

# Kick-Off

## Introduction

“Football is not just about scoring goals, it’s about winning.” - Alan Shearer

Soccer is an amazing game that requires accuracy and precision in handling the ball, it becomes more interesting when robots start playing it. KICK OFF is a Robo-soccer in which bots play football against one another.

## Event Format

- **Round 1: Qualifiers**
  - In this round, each team will try to shoot goals from 5 fixed locations of the arena. A single attempt will be allowed from each location.
  - The objective of the round is to score a maximum number of goals in minimum time.
  - The top teams move on to the next round.
- **Round 2: Knock Out**
  - The selected teams will be divided into two groups by the chit method and the competition will be held among these.
  - The teams will be fighting amongst each other in a knockout match.
  - One team from each group will be selected for finals.
  - Team with the maximum goals under the given time will win.
- **Round 3: Finals**
  - Two teams will face each other in the final match split into two halves of 3 minutes each.
  - An interval of a maximum of 1 minute will be given between the 2 halves.
  - The objective is to score the maximum number of goals.

## Judging Criteria

- **First round**
  - Each goal scored will give 100 points. Each second saved from the limit of 5 minutes will give 2 points each. The gross point is calculated.
  - In case of a tie in the ranking, the team with the maximum number of goals will be given priority.
- **Second round**

- The team with the maximum number of goals after full time will be declared as the winner.
- In case of a tie in score, 3 Free kicks at different positions shall be given to both the teams.
- The team scoring the maximum number of goals will be declared as the winner. After penalty shots, if tie status remains intact, one more round of penalty shots may be taken.

## Specifications

- **Team specifications**
  - Each team can consist of a maximum of five members.
  - Each team member should be a student of an Authorized college.
- **Robot specifications**
  - Dimension of Robot should be within the limit: 30cm x 30cm x 15cm (width x length x height)
  - Weight of the robot should not exceed 15kg. Extra points will be awarded to keep the bot within 5kg of weight.
  - The robot should be manually controlled and can be wired or wireless. In the case of wireless bots, their operating frequency should be adjustable, so that no two robots, in any case, have the same operating frequency. This matter should be checked and dealt with, prior to the match.
  - The potential between any two points on the robot should not exceed 12V.
  - No sticking or ball holding mechanism should be used by robots. Robots should not cover the ball from the top or around, they can either push or shoot.
- **Arena specifications**
  - Dimension of arena: 120cm x 200cm.
  - Goalpost: 40cm x 20cm.
  - The dimension of D: 60cm x 45cm
  - The ball used will be of regular tennis ball size. Max-weight: 100gm.

## Rules and Regulations

- Any failure in meeting the specifications can lead to disqualification of the team.
- Each participant should bring college ID proof.



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- Any of the Robots should not be modified after any round or in between the rounds whatsoever. Although repairing of bots like wiring, soldering, tightening screws, etc. are allowed.
- We will not provide any type of charging facility for batteries. You have to bring your own batteries for the competition.
- In 2nd round, Warning will be given if you do intentional ramming (foul) or letting your opponent to kick more goals intentionally.
- On the second warning, the robot found doing such malpractice will be disqualified.
- Foul inside D can lead to a penalty, where the ball can be shot freely in obedience with first-round rules of shooting with the opponent standing in front of the post. The penalty shall be taken from the border of D.
- If the ball goes out of the arena, a free kick is awarded to the opponent. In this case, bot Has to keep a minimum distance from the bot who is awarded free-kick.
- The organizers reserve the right to change any or all the rules as they deem fit.
- The decision of organizers shall be treated as final and binding on all.
- Robots should be checked well before the match. If a robot is damaged during the match, it will be considered the team's liability. However, an extra time of 2 minutes may only be given in case of accidental damage of solder joints, leading to circuit failure.