## Robotic Cart Rules - JedoBot 2024

## Principle:

The robot must drive as many laps as possible along the set route in the given time.

## Robot:

The robot must be completely autonomous. The maximal width of the robot is 180 mm and the maximal length is 280 mm . Minimal height is 80 mm . The robot must in no case exceed the dimensional limit and intentionally change its dimensions and shape. The robot must not release any substances, pollute or damage the track.

## Competition:

Robots start together in groups of two to four. The competition has two to four attempts. The overall ranking is decided by the sum of laps from all attempts. The competition runs anti-clockwise. The position in the starting box will be determined by drawn lots. Rounds are counted in quarters. If the robot goes in the opposite direction, the laps are subtracted (only to 0 ). The attempt starts by removing the starting box from the track and ends after the time limit has expired. Non-functional robots and discarded parts are removed only after the trial is over. A stuck robot can be turned off after agreement with the referee.

## Disqualification:

The robot can be disqualified from the competition or from the trial. If it is disqualified from the competition, it is treated as if it did not participate in the competition at all. Disqualification from the competition is only for serious violations of the conditions of the competition (e.g. fraud). If it is disqualified from the attempt, it will be credited with 0 laps. Only the referee can disqualify the robot.

## Track:

The total size of the track is approx. $3.2 \times 3.2 \mathrm{~m}$, it is divided into imaginary squares with a side of 80 cm . The track is bordered only by wooden guardrails with a height of 100 mm and a thickness of $16-22 \mathrm{~mm}$. The inner border is red, the outer border is green (the colour corresponds approximately to Lego bricks). The background (path) is undefined. Guardrails can be laid on OSB boards, laminate or just on the floor. The starting box is an enclosure with a height of min. 100 mm and has no defined colour.


