



# Robo Sumo: Official Rule Book

**This competition is open to all school, college and university students aged 12 and above.**

## 1) General Rules:

- Each participating team may consist of upto 4 members.
- If the students from different Institutes/Universities want to join hands and form a team in collaboration, they can do so.
- No team member will be added further once the registration is done.
- If you want to register for the competition you must need to fill the form on website.
- Disqualification will be made on the spot, if any of the team members are found arguing (using slang/physical contact) with the organizing team or the member of another team.
- Organizing team have the right to amend the competition rules/duration at any time.
- The panel of judges for each competition will be comprised of members from the relevant fields and past experiences in competitions.
- The decision of judges will be final.
- If you win a competition, we will notify you at the end of the whole event.
- The prize will not be transferable to another team.
- No part of a prize is exchangeable for cash or any other prize.
- Incorrectly completed entries will be disqualified.

## 2) Game Rules:

- The objective of the game is to push the opponent's robot out of the arena.
- Each round will be a maximum of 2 minutes, unless a match terminates early.
- Timing shall start once the start signal is given.
- Once the Robot moves, team members will not be allowed to touch the robot.
- If the robot moves out of the arena either by itself or by being pushed by the opponent, the robot that remains in the arena wins the match.
- If neither the robot leaves the arena within 2 minutes time limit, the robot that is closer to the center of the arena wins the match.
- If at any time during a match, a robot becomes stuck on the arena floor due to being pushed by an opponent and cannot free itself within 30 seconds, the Referees may authorize an intervention to assist in freeing the robot. This intervention time will not be included in the total match duration.



- If the robot is immobilized for 20 seconds due to some reason, timeout is allowed.
- Only one timeout of 2 minutes for each team is allowed during the match, and any time taken for the timeout will not be added to the overall time of the match.
- After one timeout it will be considered a knockout.
- Robots are not allowed to use any weapons or to flip each other.

### 3) Robot Specifications:

#### a) Dimensions and Weight:

- The maximum size of the robot should be 12 x 12 x 12 inches.
- If robot exceeds the dimension 1 point will be deducted per inch.
- The maximum weight of the robot should be 5 kg.
- All components mounted on the robot will be counted as part of the robot's total dimensions.
- All robots will have to pass prior inspection before entering the competition.
- Any robot exceeding these limits will be immediately disqualified.
- Robots weighing more than 5 kg will incur a penalty of 2 points per 100 gram for any additional weight. For example, a robot weighing 5.2 kg will have 4 points deducted from its score. If a robot's weight exceeds 5.5 kg, it will be disqualified from the competition. The disqualified robot may be allowed to reduce its weight within a given time frame, if failed then it will not be allowed to participate further. It is the responsibility of the team to ensure that their robot meets the weight requirements and that any modifications made during the competition do not cause the robot to exceed the weight limit. The weighing of the robots will be done before the start of the competition, and the weight limit will be strictly enforced.
- Robots that weigh under 3 kg will be awarded 10 additional points at the start of the match. This rule is designed to encourage the development of smaller, more agile robots that can compete with larger, heavier robots. Additional points will be added to the robot's starting score and will not affect the scoring system during the match.
- It is important to note that the weight of the robot will be determined before the start of the match, and any modifications made during the competition that cause the robot to exceed the weight limit will result in disqualification.

#### b) Electronics:

- The robot must be remote-controlled and have an on/off button.
- All types of transmitter and receiver modules are allowed such as Bluetooth module etc.
- Any type of microcontroller is allowed.
- There is no limit on the number and types of motors used in the robot.
- Any kind of motor driver IC or module can be used.
- Power sources that are considered dangerous or unsuitable by the judges will not be permitted.



- The voltage of the robot electrical power source must not exceed 24-volt DC.
- Power banks may be used.

#### 4) Important Dates

- **Competition Dates:** October 12-13, 2024

#### 5) Collaborative Partner

This competition will be hosted in collaboration with Robo Automators.

#### 6) Contact Information

For any questions or additional information, please contact us at:

- **Email:** [contact@teknofestpakistan.com](mailto:contact@teknofestpakistan.com)
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