



ROBORHYTHM

Overview:

Teams have to build an autonomous robot that can follow a black line and keep track of directions while going through the maze.

Rules for Roborythm are as follows:

1. Vehicle dynamics – The maximum size of a robot is 20 x 20 cm. Dimensional limits for robots shall be strictly enforced. Prior inspection of the robot will be done by the organizing team before the start of the competition. A team can bring only one robot for the participation.
2. Course time – Time is measured from the start line until the robot crosses the finish line. A robot is deemed to have crossed the line when the forward-most part of the robot contacts or crosses over the line.
3. Time limit – A maximum of 5 minutes is allowed for a robot to complete the course. If a robot is unable to complete the course in the allotted time that specific run will be terminated.
4. Attempt limit – A maximum of 3 attempts will be given to each team, the validity of each attempt will expire once the elapsed time exceeds 5 minutes.
5. Autonomous control – Once a robot has crossed the starting line it must remain fully autonomous, or it will be disqualified.
6. Losing the path – Any robot that loses the line course must start again from the latest checkpoint crossed by the robot.
7. Trial run – Teams can have a trial run before the events start but not once it gets started.
8. Changes – No changes in the robot or the program will be allowed once the robot has started its run.

Scoring criteria:

- **Checkpoint**

A = 25 points will be awarded if the robot crosses the checkpoint but it will be counted only once for each checkpoint.

- **Time taken**

B = (180 – Total time taken in seconds to complete the run) points will be awarded for the time taken.

