

Rulebook for Death Racev2.0

ON THE BATTLEGROUND

The Death Race comprises of three levels of competition. The first, themed as 'Fast & Furious', is a RoboRace. The bot must overcome the various hurdles within the time-limit and reach the final checkpoint. The second, is themed as RoboWar. Every team's robot must bear a minimum of one weapon. The teams with maximum points from both rounds will participate in the third and final 'Grand Finale' round. The winner of the 'Grand Finale' will be crowned as the Victor of Death Race.

SCORE STRUCTURE

Level 1:

Fast & Furious: The maximum Time limit to complete the track is 3 mins. The scoring will be done in the following way: $(3 \times 60 \text{ seconds} - \text{Time taken by the Robot to complete the track (in sec)})$. (Weapons are not allowed in this level.)

Level 2:

The RoboWar: Two teams will compete in the pit for 1.5 minutes. 10 points will be awarded when one robot hits the other. If a team disables the robot of the other, 20 bonus points will be awarded. If a team pushes another robot out of the pit, 20 points will be awarded.

Grand Finale:

Best teams (combined success in the above levels) will compete in the real Death Race. Two teams will race together and points will be awarded for damaging the other bot while racing. The bots will then cross the war pit where they will have to fight for 1.5 minutes, and then continue the race. The team surpassing all the levels will be named the victor of the Death Race.

RULES AND REGULATIONS

Teams:

1. Teams of 4 or 5 can register, each team having a unique name (team name and robot name may be the same).
2. In case of repeated team names by more than one team, teams may require a name change before proceeding for the competition. Organizers must immediately be notified of any name changes, failing which, the team will face disqualification.
3. Team captain (compulsory) must ensure smooth communication between the organizers and the participating teams. All the important dates, updates in the rules and all the queries will be communicated with the respective captain. The captain must submit his/her email id and contact number at the time of registration.

Theme:

Death race is the brutal and breath-taking combination of Robo-Racing and Robo-Wars. Teams will compete two at a time. Respective teams will place their bots in the arena. Teams have to transverse the whole path while destroying their opponent's robot.

Arena and Game:

The game field is strewn with several obstacles and paths. Robots are allowed to damage the other bot or to push the opponent bot out of the track. The length of the arena track will be disclosed at the time of competition. The track will have checkpoints at regular intervals, at which judges will grade the bot.

Robot Specifications:

1. The robot dimensions **MUST NOT EXCEED 500x500x400 mm cuboid at any time during the competition. If it exceeds the above dimensions then the respective team will be disqualified immediately.**
2. The maintenance parts such as battery, wheels, communication setup or pressure bottles, must be easily accessible.
3. The weapon and battery setup must be easily removable and replaceable within a span of 5 minutes (in case of emergency).
4. Robots can be controlled wirelessly or by wire for example Bluetooth, Wi-Fi, radio, etc.
5. Other than the communication protocol, the maximum number of sensors that can be mounted on the robot is 2.
6. Except for flame-throwers, teams are free to choose any weapon to mount on their bot. Weapons including projectile are not allowed. Lasers on the robot, if any, must not exceed Class 2. Hidden weapons on the robot will result in immediate disqualification.
7. Jumping and flying robots are not allowed.
8. It is the responsibility of the participating teams to take care there is no interference of frequencies. Such a circumstance will not be considered for a rematch.

Powers Source:

1. Robot must be powered only electrically. Any other power sources will lead to disqualification.
2. The power source of the robot must not increase beyond 24V at any point of the race. The power source check will be done at any time and for any number of times during the event.
3. Teams are not allowed to change their batteries at any point of time during the race, but may do so during their time-out.
4. The robots must have an emergency switch to avoid any mishaps during the race.

Point System:

1. One race will go on for a maximum of ten minutes (Death race final event).
2. 20 points will be deducted every time the bot moves out of the track.
3. 50 points will be awarded for crossing a checkpoint.
4. 10 points will be deducted for rule violation.
5. Each team can take a time out of 10 seconds. In that time, team members can enter the arena and touch their bot.
6. Points will also be awarded for aggression, stability, control as well as innovative ideas.

Violations:

1. Team member cannot touch their robot during the race.
2. The size of the robot should not exceed the dimensions specified.
3. Any de-motivational or harsh language will be considered as violation.
4. Any deceiving method like hidden weapons or lasers, etc. used will be rated as violation of rules.

Registration:

Registrations for Death Race can be done from the technoVIT'16 website.

Disclaimer:

- 1) Judges and Referee decision is final and undebatable.
- 2) Organisers are not responsible for any damage of bots.
- 3) The teams must carry their own components.