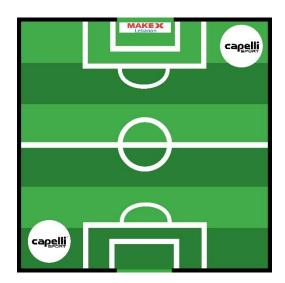
# **(Section 2)** Capelli Sport - Soccer Category — Proposed Rules

## 1. Field & Equipment

- Field size: Square field (e.g., 125 × 125 cm).
- **Goals:** Two low-profile goals (20 cm wide) fixed on each side.
- Ball: Soft foam ball (6–8 cm diameter).
- Robots allowed: mBot2, CyberPi, Codey Rocky or equivalent.
- Maximum dimensions: Robot footprint must not exceed 22 × 22 cm.
- **Robot weight limit:** 1.5 kg max (to avoid excessive impact).



#### 2. Match Format

• Teams: 1 vs 1 robot.

### Duration:

- o 2 halves of 2 minutes each.
- o 30 seconds break in between.
- **Start position:** Each robot inside the Capelli Sport circle near the goal on each side.
- **Kickoff:** Ball placed at the center by referee.

# 3. Game Objectives

- Score goals by pushing or redirecting the ball into the opponent's goal.
- The robot must **not** pick up the ball, grab it, or trap it underneath.

#### 4. Movement & Contact Rules

#### Allowed:

· Light pushing.

- Bouncing.
- Driving around or blocking space.

### Not Allowed (to avoid chaos & damage):

### No high-speed ramming

o Max speed must be limited in code (recommend 50–60% speed limit).

### No lifting or flipping the opponent

o Designs that include arms, claws, or levers are banned.

## No pinning the opponent

- o You cannot block the opponent against a wall for more than **5 seconds**.
- o Referee counts aloud: "1...2...3...4...5".
- o If pinning persists → free kick.

### No dangerous attachments:

- No sharp edges
- No metal protrusions
- No rotating blades
- No drills, saws, or tools (obviously!)

### 5. Ball Handling Rules

- The robot may push the ball with its body.
- It cannot trap the ball inside a mechanism.
- If the ball gets stuck under a robot, referee stops play → ball drop.

#### 6. Fouls & Penalties

### Minor Fouls (warning):

- Accidental pushing from the side.
- Robot blocking the ball without moving for 10 seconds (stalling).

### Major Fouls (penalty kick):

High-speed ramming

- Pinning longer than 5 seconds
- Grabbing/trapping the ball
- Intentionally damaging the opponent

## Red Card (disqualification):

- Robot that repeatedly crashes intentionally
- Robot that uses illegal mechanisms
- Robot that causes visible damage

## 7. Penalty Procedures

#### Free Kick

- Ball placed at the nearest open zone.
- Opponent stays 20 cm away.

### **Penalty Kick**

- Ball placed 15 cm from the goal.
- Opponent is frozen (motors off) for 3 seconds.

### Reset

- For robot stuck, broken code loop, or flipped.
- Referee may reset the robot once per match.
- Additional resets → goal awarded to opponent.

### 8. Safety & Code Requirements

- All robots must be checked before the game:
  - √ Firmware
  - ✓ Battery level
  - √ Speed limit
  - √ No aggressive attachments
- Teams must upload code via USB before the match to verify:
  - o No unpredictable "boost" mode
  - Motors capped at agreed percentage

### 9. Speed Regulation Rules

To ensure fairness between robots, prevent collisions, and keep the match safe, the following speed-control rules are added:

### 9.1 Motor Power Limitation (Mandatory)

Before each match, the referee must inspect the robot code.

#### Rule:

All motor speeds must be capped at 40 RPM maximum.

Robots whose code exceeds the speed cap will **not be allowed to enter the match** until the issue is corrected.

### 9.2 The Referee Speed Test (Match Inspection Protocol)

To validate that no robot has a hidden boost or speed advantage, the referee must perform a **Speed Test** before each match.

### **Procedure**

- 1. Place the robot on its starting goal line.
- 2. The referee instructs the team to run "forward" in a straight line.
- 3. The robot must require **at least 2 seconds** to cross the field from one goal line to the opposite side.

#### **Outcome Rules**

- If the robot crosses in less than 2 seconds → It is considered too fast and must be reprogrammed.
- The robot is **not allowed to start the match** until it passes the test.
- Hidden "boost modes," acceleration tricks, or remote speed changes are strictly forbidden.

### 10. Scoring System

- Goal = 1 point
- Own goal = 1 point to opponent
- If ball bounces and enters goal → counts
- If a robot pushes an opponent into the goal → not a goal, reset

# 11. Winning

- Highest score after 2 halves wins.
- If tie →
  - o Golden Goal (30 seconds)
  - $_{\circ}$  If still tied  $\rightarrow$  3-shot penalty shootout (ball placed center, robot must push it into goal)

# 12. Fair Play

- Teams must follow spirit of healthy competition.
- Any attempt to damage or hack opponent-robot radio signals leads to disqualification.