# **Constitution of University of Toronto Concrete Canoe Team**

## 1. Article One – Name and Purpose

- 1.1. The official name of the recognized student group is University of Toronto Concrete Canoe Team
- 1.2. The official acronym or abbreviation of the group is UTCCT
- 1.3. The purpose, objectives, mission and/or mandate of the organization is outlined here:

The purpose of this organization is to combine the thoughts and ingenuity of students from across the school to design, construct, and race a concrete canoe. Students gain practical experience in applying their knowledge to an engineering problem, and they are given the opportunity to explore roles in teamwork and leadership.

The University of Toronto Concrete Canoe Team is a multidisciplinary design team challenging the unfeasible by making a canoe made of concrete float. We take concrete, a dense and typically unintuitive material for shipbuilding, and experiment until it is strong in tension and lighter than water! With a successful canoe designed, tested, and built every year, the only thing left is to race it against other universities across Canada. From optimizing hull designs, designing concrete mixes, machine learning, structural analysis, and paddling, our team provides students with the opportunity to gain hands-on experience in all aspects of the canoe.

## 2. Article Two – Membership and Membership Fee

- 2.1. The group shall maintain a list of group members.
- 2.2. Voting membership is open to all registered students of the University of Toronto.
- 2.3. Voting membership is open only to registered students of the University of Toronto.
- 2.4. Non-voting membership is open to University of Toronto staff, faculty, alumni, and to persons from outside the University. Unless otherwise stated, non-voting members do not hold any rights awarded to voting members.
- 2.5. The membership fee will be \$0 per year. No fees are required, however members accompanying the team to competition are asked to pay approximately \$150 for a registration fee if they will be attending the competition

### 3. Article Three – Rights of Members

- 3.1. All members may apply for a full refund of their membership fee within one (1) month of becoming a member.
- 3.2. All voting members have a right to attend all general meetings of members.
- 3.3. All voting members have a right to cast votes at all general meetings of members.
- 3.4. All voting members have a right to stand for election unless otherwise stated in this document.
- 3.5. All voting members have a right to cast votes in all group elections and referenda.
- 3.6. All voting members have a right to propose and vote on amendments to this constitution.

3.7. The rights prescribed in Article Three are not awarded to non-voting members as described in Article Two.

#### 4. Article Four - Executive Committee

- 4.1. The term for all positions on the Executive Committee shall be from May 1st to April 30th.
- 4.2. The Executive Committee shall be comprised of 25 voting members.
- 4.3. All voting members of the Executive Committee must be currently registered students of the University of Toronto.
- 4.4. Non-voting members may hold only non-voting positions on the Executive Committee.
- 4.5. The maximum amount of non-voting positions on the Executive Committee shall be one (1) position or ten per cent (10%) of the positions on the Executive Committee, whichever is greatest.
- 4.6. Persons holding non-voting positions on the Executive Committee cannot serve as an officer, financial authority, signing authority, primary contact, or secondary contact.
- 4.7. No person may serve as a financial authority or signing authority for the group if they are currently serving as a financial authority or signing authority for another recognized student group at the University of Toronto.

## 5. Article Five - Executive Committee Composition and Duties

## 5.1. The Project Manager shall:

- 5.1.1. Be eligible to cast votes at meetings of the Executive Committee,
- 5.1.2. Oversee the operations, management, and success of the group,
- 5.1.3. Serve as spokesperson for the group,
- 5.1.4. Oversee all finances-sponsorship and project expenses,
- 5.1.5. Organize the technical report,
- 5.1.6. Preside over meetings of the Executive Committee and/or members,
- 5.1.7. Communicate with the faculty advisors and other faculty members,
- 5.1.8. Ensure a transition of office from one year to the next.

### 5.2. The Concrete Director shall:

- 5.2.1. Determine and procure the components of concrete mixes through sponsorship and material donations,
- 5.2.2. Ensure all material is rule compliant with competition regulations with proper MTDS from the manufacturer.
- 5.2.3. Design concrete mixes that will achieve desired material properties,
- 5.2.4. Conduct standard tests to assess the performance of each mix and select mix designs based on objectives.

# 5.3. The Hull and Structural Manager/Director shall:

- 5.3.1. Conduct structural analysis to determine levels of stress experienced throughout the canoe in a variety of loading cases,
- 5.3.2. Utilize multiple methods of structural analysis including hand methods, in-house software (CAP), or commercial software (Excel/Matlab) in conducting and presenting the structural analysis,

- 5.3.3. Design the shape of the canoe hull through the selection of parameters based on design objectives and be in compliance with competition regulations,
- 5.3.4. Run preliminary assessments on hull design candidates and conduct empirical tests using the fluids laboratory,
- 5.3.5. Model the canoe and its mold using 3D CAD software, and make the AutoCAD drawing.

### 5.4. The Construction and Quality Control Director shall:

- 5.4.1. Determine and procure material for construction projects including canoe mould, display stands, humidity tent, transportation box etc.,
- 5.4.2. Teach members proper power tools/PPE procedures,
- 5.4.3. Oversee the quality and construction of the canoe and identify proper casting procedures,
- 5.4.4. Identify and develop new projects to outfit the new workspace for the team's canoe construction needs.

#### 5.5. The Aesthetics Director shall:

- 5.5.1. Coordinate theme selection and its integration into the canoe and display components (e.g. display board, stand and technical report),
- 5.5.2. Develop graphics for team activities including t-shirts, and marketing,
- 5.5.3. Develop realistic objectives and timelines, and work in conjunction with other execs (Construction Lead) to create the final display of the canoe.

# 5.6. The Paddling Director shall:

- 5.6.1. Design and oversee the paddling team training regime
- 5.6.2. Monitor team progress throughout the year and identify areas of improvement
- 5.6.3. Manage the team's paddling equipment and procure new equipment if necessary
- 5.6.4. Coordinate practice sessions with external venues and trainers
- 5.6.5. Allocate team members to race positions at competition based on identified strengths

#### 5.7. The Outreach Director shall:

- 5.7.1. Coordinate outreach events both within UofT and externally
- 5.7.2. Connect and engage with Alumni through events, workshop sessions etc.
- 5.7.3. Identify opportunities for greater marketing and outreach of the club.

### 5.8. The Social Director shall:

- 5.8.1. Coordinate and conduct team socials to enhance the team's community.
- 5.8.2. Lead social events for both online meetings and in-person events.
- 5.8.3. Help coordinate frosh related events.

# 5.9. The Strategy Director shall:

- 5.9.1. Complete and submit forms surrounding safety protocols of club activities.
- 5.9.2. Ensure personal protective equipment is in use during necessary activities.

### 5.10. The Sustainability Director shall:

- 5.10.1. Research, experiment, and establish sustainable practices in processes.
- 5.10.2. Analyze and record the ecological footprint of club activities through Life Cycle Assessments.

### 6. Article Six – Elections

- 6.1. All voting positions on the Executive Committee shall be filled through an annual election.
- 6.2. All voting group members shall be eligible to seek nomination to and cast a ballot for each voting position.
- 6.3. All non-voting group members shall be eligible to seek nomination only for non-voting positions on the Executive Committee.
- 6.4. Non-voting group members shall not be eligible to cast a ballot for any elected position.
- 6.5. The nominee winning the plurality of votes cast in the election for each position shall be deemed the winner.
- 6.6. On the condition that multiple candidates are to be elected for a single position, the nominees winning the largest share of the votes cast shall be deemed the winners until all positions are filled.
- 6.7. The elections must be held in a nonbiased manner. No individual who is seeking election may participate in planning or administering the election.

### 7. Article Seven – Finances

- 7.1. The Project Manager shall keep an active record of income and expenses.
- 7.2. The Treasurer shall present the group's updates on the group's financial position at annual general meetings.
- 7.3. The Executive Committee must approve all expenditures over \$100.00 through a majority vote at a meeting of the Executive Committee.
- 7.4. The group may not engage in activities that are essentially commercial in nature.
- 7.5. The group will not have as a major activity a function that makes it an on-campus chapter of a commercial organization.
- 7.6. The group will not provide services and goods at a profit when that profit is used for purposes other than those of the group.
- 7.7. The group will not pay salaries to any of its officers.

### 8. Article Eight – Meetings

- 8.1. The Executive Committee shall meet monthly. The quorum for Executive Committee meetings shall be 50%+1 of the voting members of the Executive Committee.
- 8.2. The group shall hold general meetings at least twice per year to provide the general membership an opportunity to review the group's annual activity plan, financial health, and propose or vote on constitutional amendments.
- 8.3. The Executive Committee must announce the date of a general meeting to the general membership at least two (2) weeks prior to the date of the meeting.

# 9. Article Nine - Termination of Membership

- 9.1. The Executive Committee may revoke the membership of 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.
- 9.2. A vote to revoke membership must be held at a meeting of the Executive Committee.

- 9.3. A two-thirds majority of the Executive Committee is required to approve any motion to revoke membership.
- 9.4. Any member facing removal shall have the right to appeal the decision of the Executive Committee to the general membership.
- 9.5. In the case of an appeal, a simple majority vote at a meeting of the general membership shall be required to sustain the revocation of membership.
- 9.6. Following a termination of membership, the member will be removed from the club's membership and will lose any privileges associated with being a member of the club.
- 9.7. Executive Committee members are subject to the same termination of membership process as general members.

### 10. Article Ten – Amendments

- 10.1 All constitutional amendments shall require a 2/3 majority vote to be passed at a general meeting.
- 10.2 All voting members may propose and vote on amendments to the constitution.
- 10.3 The Executive Committee shall submit the revised constitution to staff in the Division of Student Life at the University of Toronto within two (2) weeks.
- 10.4 Amendments to the constitution shall take effect only once the revised constitution has been approved by staff in the Division of Student Life at the University of Toronto.