**ROBOTECH’21**

**FASTEST LINE FOLLOWER**

**Event Code Of Conduct**

* Robots that cause deliberate interference with other robots or damage to the track will be disqualified.
* Humans that cause deliberate interference with robots or damage to the track will be disqualified.
* It is expected that the aim of all teams is to play a fair and clean game.
* The robot participating in the event must be autonomous.
* Lego kits are strictly prohibited. The robot must not be made from any ready-made kit, if found so, the team will be disqualified.
* The Robot must be non-destructive and non-harmful to humans and the track.
* Participants must arrange their own batteries.
* Use of IC engines or compressor is not allowed. All vehicles must depend only on electric motors for their motion and control.
* The Robot must not emit smoke or fire, leak, stain or soil.
* Power source must be on board.
* Robot must have sensors onboard to sense the black line marked on the arena.
* Dimensions: The following size limitations apply for each robot.

Width – Not more than 20 centimeters

Length – Not more than 20 centimeters

Height – Not more than 20 centimeters

Maximum weight must not exceed 5 kg (However a tolerance of 5% is acceptable)

* Power Source:

Only Electrically powered Robots are allowed in the event.

Batteries must be sealed, immobilized electrolyte type (gel cell, lithium, NiCad, or dry cells).

The electric voltage anywhere in the machine should not be more then 12V DC at any point of time.

* Construction:

Any robotic parts/building material can be used until the robot meets the above specifications and the design and construction are primarily the original work of the team. Ready-made robots are not allowed to compete in the competition.

* Game Play

There will be two rounds i.e. Knockout round and Final round

* Knockout Round: In this round two teams will compete one-on-one starting at the same time, the team finishing the race in the minimum time will qualify for the Final round.
* Final Round: Qualified teams will compete in this round to achieve the minimum runtime. Single run will be conducted for each qualified team. Teams with the minimum runtime will be nominated as the winner of the competition.
* Race clock: The race clock begins as soon as the robot crosses the starting point and ends when the robot reaches the finishing line without any fail.
* Runtime: The robot must traverse the full track from the starting point to the finishing point in a single run at least once for each round within the maximum access time (5 minutes). This runtime will be the official runtime for the team.
* Pre-Game setup: Before starting the competition, each team will get 10 mins to calibrate the robot and make a trial/testing runs. All the preparations must be done during this time (adjusting the sensors, reprogramming the robot etc.).
* Game Zone: An area around the field will be designated as the GAME ZONE. No one is allowed inside the game zone except the robot handlers and the referees.
* Start and Restarts: Only the team Leader will be allowed to handle the robot during the gameplay.
* The robot will be placed at the starting point with the consent of the referee.
* A robot may restart the run if the person handling it feels the necessity. A restart can be requested only if the robot doesn’t follow the line, has stopped on half way or has lost the directions/Black line.
* At any restart, the robot must be re-positioned back at the start point.
* It is not allowed to reprogram the robot or to add/remove parts on the robot during the run, but adjusting the sensors is permissible with the consent of the referee.
* The RACE CLOCK/RUN TIME will reset to zero on every restart. The COMPETITION CLOCK (maximum access time) will keep running during all restarts.
* Only 3 restarts are allowed for each round.
* A robot must restart if:
* The robot does not start after pressing the Start Button for 1 minute.
* The robot is touched by a human without the consent of the referee.
* The robot moves out of the arena.
* The referee orders to restart.
* Misbehaving teams and participants will be asked to leave the competition area and risk being disqualified from the contest. The rules will be enforced at the discretion of the referees, officials, and local law enforcement authorities.