

Rules and Regulations

A. Team Rules:

A-1 For **University/Degree awarding Institute/College/Diploma Institute:**
Team may comprise of up to three students and must be supervised by a faculty member. Only the students will be eligible for the awards. The team members are required to carry identification cards of their University/Institute/College.

A-2 For the **Hobbyist/Professionals:** If sufficient number of teams are registered then a separate category for Professionals will be introduced in the contest. Otherwise their participation will depend upon the decision of the Judges.

A-3 University/Institute may have more than one team (entry). Each entry will be registered separately based on a different hardware (chassis & electronics) and different team members.

A-4 Postal Order/Bank Draft of **Rs 500/-** (non-refundable), in favor of:

Institute of Space Technology, Islamabad.

must be attached with each registration form.

A-5 Duly filled and verified registration form should reach no later than **30 March 2012**, to

***Hayat Muhammad Khan
Assistant Professor (A&A)
Institute of Space Technology
1, Islamabad Highway (near Rawat Toll Plaza)
Islamabad.
Contact: 051-9075491 Fax: 051-9273310***

B. Dimensions and Weight:

B-1 The size of the Robot should not exceed **30cm x 30cm x 30cm**.

B-2 The weight of the robot should be less than **12 Kilograms**.

B-3 Judges will inspect and verify the dimensions and weight specifications prior to the commencement of the contest.

B-4 A Technical report is required to be submitted in order to check the originality of the idea and implementation. Judges may conduct a detailed interview of the participating teams. They can disqualify any Robot on the basis of any discrepancy.

C. General Rules and Regulations

- C-1** The Robot should be fully autonomous. Any Robot navigating by other means except **GPS** will be disqualified from the competition.
- C-2** For reference and to know the orientation of the arena, the participants can measure the coordinates of the start line at point 'A' and 'B'.
- C-3** The Robot should have the capability to identify the wrong GPS signal and should be able to tackle a situation in which such a signal occurs.
- C-4** Every Robot should be loaded with **3** colored Ping-Pong balls i.e. Red, Blue and Green before the start of the Run. The Robot must first release the Red ball then Blue ball and at the end the Green ball as it enters into WP1, WP2 and WP3 respectively.
- C-5** The releasing sequence of the balls should be properly followed according to the color scheme mentioned in the arena. While the Robot releases the ball it should be inside the defined area as marked in the arena map. There will be no colored marking in the physical arena.
- C-6** In case the ball is not released or a wrong colored ball is released then time will be added as penalty in the final score.
- C-7** The winner will be that Robot, which will complete all the defined tasks in minimum time without violating the rules.
- C-8** Maximum time allowed to complete the task is **15 minutes**.
- C-9** In case of a tie between 2 or more Navbots, they will have to compete again.
- C-10** In the First Run, if a Robot disorientates from the arena then a Retry will be given. On the First Retry the time will be reinitialized.
- C-11** If a Robot disorientates during the First Retry, the Robot will be again placed on the start line but the start time of the First Retry will be considered. A maximum two Retries are allowed in a Run.
- C-12** In case any Robot failed to reach the finish line, then the maximum correct path traveled by the Robot will be considered as the winner. The judges will decide on the basis of the maximum correct distance in the allotted time.
- C-13** In the case of a tie in the distance covered by the Navbots then Rerun will be given to the members.

C-14 During the Retries the Robot has to start again from the same start point which was defined earlier for it.

C-15 If a participant wants to have second Retry then the final distance will be considered in the score.

C-16 During the Retries, the members are not allowed to alter any hardware of the Robot except for the battery change.

C-17 During the Run, the team members are not allowed to touch the Robots but they are allowed to avail their Retry chance.

D. General conduct:

D-1 Any attempt to damage the game arena by the Robot or the team, will result in the disqualification from the contest.

D-2 Using unfair means will disqualify the Robot from the contest.

D-3 The decisions made by the Judges can not be challenged at any instant during or after the contest. Unnecessary arguing with the judges can result in a disqualification of the team.

E. Special Engineering design award:

The Special Engineering design award will be presented to the team other than the winners, with a very good engineering design strategy, as decided by the judges.