

Stuyvesant Robotics Team (StuyPulse) Charter

Last updated: 2015/07/09

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 programming 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 advertisement as well as managing the logistics of a large team.

We require no prior experience in engineering, programming, or marketing 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 season. It is an open meeting with the only requirement being that there must be at least two-thirds of the Executive Council present. All members who have paid their team dues, have passed the safety test, and have written a reflection may vote. In the days leading up to the meeting, members

who would like to propose charter amendments may send emails to the mailing list to start discussion.

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.

Executive Council:

The Executive Council (EC) includes all officers, elected and appointed.

Elected Executive Council (EEC):

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

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.

President of Marketing (PoM): The President of Marketing will hold 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 should also have adequate knowledge of the other two departments.

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 should have extensive knowledge of all awards submissions as well as some 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. The VPoSE should 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.

Vice President of Engineering (VPoE): The Vice President of Engineering is the second-in-command for the engineering department. The VPoE should have knowledge of what the President of Engineering is currently doing and should be able to direct the engineering department in the event of the PoE's absence. They should have extensive knowledge of each part of the robot as well as some basic knowledge of all awards submissions.

It is the responsibility of the EEC 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 pre-season, build season, and competition season.

Appointed Executive Council (AEC):

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

Director of Animation: The Director of Animation is responsible for coordinating the team's animation efforts, including participation in FIRST's animation competitions and off-season competitions as well as creating promotional animations. This person should maintain an active animation department, recruiting and training participants.

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.

Director of Electronics: The Director of Electronics is to set up and manage the electronic systems on the robot to FIRST regulations. They should cooperate with both engineers and software engineers to ensure that the electronic systems are organised and able to be modified if needed. They are also responsible for the education of other members in the electronics sub-department.

Director of Field Construction: Is it 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, they 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 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 EEC and Faculty Advisors. They must also maintain stable relationships with sponsors and contact them on a regular basis.

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. They are also responsible for ensuring that all necessary safety rules are observed in the lab during build season. The person chosen for this position 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. They are 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 Director of Procurement is also required to maintain a detailed, up-to-date account of the team's expenditures, available on request.

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, they are responsible for creating a strong team media presence using blogs, photographs, videos, social media, and other media.

Director of Strategy: The Director of Strategy is to ensure all team members know game rules and robot restrictions. During the build season, they can suggest features for the robot that will allow for possible gameplay strategies. In addition, they should assemble and educate a group of scouts that will gather information on other teams during the competition. During competition, they are responsible for creating and communicating with the drive teams of our alliance strategies for each match. They should make a list of the top 24 teams for alliance selections. This Director shall also be responsible for the selection and practise of the driver, operator, and human player. The drive team will be selected through tryouts organised by the Director, and conflicting responsibilities as well as other factors will be taken into account for the final selection. The drive team must be approved by the majority of the EC and the Faculty Advisors.

Primary Machinist: The Primary Machinist is responsible for the maintaining the mill, lathe, and their parts. They 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.

Assistant Director of Electronics: The Assistant Director of Electronics must be 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. This Assistant Director should not be a graduating member.

Assistant Director of Strategy: 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. This Assistant Director should not be a graduating member.

Elections:

Elections will take place during May or June of 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 have one week to appoint members to the AEC. 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 who have paid their team dues, have passed the safety test, and have written a reflection may vote.
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.
4. The highest-ranking senior members have authority during elections. They must uphold the rules, maintain order, and mediate any disputes that arise.
5. In the absence of senior presidents, the next highest-ranking senior officer will preside during elections.

Order of Elections:

1. President of Engineering
2. President of Software Engineering
3. President of Marketing
4. Vice President of Marketing
5. Vice President of Software Engineering
6. Vice President of Engineering

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.
- 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 EEC. The two members of the EEC 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 EEC members who approved the absentee candidate.
- For the election of the presidencies, a co-presidency formed by two members of the team may be nominated as its own candidate, provided that both members accept the nomination.

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.

- Submitted ballots may only be viewed by the members in charge of elections and the faculty advisors. If a member of the team not in charge of elections has intentionally viewed a ballot, that member will lose their right to vote and that round of voting will be repeated.
- 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 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. If 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 will appoint the Presidents to represent the new EC 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 will vote on the appointed position again.

In the event that any position is not filled by the EC for any reason, the faculty advisor will appoint a member to fill the position.

Impeachment

Any member of the EC 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 (lol)
 - 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. 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 Executive 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 resigns, the position will be filled by a two-thirds majority vote of the remaining EC.

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 has elected another member of the team to serve as President.