

## ARRTECH\_ UTSAV 2K21

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<b>Department</b>	<b>: Mechanical</b>
<b>Name of Event</b>	<b>: ROBO FOOTBAL</b>
<b>No of Participants</b>	<b>: 2 -4</b>
<b>No of Winners</b>	<b>: 2</b>

### **Individuals Event Description**

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## **RULES FOR ROBO FOOL BALL**

### **❖ TASK**

Design a robot either wired or wireless within the specified dimensions that can operated manually and can **MAXIMUM GOAL** within time limit. The robot that will complete **MAXIMUM GOAL** in least time will be the winner. Think your robot can overcome any obstacle-big or small in the least of time.

### **❖ ROBOT SPECIFICATIONS:**

- 1) The maximum dimension of the robot can be 50 cm x 30cm x25 cm (l x b x h).
- 2) The robot may be wired or wireless.
- 3) The length of the wire (for wired bots) should be long enough to cover the whole track and wire should remain slack during the complete run.
- 4) Maximum weight must not exceed 5 kg.
- 5) The participants will be provided with 220 Volts, 50Hz standard AC supply. Participants will have to themselves arrange for adaptor or batteries.
- 6) The machine must not be made from Lego parts, or any ready-made kit, if we find such machine it will be disqualified.

### **❖ BATTERIES & POWER:**

1. The machine must be powered electrically only. Use of IC engine is not allowed.
2. Batteries must be sealed, immobilized electrolyte type (gel cell, lithium, NiCad, or dry cells).
3. The electric voltage anywhere in the machine should not be more then 24V DC at any point of time.

### **❖ GENERAL RULES:**

- 1) This is football event so fastest and most balanced robot will win.
- 2) Robot should be as per the given specifications.

- 3) Each team can have maximum four members. Students from different institutes can form a team.
- 4) Each member of the team must contain the identity card of his/her respected institute.
- 5) The robot should not damage the arena.
- 6) No test practice will be allowed on the arena.
- 7) The robot must not leave behind any of its parts during the run; else it will result in disqualification
- 8) Unethical behavior could lead to disqualification. Faculty co-ordinators have all the rights to take final decision for any matter during the event.

Judge's decision will be considered final.

- 9) Certificates of Participation will be given to all the teams that will participate in the event, but not to the teams which get disqualified due to disobeying any of the competition rules. \*Co-ordination committee reserves the right to add or update any rule.

#### ❖ **TRACK SPECIFICATION:**

- 1) Balls are placed at specified locations on the arena.
- 2) Time limit is 3 minutes.
- 3) Participants can drive, push or hit the ball into any of the goal posts.
- 4) Points = number of goals.

#### ❖ **GAME RULE:**

- 1) The competition is based on time trail system. There will a qualifying round for each team.
- 2) The top team from qualifying round makes it to the final round on basis of time trials.
- 3) Wires should remain slack during the course of the run. Pulling the wire to aid the robot in traversing may lead to disqualification.
- 4) If any of the robots starts off before start up call, the counter would be restarted and the machines will get a second chance. If repeated again then team will be disqualified.
- 7) Your robot must be ready when call is made for your team. 6) The robot will be judged on basis of (in priority):-maximum goal done.
- 8) Machine must not contain any readymade kits, pneumatic &hydraulic systems, IC engines.
- 9) Decision about your robot will be taken by the organizers.

**EVENT VOLUNTEER**  
**MOHATA MAHESH- 9104557601**  
**CHAUDHARI SUJIT- 8320143582**

**GUIDED BY**  
**PROF. MIRZA SHAHBAZ**  
**PROF. AMZAD ALI PARBADIYA**

## ARRTECH \_UTSAV 2K21

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**Department** : **Mechanical**

**Name of Event** : **Junkyard Wars**

**No of Participants** : **2 -4**

**No of Winners** : **3**

### **Individuals Event Description**

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Inspired by real life incident, junkyard wars will test your ability to make use of every resource available in an optimized manner under the given time constraint. The participants will have to apply innovative ideas and feasible solutions of a given real life problems to design the mechanism from the given scrap and have to complete the task in required time limit. All that you need is some jugaad from kabaad! So put on your hats of imagination, get ready to dirty your hands and let the battle of creative minds begin!!

### **General Rules**

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- No certificates will be given to the participants if they do not appear in ROUND1.
- Any team which is not ready at the time specified will be disqualified from the competition automatically.
- The decision of the judges will be final and binding in any circumstance .Arguments on their decision won't be entertained and may lead to disqualification.
- The teams must adhere to the spirit of healthy competition. The coordinators reserve the right to disqualify any team for their misbehavior.
- The number of rounds and their contents are liable to change before the event and the change will be informed to all who register.
- The task has to be completed in given time itself otherwise the team will be disqualified.
- Interaction with other team during event is not allowed.

## Evaluation Criteria

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- Task completion and time taken for it
- Aesthetic of create model.
- Negative marking consideration if
  1. Hint provided
  2. Extra material provided
- Decision made by the event head will be final and acceptable in any cases.
- The decision of the coordinator will be final and the rules may vary for the successful completion of the event.
- Certificate of participation will be given to all participants.

**EVENT VOLUNTEER**  
**DABGAR MITESH- 7600705313**  
**DHARVIYA GUNVAT- 9824269016**

**GUIDED BY**  
**PROF. MILAN CHAUDHARY**  
**PROF. KAMLESH VARMA**

