# Constitution of "Interplanetary Space Exploration Team"

# 1. Name

The official name of this recognized campus group is "Interplanetary Space Exploration Team"

The acronym or abbreviation of this group is: ISET

# 2. Purpose and Objectives

The purpose of this team is to offer students at the University of Toronto St. George campus an opportunity to design a vast array of technologies and solutions for interplanetary colonization from an engineering perspective.

The team's mission is to change perceptions of space design complexity by applying engineering principles at the undergraduate level to overcome challenges associated with interplanetary colonization.

Initially, our team's focus revolved around the development of an entry/exit system for a Martian colony as part of the Project Airlock Challenge engineering competition hosted by the University of British Columbia. However, through these efforts, we have gained greater insight into the potential for colonization on Mars and sought to further the technological development of engineering solutions, with a new focus on developing various systems for a versatile colony beyond the entry/exit system.

The team aims to achieve this mission by designing and building various integral tools and components for the Martian atmosphere that demonstrates the possibility of students applying their knowledge in a relatively unexplored field of space colonization. Specifically, we are focusing on the development of interconnected, multi-disciplinary projects in 1) space suit development, 2) colony urban planning, 3) transportation vehicle development, and 4) power generation. Through these projects, we aim to develop the essential systems that would allow for humans to sustainably colonize Mars hence demonstrating students' pioneering efforts in space colonization.

In order to bring this vision to reality, the team will host weekly work sessions with the general members. The aim of these work sessions is to understand the physics and characteristics of the systems and models within these projects, design these systems and modelling approaches, and, if necessary, build functional prototypes of the designs.

By showcasing our prototypes and participating in competitions, we aim to prove that all students can thrive and have a significant impact in the field of space exploration.

# 3. Membership

Membership to the group is open to all currently registered University of Toronto students. Members must register with a designated executive by submitting their full name and a valid email address.

U of T members are permitted to run, nominate, and vote in elections and constitutional amendments. The group is open to non-U of T members. However, these members do not hold the aforementioned rights.

Members must register with a designated executive by submitting their full name and a valid email address.

There is no membership fee. However, there may be some charges associated with the competition such as airline tickets to travel to competitions, the team will take part in, as well as residential accommodations there. These fees will be optional, and all members will have the choice of not paying them.

# 4. Executive List and Duties

The executive committee shall be comprised of three (3) elected officers.

*General Director (one (1) seat)* 

- Creating, planning, implementing and integrating the strategic direction of the entire team
- Work with Business Development Director to set and work towards overall club goals in executing initiatives to further space exploration
- Create outlines for board meetings
- Be the club's spokesperson
- Ensure that all the activities of the club meet regulations and policies of the University of Toronto
- Ensuring individual subteams are overcoming any financial challenges that prevent them from achieving their goals
- Initiate, execute and maintain official financial transactions and records
- Work with technical leads to determine the required budget of the team and the scope of technical work.
- This executive has signing authority towards official documents or orders, as well as towards payment and purchases

Business Development Director (one (1) seat)

- Develop and maintain team presence within and outside of the university through a variety of new and existing physical and online platforms
- Develop and maintain industry relations for the purposes of procuring financial support and/or services necessary to design and prototype technical projects
- Develop and maintain relations with university bodies, faculty and students for the purposes of funding, outreach to the community and involvement in the design and outreach activities of the Interplanetary Space Exploration Team
- Advertise showcases held by the team throughout the university
- Work closely with General Director to develop timelines to implement marketing, advertising and showcase campaigns
- Provide weekly updates to entire team regarding promotional and sponsorship financial goal progress
- This executive has signing authority towards official documents or orders, as well as towards payment and purchases

The group may appoint individuals as Project Managers for task force teams with the intent to provide support in the execution of one of several technical projects under the Technical Director's purview; however, such positions do not hold executive decision making authority.

#### **Termination of Executives or General Members:**

Any member of the club who commits an act negatively affecting the interests of the club and its members, including non-disclosure of a significant or continuing conflict of interest, may be given notice of removal.

The member up for removal shall have the right to defend his/her actions.

A two-thirds majority vote of the current members present in favor of removal is required. The member must have the right to an appeal before the general membership, and the majority vote of the general membership will have the final say on the matter.

The member will be removed from the club's membership and will lose any privileges associated with being a member of the club.

Executive members are subject to the same termination or impeachment process and, as determined by the vote, may lose their executive position along with their membership to the group.

# 5. Elections

The executive committee shall strike the Elections Committee and appoint one (1) Chief Returning Officer (CRO) and two (2) Scrutinizers from the general members on the committee to conduct and hold elections according to the timelines outlined in the following situations:

- 1. The Interplanetary Space Exploration Team is currently in a competition, and is committed to a subsequent competition.\*
  - In this case, elections would be held six weeks before the end of the school year during which the current competition ends. The newly elected executive team would assume office after the current competition is done and the new executives would hold position until the future competition ends.
- 2. The Interplanetary Space Exploration Team is currently in a competition but is not committed to a subsequent competition.\*
  - In this case, elections would be held six weeks before the end of the school year during which the competition ends. The newly elected executive team would assume office after the current competition ends. In this scenario, upon the new executive team assuming office, the electoral processes as described in point 3. will be in effect.
- 3. The Interplanetary Space Exploration Team is not in an existing competition, and there is no sign of commitment for a subsequent competition.\*
  - In this case, elections would be held six weeks before the end of each school year. The newly elected executive team would assume office at the start of the next school year.
- 4. The Interplanetary Space Exploration Team is not currently enrolled in a competition, but is planning to commit to a subsequent competition.\*

If the competition begins in the current school year, then the already present executive team would hold position until the end of the competition.

If the competition begins in the following school year, then elections will be held six weeks before the end of the current school year and the turnover would be at the beginning of the following school year when the competition begins. The executives would remain until the end of the new competition.

5. The Interplanetary Space Exploration Team experiences an unforeseen event that leads to the removal of one or more executive members (i.e. the graduation of an existing executive member, an executive member leaving).

A by-election would be held to replace the position of the missing executive immediately to fill the position.

\* A subsequent competition is defined as any competition, hosted by any organization, which provides a platform to develop and showcase an undergraduate-level engineering design to meet a particular challenge of interplanetary colonization.

All members of the Elections Committee shall be unbiased in the results of the election and shall be required to disclose any and all conflicts of interest in the election.

The electoral process for the executive committee is as follows:

A general team meeting would be called where every Interplanetary Space Exploration Team member would have the opportunity to contest in an electoral process for executive committee positions. The available executive committee positions and number of seats for each position that Interplanetary Space Exploration Team members can contest for include: one (1) General Director, one (1) Technical Director, one (1) Business Development Director.

The Chief Returning Officer shall accept nominations only from group members that are also registered U of T members for candidacy of executive positions from the general membership three (3) weeks before the election period which is described in the five aforementioned election scenarios. Candidates have to be members in good standing and be part of the group for at least three (3) months prior to the nomination period.

The CRO shall select three (3) election dates before April 10<sup>th</sup>, unless it is a by-election during which the earliest possible dates would be chosen. These dates will be announced in a minimum of two (2) weeks prior to elections dates and must fall on weekdays. However, in the event that a by-election for an unforeseen event were to occur, the election dates would be announced in a minimum of five (5) days prior to the election dates and must fall on weekdays.

The CRO and Scrutinizers shall provide each U of T member, excluding the existing executive team, with a paper ballot on the voting dates and ask the member to place the ballot in an enclosed box. Every eligible voter would have one vote per seat for each position. For the positions with two (2) or more seats, eligible voters can only vote for a candidate contesting for the position once.

In preparation for a tie, the CRO shall select an executive from amongst the executive committee, to cast their ballot and seal it in an envelope. In the event of a tie for an executive position, one of the two Scrutinizers shall break the seal and count the ballot in order to break the tie.

After the election is over, the CRO and Scrutinizers shall count the ballots. The candidates with the most votes shall be elected to their respective seats available for the particular position (i.e., a simple majority vote is required to elect a nominee or candidate to an executive position). For example, the Project Manager consists of two seats, for which the candidates with the two highest number of votes would be elected to fill the seats. The CRO and Scrutinizers shall submit a report of the results of the elections to the Executive Committee and general members.

Registered U of T members may not vote by proxy. Non-U of T members may not nominate or vote in elections, and they may not run for positions.

Only U of T members who have paid any applicable membership fees, who are not bound by any voting limitations due to their contestment in aforementioned executive committee roles, and have been a member in good standing for 60 days prior to election dates are eligible for voting.

In terms of general members, a recruitment meeting will be held after each competition or annually, where members from the U of T community can attend to know more about our team's activities and visions, and join the club if they so wish.

#### 6. Finances

The General Director shall keep records of all income and expenses. The General Director shall present the group's financial health at the annual general meetings and executive meetings. The Executive Committee will vote on expenditures of over \$100.00 by majority vote at an executive meeting.

The team forecasts three primary types of financial activity, (1) cash flow activity and (2) asset acquisition and disposal and (3) inventory records.

For cash flow activity, all expenditures present in the team will require proof of transactions, i.e., source records, which prove the source of the transaction and funds and sources involved. Upon verification of the transaction, the General Director will act as the comptroller with access to the store of organization funds. At this point, the General Director will release a cheque in the name of the member, and record the transaction in a formal journal entry, and post it to the official ledger. This journal and ledger entry will follow ASPE standards. Services for manufacturing and prototyping may also be outsourced, for which receivables accounting would take place and where the General Director would handle A/R and A/P procedures.

The other aspect of financial activity, asset acquisition and disposal, is encompassed on both sponsorship support/funding and acquiring software and parts. The General Director will use the fair value of the assets obtained in order to ethically make the required journal and ledger entries for record keeping. In addition, source records for each transaction will be recorded both digitally and in paper.

Through the building stage of a prototype, the team will acquire components towards building the prototype and will require inventory tracking. Hence, the team will use ASPE accounting standards and

inventory methods in order to keep track of inventory and valuation of stock in order to keep track of parts.

To keep accounting records under continual auditing, the team will conduct regular bank reconciliations to compare bank records and ledger entries and investigate any discrepancies found.

The group's executive or members may not engage in activities that are essentially commercial in nature. This is not intended to preclude the collection of membership fees to cover the expenses of the group, or of charges for specific activities, programs or events, or to prohibit groups from engaging in legitimate fundraising. However, the group will not have as a major activity a function that makes it an on-campus part of a commercial organization, will not provide services and goods at a profit when that profit is used for purposes other than those of the organization, and will not pay salaries to some or all of its officers.

# 7. Meetings

# a) Annual General Meetings (AGMs):

The group shall hold general meetings at least twice per year, i.e. once per academic term.

The Executive Committee will announce these dates two (2) weeks prior to holding the meetings. These meetings are intended to go over the group's annual activity plan, financial health and propose or vote on constitutional amendments, if any. Motions will require 2/3 majority of registered members in attendance for a vote to be cast. The motion with the most votes will be passed.

### b) Executive Meetings:

The executive committee shall meet on a monthly basis where date and times are to be set by an executive. The quorum of executive meetings shall be 50% of executives.

# c) Sub-team Work Sessions

Each sub-team will be having a work session approximately every week to discuss current progress, future plans, and assign individual tasks. The aim of these work sessions is to understand the mechanics of systems, design these systems that meets the criteria of the project and/or competition and then, if required, build a functional prototype of the design.

# 8. Amendments

Any registered U of T members may propose and vote on amendments to this constitution. The Executive Committee will administer the process of having amendments discussed at general meetings.

Constitutional amendments shall require a 2/3 majority to be passed at Annual General Meetings by registered U of T members in attendance.

The Executive Committee shall formally adopt the new constitution and submit the revised constitution to the respective University offices (i.e. The Office of Student Life, The University of Toronto Students' Union, etc) within two (2) weeks of its approval by general members.