



**RULE BOOK
LINE FOLLOWER ROBOT**



NATIONAL MECHANICAL FESTIVAL 2018
6-8 SEPTEMBER 2018



**DEPARTMENT OF MECHANICAL ENGINEERING
KHULNA UNIVERSITY OF ENGINEERING & TECHNOLOGY**



TEAMS WILL BE REQUIRED TO BUILD A LINE FOLLOWING ROBOT AND PROGRAM IT ACCORDINGLY. DIMENSIONS FOR THE DESIGN OF A ROBOT AND A PLATFORM WILL BE SPECIFIED. THIS WILL ENCOMPASS THE PARTICIPANTS FROM BOTH COLLEGE AND UNIVERSITY LEVEL.

LFR RULEBOOK

- ❖ The competition is open to all the students of college and undergraduate students of all universities.
- ❖ The participant team must register on the google form, provided in the Ignition Event.
- ❖ Registration Fee: BDT 1500/- (For 1-3 Members)
- ❖ Each team will be recognized by its registered team name and registered team leader.
- ❖ Each team can consist of maximum 3 members. Additional One member will cost extra BDT 500 with the total fee amount.
- ❖ Design: Robot must be a ground wheeled vehicle
 - ❖ Length: Maximum length is 25 cm
 - ❖ Width: Maximum width is 25 cm
 - ❖ Height: Maximum height is 25cm
 - ❖ Weight: 4 kg maximum
 - ❖ Power: Maximum 24 volts on-board power supply.
- ❖ The Robot must follow the line fully autonomous without any human intervention.
- ❖ No wireless communication or external data feed to robot is allowed.
- ❖ There will be two rounds. First round track will be a simple line follower track with black lines on white surface. For second round there will be bridge, objects and walls.



RULES & REGULATIONS

- Before the competition starts, each team has to submit their bot.
- After submitting the bot, the teams are not allowed to make any kind of changes to the robot.
- In the time of race, only 1 member will be able to stay in the arena.
- Points will be awarded only if the robot travels the whole path between two checkpoints and crosses the new checkpoint. No checkpoint can be skipped
- Touching the bot during runtime is a compulsory restart. Restart is a must in case the bot gets out of track.
- The bot must restart from the last completed checkpoint.
- Max no of restarts: 5.



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ARENA SPECIFICATION

- Track will be printed 'Black on White' surface.
- Track line will have a min breadth of 3cm through the whole track.
- Sharp turns will form 45° , 60° , 90° and 135° angles. There will be no angle smaller than 45° .
- There will be curves and discontinuity in the line.
- Bridge angle will be at most 45° .
- For the consideration of the participants a demo track has been presented here. The first round track will be almost similar to this one. Tracks for the second round will be updated soon. Stay connected with us for further updates.



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ALL DIMENSIONS ARE IN CM



REGISTRATION PROCESS

- Firstly, Payment should be done through bkash. (Step by step procedure in next page)
- **Bkash Reference code: LFR**
- Secondly, Fill up with the necessary information in the google form, provided in the event page.
- Thirdly, Make sure that you've filled the TrxID properly in the google form.

We will send you confirmation message to your phone number and email address within 48 Hours.



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PAYMENT PROCEDURE:

***247#**

Dial *247# to start

1. Send Money
2. Buy Airtime
- 3. Payment**
4. Cash Out
5. Pay Bill
6. Remittance
7. My Bkash
8. Help line

Enter Merchant bKash
Account No:
01533-001841

Enter Ammount:
1500

Enter Reference:
LFR

Enter Counter No:
0

Enter Menu Pin:
XXXX

Payment to
015533-001841 Successful.
Ref. LFR. Counter 0. Fee TK
1500.00. Balance TK
XXX.XX TrxID XXXXXXXXX
at 3/08/2018 15:12



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CONTACT INFO

For Query about LFR Rules and Regulation:
Nihal- 01867-555133

For any Query about Registration:
Mahi- 01767-655379

Send us e-mail at ignition.kuet@gmail.com to any kind of query.
We'll get back to you as soon as possible.



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