

SUMO

Bot vs Bot Arena Combat

Official Rules & Regulations

Read carefully. All rules are binding and subject to coordinator decisions.

EVENT OVERVIEW

The ultimate battle of mechanical titans! Robots face off in intense pin-and-push combat in the arena. Teams design, build, and remotely control a robot capable of pinning the opponent against the boundary for 3 seconds to score a point. A blend of engineering, strategy, and aggression determines the champion.

BOT SPECIFICATIONS

SPECIFICATION	DETAIL
Weight	Max 3 kg (100 g margin allowed); remote controller weight excluded. Cluster bot total ≤ 3 kg.
Dimensions	No restriction on dimensions
Voltage	Max 18 V DC at any operating point
Power	Electrically powered only — IC engines strictly prohibited
Battery	Must use LiPo battery. Only sealed/leak-proof types allowed: Li-ion, NiMH, NiCad, Gel, Dry cell
Control	Wireless remote control only; all power supply must be on-board
Remote	Minimum four-frequency remote or dual interchangeable control circuits required. Ensure proper
Kill Switch	Manual disconnect switch (Kill Switch) + radio-controlled E-Stop — both mandatory and safe
Autonomous	Autonomous features allowed ONLY if they can be overridden remotely at any time
Mechanisms	Pneumatic, hydraulic, electric lifters, and wedges allowed. Manual jumping/hopping allowed -
Prohibited	Flying mechanisms (airfoils, balloons, ornithopters), sticky/suction devices (glue, sticky tread)
Mobility	Must have clearly visible and controllable mobility using wheels, tracks, rolling bodies, or app

TEAM & REGISTRATION RULES

- Team composition: minimum 2 members, maximum 5 members (same or different institutes).
- Teams without a bot may be provided one by college authorities.
- Every team must register with a unique and appropriate team name (subject to organizer approval).
- Teams must inform organizers if the team name is changed after registration.
- Each team must appoint a team leader at registration — the official point of contact.
- Team leader must provide a valid phone number and email ID.

MATCH RULES

MATCH ELEMENT	DETAIL
Active Fight Time	3 minutes per match (excluding time-outs)
Match Types	1v1 (Match) or Multi-robot Rumble
Golden Round	1 minute — triggered on draw; first successful pin wins

SCORING & VICTORY CONDITIONS

- Victory: the robot that scores more valid 3-second pins within the match duration wins.
- Scoring: 1 point is earned when the opponent is pinned against the boundary for a continuous 3 seconds.
- Pinning is valid for only 3 seconds; after that, the pin must be released.
- Lifting of opponent bots is allowed.
- Ignoring referee instructions may lead to penalties.
- Arena Stuck: if a bot gets stuck due to arena conditions, it will be repositioned fairly (video review used if needed). Winner decided on total pins scored.
- Disqualification: any robot deemed unsafe OR thrown out of the arena is immediately disqualified — opponent is declared winner.
- If no 3-second pin is achieved, winner is decided based on aggression, control, and strategy.
- No rematch will be given for signal interference — ensure proper binding.
- Battery change during a match is strictly not allowed.

IMPORTANT: The coordinator's decision is final and binding in all situations. Any robot deemed unsafe by judges will be immediately disqualified. All participants must carry a valid college ID. Unsportsmanlike behaviour will result in immediate disqualification from all events.