

SNAG-CROSS

Problem Statement: To build a remote controlled electric-powered robots that can be used to complete-broken pathways and complete the path by running on land as well as water.

Task:

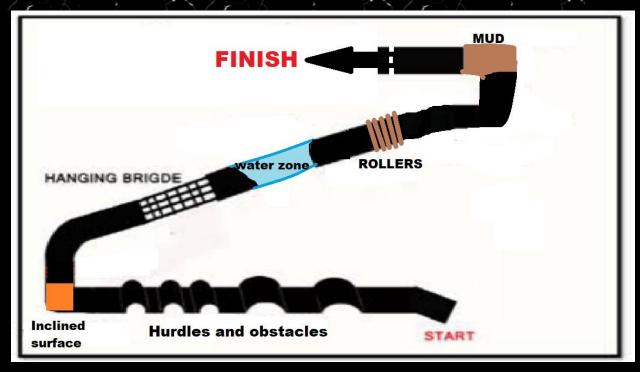
- Build a robot that can be used to perform tasks on land and water.
- Traverse across uneven terrains.
- Complete the path over crossing different huddles and abstraction like sand, water, inclined path, rollers, hanging bridge, mud.

Robot specifications:

- Participants have to bring an amphibious robot that can travel on both land and water.
- The robots must be electric powered and both wired and wireless(remote controlled).
- Participants can also use Bluetooth/internet/Arduino techniques to control the bot.

Event Rules:

- Every team has to register online on the official ADASTRA-2K19 website for the competition.
- A Team ID will be allocated to the team on registration which shall be used for future references.
- LEGO kits or its spare parts or pre-made mechanical parts are not allowed.
- A team can register at any point of time before and can submit final abstract(as mentioned in the structure).
- The decision of the organizers or judges shall be treated as final and binding on all.
- No responsibility will beheld by ADASTRA-2K19,EATM,BBSR for any late, lost or misdirected entries.
- Note that at any point of time the latest information will be that which is on the website. However, registered participants will be informed through mail about any changes.
- Participants should report at the Arena in their respective slots. No further requests will been retained.
- Robot has to move in specified channels and bumping into the arena will be penalized wit negative points.



Round 1:

Arena Description and Task:

- Arena with water zone is of 150cm x 50cm.(zone3)
- Arena with inclined surface 100cm(in water zone).(zone2)
- Arena with hanging bridge 100cm with angel 30 degree.(zone5)
- Arena with huddles and obstacle 150cm with 5 huddles.(zone1)
- Arena with mud 60cm.(zone6)
- Arena with rollers 100cm.(zone4)

Task:-

- Time and point based round.
- Maximum time:-5 min.
- Maximum number of timeout allowed:-1(1min).

Scoring formula:-

- Finishing zones :- +300 points(each zone carry +50 points)
- Timeout :- -50 points
- Restart :- -100 points
- Bumping outside the arena :- -50 points
- Falls into water :- Restart(-100 points)
- Time bonus :- +1(Time left per second)
- BOTS turn over :- -50points(on land)

Wining Prize:-

The winning team should got a prize of amount Rs 15,000/-