



## Rulebook

# Battle Bot Fight

## About

Robot combat is a mode of robot competition in which custom-built machines fight using various methods to incapacitate each other. The machines have generally been remote-controlled vehicles rather than autonomous robots. Robot builders are generally hobbyists, and their machines' complexity and cost can vary substantially. The world is already moving quickly, but technological and informational innovation has made it even more so. Accepting diverse skill sets and abilities is crucial for ensuring adaptability and transformation, increasing efficiency over time. Thus, by showcasing some of your creative robotic talents, the National Innovation Competition-2023- Technocrats V. 1 gives you the chance to reveal some of your hidden talents.

## Eligibility

1. Participants must be **University** (Undergraduate Level, Bachelor's, Honor's, Degree) students. Participants must have a current studentship status which could be verified by an institutional ID card.
2. Each team shall be within 1-4 members.
3. Students from different educational institutions can form a team.

**Registration Fee: 2,000/-**

**Registration Link:** [rebrand.ly/TechnocratsV1\\_23](https://rebrand.ly/TechnocratsV1_23)

**(Please select your following segment during registration)**



## General Rules

- The entire program provides a platform for fostering goodwill between engineers and technical people as well as a robotics competition. Therefore, we do not accept any unpleasant or impolite behaviour from anyone.
- Participants must register their team using a team name.
- Competition rounds will depend on the team number. The schedule will publish before the event date.
- Before starting each round, the bot must be handed over to the authority.
- Only 2 members will be allowed in the arena to control the bot during the competition.
- All participants are asked to keep to the schedule and work together to foster a welcoming environment.

## Bot Specification

- Maximum weight of the bot will be **12 kg** with all utilities.
- The machine must be powered electrically. Use of an IC engine in any form is not allowed. Onboard batteries must be sealed, immobilized-electrolyte types (such as gel cells, lithium, NiCad, NiMH, or dry cells).
- The electric voltage between any 2 points on the machine should not exceed **36V** DC at any point in time. Participants will have to bring their converters for standard power supply according to Bangladesh standards.
- Participants must protect the battery terminals from a direct short and causing a battery fire, failure to do so will cause direct disqualification.
- Use of damaged, non-leak-proof batteries may lead to disqualification.

- Special care should be taken to protect the onboard batteries. If the judges find that the battery is insufficiently protected, the team will be disqualified immediately.
- Change of battery will not be allowed during the match.
- Only bots with onboard batteries will be allowed.
- Before combat, all bots will go through a technical inspection. Any operating principle that is not disclosed will result in immediate disqualification. Judges may limit any function they find dangerous.
- The form of a robot must be distinctive. There will be no secondary robots or independently moving objects that separate from the primary robot.

## Gameplay

- Every bot must follow the weight limit. Exceeding the weight will cause a point penalty. Exceeding 50 grams, 30 marks will be deducted as a penalty.
- Bots cannot activate their weapon before starting the match or while counting down.
- No points will be counted for pushing.
- Only active weapon-hitting points will be counted.
- Besides the hitting points judges will also mark 3 categories.
  - a. Aggression
  - b. Tactics
  - c. Damage to the opponent bot.
- Every team can take a maximum of one restart for 1 minute.
- 40 points will be deducted for restart.



- If the weapon of any bot becomes immobilized during the match, then the bot will not get any more points after becoming the weapon immobilization.
- Flammable fuels, liquid, gaseous or solid, are not permitted.
- If any bot cannot move or comes to a stop, the judge will start the countdown for 10 seconds. Within this time if the bot remains stopped the opponent team will declare a winner.
- Bots are not allowed to hold the opponent bot to the side wall for more than 20 seconds.
- It is against the rules to physically or electronically jam your opponent's controller. All jamming-capable robots will be eliminated from the tournament.
- All entries must agree to the general rules of the facility of the event.

## Mobility

All robots must have easily visible and controlled mobility to compete. Methods of mobility include-

- Rolling (wheels, tracks, or the whole robot)
- Walking: Walking robots are defined as those with linear-actuated legs that operate independently of each other
- Jumping and hopping are allowed
- Flying is NOT allowed

## Grading Criteria

- Active weapon hit 10 points per hit
- Restart the penalty Negative 40 points each time

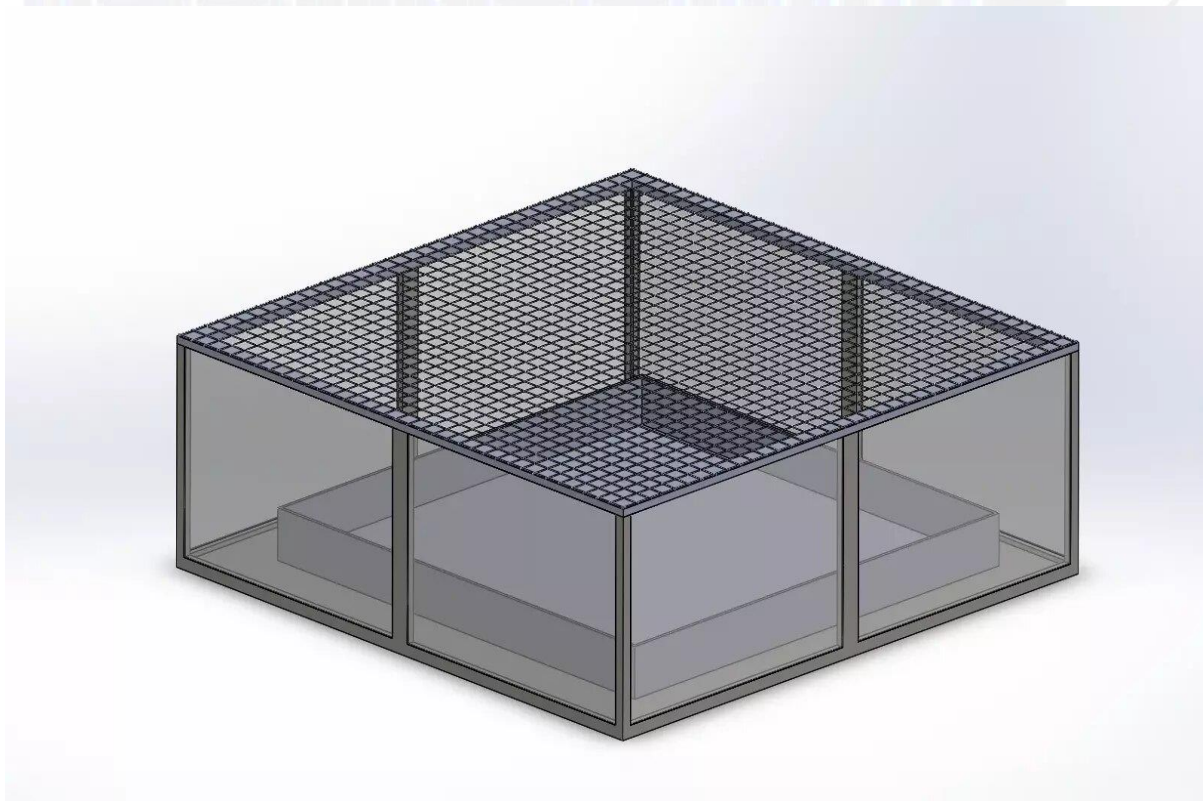


- Aggression 10 points each time
- Tactics depending on the judgment panel
- If any team cannot continue, the opponent will be declared the winner.
- Damage to opponent 10 points and depending on the judgment panel

**Note:** The judges' rulings are definitive in every instance. The Judges and the event's organizers maintain the right to modify the rules as they see fit. Misbehavior toward the judges and organizers may be used as justification for disqualification.

## Arena Specification

The Arena will be (12' x 12') in length and width with a height of 4.5'. The sample arena view is given below-



## Awards

- Champion will be given a price money of **40k** along with crest and certificates.
- Runner-Up will be given a price money of **25k** along with crest and certificates.
- 2nd Runner-Up will be given a price money of **15k** along with crest and certificates.

## For Any Queries:

### Contact/Organizers Details

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