

FAST AND FURIOUS

ELEGIBILITY

1. The competition is open for registration to full time Engineering/ Science/ Polytechnic college students who are studying in universities/ colleges, for a degree in any discipline.
2. Each team must have four members.
3. Each student can join only one team.
4. One member of the team should be designated as the team leader, who is responsible for all communications with InfoX team.
5. InfoX judges' decision is final should there be any dispute.

TERMS AND CONDITIONS

1. Each team member will register with only one email ID.
2. A team will NOT BE PERMITTED to change/replace any team member(s). A team once registered will remain unchanged till the end of competition.
3. Failure to comply with any of the rules, terms and conditions of the competition may result in disqualification of the participating team.
4. All participants (implicitly) consent to allow their names and photographs to be used for publicity purposes by InfoX during and after the competition.
5. All material submitted must be the team's **original work**.
6. Any kind of **plagiarism is strictly prohibited** and will lead to disqualification of a team.
7. InfoX reserves the right to modify or amend the prizes, rules, terms and conditions of the competition at any time.
8. InfoX's decision is final and no appeals will be entertained.

RULES

1. The Event Involves Remote controlled Robo-Car racing on a given racing track with obstacles and hurdles which has to be completed within a given time frame of 20 min at maximum. End of maximum time limit will mark the end of run, regardless of car's position and status.
2. The track will consist of different hurdles and obstacles each testing vital technical aspects of the racing car and driver's skills.
3. Communication can be wired or wireless, but wireless mechanism will fetch bonus marks.
4. The complete racing track would be only revealed on the day of event. As for track dimension related specifications refer to **Section "ARENA SPECIFICATIONS"**.

- 5.If robot is found to be displacing any obstacle/hurdle, or damaging the arena, it will be considered as the end of the run.
- 6.Participants are not allowed to keep anything inside the arena other than the robot.
- 7.The time measured by the reviewer will be final and will be used for scoring the teams. Time measured by any participant by any other means is not acceptable for scoring.
- 8.The team should Switch ON the robot when asked by the reviewer. This is the start of a run. The timer will start the same time.
- 9.The Robo car must not leave the arena at any point of time.
- 10.The robot is not allowed to make any marks while traversing the arena. Any robot found damaging the arena will be immediately stopped; repositioning will be allowed as per the rules. The final decision is at the discretion of the InfoX team.
- 11.The Event will progress as a Knockout Tournament where Robo Cars will race and winner will progress into successive round.

ROBOT HARDWARE SPECIFICATIONS

Dimensions and Fabrications

- The machine should fit in a box of dimension 80 cm x 80 cm x 100 cm (l x b x h) at start of during the match. The external device used to control the machine or any external tank is not included in the size constraint.
- The machine should not exceed 30 kg.
- Any part of bot which is outside arena (whether it is battery or external tanks) except remote control and wires are included in weight (1.5 Times of actual)
 - **for example** An external Battery source.

Methods of mobility include:

- Rolling (wheels, tracks or the whole robot).
- Walking (linear actuated legs with no rolling or cam operated motion).
- Ground effect air cushions (hovercrafts).
- Flying (airfoil using, helium balloons, ornithopters, etc.) is NOT allowed.

Control Requirements

- Bot can be controlled wirelessly or with wires.
- In case of wired bot, wires should be stacked into a single unit and should be slack at every moment of the competition.
- All the robots with wireless control should be able to change frequencies (if required) or coded channels to prevent any radio conflicts, it may be changed before the start of the match to avoid frequency interference with other teams.
- Remote controls available in market can also be used.

Battery and Power

- The machine can be powered electrically only. Batteries must be sealed, immobilized electrolyte types (such as Li-ion, NiCd, NiMH or dry cells).
- Working voltages must not exceed 24V DC (mean voltage) at any point of time.
- All power connections must be of an adequate grade and adequately insulated. Cables must be routed to minimize the chances of being cut.
- All efforts must be made to protect battery terminals from a direct short and causing a battery fire, failure to do so will cause direct disqualification.
- Battery Eliminators are allowed and power source would be available at the venue for the eliminators.

ARENA SPECIFICATIONS

Max Track Length: 100 m

Max Track Elevation: 4m

Min Track Width: 2m

Min Turn Angle (With the Vertical): 60 deg

Type Of Arena : Rugged Terrain

JUDGING CRITERIA

1. Winner of the last Round of Tournament , The Finale will be declared the winner,