

RoboCon (LFR)

Registration:

- Registration is compulsory for participating in the event and is free of cost.
- Teams of two to four people are allowed. This would include one person to be declared as the Team Captain.
- Intercollege/institute teams are more than welcome.
- Each team must declare a unique name for their machine at the time of registration.
- An individual can't participate under two different team names, in such a case all his teams are liable to be disqualified.
- All Participants MUST present their college ID cards at the time of registration.

Description:

- This is a line following robot competition which is basically an autonomous machine that follows a black line on a white surface(for the most part?) using different sensors.
- For further information/knowledge, try google :p or http://www.thinnkware.com/wiki/index.php/Line_Follower_Robot

Robot Specifications:

- The robot must fit in a cube of edge 30 cm.(Exclusive of the wires in case of wirely powered machines. Scroll down and check the rules once. Thanks.)
- The robot should be made by team members and any team found using a readymade machine(eg. lego kits) will be disqualified.
- There is no restriction on the weight of the robot.
- The robot can be made with or without the use of a microcontroller.
- Robots without microcontroller will be given advantage which will be announced prior to the start.
- The machine can use an externally placed or onboard electric power supply.
- The organizers will provide a standard 220V/50 Hz AC power supply. Any eliminator, adaptor etc. required will have to be arranged by participants themselves.
- There is no restriction on the number of sensors used as long as the total voltage consumed by the machine at any point is less than equal to 24 Volts. (Applies to both wired and wireless robots)

Rules:

- Race will be judged upon distance/time ratio.
- In case of an incomplete race (either due to disqualification or otherwise) above said rule will be implemented.
- Time would start when the robot starts moving and end when any part of the robot touches the designated finish point (or time ends at any particular stage in case of incomplete race).
- In case of a wired robot, the said wire should remain slack under all circumstances during the competition. All the wires coming out of the machine should be stacked as a single unit.
- If the robot uses an externally placed power supply, the dimensions of the power supply are not included in the size constraint.
- In case of a microcontroller based robot, three microcontroller resets are allowed each incurring a time penalty which will be announced prior to the start. Any robot that loses the course line i.e. wards off into a different direction all together, must come back to the line at the point where it lost track, or at any earlier point which was crossed.
- Use of improper language or any kind of misconduct with the team of RoboCon would lead to the immediate disqualification of the whole team/s associated.
- In case of any dispute, decision made by Judges and the esteemed organisers would be final.
- Teams are not allowed to make any changes in their robot once a round has started. Judges reserve the right to disqualify any machine whose working mechanism or game strategy is considered hazardous in any way.
- Inability to follow any of the safety rules (mentioned below) may lead to penalty or even disqualification in adverse cases.

Safety Rules

- The battery used should NOT release any toxic chemicals capable of damaging arena or fellow participants.
- The robot must not harm the arena and track in any respect.
- There should be no loose parts hanging out of the machine.

Disclaimer: The organisers, Esya or Indraprastha Institute of Information Technology, Delhi will not be responsible for any physical damage sustained by the robot or the participants during the course of the event. IIT-Delhi won't provide accommodation to the participants. We promise special care to avoid any such incident or circumstances leading to such accident. NOT :P