

Rulebook

Soccer Bot

(Open for All)

About

The world is already changing swiftly, but the rapid advancement of information and technology has increased this speed. Acknowledging a range of skill levels and aptitudes is essential to guaranteeing flexibility and development that will eventually boost productivity. Therefore, the **National Innovation Competition 2024 - Technocrats V.2** offers you the opportunity to showcase some of your innovative robotic talents and uncover some of your hidden talents. This is an opportunity for participants to show off their robotics skills and to celebrate football. They have to construct two manually operated robots that can play soccer in a dedicated venue made for the robotics soccer match.

Eligibility

1. Participants must be **University** (Undergraduate Level, Bachelor's, Honor's, Degree), **College, Polytechnic** 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: <https://forms.gle/oKhRKNZ6hmx7Gq8LA>

(Please select your following segment during registration)

Bot Specification

- Maximum dimension limit of bot is **25cm×25cm×25cm** (L×W×H).
- The motors to be used for the bot's motion is within the range of **0-600 rpm**. It will be checked in different conditions.
- Maximum weight can be **3 kg**.
- The robot must be controlled wirelessly. **Any kind of wired controller is forbidden.**
- The robot must have an onboard power supply, **wired ac/dc adapters** are not allowed.
- Voltage must not exceed **24 volts** of rechargeable or nonchargeable batteries.
- The robot must not have more than **a single** switch.
- Garbing mechanisms are not allowed. It has to control the ball only by pushing with its body.
- The ball has to remain outside the perimeter of a robot's body all the time. It cannot cover the ball with part of its body.
- Only mechanical force has to be used. **Any type using fire, water, or chemicals is forbidden.**
- The wireless controller should have its own power supply.

Arena Specification

- Size of the area is **8 feet** in length and **4 feet** in width. It is almost like a football field.

There will be two goalposts.

- Goalposts will be of **18-inch** in length and **6 in** height.
- The arena will be surrounded by walls of **5-inch** height

Rules

- Each team must have a maximum of **four members**.
- Teams will have to submit their bots an hour before starting the event.
- Readymade logo kit and **IC engine** are not allowed.
- Readymade gear assemblies can be used.
- Bots will not be allowed which are found unsafe for other teams or the arena.
- The ball will be dragged, pushed, or kicked by the bot.

Gameplay

- Teams will have to play a football match against another team.
- **3 minutes** will be provided for each team for pregame setup and testing.
- The match will be of **8 minutes** (two halves of **3 minutes** and **2 minutes** for maintenance.)
- The game will be started on the count of three by the referee. Teams making mistakes during the start more than twice will be punished by **-2 points**.
- Bot will be placed at the start zone of the arena at the start of the match.
- In case of a jam-up of bots for more than **15 seconds**, the ball will be kicked off against the command of the referee.
- In case of bot problems during the match (only motor problem, connection loose), a maximum of **5 minutes** will be given for repair with **-1 point for every 10 seconds**.

- For each goal **+10 points** are awarded in the first **3 minutes** of each half.
- In the powerplay of **1 minute** of each half, **+15 points** are awarded for each goal.
- During powerplay defenders will be removed from both sides.
- Teams with maximum points will be the winner.
- In case of a tie, **1.30 minutes** will be played again two times. After even the goal is not scored, then **3 each penalty** shorts will be given to each team.
- For each goal on its own goal post will deduct **5 points** from the respective team.
- Could not hit the opponent intentionally. Hitting a bot without a tackle will be considered a foul. Each foul will be deducted **2 points**.
- **Grabbing** the ball is strictly prohibited.
- Any **pillowy parts** could not be used with the bot.
- **Free kick** will be done after every restart.
- Any type of **intentional damage** caused to the opponent team's bot will be considered a foul.
- If the **bot hits**, the defender of the opposing team considers it a foul.
- If a team member **touches the bot** during a match, it will be considered a foul.
- In case of a foul a free kick will be given to the other team from a fixed arc 'y' point during which both of the teams committing the foul will be frozen at freeze point.
- Decision of the referee will be final.

Disqualification

- If a team fails to adhere to the size of the bot as specified.
- If a team damages the arena in any way.
- If a team commits repeated fouls more than five times.

Awards

- Champion will be given a price money of **25k** along with crest and certificates.
- Runner-Up will be given a price money of **15k** along with crest and certificates.
- 2nd Runner-Up will be given a price money of **10k** along with crest and certificates.

NOTE – The team Coordinator and Judge reserve the right to change the rules at any point in time. The change will however be highlighted on the website.

For Any Queries:

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