

General rules:

- Each team can have a maximum of 5 participants.
- A team may consist of students from different colleges.
- Certificates of Excellence will be awarded to the top three teams.
- No damage should be made by a bot to the arena or to other team's bots during the match any manner.
- Bots should not be disassembled until the results are declared.
- The organizers reserve the right to change the rules as they deem fit.
- When a team is called for match, they must report within five minutes.
- Judges decision will be final.
- During wall following, a line would be drawn at a distance of 400mm from the wall. The bot must not cross this line at any cost. In case the bot crosses the line, then human intervention would be allowed and points would be cut for the same.
- The mat for the line following would not be disclosed before the event and similar holds for the turns present in the wall. The maze for line following and shape of the wall shown in the 'Arena' tab is just for the purpose of illustration and would be different in the event.

Mission objective:

The event focuses on solving a line maze via line following, one of the very basic yet extremely important concept of robotics, and calculate the shortest path in the maze. In addition to that bot has to travel by following a path bordered by a continuous wall. The event will test your analytical and coding skills, and will bring out the genius in you. Participants from various countries would participate in a country specific qualifying round, and the winning teams from the countries would be given entry to the Grand Finale (Final Round) of the iARC to be held during Techkriti'15. Any International team which missed the opportunity to participate in the national qualifying round of iARC, can also participate through the open-round, which will be held during Techkriti'15, in India.

Objective-National Round:

You will have to prepare an autonomous bot which can solve a line maze via line following and return in shortest time (shortest path in the traversed area) to the start point. Both start and the end points will be marked big black dots.

Objective-Final Round :

You will have to prepare an autonomous bot which can solve a line maze via line following and return in shortest time (shortest path in the traversed area) to the start point. The line maze is referred to as the first part of the arena. Then in the second half of the arena the bot has to travel by following a path bordered by a continuous wall on one side by using the principle of wall following. The farthest part of the bot from the wall should not cross the line which would be at a distance of 400mm from the wall. The transition between the first and second part of the arena is marked by a big black dot. Both arenas will be connected and robot needs to reach the finish point in one go.

Robot Specification:

- During the whole event the bot must fit within a square of 250X250X250 (lXbXh). Dimensions in mm.
- The Robot must be stable and able to move on its own. A bot not fulfilling these criteria will be disqualified.
- The bots should be able to follow the line according to event specifications.
- For obstacle avoidance team can use any sort of technology/sensor as far as it fits in the dimension mentioned and also it should not be factory made or commercially available setup.
- The wire used to power/feed the bot should remain slack at all times.
- Each team has to bring its own power supply for its robots. The voltage difference between any two points on the bot must not exceed 24 volts.
- Teams are advised to use an on-board power supply. In case they are using external power supply they will be responsible for any problem created by entanglement of wires.
- Bot's code will be checked for hard coding before trial is allowed.