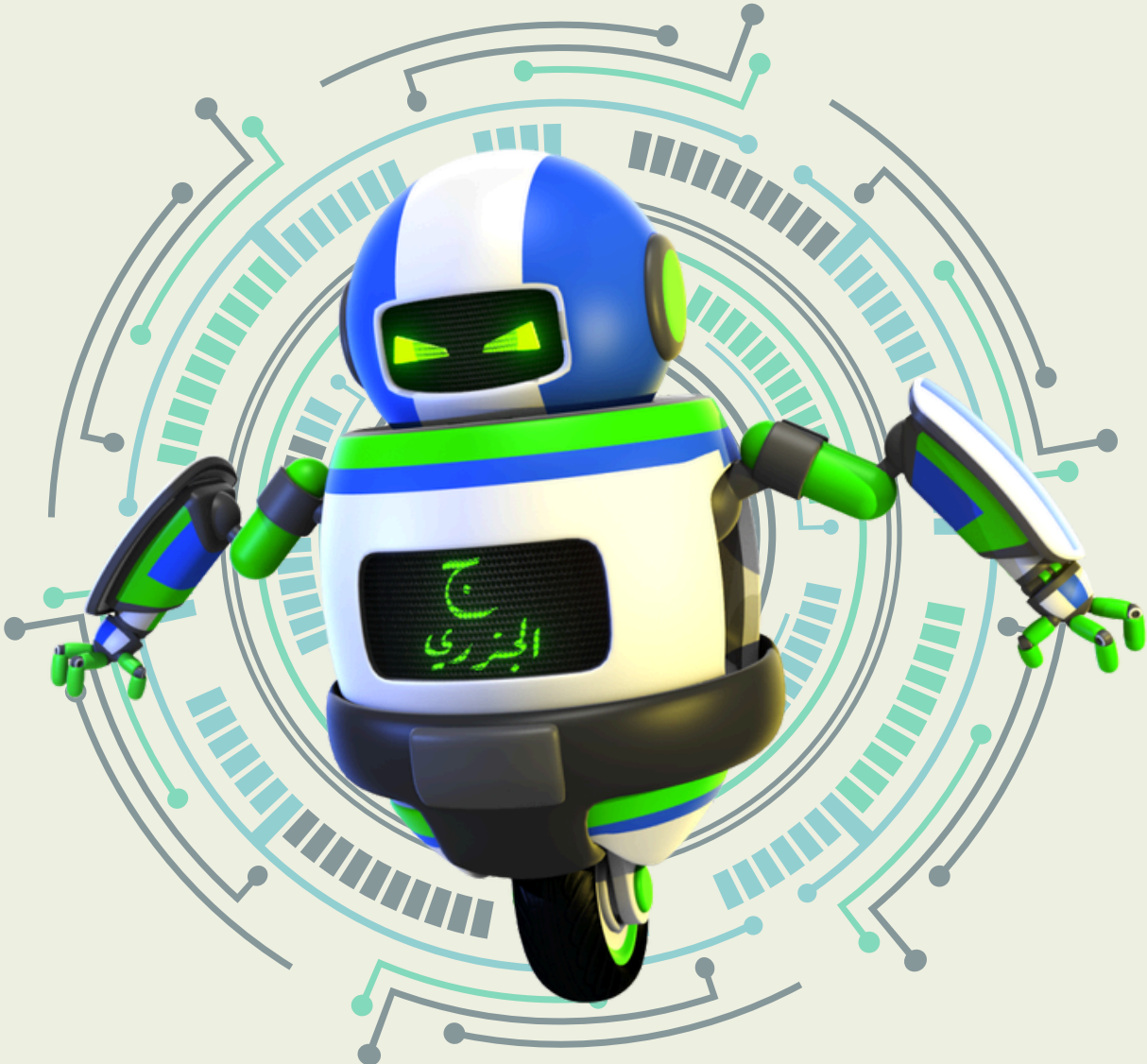


GUIDE BOOK



International Islamic School Robot Olympiad
أولمبياد الروبوتات العالمي لمدرسة إسلامية

ROBOT SUMO RC BASIC



GAME DESCRIPTION

To improve teamwork and evaluate participants' ability to design robots with high stability and the ability to control robots to play soccer.

PARTICIPANT TERMS AND CONDITIONS

- The competition is open to participants from Indonesia and the Indonesian Foreign participants through the following categories :
 1. Junior Category [age of Under 12 years old]
 2. Senior / Open Category [age of under 19 years old]
- Each team consists of a maximum of 7 participants including. Each participant (except assistant teacher/team manager) is only allowed to register join a team only.
- Team registration must be done online at the website.
- Eating & drinking are not provided.
- The Robot Kit is not provided by the committee

ROBOT RULE

ROBOT SOCCER RC JUNIOR

Robot Specifications.

- Each team must have two robots with clear identification (color, number, logo/team name).
- Each team must have its own robot; sharing the same robot between teams is prohibited during the competition.
- Maximum robot dimensions (L x W x H) are 10x10x10 cm.
- Maximum robot weight is 500 grams.
- Maximum battery voltage is 9 volts, measured from the battery terminal/connector.
- Yellow DC TT gearbox motors are required, as shown in the example below:



GAME SYSTEM

a. Sumo Games

A game consists of three rounds, each lasting one minute. The winning team receives one round point, while the losing team receives no round points. If the match ends in a draw, each team receives one round point. The winner of a sumo game is the team with the most round points. The winner of a sumo game receives three points, and the loser receives zero points. If the score remains tied after two rounds, the winner will be determined by additional rules set by the committee.

b. Round Winner

The robot that successfully knocks the opposing robot out of the arena (with its entire body touching the floor) will be declared the winner of that round. If both robots fall out of the arena, the last robot to fall (with its entire body touching the floor) will be declared the winner. A tie is declared if both robots remain in the arena until the round's time limit.

c. Knockout Round

- The knockout round will be divided into two pools, with the winner of each pool becoming the grand finalist of RC SUMO IISRO 2025.
- At each level, robots will receive one sumo game (3 rounds), with each round given a time limit of 1 minute.
- To advance to the next level, the team that first scores 2 points is the winner (2 winning sets).
 - 1.If neither robot falls in a round, the round is declared a draw.
 - 2.If both robots remain motionless for 30 seconds due to damage, the round is stopped and both teams are declared a loss.
 - 3.If both teams have the same points, an additional round will be held until a winner is determined.
- Teams that lose in the top 8 will be relegated to the Lower Bracket for another chance to compete.
- The scoring system in the Lower Bracket is the same as in the Upper Bracket.
- Teams that lose in the Lower Bracket are disqualified from competing.

GAME CHALLENGE

Robots will compete against each other to knock their opponents out of the arena under various conditions (e.g., touching the floor or outside the white line). The robot that knocks its opponent out first will be declared the winner of that round.



COMPETITION RULES

BEFORE THE MATCH

1. Participants must meet the administrative requirements (forms and identification).
2. Participants must arrive 15 minutes before the match.
3. Robots must pass the robot specification test.
4. Team name tags provided by the committee must be attached to the front of the robot.
5. Participants may use the designated pit stop area as appropriate.
6. Participants who are not yet competing are not permitted to interfere with participating teams or other robots.
7. Both competing robots will undergo a 30-second test drive. This test drive ensures there is no signal interference between the robots.
8. Robot damage before, during, or after the match is not the responsibility of the committee, and participants are expected to bring their own repair equipment (e.g., screwdrivers, pliers, laptops, spare parts, cable reels, etc.).

DURING THE MATCH

1. Participants are advised to wear shoes and cloth gloves.
2. The time available for robot preparation in each round is 1 minute.
3. Operators are only allowed to operate one RC Sumo Robot during IISRO 2026.
4. In each sumo game, operators are allowed to alternate with their teammates, but they are not allowed to alternate with their team members during that game.
5. Participants are prohibited from littering or damaging the track.
6. Robot operators can only control their robots from the sidelines.
7. Robots must stand behind the line and must not move until the referee signals them.
8. Robots are allowed to start moving when the referee signals them.
9. Competitors are not allowed to change power supplies during the match. Power supply changes can be made during a timeout and must be checked according to specifications.
10. If a penalty is awarded, the round is stopped and restarted.
11. Penalty points are awarded if:
 - Participants touch their own or the opponent's robot during the match.
 - The participant physically interferes with the opponent.
 - The robot moves before the referee gives the start signal.
 - The robot remains motionless for 30 seconds after the referee gives the start signal. The participant is late to the game (the lateness limit is 10 minutes after the team's call).



- No words containing elements of race, religion, race, and intergroup relations (SARA).
- The participant or their companion disrupts the game.
- The companion enters the sterile arena.

12. Time Out Provisions:

- Each team has a 30-second time out before the start of the round. (One time out per team in one Sumo game.)
- Battery changes are permitted during time outs.
- The robots of competitors who do not request a time out may not be touched or moved.
- If neither competitor feels they need a time out, they can proceed directly to the next round.
- The team requesting a timeout may only prepare the robot outside the sumo track.
- Only participants may prepare or touch the robot during the timeout.

AFTER THE MATCH

1. Participants must maintain good sportsmanship during the match.
2. Non-competing teams are permitted to spectate, but must remain outside the sterile area and not interfere with the competing teams.

VIOLATIONS AND CONSEQUENCES

Participants will be disqualified if:

1. There is a sensor on the robot.
2. They incur three penalties during the event.
3. They do not meet the established specifications.
4. They add components to the robot that do not meet the robot's specifications.
5. They damage the field and/or existing facilities.
6. They commit physical violence against the committee.
7. The judges' decision must be accompanied by a clear rationale.

