





# 13<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> March 2020

Vellore Institute of Technology Vellore , Tamil Nadu India-632014.

# **ROBOSOCCER**

## Event Date: 14th March 2020

#### **INTRODUCTION:**

Still stuck between the Messi-Ronaldo verdict? Guess who's a better player than both!

The answer to your eternal question is a Soccer Robot. If you'd like to know how things are going in the world of robotics, you would do well want to be a part of MECHNOVATE'20 and it's very own ROBOSOCCER event.

A well packed room with hyper complex thought clouds, where everyone you look at is lost in the drill with a robot head in one hand while tapping on a computer with the other. So come witness the best of competitive play with us this Mechnovate.

All you have to do is interweave your passion for the sport and your knowledge about robotics to mesmerize the crowd and compete in an exciting tournament.

#### TEAM NAME:

- Every team must have a name which should be unique.
- Event organizers reserve the right to change the name of the team whose name they deem inappropriate, offensive or conflicting.
- If two teams are found to have same names, organizes reserve the right to change the names of the team.
- The team name should not include any country's name and should not be associated with any country's name.
- Organizers must be notified if a Team's name has been changed.

#### **TEAM SPECIFICATIONS:**

- There can be a maximum of 7 members per team.
- Only 2 members of each team may be present at a time at the arena.
- One member will be the controller of the bot and the other will be the wire holder.

#### **CERTIFICATE POLICY:**

- A certificate of participation will be awarded to all participating teams.
- A certificate of appreciation (or excellence) will be awarded to the winners.

#### **BOT SPECIFICATIONS:**

- Bots can be wired or wireless.
- The wire length of wired bots must be greater than 15 feet.
- The bot dimensions should be as follows

(20% tolerance is allowed):

a)Length <= 30 cm

b)Breadth <= 25 cm

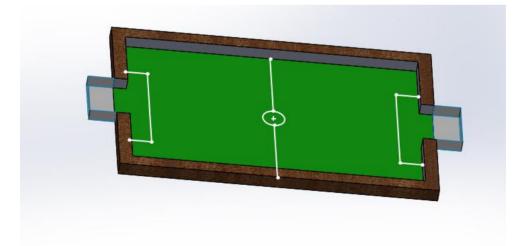
- c) Height <= 25 cm
- d) Weight <= 5 kg.
- The battery voltage (potential) supplied to the bot should not exceed 15 **volts**.
- Any kind of mechanism for kicking the ball is not allowed.

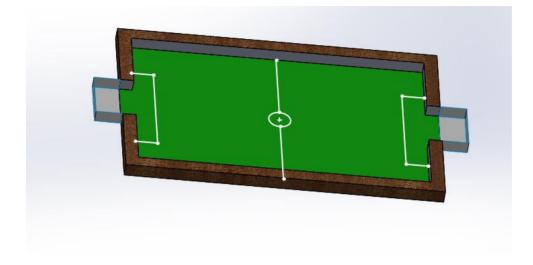
 Any kind of lifting, grabbing or suction mechanisms are not allowed. (The ball should not be completely confined at any given instance, minimum clearance for the passage of the ball should be provided).

#### **ARENA SPECIFICATIONS:**

- Arena Dimensions: 11 feet X 7 feet
- Goal post Dimensions: 24 inches X 12 inches
- Penalty area: 2 feet 2 inches
- Centre Circle diameter: 2.5 feet
- Ball Diameter: 2-3 inches
- Ball type: Tennis ball
- The arena will have a rigid base with a green carpet surface for the pitch

#### VIEWS:





#### **GAMEPLAY:**

- At the beginning of each half, the ball will be kept within the center circle (see figure), and both bots must have some part of the robot inside the circle, within their own half of the arena. The team which wins the toss will decide, whether it first wants to attack or defend.
- The team which attacks will start from the midline. The bot which will defend will start from its half of the arena.
- After every goal, the opponent must start from the midline and the other team must be in its own half of the arena.
- Each match duration will be 180 seconds.
- In case of foul, the match will resume from the point of foul.
- In case of a draw (based on overall score) extra play of 90 seconds will be given.
- Winner will be declared in accordance with the final score.

#### **RULES**

- All bots must have their own power supply (lithium based batteries only)
- The soccer bot can only transform to its size at the beginning .It cannot transform into multiple separate parts once it enters the arena.The soccer bot should remain in one piece while in the arena.
- Bots will be analysed by the referee before a match. He will select or reject bots, taking into consideration the rules and dimension limits.
- The match will be paused in case of any entanglement of wires of both the bots.
- Any clamp in the structure of the bot should not have a length greater than the diameter of the ball.
- Bots should not lift the ball in the air.
- In case one team is disqualified, the other team wins.
- In case of any disputes, the decisions of the referees or event managers will be final.

#### **SCORING:**

- 5 points are awarded for every goal scored by each team.
- If the bot becomes immobile during the match, the team will first be given 90 seconds to fix it without any loss of a point. After 45 seconds 1 point will be deducted every 30 seconds.
- If a foul is committed, and a goal occurs before play is restarted for the foul, the goal will not be counted.

- A team gets '-1' point for each foul (if it does not have 0 points already).
- The winner will be declared on the basis of points.

#### FOULS:

- > The offences considered as fouls are as follows:
  - Kicking the ball out of the arena.
  - Damaging the opponent bot.
  - If any team member touches any bot without the referee's / event manager's permission, it is considered a foul.
  - Damaging the arena.
  - Any other offensive or aggressive behavior will be considered a foul.
- > In extra time, a single foul will result into losing the match.

# TOTAL PRIZES

- \* First place :Rs13000 + certificate of achievement for the team
- \* Second place:Rs 10000+certificate of achievement for the team
- \* **Third place** : Rs7000 + certificate of achievement for the team

# **REGISTRATION FEE**

# \* RS.1500+18%GST

(Per Team)(No Individual Member Registration) Send us in your queries at : mechnovate20asmevit@gmail.com

## **WEBSITE LINK : mechnovate20.asmevit.com**

✤ For More details , follow our social media pages:

- https://www.facebook.com/Asmevit/
- https://www.facebook.com/mechnovatevit/
- <u>https://www.instagram.com/asmevit/</u>
- <u>https://www.instagram.com/mechnovatevit/</u>

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**Note:** Winning does not guarantee to qualify for the next round. Performance of individual bot will be considered for qualification. Rules mentioned above are subject to change any time. Participants should check for the latest updated pdf on the official website of Mechnovate'20. However, this draft is to be followed as the latest version.

Mechnovate'20 reserves all rights regarding rules and regulations.