



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## ROBOBALL BLITZ



"Robotic Precision Meets Sporting Passion."

Day 1: Qualifiers

Day 2: Finals

### Categories

Young Innovators (Grades 6-8)

Youth Innovators (Grades 9-12)

**The Millennium School  
Sector 119, Noida**

**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## PROBLEM STATEMENT

Forge and command a formidable duo of custom, wireless soccer bots—one attacker and one defender—to outmaneuver and defeat your opponents on the pitch!

## BOT SPECIFICATIONS

- Every team must have 2 bots: A defender and an attacker.
- The bot must be powered only by an electric motor mechanism. Fuel based cars are strictly prohibited
- Both bots must weigh less than **2 KG** for **Young Innovators** and less than **3 KG** for **Youth Innovators**.
- Maximum Terminal Voltage: **18 volts**.
- Lead acid battery is not allowed.
- Maximum Robot Dimensions for Young Innovators: **30 cm** (length) × **25cm** (breadth) × **25 cm** (height)
- Maximum Robot Dimensions for Youth Innovators: **40 cm** (length) × **30cm** (breadth) × **30 cm** (height)

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



- The bots can use any kicking mechanism if it is mechanically stable. However, the mechanism should not cover more than **30%** of the ball.
- Teams can use any wireless communication method

## GUIDELINES & GAMEPLAY

- Each team may consist of a maximum of 4 participants.
- The duration of each match will be 5 minutes with an interval of 1 minute after half time.
- The positions of the robots and the ball will reset after each goal.
- 1 minute extension will be issued if there is a draw after the time limit is over. Penalty shootouts will take place after two consecutive draws.
- If the robots get stuck, the positions will reset.
- Top teams on day 1 will qualify for day 2.
- Touching the robot is prohibited except if positions are being reset

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>

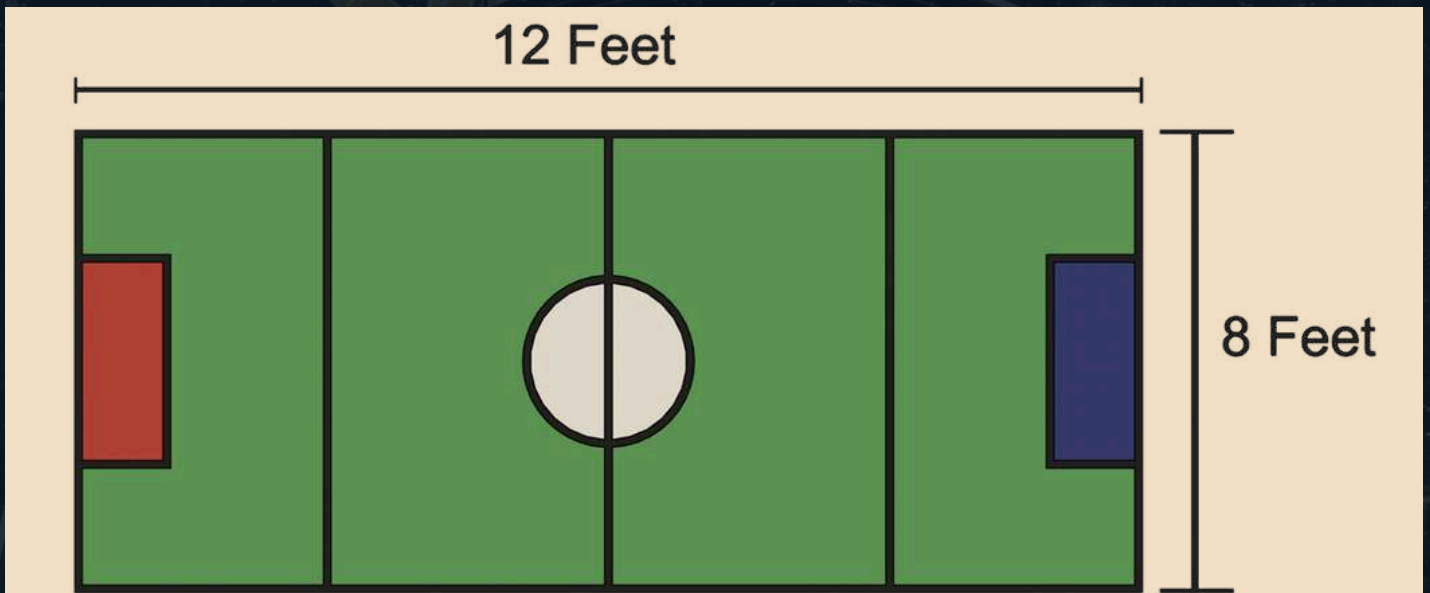


# ESTELLA 2.0

Inspiring Students, Creating Leaders



## ARENA



- These diagrams are only given as rough reference and are not drawn to scale.
- The arena is subject to changes.

**Note:** If any robot breaks during gameplay, the team can either use a backup robot or continue with 1 bot only. The opposition will still play with 2 robots.

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## LINE VIOLATION

- The defender can't cross the half line.
- No bot can be behind the line in front of their goal until the ball reaches there.
- If they cross the line, two warnings will be given, after which a line violation will be invoked. Goals conceded in these situations won't be considered.

## MARKING SCHEME

<u>Criteria</u>	<u>Points Given</u>
Goal Scored	20
Line Violation	-10 per incident

**The Millennium School**  
**Sector 119, Noida**  
**201305**

<https://estellafest.in/>



# ESTELLA 2.0

Inspiring Students, Creating Leaders



## DECLARATION

The organizing team has made all efforts to make sure no changes are needed. However, modifications, clarifications or adjustments may be made due to unforeseen circumstances.

Participants are expected to extend full cooperation to the organizers and abide by all instructions communicated.

Any form of disorderly conduct, use of unfair means or intentional attempts to hamper the decorum and smooth conduct of the event shall result in immediate disqualification.

**Teacher In-Charge:** Mr. Manish Chandra Jha (99106 32320)

**Student In-Charge:** Varad Bansal (85128 43345)

**The Millennium School  
Sector 119, Noida  
201305**

<https://estellafest.in/>