Full-Throttle
The fun begins where the pavement ends

Introduction

Engineering students are competitive by nature and the notion of competition was an appealing approach to capitalize on this characteristic. And therefore here participants have to win with the help of their RC Nitro bots. Students have to Design a remote-controlled bot consisting of an IC Engine that can compete with other opponents on a dirt track full of various types of obstacles.

Prize Money

1st Prize: 35,000
2nd Prize: 25,000
3rd Prize: 20,000

Problem Statement

Round 1
Teams will need to submit a proof of concept (POC) of the model.

Round 2
It will be an on-site competition. Each team will be given 2 laps out of which faster lap will be considered. There will be points system for clearing each obstacle on the track. Depending on score teams will be selected for next round.

Round 3
It will be a race between three teams qualified from round 2.

Track Specification

➤ Exact design of the track will be disclosed on the day of the event.
➤ Track will be made up of either dry ground or mud consisting of up and downs, bumpers, turns, etc.
➤ Borders of the track will be clearly indicated.
➤ The minimum width of the track will be around 5 feet.
➤ A lap of the track is completed when the bot comes back to the start-finish line.
➤ Driver has to operate bot from specific control stand provided on the side to the track.
➤ More than one bot may race on the track at the same time.
➤ Despite the organizer's efforts to keep the track's quality intact, the track may undergo wear and the bot is expected to be able to perform on such a weakened track as well.

Machine Specification

➢ Bot should fit in a box of dimensions 500mm x 300mm x 300mm at any moment of time during the race.
➢ Only wireless communication is allowed throughout the race.
➢ Functional parts - Gears, differential gear, engine, springs, shock absorbers, batteries, wheels and wheel hub can be directly used as available in the market.
➢ Structural parts - Chassis, steering mechanism, shock towers and suspension (excluding upper suspension arm, suspension spring and shock absorbers) have to be built by the participants themselves.
➢ Only single-cylinder, two-stroke, normally aspirated, air-cooled, glow- ignition engines utilizing standard or turbo plugs will be permitted. IC engine specification- up to 6cc.
➢ Fuel tanks must be safely mounted.

Game Rules

➢ There will be 3 rounds among which round 2 and round 3 will be in offline mode
➢ Number of stages in each round may vary accordingly.
➢ Team members are not allowed to touch bot once race Hand touch is allowed at cost of the penalty.

General Rules

➢ Teams are not permitted to damage other team's bot during race intentionally.
➢ Any damage to track due to bot will not be tolerated.
➢ The bot is not allowed to lose any loose parts on any part of the arena. Any bot disintegrating during the race will be disqualified.
➢ Bring your college/student I-Card at the time of competition.
➢ Decision Taken by Judges will be final and binding for all.
➢ Any misbehaviour will lead you to disqualification from the competition.

If less than 5 teams will be registered, then only first prize will be given and if less than 10 teams will register, only two prizes will be given.

Team Specifications

➢ Team should be of 3-5 members.
➢ Members of a team may be from the same college/school or different (K12/UG/PG).
➢ Any number of teams can participate from one college/school.
➢ Professionals are not allowed. Only students can participate.
➢ Participants are required to bring their school/college ID cards.
➢ Once registered, the same team cannot register with another name or for another robot other than previously registered one.
➢ Every team must have a unique name that should not be offensive conflicting or inappropriate.

- Organizers have the right to reject entries for any inappropriate team name.
- Organizers must be notified if a team's name has been changed.
- Team Representative: Each team must specify their Team Representative (Leader) at the time of registration on the website. All important communications between the organizer and the registered teams will be done through their Team Representative. The Team representatives must submit valid contact details (phone no., email id, etc.) at the time of registration.
- If teams don't show up on allotted slot, they will be disqualified.

Event Timeline

Round 1	POC Submission Deadline	11th April 2022
Round 2	Technical Inspection	15th April 2022
	On site performance	15th April 2022
	Releasing list of top 3 teams	15th April 2022
Round 3	Final race	15th April 2022

Registration Details
Registration window will open soon!