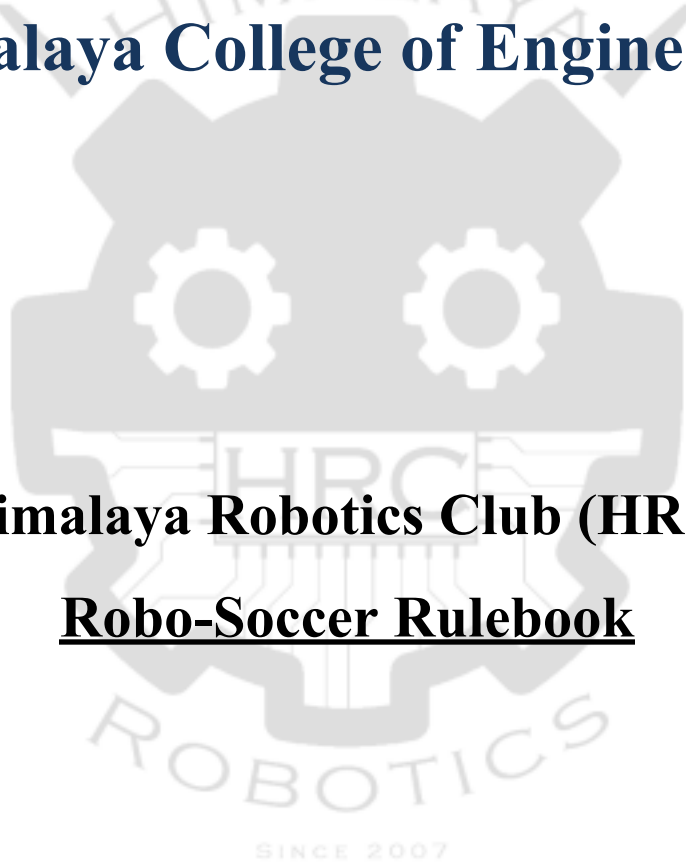




**HIMALAYA EXHIBITION (HEX)**  
**Himalaya College of Engineering**

**Himalaya Robotics Club (HRC)**  
**Robo-Soccer Rulebook**



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## 1. Bot Guidelines

1. The robot must fit within a box of dimensions **40 cm × 40 cm × 40 cm**.
2. The robot must not weigh more than **5 kg**.
3. Robots must be manually controlled at all times.
4. Weapons including blades, spikes, or any sharp protrusions are strictly prohibited.
5. Ready-made toy cars or Lego-based builds are not permitted.
6. A shooting mechanism is not mandatory but is recommended, particularly for penalty shootouts.
7. Goalkeeper robots may extend their structure by up to **10 cm** beyond their original dimensions strictly during active gameplay only.
8. The potential difference between any two points on the robot must not exceed **24 V** at any time.
9. The bots may be inspected/ re-inspected by the organising committee or the judges right before the match starts or during the match.

## 2. Controller Guidelines

1. All controllers must be wireless.
2. Controllers must not interfere with other teams' equipment or communication systems.
3. Automatic target-locking or autonomous targeting systems are not permitted.
4. Match officials reserve the right to pause the game if any controller or communication system poses a safety concern.

## 3. Arena and Ball Specifications

1. The arena is a **550 cm × 365 cm** rectangular field enclosed by a boundary wall.
2. Field markings will follow standard football conventions, including the centerline, center circle, and penalty (D) area.
3. The goalpost dimensions are approximately **90 cm × 60 cm**.
4. The playing surface will be smooth and matte, with even traction throughout.

5. The ball will be a lightweight foam or plastic soccer ball with a diameter of approximately **10 cm**.

#### 4. Game Rules

##### Match Format

1. Each match is played between two teams of **3 robots each**.
2. Match duration is **6 minutes**, divided into two halves of 3 minutes each, with a **3-minute halftime break**.
3. During halftime, teams may repair robots or replace batteries. No robot substitutions are permitted during match time.

##### Kickoff and Ball-in-Play

4. At the start of each half and after every goal, the ball is placed at the **center spot** and all robots must return to their designated starting zones before play resumes.
5. The referee signals the start of play.
6. If the ball crosses the boundary, the timer is paused and the opposing team restarts play from the point where the ball exited.

##### Scoring and Tiebreakers

7. In the event of a tie at the end of regulation, **extra time of 3 minutes** will be played in two halves of 90 seconds each.
8. If the score remains level after extra time, the winner will be decided by a **penalty shootout**. The penalty spot location will be determined by the referee on the day.

##### Fouls and Misconduct

9. Excessive pushing, intentional collisions, and deliberate arena damage constitute foul play.
10. A **yellow card** serves as a formal warning for foul play.
11. A robot that receives **two yellow cards** in the same match will be issued a **red card** — the robot and its operator are disqualified for the remainder of the match, and the team

must play with a reduced roster.

## 5. General Rules

1. Each team may have a maximum of **4 members**.
2. All robots and controllers must pass a pre-match inspection to verify compliance with the bot and controller guidelines. Teams that fail inspection will be unable to participate.
3. Any team accumulating **more than two red cards** across the competition will be disqualified.

## 6. Organizer's Rights

1. The organizers reserve the right to modify these rules prior to the event.
2. Any rule changes will be communicated to all teams before matches begin.
3. All decisions made by the organizing committee and referees are final and binding.

## 7. Prize Distribution

- Awards will be presented during the official closing ceremony.
- At least one representative from the winning team should be present to receive the award.
- The announced prize amount is final and will be distributed without any VAT deductions.

## 8. Certificate Policy

1. A **Certificate of Excellence** will be awarded to the winning team.
2. A **Certificate of Participation** will be awarded to all teams who compete.
3. Teams disqualified for rule violations are not eligible for any certificate.