





**DEPARTMENT: ROBOTICS** 

NAME OF EVENT: Robo-War

NO. OF MAX. PARTICIPANTS: 100

### **EVENT DESCRIPTION:**

• Robo-war is battle between bots where they will all fight each other till death. the robots will be fitted with various types of weaponaries such as cutter, roller, hammer etc. the robot which will survive till the end will be the winner

### TEAM AND ROBOT SPECIFICATION:

- Robots in robo-war can be wireless or wired.
- The robot will be categorized as a wired robot if any wire comes out of the arena ring.
- Any liquid batteries should be strictly placed outside the playing arena.
- Maximum allowed dimensions are 50x50x60 cm (LBH).
- Maximum Battery voltage is 24 volts
- Maximum permissible weight 40 kg.

# REQUIREMENTS:

- Participants must bring their own supplies.
- No battery chargers or tools will be given on the event grounds. So, if they are needed the participants must bring their own.
- AC charging ports will be given on the day of event to charge batteries and use tools







#### **GENERAL RULES:**

- Any form of projectile(shooting) mechanism is prohibited.
- Fire or water weapons are not allowed.
- Frequencies should be changeable for wireless robots.
- Batteries that spill or spray their contents are not allowed in the arena(Gel cells, Hawkers, etc are allowed).
- Wire length should be at least 10 meters long.
- Kill switch should be placed outside the arena.
- In the case of wireless robots, a wireless kill switch having a separate remote control should be placed outside the arena.
- Pneumatics and hydraulics tanks should be placed in an armoured position.
- Fluid in hydraulics should be inflammable.
- Pressure should not exceed 8 bars in pneumatics as well as in hydraulics.
- If any fluid leaks from the bot it will result in disqualification.
- Damaging an opponent's wired connections is strictly prohibited.
- No electromagnets as a weapon, No open connections, No tesla coil/tasers as a weapon.

### WEIGHT GUIDELINES

- The maximum weight for the robot should not be more than 40kg.
- In the case of a wireless robot, the weight will be considered 0.75 times the original weight.
- Any tanks for pneumatics or hydraulics that are placed outside the arena are considered 1.5 times the original weight.
- Batteries placed outside the arena will be considered weightless.

### LEVEL DESCRIPTION:

- Round 1: (Day 1, 2 Hours, 120 Participants)
  - Teams will go head-to-head against each other trying to remain in a marked box for the longest amount of time with the one staying the longest in the box winning
- Round 2: (Day 1, 1.5 Hours, 60 Participants)
  The winners of the previous round will go head-to-head in this round trying to make sure that the other robot stops working.







• Round 3: (Day 2, 3 Hours, 20 Participants)

Winners from previous round will go head-to-head for the last time as they fight for the win.

(Event Details may change on the day of the event on the basis of entrants)

# JUDGING CRITERIA:

- Robots which stay in the center circle the longest time will be considered winner of the first round and will progress to next round.
- The loser of the next round will be the one whose robot stops functioning first

# JUDGES:

1. Asst. Prof. Dixit Patel (Institute Faculty)

# **EVENT COORDINATORS:**

You can contact the following coordinators if you have any query regarding the event.

Sr.	Name	Faculty/	Contact No	Email ID.
No		Student		
1	Vishal Chudasama	Student	7984354076	Vishalchudasama8474@gmail.com
2	Yaksh Patel	Student	9327988170	Yakshpatel0209@gmail.com





