

# **RULEBOOK**

# **ROBO SOCCER**



**ROBOVANZA9.0**  
**2025-26**

## 1. GAME OVERVIEW:

Participants must build two soccer-playing robots:

- One robot will function as the Striker
- One robot will function as the Goalkeeper

The competition evaluates:

- Robot ball-handling capability
- Controller precision
- Operator skill

Each match winner is determined by the number of goals scored within the allotted match time.

## 2. ROBOT SPECIFICATIONS:

- Maximum robot dimensions: 30 cm × 30 cm × 30 cm (L × B × H).
- Maximum robot weight: 5 kg with a tolerance of ±5%.
- All components of the robot will be included in the weight measurement.
- Maximum circuit voltage must not exceed 12V DC at any time
- Power source must be a single 12V DC battery only
- A tolerance of ±5% is allowed for dimensions and power supply
- Robots may be wired or wireless (using ESCs)
- Ball baskets must be designed to carry the ball, not grab it
- Moving or rotating mechanisms for hitting the ball are strictly prohibited.



### **3. ARENA SPECIFICATIONS:**

- The Arena dimensions will be revealed to the participants on the day of the event.
- Field dimensions, goals, and special zones are measured in millimeters between line centers.
- Defending robots must not cross the half-line of the arena
  - Violation will result in an immediate foul.

### **4. TEAM INSTRUCTIONS:**

- Team size: Minimum 2 members, Maximum 4 members.
- Members from different institutions are allowed to form a team.
- Each team must have:
  1. One attacking robot
  2. One defending robot
- The robot(s) must be controlled by the same two team member throughout all rounds.

### **5. COMPETITION OFFICIALS (REFEREE AUTHORITY):**

- Each match is supervised by an appointed referee.
- The referee has full authority to enforce all rules.
- Referees will use the designated walking area beside the field
- All referee decisions regarding gameplay facts are final and binding.



## **6. TEAM COLOURS & IDENTIFICATION:**

- Team captains will be asked to choose a team colour:  
Blue or Yellow
- Colour stickers will be provided and must be placed on robots.
- Communication flags will be used to avoid gesturing, shouting, or verbal disputes with referees.

## **7. GAME STAGES:**

### **• StageDuration**

First Half:90 seconds.

Second Half:90 seconds.

Total time:3 minutes.

## **8. TECHNICAL TIMEOUT:**

- Each team is allowed a total of 60 seconds of technical timeout per match.
- Timeouts may only be taken during:
- Robot malfunction.
- Game stoppage.
- Timeout must be requested officially.
- Time is monitored and recorded by the referee.
- Timeouts may be taken in multiple intervals.
- No robot parts may be replaced or changed during technical timeout.



## **9. STOPPING THE GAME (STOP COMMAND)**

When the Stop Command is issued:

- Robots must:
  - Stop OR.
  - Move slower than 1.5 m/s
- Robots must maintain 0.5 m minimum distance from the ball.
- Ball manipulation is strictly prohibited.
- Used when:
  - Ball crosses field lines (including goals).
  - An offense occurs.
  - Preparing for game restart after halt or timeout.
- Grace period: 2 seconds to comply.
- Repeated violation may result in a foul at referee's discretion.

## **10. GAMEPLAY RULES:**

- Robots must be constructed so that they cannot enter the goal post.
- This rule applies to all robots on the field.
- Entering the goal post 3 times within 20 seconds results in a foul.
- Intentional attacking of opponent robots is a foul.
- Includes attacking when opponent does not possess the ball.
- Penalty: -1 point.
- Rule violations:
  - First → Warning.
  - More than two warnings → Team disqualification.



• • • • • • •

## **11. GAME ZONES & MATCH FORMATS:**

### A. Knockout Rounds

- 1.Opponents selected via lucky draw / winners of previous rounds.
- 2.Each team must bring two robots:
  - 1 Goalkeeper.
  - 1 Striker.
  - (2 vs 2 format)
- 3.Robot placement will be done by event coordinators.
- 4.Objective: Score in the opponent's goal, as in standard soccer.

### B. Tie-Breaker Round

- 1.A white ball will be placed at the center of the arena.
- 2.Robots compete using speed, strategy, and control.
- 3.The robot that places the ball into the opponent's goal wins.

## **12. DISQUALIFICATION CRITERIA:**

A team/robot will be disqualified if:

- Ball is grabbed unjustly by any mechanism.
- Ball is locked and not in a moving condition.
- Arena is damaged in any form.
- Robot is lent/shared between teams.
- Human interference occurs:
  - Touching robots.
  - Entering arena.
- Non-compliance with event rules.
- Usage of potentiometers.
- Entering and blocking the goal post.
- Failure to place robots in arena within 5 minutes of call.
- Replacement of any robot parts during the competition.



## **13. COMPETITION RULES:**

1. Goalkeeper must remain within its respective team zone.
2. Technical glitch:
  - Team must call technical timeout.
  - Otherwise, the match continues with faulty robot.
3. Robots entering the goal post will face penalties.
4. No part replacement during runs or between rounds.
5. Chassis, tires, and motors cannot be reused.
6. Same robots may be used in different events.
7. Same robot cannot be reused by another team in the same event.

## **14. GENERAL INFORMATION:**

1. All participants will receive a Certificate of Participation.
2. Winners and runners-up will receive a Certificate of Merit.
3. A member participating in one team cannot participate in another team for the same event.
4. Participants must thoroughly review this rulebook
  - No rule will be compromised under any circumstances.
  - Teams are advised to keep a copy of this rulebook during the event.
5. Organizers reserve the right to modify rules when necessary.

## **15. PRIZE POOL:**

 **Total Prize Pool: ₹20,000**



## **16. EVENT COORDINATORS:**

President:

Thishan – 8639410265

Event Heads:

Bhuvan Balaji – 8019717512

Saiteja – 9494452784

