



# BuWizz Gathering 2024

## General rules

- 1. The models must be original designs, built by the competitors.**
- 2. Modifications of existing sets are not allowed, except in the 42160 BuWizz MOD category.**
- 3. Non-LEGO sets are forbidden.**
4. Regardless of category, **all models must be built from unmodified LEGO pieces.** The only allowed exceptions are custom stickers, rope, rubber bands, BuWizz motors and bricks and lubrication.
5. Only BuWizz powered vehicles are allowed to compete.
6. Only one vehicle per competitor is allowed to compete in a category.
7. Every competing model will be marked with a unique number.
8. Vehicles must look realistic with a minimum of a cabin, a seat and a steering wheel (naked chassis is not allowed).
9. Each category will have its own category winners, except SUMO bots.
10. Competitors will have 15 minutes of practice time on tracks before each race.
- 11. If there are less than 5 competitors per category, there will be no rewards.**
- 12. For between 5 and 9 competitors per category, there will be only the reward for the winner.**
- 13. If there are at least 10 competitors per category, there will be three rewards for top 3 competitors.**
- 14. Competitors must compete in at least two of the categories.**
- 15. You have to build a new model for every category, re-using previous year's models is not allowed.**



# **BuWizz Gathering 2024**

## **1. 42160 BuWizz MOD competition**

### **General rules:**

1. The purpose of this entry category is to allow newcomers to partake in a competition with mechanically identical models
2. Each model must be built exactly as per 42160 BuWizz MOD instructions, found on our webpage: <https://BuWizz.com/shop/BuWizz-motorization-kit-for-42160-lego-technic-audi-rs-q-e-tron/>
3. Only deviation from the instructions allowed is in the colors of the pieces and in use of lubrication.
4. Any kind of custom stickers are allowed.
5. Around 4 competitors will race simultaneously on a moderately varied off-road track for 5 laps.
6. Each model will be inspected before the competition.
7. Disabled (mechanically broken down) models will be removed from the race.
8. If a model flips and is still drivable, it can be put back on its wheels without penalty.
9. Each model will have an independent spotter assigned, who will check lap progression.
10. Points will be awarded according to final times, last competitor receiving 10 points, second to last 20 points, each faster competitor +10 points, etc...
11. Race time will be limited to 10 minutes, not finishing the course in time will result in receiving zero points.
12. Starting positions will be assigned randomly.



# **BuWizz Gathering 2024**

## **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 will be routed in laps, each competitor must complete 1 lap.
3. One competitor will compete at once.
4. Each model will have an independent spotter assigned, who will check for penalties and race laps progression.
5. Models must drive through the gates, breaking them results in 10 seconds penalty added to the scoreboard for each occurrence.
6. Touching gates without breaking them results in no penalties.
7. If a model gets stuck, disabled, flipped or needs assistance, 10 seconds penalty will be added to the scoreboard for each occurrence.
8. The only exception to above rule is using a winch to pull if a model has one.
9. Points will be awarded according to final times, last competitor receiving 10 points, second to last 20 points, each faster competitor +10 points, etc...
10. Race time will be limited to 10 minutes. If competitor will not finish the race in 10 minutes, the last gate passed will be scored.

### **Model specific rules:**

1. Wheeled and tracked vehicles are allowed.
2. An unlimited number of PF, PU, or BuWizz motors is allowed for any function.
3. A suspension system is required.
4. Due to the racecourse size, width of the models is limited to 30 cm.
5. Each model will be inspected before the competition.

### **Recommendations:**

1. Gearboxes are HIGHLY recommended for the high speed straight sections.
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 these models, there may be running involved.



# BuWizz Gathering 2024

## 3. Mini racers competition

### General rules:

1. The Mini racers competition will be held on a flat foam track in a course of 10 laps.
2. The course will have a mix of fast straights and sharp corners.
3. Around 4 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 drivable, it can be put back on its wheels without penalty.
6. Each model will have an independent spotter assigned, who will check for lap progression.
7. Points will be awarded according to final times, last competitor receiving 10 points, second to last 20 points, each faster competitor +10 points, etc...
8. Race time will be limited to 10 minutes, not finishing the course in time will result in receiving zero points.
9. Starting positions will be assigned randomly.

### Mini racers specific rules:

1. Only wheeled vehicles are allowed.
2. Unlimited number of PF, PU, or BuWizz motors is allowed for any function.
3. Size of the models is limited to a maximum width of 15 cm, length of 30 cm and height of 15 cm (1:16 scale)
4. Each model will be inspected before the competition.

### Recommendations:

1. Use the current 1:16 scale line-up as a guideline for size, style and general shape of your racer.
2. High steering angle and accuracy is recommended with proper geometry.
3. Foam track has a very high traction and rolling resistance, higher torque output is recommended.
4. Concentrate more on maneuverability, accuracy and acceleration than top speed, since bumping into foam sidewalls slows down models a lot.
5. Unique designs and color combinations are encouraged to differentiate models.
6. Expect very rough physical contact and crashes during the race.



# BuWizz Gathering 2024

## 4. Mini Truck Trial

### General rules:

1. Mini Truck Trial is less about performance, but more about accuracy and maneuverability.
2. Competition will be held on a mix of natural and artificial track that will be set up on the spot.
3. Track width is limited to around 15 cm.
4. One competitor will compete at once.
5. Each model will have an independent spotter assigned, who will check for penalties.
6. Models must drive through the gates, touching them results in 10 seconds penalty added to the scoreboard for each occurrence.
7. If a model gets stuck, disabled, flipped or needs assistance, 10 seconds penalty is added to the scoreboard for each occurrence.
8. The only exception to above rule is using a winch to pull if a model has one.
9. Points will be awarded according to final times, last competitor receiving 10 points, second to last 20 points, each faster competitor +10 points, etc...
10. Race time will be limited to 10 minutes. If competitor will not finish the race in 10 minutes, the last gate passed will be scored.

### Mini Truck Trial specific rules:

1. Only wheeled models are allowed.
2. Maximum wheel size is 62.4 mm.
3. Unlimited number of PF, PU, or BuWizz motors is allowed for any function.
4. Each model needs to use some type of suspension.
5. All wheel drive is required.
6. Each model must look like a truck (not a pickup, but a truck-truck, lorry, etc.)
7. Track width is limited to around 15 cm, so models should be narrower than that.
8. Each model will be inspected before the competition.

### Recommendations:

1. Making the model as compact as possible will leave you more space to navigate the gates.
2. Unique designs and color combinations are encouraged to differentiate models.
3. Expect rough physical contact during trials and build the body appropriately
4. Concentrate more on maneuverability and accuracy, than top speed



# BuWizz Gathering 2024

## 5. 1:10 Off-road vehicles competition

### General rules:

1. 1:10 Off-road vehicles competition will be held partly on the course from the Unlimited off-road competition.
2. The course will be routed in laps.
3. One competitor will compete at once.
4. Models must drive through the gates, breaking them results in 10 seconds penalty added to the scoreboard for each occurrence.
5. Touching gates without breaking them results in no penalties.
6. If a model gets stuck, disabled, flipped or needs assistance, 10 seconds penalty is added to the scoreboard for each occurrence.
7. Points will be awarded according to final times, last competitor receiving 10 points, second to last 20 points, each faster competitor +10 points, etc...
8. Race time will be limited to 10 minutes. If competitor will not finish the race in 10 minutes, the last gate passed will be scored.

### Model specific rules:

1. Each competitor must design an accurate 1:10 representation of a current or past existing off-road or SUV vehicle.
2. The model can be modelled after any existing ICE/hybrid off-road or SUV only, BEVs (battery electric vehicles) are not allowed.
3. Fake ICE and at least 2 - speed gearbox must be replicated as per existing full-size vehicle (reason why BEVs are not allowed).
4. You must build an original 1:10 vehicle, MODs of existing sets are not allowed.
5. A suspension system is required on all wheels.
6. Steering wheel must be connected to the steering mechanism.
7. The interior must include the same number of seats and basic details as the original vehicle.
8. A maximum of two BuWizz motors are allowed for driving, unlimited number motors are allowed for any other function.
9. Each model will be inspected before the competition.

### Recommendations:

1. This category is primarily all about accurate looks and details.
2. Use existing 1:10 lineup as a guideline for the style and high level of detailing.
3. The race will be held on a moderately varied terrain, so design the model accordingly (ground clearance, suspension, ingress protection).
4. Since the models may reach high speed, some running may be required.
5. Unique designs and color combinations are encouraged to differentiate models.



# **BuWizz Gathering 2024**

## **6. Unofficial Battle/Sumo Bots**

### **General rules:**

1. Sumo competition is an unofficial tournament style which is held on a raised flat ring area.
2. There will be no rewards awarded for this category
3. Bots must be able push each other off the ring or disable each other.
4. Generally, only two bots compete in a single ring at once.
5. Wheeled and tracked vehicles are allowed.
6. Unlimited number of PF, PU and/or BuWizz motors is allowed for any function.
7. Besides driving, the model can use any number of functions such as ramps, spinners, etc...
8. Weight and size of the models is 1000  $\pm$ 100 g, size is limited to 25 x 25 x 25 cm.