



IIT Bhubaneswar

The Annual Techno Management Fest

WISSENAIRE

Robo-Race

INTRODUCTION:

"Straight roads are for fast cars, turns are for fast drivers."

~ Colin McRae

Build It, Run It, Break It, Fix It, REPEAT!

Who doesn't love the adrenaline rush when you are almost at the finish line? How much more fun if the bot built by you is running on the track, competing to be the best!

Wissenaire'23 presents to you Robo-Race.

Team Specification and Eligibility

Eligibility: Team from any recognized engineering college/Institute is eligible to participate. All Participants must bring their respective ID cards.

Team Specification: Any participating team can have a maximum of 4 members.

Team Name: Every team must have an appropriate name. Team's name can't be changed once submitted. Each team must specify their Team Representative (Leader) at the time of registration.

Task

- To build a manually controlled wired/wireless robot capable of finishing the race track by competing with the opponent bot. This will be a knockout race.
- The participant shall hereafter be referred to as the player and their robot, the bot.
- In this event, the players are supposed to run their bots through a path with obstacles that may either be active or passive, implying that they may attempt to cause structural damage to the bot or just make the path tougher to traverse.
- The player who finishes the track in the least time wins the event. Several checkpoints are set up on the track. The bots must pass through all these checkpoints in the order they are provided and may return to an already crossed checkpoint if the need arises. Time penalties are awarded, as will be explained at the start of a round, for getting trapped at particular spots. The bot should not harm the arena. The bot designs must strictly adhere to the event rules.



General Rules

- It must be a manually controlled wired/wireless bot, i.e., there must be a way for the player to control the movements of the bot wired/wirelessly.
- It can have some automatic features, but deciding to toggle those features should lie with the player. There would be bonus points for wirelessly controlled bots.
- The dimensions of the bot must be less than 25 centimeters by 25 centimeters (length by width), and it must have a height of less than 20 centimeters.
- The maximum permissible weight of the bot is 3 kilograms.
- Teams are not allowed to use any readymade Lego kits or assemblies.
- The bot must complete the entire race track. Shortcuts are strictly prohibited. In case of any discrepancies in the rules, the view of the organizer and jury over the event shall be final and binding.
- Decisions regarding exceptional circumstances shall also lie in the hands of the organizer.

Power Supply

- It cannot use AC-powered components.
- The player must bring an adapter to the arena to resolve issues with the length of the wire and faulty equipment.
- The player can use the provided socket or have their supply with a maximum of 24V DC Voltage between any two points in the bot during the game.

Mobility

- Freedom of mobility may include Rolling (wheels, tracks, or the whole robot).
- Walking (linear actuated legs with no rolling).
- Any other method of mobility that leads the robot to lose contact with the ground is not allowed.

Gameplay Rules

- A Bot is allowed to participate only once in this event.
- Yanthrix organizing committee is not responsible for any damage to your bot on or off the event.
- We request the participants not to assume anything not mentioned in the document without contacting the organizers.
- The players must not enter the arena unless permitted by the organizer.
- The player must not directly or indirectly nudge or touch the bot once the race has started without prior permission of the organizer.
- The bot shall only be controlled by one person who cannot be changed once the race has started.
- The team leader shall intimate the identity of the controller to the organizer.
- Violation of any rules or misconduct will lead to disqualification.



IIT Bhubaneswar

The Annual Techno Management Fest

WISSENAIRE

CONTACT DETAILS:

Ayush Asutkar and Shikhar Agrawal

Event Coordinator

Wissenaire' 23

Contact no: 9960955907, 8599812216

E-mail: 20cs01057@iitbbs.ac.in, 20ce01013@iitbbs.ac.in