

# AUTOMARENNEN

“Speed kills but with skills it thrills”

*-Rajeshwar Raj*

## Problem Statement

### Introduction

Would you not want to run over a rugged road with your remote controlled motor vehicle? Taking sharp and swift turns, passing through deadly circular tracks, and dealing with innumerable hurdles as you move. Jumping over planks, crossing a hanging bridge, getting across a sandy land, climbing an inclined plane and what not. Doesn't it sound like a Herculean task. But What's a gain with no pain. Get ready to thrill yourself with this adventurous race. Gear up and start designing your own racing car and see your creation getting through all the odds to bring victory to your feet.

So here is Techzion's grand tournament. Bringing to you an awestriking challenge which will take your excitement to another level.

**Task** – Each Team will have to make a remote-control robot car (wired/wireless) which will have to cross a race track competing with the robots of other teams.

### General details:

- Any team can take part in Automa-Rennen, Techzion. A team can have a maximum of 4 and minimum of **2 participants**.
- Each team must specify a team representative. All the important communication will take place between Techzion co-ordinators and the team representative.
- All the participants must submit their valid contact details at the time of registration.
- **Team name**- Every team must have a unique name. If team names deem to be inappropriate or offensive, then the team can be rejected by organizer.

### Design specification:

- Bot should be made within a size limit as given below:
- Dimensions - Length:30cm, width:30cm and height:35cm.
- The external remote control used to control the bot is not included in the size constraint. These are the maximum limits, and bot should not exceed these in any orientation.
- Teams can use both wired as well as wireless remotes. In case of wired bots, the length of wire should be such that it always remains slack at any instant of time.
- Battery and Power: Each team should bring their own power supply for the bot. The potential difference between any two points should not exceed 24V DC.

**Note: Bots not fulfilling these criteria will be disqualified.**

### Gameplay:

- Each team will have to cross the arena surpassing all the hurdles that comes in the way.
- The arena consists of various checkpoints having flags placed at each check point.
- Time will be recorded by the co-ordinator as the bot crosses each check points.

- If the bot is not able to cross a particular checkpoint then team members are allowed to manually carry the bot to the next level in order to complete the game. But in such case marks will be deducted.

## **RULES AND REGULATION:**

- Each team can have a maximum of 5 participants and a minimum of 2.
- Teams have to make their robot. They can't use the other team's robot.
- No damage should be made by a bot to the arena or other team's bots during the match in any manner.
- Bots should not be disassembled until the results are declared.
- The organizers reserve the right to change the rules and arena as they deem fit.
- When a team is called for a match, they must report within five minutes.
- Judges/manager's decision will be final.

### **Event Head (Final Year)**

Harshit Shukla (ECE)  
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### **Coordinator (Third year)**

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