



IEEE



IEEE
BANGALORE SECTION

IEEE Women in Engineering
WIE

IEEE SIT SB

PRESENTS

IdEEEas-2K22

ROBOTICS

Join the robolution





What is robotics?

"Robotics" has been a star attraction of IdEEEas for a long time, with people from all over India coming in with their creations for an event where nothing is impossible. The robotics event is divided into three sub-events. **ROBO-RACE** (Manual Bot Competition), **LINE FOLLOWING ROBOT** (Autonomous Bot Competition) and **EXIGENCE** (crossroads). The exhilarating atmosphere is enough to send a shiver down one's spine! Teamwork makes the **STEAM** dream work.



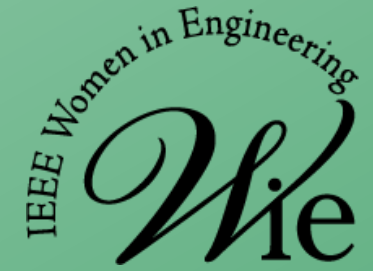
General rules:

- Each team can have a maximum of 4 participants except **EXIGENCE** (solo).
- All students with a valid identity card from their respective colleges are eligible to participate in the event. A team may consist of students from different colleges.
- The organizers reserve the right to change the rules as they deem fit.
- The judge's decision will be final and binding to all.
- Bots should not be disassembled until the results are declared.
- The teams will have to take care of their stock of batteries.



Flow of the event:

- A maximum of **four participants** per team is allowed.
- The event will contain 3 sub-events in which the participants have to bring their bots and run them on the given path.
- The components that are required must be bought by the participants.
- In the second event (EXIGENCE), participants have to run the bots given by the organizers and solve the maze.
- In last event they have to run the bots on the provided path.



SUB EVENT-1: LFR (Line Following Robot)

- In this event, the participants have to bring their bots and run them on a provided lane.
- Robots should be **wireless**.
- Robots should be prepared prior in hand, no time will be given during the event.
- The robot path must **NOT** be saved in robots.
- Required elements must be bought by the participants only.
- Judges decision will be final.



SUB EVENT-1: LFR (Line Following Robot) contd.

Arena Description:

- **The base of the arena is made up of a white-coloured flex sheet on which black coloured line is printed or can be pasted (For both qualifying and final round).**
- **The thickness of the line will be 3cm (0.5cm tolerance).**
- **The course line may have acute, obtuse, right angles and curves.**
- **The course line may also have discontinuities at various points.**



SUB EVENT-1: LFR (Line Following Robot) contd.

Bot specifications:

- **Robots must be autonomous.**
- **There is no restriction on the size, weight, and RPM of the motors whatsoever. It is the designers' responsibility to design a robot that can finish the race in the least time.**
- **No lego kits or vega kits are allowed. If any robot is found skeptical, it will be immediately disqualified.**
- **The voltage should not exceed 12V between any two points in the circuit.**



SUB EVENT-2: EXIGENCE

- It is a **SOLO** Event.
- In this round, the organizers will provide the robots.
- Participants have to solve the maze(puzzle).
- Bots should not be disassembled.
- Judges decision will be final.



IEEE



IEEE
BANGALORE SECTION



SUB EVENT-3: Roborace

- In this event, the participants have to bring their bots and run them on a provided lane.
- Robots can be wired or wireless.
- Robots should be prepared prior in hand, no time will be given during the event.
- The robot path must **NOT** be saved in robots.
- Required elements must be bought by the participants only.
- Judges decision will be final.



Judging Criteria:

Innovation | Credibility | Sustainability | Feasibility | Scalability | Relevance

Eligibility:

Open to all the branches.

Maximum team size: 4

Contact:

Mohammed Rafi +91 97389 00867

Lalith Kumar Reddy +91 63008 77442

E-mail: robotics.ideeeas2k22@gmail.com



FAQs:

Can we bring different bots for 2 events?

YES

Can I get any components if required?

NO

Contact co-ordinators for more information.



IEEE SIT SB
PRESENTS

IdEEEas-2K22

THANK
YOU



ROBOTICS