and regional activities, such as seminars. The PoSE must effectively manage the software development team in order to accomplish these responsibilities and must have the same level of familiarity with the robot as the PoE.

**Vice President of Engineering (VPoE):** The Vice President of Engineering is considered the second-in-command for the Engineering department. They have knowledge of what the Presidents are currently doing and is able to direct the Engineering division in the event of the PoE's absence. The VPoE also has extensive knowledge of each part of the robot as well as basic knowledge of all awards submissions.

**Vice President of Marketing (VPoM):** The Vice President of Marketing is the second-in-command for the Marketing department. The VPoM should have knowledge of what the President of Marketing is currently doing and should be able to direct the Marketing department in the event of the PoM's absence.

They have extensive knowledge of all award submissions as well as basic knowledge of each part of the robot.

**Vice President of Software Engineering (VPoSE):** The Vice President of Software Engineering is the second-in-command for the Software Engineering department. They have knowledge of what the President of Software Engineering is currently doing and should be able to direct the Software Engineering department in the event of the PoSE's absence, as well as collaborate with the President of Engineering in managing the overall robot project.

It is the responsibility of the EC to create an annual Operations Plan. The Operations Plan includes the administrative process of the team to improve quality and increase efficiency in operation. It may include preliminary budgets and operational strategies for each department and a timeline for the preseason, build season, and competition season.

### **Appointed Council (AC):**

Directors and assistant directors are responsible for seeing the completion of their respective jobs, but do not necessarily have to be the ones to complete the job. The role of the director and assistant director is to ensure the job is completed, and to organize/delegate the job(s) to members of the team who wish to help in their specific area.

Assistant directors must be appointed after directors. This is to ensure that directors have a say in who their assistants will be.

**Director of Electronics:** The Director of Electronics sets up and manages the electronic systems on the robot to FIRST regulations. They cooperate with both engineers and software engineers to ensure that the electronic systems are organized and able to be modified if needed. The DoE is also responsible for the education of other members in the electronics subdepartment.

**Assistant Director of Electronics:** The Assistant Director of Electronics is familiar with all aspects of the electronic systems on the robot and be able to assume the jobs of Director of Electronics at any time.

**Director of Pneumatics:** The Director of Pneumatics is responsible for the creation and management of the pneumatic system on the robot according to FIRST regulations. They cooperate with the electronics subdepartment to organize the pneumatics system alongside the electronics. The director is responsible for the upkeep and maintenance of all compressors, solenoids, and pistons. The DoPn is also responsible for the education of other teams members on the subject of pneumatics.

**Director of Lab Operations and Safety:** The Director of Lab Operations and Safety, at the highest level, is responsible for the smooth running of the team's workspaces. They are responsible for keeping a detailed inventory of the tools and construction materials in the laboratory as well as a record of materials used in the construction of the robot. The DoLOS is also responsible for ensuring that all necessary safety rules are observed in the lab during build season. The DoLOS will automatically be appointed Safety Captain at the competition and will be responsible for carrying out all duties therein.

**Director of Procurement:** The Director of Procurement is responsible for overseeing and actualizing the procurement of goods necessary for the team's operation. The DoP is similarly responsible for identifying adequate substitutes when a necessary resource cannot be obtained from the traditional supplier for a reasonable cost. All procurement requests must be approved by a faculty advisor. The DoP is also required to maintain a detailed, up-to-date account of the team's expenditures, available on request.

**Director of Finance:** The Director of Finance must ensure the stability of the team's finances, such as the budget of each department in conjunction with the EC and Faculty Advisors. The DoF must also maintain stable relationships with sponsors and contact them on a regular basis.

**Director of Operations:** The Director of Operations will handle the daytoday operations of the marketing division and the whole team. The DoO is responsible for paperwork, trip planning, managing deadlines and other logistics regarding the team. The Director of Operations is also responsible for award submissions, as well as a timeline that will guide the team smoothly through a busy building season and keep the pace of work going through preseason and postseason.

**Director of Public Relations:** The Director of Public Relations will plan for outreach events and direct all outreach initiatives, such as Stuy Splash and public demonstrations. At the same time, the DoPR is responsible for creating a strong team media presence using blogs, photographs, videos, social media, and other media.

**Director of Media:** The Director of Media is responsible for the creation of all visual and media content for our social media platforms. They are also responsible for taking pictures and videos at all team events. They are to work alongside the Director of Public Relations to create necessary content. The DoM is also responsible for leading and educating the members of the media team.

**Director of Strategy:** The Director of Strategy is responsible for all things strategy-related.

The Director of Strategy is responsible for recruiting, structuring, running and ensuring the wellbeing of a team of strategists. From the start of the season, the Director of Strategy must ensure that all team members know game and robot rules. The Director of Strategy can suggest designs, features, and/or adjustments to the robot, as well as autonomous routines, to allow for possible gameplay strategies. In addition, the Director of Strategy assembles and trains match scouts that will gather data on other teams during competitions.

During competition, the Director of Strategy and their strategy team are responsible for creating match strategies and communicating with our drive team and those of other teams in our alliances. In addition, the Director of Strategy is responsible for heading and collaborating with their team of strategists in making a list of teams for alliance selections, the size of which should be at least one less than the number of teams moving into eliminations for the given competition.

The Director of Strategy is also responsible for the selection, training, and practice of all members of the drive team. Each member of the drive team is to be selected through tryouts organized by the Director of Strategy, with the exception of a continuing driver, operator, or coach. Conflicting responsibilities are to be taken into account for the final selection. The drive team must be approved by the faculty advisors.

**Assistant Director of Strategy:** The Assistant Director of Strategy is responsible for collaborating with the Director of Strategy and the strategy team throughout the season. The Assistant Director of Strategy is to be familiar with all aspects of strategy and be ready to assume the jobs of Director of Strategy if necessary.

**Director of Design:** The Director of Design is responsible for the upkeep of the CAD model of the robot and all elements thereof with the aid of a CAD team. This CAD team is to be instructed in the use of CAD programs and led by the Director of Design.

**Primary Machinist:** The Primary Machinist is responsible for the maintaining the mill, lathe, and their parts. He/she must also make sure that there will be at least two members of the team that will be able to use the mill in the upcoming year, including the Primary Machinist. If there are fewer than two such members, the Primary Machinist is responsible for training new members.

**Director of Field Construction:** It is the job of the Director of Field Construction to construct the field of the released game with acceptable accuracy. For each function that the robot has to perform, it is this person's responsibility to ensure that at least one set of the field elements involved in that task is procured and produced. However, the DoFC will also be responsible for all other fields, including FLL, FTC, and FRC fields. They are responsible for the upkeep of the shipping/robot crates and building new robot carts.

**Director of Research and Development:** The Director of Research and Development is in charge of researching and developing various topics in software engineering. They are to make sure

Proof-Of-Concepts (PoCs) are made for each topic. The DoR&D is also responsible for apportioning people to look into certain projects, and ensuring the projects are ready for use on the robot if/when they are needed.

**Director of Newbie Relations (SE):** The Director of Newbie Relations for software engineering is responsible for the education of new members in software engineering, development of a curriculum, and ensuring the lessons are made in advance. The DoNR is also responsible for ensuring the new members feel included, and have tasks during the off-season.

**Webmaster:** The job of the Webmaster is to maintain the team website and any other websites created by the team. The Webmaster is to update the website with the most recent progress of the team and to upload any relevant pictures. They must also use the website to keep the team and any visitors to the website informed and interested.

### **Elections:**

Elections will take place after the charter meeting each year. This is done in order to give the newly elected officials a chance to become familiar with the position and with the handling of the team. After members have been elected to their positions, they will appoint members to the AC. There is no term limit for any position, but candidates must run for election every year, whether or not there is any opposition. A member of the team who will no longer be a Stuyvesant student the following year or who is not eligible to vote may not run for any elected position.

### **Rules for Elections:**

1. Elections will begin with a call of attendance, after which nobody may leave the room without permission and without filing an absentee ballot.
2. All members at or above a certain attendance percentage who have paid their team dues, have passed the safety test, and have written a reflection may attend and vote. This percentage will be decided by the EC and faculty advisors. Prior to the elections, a list of eligible members must be made available.
3. An absentee ballot is an official ballot on which the person leaving writes down the name of one person for every position for which they wish to cast a vote. The ballot will be given to the person in charge of elections. If the absentee does not choose a candidate for a position, they are abstaining from the vote for that position.

One team member, chosen by the Elected Council, will preside over elections as Moderator. They must uphold the rules, maintain order, and mediate any disputes that arise.

**Order of Elections:** The Presidents of each department must be elected before The Vice Presidents. The order of The Vice Presidents may be the reverse order of The Presidents, but it is at the discretion of the Moderator.

### **Election Process:**

The following election process will be followed for every position.

### **Nominations:**

The Presidents will ask for nominations for the position. Any team member may nominate any other team member for that position. The nomination must be seconded.

- A team member may not nominate themselves.
- In the event that the nominee does not wish to run for the position, they may decline the nomination.
- Members must send out a candidacy email prior to elections in order to run for an elected

position.

- A person becoming a senior in the following year may not run for vice presidency.
- A person may run for any position absentee if approved by two members of the current EC. The two members of the EC who approved the candidate will serve as one nomination for the candidate. This nomination must be seconded at the election by someone other than the two EC members who approved the absentee candidate.

### **Candidate Presentations:**

Each candidate is given up to four minutes to present his or her qualifications for the position. The order of the presentation will be determined by the members running the election.

### **Voting:**

When the presentations are completed, all candidates will be asked to leave the room and voting will commence.

- Ballots will be counted by the Moderator and one official mentor. Vote totals will not be made public to the team.
- Submitted ballots may only be viewed by the Moderator and the mentors. If another member of the team has intentionally viewed a ballot, that member will lose their right to vote for the remainder of the elections.
- If no member is nominated for a position, the position will become appointed.
- A "NONE" candidate is included in every election, including runoffs. If NONE wins the election, the position will become appointed.
- In the event of a tie after runoffs, the position will become appointed. Only the candidates who tied the vote may be appointed to the position, unless they are elected or appointed to another position first.
- A member may choose to abstain from voting during the election for any given position.
- If a candidate is running unopposed, then the voting process will be expedited with a limited question and answer period.
- If more than two candidates are running for a given position, the following will occur:
  - Each member of the team will be given one vote to be cast towards a candidate. If a given candidate gets a majority vote, they will be immediately be appointed without a runoff. If no candidate gets a majority vote, the top two candidates will go into a runoff.
  - If there is no majority vote or if only two members are nominated for a given position, the election automatically goes to a runoff.
  - Every member of the team will vote for one of the two candidates and the candidate with the highest number of votes wins. In the case that a two-thirds majority of the members choose not to vote, the position will become appointed.
- In the case that no member is elected to any position, all present members of the current EC/AC will appoint the Presidents to represent the new EC/AC and follow the procedures of appointment.

### **Appointment:**

Any appointed position will be decided by a majority vote of the elected officers after the conclusion of the election. The member chosen may decline the appointment, in which case another member must be

appointed.

In the case that a majority vote cannot be reached by the elected officers, appointment of that position will be delayed. After all other positions are filled, the EC/AC will vote on the appointed position again.

In the event that any position is not filled by the EC/AC for any reason, the position shall remain vacant.

AC positions may be held by any team member, regardless of the department that the team member is part of.

An individual is allowed to hold only one (1) position on the team, whether that be on the EC or AC.

### **Impeachment:**

Any member of the EC/AC may be impeached for reasons that include but aren't limited to:

- Dereliction of duty
- Poor attendance
- Ignoring or disregarding the general will of the team
- Performing actions that are legally or morally detrimental to the team, such as:
  - Embezzlement
  - Disregard for safety
  - Intimidation of members
  - Misappropriation of team resources

Impeachment proceedings are initiated through warnings given by a two-thirds majority of the EC/AC. The officer in question may defend himself/herself, and a two-thirds majority of the entire team will uphold the impeachment. Impeachment shall not be used to settle political or personal disputes. An impeached officer may remain as a team member, but may not run for a position without renewed approval by the Elected and Appointed Council.

Any officers, unless suspended by the faculty advisor(s), may be reappointed at any time by a two-thirds majority vote of the Elected Members. In the event of an impeachment or in the event that a member of the EC/AC resigns, the position will be filled by a two-thirds majority vote of the remaining EC/AC. When the position of President of Engineering, President of Marketing, or President of Software Engineering is vacant, his/her Vice President may temporarily fill the position as President until the EC/AC has elected another member of the team to serve as President.

### **Award Nominations:**

#### **Woodie Flowers Award:**

The nomination process will be moderated by the Presidents in attendance.

All veteran members of the team are allowed to take part in the Woodie Flowers Award nomination. The nomination process will be conducted without the presence of any mentors in the room.

The nomination process will begin with the moderator(s) asking for any nominations for the award, excluding any previous Woodie Flowers Award Finalists. Members will then be allowed to state their nominations, and their reasoning. The nominee must be seconded by another member to be considered in the final vote.

Once all nominations are made, discussion will be allowed. The amount of time allowed for discussion is left to the moderator's discretion.

After the discussion period is over, all members will close their eyes.

Moderators will call out the name of each nominee, and count the number of votes they receive. Each member is allowed to vote for only one nominee. The nominee with the most votes will be the mentor the team nominates for the Woodie Flowers Award. In the case of a tie, another round of voting will be conducted with the only the tied nominees from the previous round.

Following this, a previous Woodie Flowers Award Finalist will be chosen to be nominated for the award at the World Championship.

The moderators shall list the names of the previous winners. Afterwards, discussion will be allowed. The amount of time allowed for discussion is left to the moderator's discretion.

After the discussion period is over, all members will close their eyes.

Moderators will call out the name of each previous winner, and count the number of votes they receive.

Each member is allowed to vote for only one individual.

The individual with the most votes will be the mentor the team nominates for a chance to win the Woodie Flowers Award at the World Championship.

### **Dean's List Award:**

The nomination process will be moderated by the highest ranking senior member(s) in attendance.

All veteran members are allowed to take part in the Dean's List Award nomination excluding the juniors. All juniors must be outside of the room when the nominees for this award are being chosen.

The nomination process will begin with the moderator(s) asking for any nominations for the award. Only members in their junior year may be nominated for this award. Members will then be allowed to state their nominations, and their reasoning. The nominee must be seconded by another member to be considered in the final vote.

Once all nominations are made, discussion will be allowed. The amount of time allowed for discussion is left to the moderator's discretion.

After the discussion period is over, all members will close their eyes.

Moderators will call out the name of each nominee, and count the number of votes they receive.

Each member is allowed to vote for two nominees.

The nominee with the most votes will be selected as the first Dean's List Award nominee.

In the event of a tie, a runoff vote will be held with those nominees.

Another round of voting will be held with the same nominees, excluding the already selected individual. The nomination process will follow the same procedure as it does for the first selection.

After selecting two students for the award, the moderators shall inform the head coaches about who was selected. After their selection is approved, the nominees may be informed.

### **Additional Amendments:**

There will be an attendance requirement, as a percentage, to go on team trips. The exact number will be determined by the EC and faculty advisors.



The EC may call charter or team meetings throughout the year as needed.