

Line Tracer

No. of Team Member: 1-3

Description: The objective of this contest is for a robot to follow a black line on a white background, without losing the line. The robot which completes the course in the shortest period of time while accurately tracking the course line from start to end wins.

Rules:

- Competition will consist of two round , qualifying round and the final round.
- The arena is shown in figure 1.

Note: *The track shown in the figure is the proposed design. The actual track is subject to changes*

- *Course Time:* Time is measured from the time the robot crosses the starting line until the time it crosses the finish line. A robot is deemed to have crossed the line when the forward most wheel, track, or leg of the robot contacts or crosses over the line.
- *Time Limit:* A maximum of 3 minutes is allowed for a robot to complete the course. A robot that cannot complete the course in the allotted time shall be disqualified.
- *Time Keeping:* Time will be measured by a judge with a stopwatch. The recorded time will be final. Once the participating team takes the track the time taken for making the alterations on the robot will also be accounted.
- *Arena Edges:* A robot that wanders off of the arena surface will be disqualified. A robot shall be deemed to have left the arena when any wheel, leg, or track has moved completely off the arena surface. The teams are required to complete the track in minimum possible time. The team will be given two runs in the elimination round. The best score of the two runs will be considered.
- In case of deviation from the track, the team has to continue the race from previous check point and maximum of 5 attempts are given in the whole run.

Miscellaneous:

- Any team that is not ready at the time specified will be removed from the competition automatically. Each team has to report at least 15 minutess before the event starts.

- The teams must not damage the opponent's machine in any way. Judges reserve the right to disqualify any team indulging in negative controlling & misbehaviour.
- Maximum voltage batteries allowed is of **12V**. Participants should bring their own power supply/Batteries.
- The machines would be checked for their safety before the run and would be discarded if found unsafe for other participants and spectators.
- Organizers' decision shall be treated as final and binding on all.
- Participating teams are responsible for the safety of their robots and are liable for any accidents caused by their team members or their robots.
- The organizing team members will neither be held responsible nor be liable for any incidents and / or accidents caused by participating teams and/or their equipment.
- The organizers reserve the right to change any or all of the above rules as they deem fit.
- Change in rules, if any, will be highlighted on the website and notified to the registered participants.
- In case of ties during elimination round, a rerun will be given to the teams.