

RULES & REGULATIONS

SumoBot LEGO Division

22-24 May 2020

University of the
Sunshine Coast Stadium

Entries via
www.roboraiveinternational.org

Register by April 15,
2020

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RoboRAVE Australia extends an invitation to all Australian and International teams to enter the *RoboRAVE Australia SumoBot LEGO Division*. No prior experience or qualification is necessary.

THERE ARE NEW RULES THIS YEAR

LEGO ONLY SUMO COMPETITION (All age divisions)

The objective of the sumo competition is to push your opponent out of the ring. Any LEGO robot can be used but it must be **fully made of LEGO branded parts**, autonomous and must not be remote controlled in any fashion and must conform to the design specifications.

Competition Ring: 100cm diameter black circle with a 5cm white border on 15mm board elevated 10cm from the ground.

OPEN SUMOBOT COMPETITION (RoboRave International Rules)

As above but **any micro controller** based robot can be used with **any parts**, custom or off the shelf.

Full Open Division rules available at www.roboraiveinternational.org/challenges

GAME PLAY

1. Robots begin by touching the white line at opposite sides of the table from each other, positioned in any orientation. The robots must pause for **1 second** after the start buttons are pressed. The loser is the robot that leaves the ring first, which is defined as touching the surface upon which the competition ring is placed. The referee may call a draw after 60 seconds or force a restart after 5 seconds of "locked robots" at their discretion. Robot handlers must not touch their robots unless instructed by the referee. 5 minutes is allocated per match, if there is no winner in this time then it will be classed as a draw.
2. Conflict Resolution - during game play, the referee's decisions will be final.

SUMO ROBOT DESIGN RULES

1. Maximum size of robot is **250mm by 150mm** with no height restriction as measured with any articulating components in their upright position.
2. Maximum mass of **1000 grams**.
3. Size and weight restrictions are strictly enforced to make the competition fair for all competitors. All robots must be weighed and measured during registration on the day to receive their quality assurance stickers for competition.
4. Articulating or moving components are allowed as long as they fit the above design rules however the *no intentional harm rule* applies- this means that flippers and skid plates are fine but deliberately destructive mechanisms such as abrasive spinners or hammers etc. are not allowed.

SUMO SCORING

1. Each robot will compete in a series of round robin matches. The number of matches will be determined on the day of competition based upon the time permitted.
2. A match will be over once a team has won twice against their opponent. 3 points awarded for a win, 1 point for a draw and 0 points for a loss.
3. Teams' points will be tallied and displayed during the competition. The top 16 teams will be selected for the finals matches. If the total number of teams is large, there will be two divisions running, coming together in the final rounds.
4. The finals matches will be played as elimination matches. Trophies will be awarded to the top 2 teams in each age group. Spot prizes will be given for original and technical robot designs.