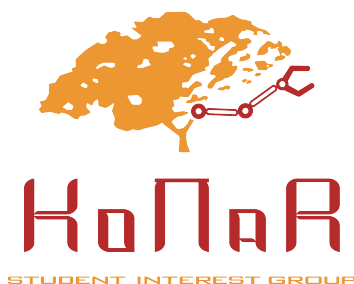


RULES OF ROBOTIC TOURNAMENT

“ XII Robotic Arena ”

Folkrace

“KoNaR” Student Interest Group
Faculty of Electronics
Wrocław University of Science and Technology



Section I

General

§ 1

1. This document regulates rules of the tournament in category “Folkrace”.

Section II

Robot Specification

§ 2

1. Robots can't be pre-built, commercial construction.
2. Maximum dimensions of the robot are 20cm x 15cm.
3. Height of robots is not limited.
4. Maximum mass of robots is 1 kg.
5. Communication with robots during matches is forbidden.
6. Disabling robots remotely is an exception from the point above.

§ 3

1. Robots must be fully autonomous.
2. Robots must be designed so that it can be run at the mark given by the judge.
3. Robots are not allowed:
 - (a) to change its dimensions,
 - (b) to damage the field and endanger the spectators,
 - (c) to emit gases, liquids or dust,

- (d) to actively ram other robots,
 - (e) to use other robots for movement.
4. Robots functionality cannot be dependent on varying environment during tournament, such as lighting (from dusk to bright reflectors), smoke, loud music or laser effects. The show may be lit by regular lightbulbs, halogens, energy saving lightbulbs, fluorescent lamps, LEDs and other lightsources common in households. Organizers have no control over street lighting near windows of the building. During the show it will be forbidden to use camera flashes and other intense light.

Section III

Route Specification

§ 4

1. The field surface and walls are white.
2. The wall at the edge of the field is white and its height is 12 ± 1 cm
3. The parts of the route can be defined by the line in a different color.
4. The trajectory of the track is curved and closed.
5. The width of the track varies between 100-120 cm.
6. The field may have simple obstacles, such as hills, holes, loose material. Additionally, there may be hindering walls, which are installed in a way that a robot who moves along the edges of the wall is not capable of pass the track.
7. The track can be on two levels. This means, that a part of a track may cross another via a bridge, etc.

Section IV

Competition

§ 5

1. The winner is the robot who earns the most points.
 - (a) Each correct completion of the lap gives one point,
 - (b) Each incorrect completion of the lap gives a minus point,
 - (c) A lap is considered completed once the robot crosses the starting line, depending on the movement direction, with the correct direction of movement being determined immediately before the particular race.
2. The points can be earned within three minutes.
3. At the beginning of the competition, the robots are placed at the starting line.
4. The starting positions and the sub-group of the robots will be drawn by lots.
5. The start signal will be given once the competitors are ready.
6. The robot is allowed to begin its movement five seconds after the start signal.
7. If the robot starts to move before the appointed time, it will be considered as a false start.
8. The robot who makes a false start, receives a warning, if it happens for the second time, the robot will be disqualified.
9. The robot that has completed the race or made a false start will be removed from the field by the representative of the team by the order of the referee.

10. If the competition is stopped (for example, all robots are still for 15 seconds), the referee has the right to give an order to the representative of the team to remove the robot that is preventing the movement.
11. The robot who prevents movement is installed in the same place after 10 seconds.
12. If the robot stumbles during the competition and does not prevent other robots from moving, then the representative of the team has the right to decide, whether the robot:
 - (a) is left down in the same place,
 - (b) is returned to the starting line.If a robot is stuck, the team has the right to ask that the robot be placed back on the starting line. Given permission, a team member may do so without disrupting other robots or participants.
13. If the robot is placed on the starting line during the race for whatever reason, one point will be subtracted from the points earned so far.
14. Upon violation of the rules, the referee may disqualify and remove the robot from the track.
15. The sub-groups may have up to five members.
16. There are three races in each sub-group.
17. At the end of the sub-group, the robots will be divided into new sub-groups based on their place.
18. If the number of the points is equal at the end of the races, the ranking will be announced on the basis of an additional race.
19. The winner of the additional race is the robot who first manages to cover one lap in the designated direction. An additional race is only carried out if the robots have earned an equal amount of points. The starting positions of the additional race will be drawn by lots.
20. Only one team member may be closer to the track than two metres and he or she is considered the representative of the team.