

## **General rules**

1. Regardless of the category all the models have to be built from unmodified Lego pieces. The only allowed exceptions are custom stickers, rope, rubber bands, BuWizz bricks and lubrication.
2. Only BuWizz powered vehicles are allowed to compete.
3. Only one vehicle per competitor is allowed to compete in a category.
4. Every competing model/vehicle/bot will be marked with a unique number
5. For off-roaders with winches a heavy rock will be provided as a winch anchor point, which has to be placed a minimum of a model's length away.
6. BuWizz team will provide all the competitors with BuWizz bricks which competitors can keep for 50% discount price.
7. Vehicles have to look realistic with a minimum of a cabin, seat and a steering wheel (naked chassis is not allowed). This applies to all categories but bots.
8. Each category will have its own, partial winners.
9. Positive points of all the categories are added up and used to determine the final winners.
10. Competitors will have 15 min of practice time on tracks before race.

## **1. Normal off-road race**

### **General rules:**

1. Off-road race will be held on a course with a mix of fast straights and challenging terrain.
2. The course may be routed in several laps.
3. Multiple competitors (up to 4) competitors will compete at once.
4. Each model has an independent spotter assigned who checks for penalties and race laps progression.
5. Models have to drive through the gates, moving or breaking results in 10 seconds penalty added to the scoreboard for each time.
6. Touching gates without moving them results in no penalties.
7. If a model gets stuck, disabled, flipped or needs assistance, 10 seconds penalty are added to the scoreboard for each time.
8. Only exception to above rule is using a winch to pull if a model has one.
9. Points are awarded according to the final position, last position receiving 10 points, second to last +10, etc...
10. Race time will be limited, not finishing the course in time will result in receiving zero points.

### **Model specific rules:**

1. Wheeled and tracked vehicles are allowed.
2. You may use one PU/PF motor drive motor per wheel/track (dual wheels count as single wheel).
3. You are allowed to use an unlimited amount of BuWizz bricks, motors for steering, gearboxes, differential locks, etc. As long as they do not power the drive wheel/tracks directly.
4. Suspension system is required.
5. Due to the track size width of the models is limited to 30 cm.
6. Each model will be inspected before competition.

### **Recommendations:**

1. Gearboxes are HIGHLY recommended for the high speed straight section.
2. Working fake engines and steering wheels are recommended but not required.
3. Unique designs and color combinations are encouraged to differentiate models.
4. Expect rough physical contact during races and build the body appropriately.

## **2. Unlimited off-road race**

### **General rules:**

1. Off-road race will be held on a course with a mix of fast straights and challenging terrain.
2. The course may be routed in laps.
3. Multiple competitors (up to 4) competitors will compete at once.
4. Each model has an independent spotter assigned who checks for penalties and race laps progression.
5. Models have to drive through the gates, moving or breaking results in 10 seconds penalty added to the scoreboard for each time.
6. Touching gates without moving them results in no penalties.
7. If a model gets stuck, disabled, flipped or needs assistance, 10 seconds penalty are added to the scoreboard for each time.
8. Only exception to above rule is using a winch to pull if a model has one.
9. Points are awarded according to the final position, last position receiving 10 points, second to last +10, etc...
10. Race time will be limited, not finishing the course in time will result in receiving zero points.

### **Model specific rules:**

1. Wheeled and tracked vehicles are allowed.
2. Any type and number of Lego motors are allowed for any function.
3. Suspension system is required.
4. Working fake engines and steering wheels are required.
5. Due to the track size width of the models is limited to 30 cm.
6. Each model will be inspected before competition.

### **Recommendations:**

1. Gearboxes are HIGHLY recommended for the high speed straight section.
2. Unique designs and color combinations are encouraged to differentiate models.
3. Expect rough physical contact during races and build the body appropriately.
4. Due to the expected high speeds of this completion, there may be running involved.

### **3. Amphibious race**

#### **General rules:**

1. Amphibious race will be held on a course with a mix of rough terrain, straights and still water.
2. Expected ratio between water and land sections of the track is 50/50.
3. Models must be able to transition from land to water and opposite without assistance – expect slopes up to 30 degrees.
4. The course may be routed in laps.
5. Multiple competitors (up to 4) competitors will compete at once.
6. Each model has an independent spotter assigned who checks for penalties and race laps progression.
7. Models have to drive through the gates, moving or breaking results in 10 seconds penalty added to the scoreboard for each time.
8. Touching gates without moving them results in no penalties.
9. If a model gets stuck, disabled, flipped or needs assistance, 10 seconds penalty are added to the scoreboard for each time.
10. Only exception to above rule is using a winch to pull if a model has one.
11. Points are awarded according to the final position, last position receiving 10 points, second to last +10, etc...
12. Race time will be limited, not finishing the course in time will result in receiving zero points.

#### **Model specific rules:**

1. Wheeled and tracked vehicles are allowed.
2. Unlimited number of PF and PU motors are allowed.
3. Any kind of water propulsion is allowed.
4. BuWizz bricks have to be wrapped in sealed bags to protect from water.
5. Each model will be inspected before competition.

#### **Recommendations:**

1. All wheel drive is recommended.
2. Suspension system is recommended.
3. Paddle wheels or tracks used for water propulsion may spray water inside the model.
4. When using a screw a retraction mechanism is recommended.
5. Keeping electronic components as far away from water as possible is highly recommended.
6. Unique designs and color combinations are encouraged to differentiate models.
7. Expect to get wet and dress appropriately.

#### **4. Sumo competition**

**General rules:**

1. Sumo competition is a tournament style which may be held at multiple ring areas at once.
2. Competition will be held on a flat ring area with edges marked.
3. Bots must be able push each other of the ring.
4. Generally only two bots compete in a single ring at once.
5. The bot has to be pushed fully from marked ring area or disabled to count.
6. Points are awarded according to the final position, last position receiving 10 points, second to last +10, etc...

**Bots specific rules:**

1. Wheeled and tracked vehicles are allowed.
2. Unlimited number of PF and PU motors and BuWizz bricks are allowed.
3. Besides driving the model can use any amount of functions such as ramps, spinners, etc...
4. Weight of the models is limited to 1000 g  $\pm$  100 g.
5. Size of the models is limited to a max of 25x25x25 cm at start.
6. Each model will be inspected before competition.

**Recommendations:**

1. All wheel drive is recommended.
2. Use of low profile soft tyres is recommended.
3. Unique designs and color combinations are encouraged to differentiate models.
4. Expect very rough physical contact during the sumo.

## **5. Mini racers competition**

### **General rules:**

1. Mini racers competition will be held on a flat smooth surface indoors during a closed course of several laps.
2. The course will have a mix of fast straights and sharp corners.
3. All competitors will race at once.
4. Disabled (mechanically broken down) models will be removed from the race.
5. If a model flips and is still driveable, it can be put back on its wheels without penalty.
6. Points are awarded according to the final position, last position receiving 10 points, second to last +10, etc...
7. Race time will be limited, not finishing the course in time will result in receiving zero points.
8. Starting positions are randomly assigned.

### **Mini racers specific rules:**

1. Only wheeled vehicles are allowed.
2. One BuWizz brick and a maximum of 2 PF/PU motors are allowed for driving.
3. Unlimited number of motors is allowed for steering, gearboxes, etc. As long as they do not power the drive wheels directly.
4. Size of the models is limited to a max width of 15 cm, length of 30 cm and height of 15 cm.
5. Each model will be inspected before competition.

### **Recommendations:**

1. Use 42109 as a guideline for size, style and general shape of your racer.
2. All wheel drive is recommended for best possible control.
3. High steering angle is recommended.
4. A quick switching gearbox is recommended to switch between high accelerating and high speed gears.
5. Unique designs and color combinations are encouraged to differentiate models.
6. Expect very rough physical contact and crashes during the race.

## **6. Your favourite model**

### **General rules:**

1. All competing models will be exhibited for this competition.
2. This competition is voting based.
3. Each competitor votes for their mechanically and/or aesthetically favourite model(s) from any of the competing categories.
4. Each competitor gets 3 paper slips for voting, each counting as one point.
5. Competitors can't vote for their own models.
6. Points are awarded according to the final position, last position receiving 10 points, second to last +10, etc...