

RULES & REGULATIONS

Contact / Registration:

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RoboCoast
Sunshine Coast Robotics



Tuesday 7 May 2019

Mountain Creek SHS

Secondary Campus

Free Entry 9 am – 2 pm

Register by May1 at:

srich252@eq.edu.au

RoboCoast extends an invitation to Queensland High Schools and Primary Schools to enter the *RoboCoast Sumo Robot Competition 2019*. No prior experience or qualification is necessary.

THERE ARE NEW RULES THIS YEAR

LEGO ONLY SUMO COMPETITION (Primary & Secondary 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.

OPEN SUMO COMPETITION (All ages compete together)

As above but **any micro controller** based robot can be used with **any parts**, custom or off the shelf. Robots must still conform to the same design rules.

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

GAME PLAY

1. Robots begin 5 cm away from each other in the centre. The robots must pause for **3 seconds** 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.

2. Conflict Resolution - during game play, the referee's decisions will be final.

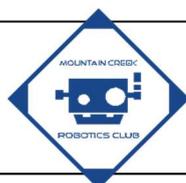
SUMO ROBOT DESIGN RULES

1. Maximum size of robot is **250mm long by 150mm wide** 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 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 3 points. A point will be awarded to the winning team for each successful round in a match. The number of rounds in each match will vary depending upon the points that teams accrue.

3. Teams' Wins and Losses will be tallied and displayed during the competition. The top 16 teams will be selected for the finals matches.

4. The finals matches will be played as elimination matches. Trophies will be awarded to the top 2 LEGO secondary teams, top 2 LEGO primary school teams, top LEGO all-female team and top open team. EV3 prizes will be given to the Primary and Secondary LEGO division winners. Spot prizes will be given for original and technical robot designs.