

# Robosphaera

## Participation:-

- Team Event.
- Maximum of 4 persons per team.
- All students should possess Identity card of their respective institutes.

## Structure:-

- **Inspection of the car:** Your bot will be inspected according to the specifications which are given by the organisers.
- This is a tournament. And the format of the tournament will be decided according to the number of participating teams.
- Each match will have 4 rounds of 2.5 minutes each.

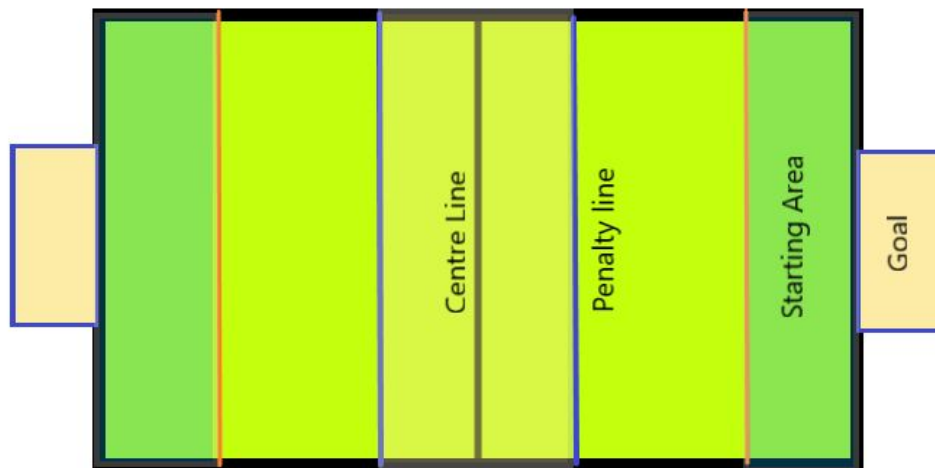
## Rules & Regulations:-

- The Robot should have a mechanism for hitting the ball. No other mechanism of gripping or hiding the ball while dragging it towards the goal post will be acceptable.
- At the start of the match there will be a coin toss, and the winning bot will start the game. After each quarter the other bot will get to start.
- The starting bot can place the ball anywhere within its start area and start the game by kicking the ball.
- Both bots are not allowed to cross the half line. They have to be in their half. If any of the bot crosses the line then game will stop and it will be counted as a foul and other bot will be given the ball to start the game from anywhere within his half of the arena.
- There shouldn't be free wires hanging around the bot, if the ball gets stuck anywhere in the bot then it will be considered a foul.
- Hitting the side walls of the arena will also be counted as foul.
- After each goal the ball will be given to the other bot to start.
- In case of a tie-breaker (both in goals and fouls), 1 penalty shoot out to be given to each team.
- Penalties can be taken from anywhere on penalty line.
- If any bot stops working in the middle of the match, the team will be disqualified and other team will qualify for the next match.
- If the machine is found unsafe to run on the arena, the team will be disqualified.

- The teams must adhere to the spirit of healthy competition. The coordinators reserve the right to disqualify any team indulging in misbehaviour.
- Decisions made by the organisers will be final.

### **Arena Specifications:-**

- Arena is a wooden field of dimensions 1.5m x 1m. The design for the arena is given below.
- Whole arena will be surrounded by a 30 cm high wall.
- Goal post Specifications : Length- 45 cm and Height- 20 cm.
- A Table Tennis ball will be used for the match.



### **Bot Specifications:-**

- **Vehicle Dimensions:** The bot should fit in a box of dimensions 200mm x 150mm x 150mm (l x b x h) at any moment of time during the match. The external device which is used to control the machine is not included in the size constraint.
- **Power Supply:** The bot must have an on-board power supply to provide power to any mechanism requiring electric power not exceeding 12V.
- **Radio Controller:** The bot has to be necessarily controlled by a wireless remote-control system.

### **Judging Criteria:-**

- Team with most goals and least fouls will win the match.
- Every 4 fouls will be equivalent to a goal, and a goal point will be reduced for that team.

### **Prize:**

1. First Prize: 7000
2. Second Prize: 5000

### **Contacts:**

Name: Sunil Kumar

Phone No.: 9024809554

email-id: [ch18b026@iittp.ac.in](mailto:ch18b026@iittp.ac.in)

Name: Arpit bandejiya

Phone No.: 9411890675

email-id: [cs18b003@iittp.ac.in](mailto:cs18b003@iittp.ac.in)