

# RC ROBO RACE

From sketching your design to navigating curves and ramps, the RC Robo Race transforms ideas into action. This competition challenges participants to design, build, and control a remote-controlled car while testing its performance on a track. With a carefully designed track and power-limited vehicles, the race rewards control, stability, and smart decision-making — proving that true speed comes from skill, not just power.

## 1. About the Event

The RC Robo Race is a remote-controlled car racing competition where participants design and build an RC car within given constraints and navigate it on a custom track filled with turns, ramps, and obstacles.

## 2. RC Car Configuration & Specifications

Parameter	Allowed Range
Vehicle Scale	Approx. 1:16 or 1:18
Ground Clearance	2 – 4 cm
Motor	20,000 RPM (Brushed) OR 3000 kV (Brushless)
ESC	25 A maximum
Battery	7.4 V (2S only)
Steering Servo	Up to 2.5 kg-cm torque

## 3. Track Description

- Closed loop track, approx. 40 m per lap (the race may involve multiple laps)
- Uneven surface (soil/sand/grits) + Obstacles
- Multiple Curves
- Ramp/Slope Sections

Note: Teams are advised to design their vehicles and control systems accordingly.

#### 4. Important Notes for Participants

- Participants may bring charger, extra battery as required.
- Organiser will NOT be responsible for any damage to the robot.
- Only electric RC vehicles are allowed; nitro or any fuel-based RC cars are NOT permitted.
- Commercially available RC cars are allowed, but any modifications beyond the specified limits are strictly prohibited.

#### 5. General Rules

- Maximum 2 members per team.
- This is a time-trial based event.
- Each team gets one official run.
- Any contact with the boundary will attract a time penalty.
- If the robot flips over during the run, a time penalty will be imposed.
- The winner will be decided based on time taken to complete the race.

Note: Exact track layout and dimensions will be revealed on the day of the competition. The decision of judges will be final.

For any queries or clarifications regarding the event, please feel free to contact:

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