

# TECHNOCRATS GSV

## ROBOTICS DOMAIN



### ROBOWARS 2.0

#### OFFICIAL RULEBOOK



#### EVENT OVERVIEW

RoboWar 2.0 is a combat robotics tournament where student teams design and pilot remote-controlled robots to battle in a secure arena.

The competition follows a direct-combat format where survival and aggression determine the winner.

## ELIGIBILITY AND REGISTRATION



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### PARTICIPATION:

Open to all undergraduate and postgraduate students.

### TEAM COMPOSITION:

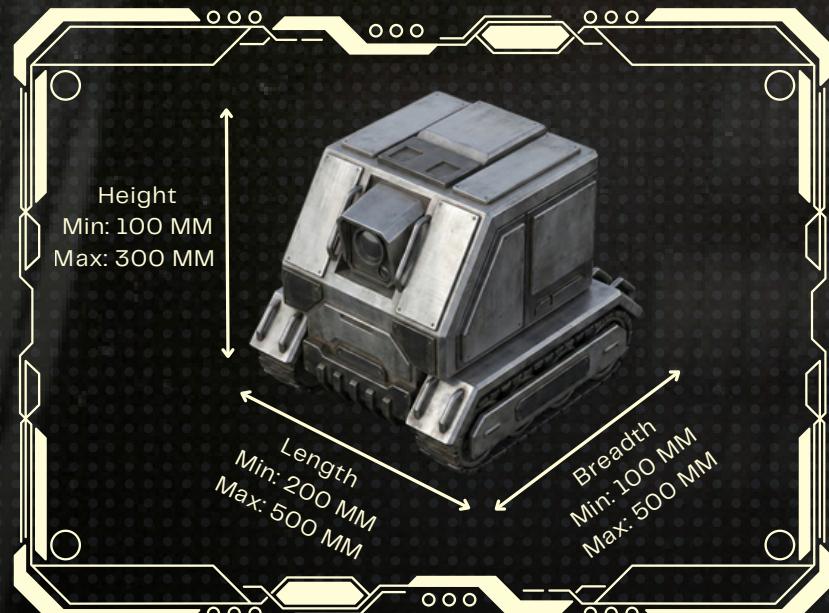
Minimum 2 members, maximum 5 members per team.



SCAN QR TO REGISTER !

## ROBOT SPECIFICATIONS

Strict adherence to these specifications is required to pass the safety inspection.



**24V MAX**



**5 KG MAX**

### WEIGHT CLASS:

Minimum 4 KG to Maximum 5 KG (inclusive of all batteries and onboard components).

### DIMENSIONS:

- Minimum: 200mm x 100mm x 100 mm.
  - Maximum: 500mm x 500mm x 300 mm.
- (Standardized Length x Breadth x Height limit for this weight class)

### POWER SUPPLY:

- Maximum Range : 12 – 24 Volts
- Teams must have their own batteries.
- Batteries must be securely mounted and shielded to prevent puncture or dislodging during impact.

### CONTROL SYSTEMS:

- Wireless: Must use legal frequency bands and avoid interference.
  - Wired: Tethered robots are permitted if the cable length is at least 5 meters.
- The robot must be fully self-contained; no external assistance is allowed during the match.

# WEAPONRY AND SAFETY GUIDELINES

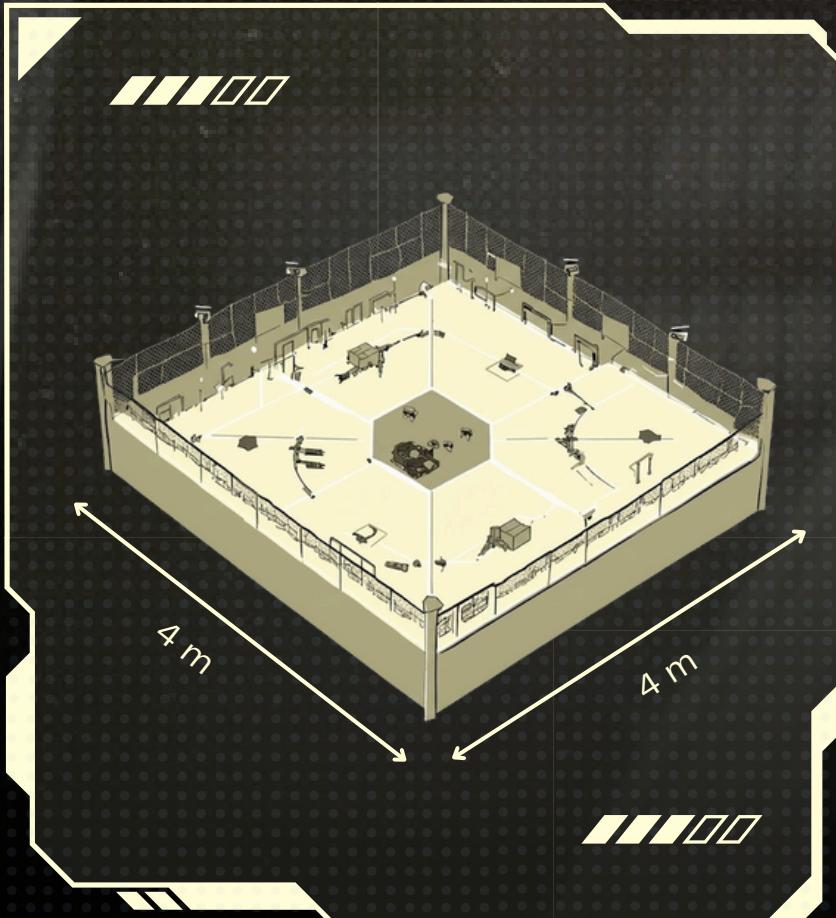
## PERMITTED WEAPONS:

- Kinetic energy transfers (spinner weapons must not exceed 10 mm thickness at any point, drums, discs).
- Hammers.
- Flippers and lifters.

## PROHIBITED ITEMS:

- Fire or flammable liquids.
- Explosives.
- Entanglement devices (nets, strings).
- Liquids or adhesives.
- Drill machines (modified power drills prohibited; custom drill mechanisms allowed if compliant).
- Unsecured sharp edges that pose a handling risk outside the arena.
- Electrocution or use of electric shock against opponent robots is not allowed.
- Sharp blades.

# ARENA AND HAZARDS



The combat zone is a secured platform designed to test driver skill and robot durability.

## HAZARDS:

The arena contains environmental obstacles including floor spikes and active rotating discs.

## BOUNDARY:

Ejection from the arena (if physically possible based on arena walls) results in immediate loss.

## MATCH FORMAT & SCORING

### STRUCTURE:

The tournament operates on a knockout basis (Single or Double Elimination, subject to team count).



### DURATION:

Each bout lasts 5 minutes.

### WINNING CRITERIA:

#### IMMOBILIZATION:

If a robot is unresponsive or unable to move for **60 consecutive seconds**, it is declared knocked out (KO).

#### JUDGES' DECISION:

If both robots are mobile after 5 minutes, the winner is determined by points.

### DAMAGE 30%

Visible physical damage inflicted on the opposing bot.

### CONTROL 30%

Effective driving and use of arena hazards against the opponent.

### SCORING RUBRIC:

Frequency of attacks and engagement.

### AGGRESSION 40%



## **GENERAL RULES & DISQUALIFICATION**

**Teams may be disqualified for the  
following reasons:**

- Failing the pre-bout safety inspection.
- Exceeding weight or voltage limits.
- Unsportsmanlike conduct or sabotaging competing teams.
- Intentionally damaging the arena structure (walls/floor) beyond normal combat wear.
- Changing the operator at any point during a bout may result in disqualification of the team.
- A robot that becomes non-functional during a match will be disqualified and cannot re-enter the bout.
- Only intact Li-ion, LiPo, or Lead Acid batteries are permitted and must be safely enclosed and insulated, as any damaged or poorly mounted units will be rejected during inspection.



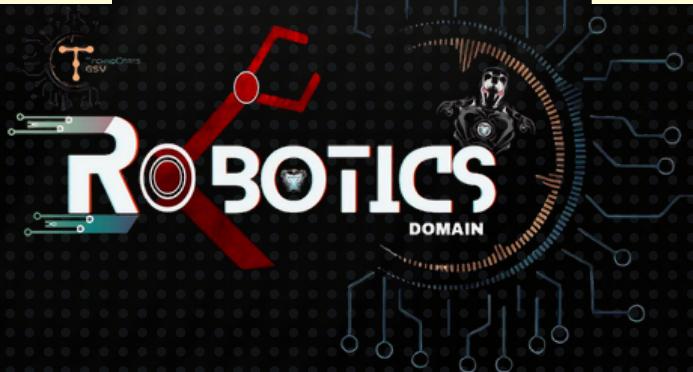
## **AWARDS**



**WINNING TEAMS  
WILL RECEIVE CASH  
PRIZES.**

**CERTIFICATES OF  
PARTICIPATION.**

\*for all teams



# **DISCLAIMER**

## **MODIFICATIONS:**

**The organizers reserve the right to amend rules at any time of the event.**

## **LIABILITY:**

**Participating teams compete at their own risk. The organizers are not liable for damage to equipment during the competition.**

## **DISPUTES:**

**In case of any dispute, the decision made by the organising committee will be final.**

## **WARNING:**

**Participating teams will be disqualified if they are involved in any verbal or physical clash with the organising committee or any other participants.**

# **CONTACT US**

## **Event Heads**

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## **Event Coordinators**

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## **Socials**

-  /technocrats
-  /technocrats-gsv
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For Robowars-2.0 Updates



**RoboWars-2.0**