### SCHWIMMWAGEN

### A challenge only becomes an obstacle when you bow to it. Thinking of going on land? Car. On water? Boat. How about both? In this test of engineering skills, challenge yourself to build the ultimate all terrain vehicle capable of maneuvering through twisted paths and conquering the elements of earth and water.

### PROBLEM STATEMENT

### Design and fabricate an r/c bot that can maneuver through all possible terrains (land and water) in the least amount of time

### RULES AND REGULATIONS

### 1. Weight of the bot should not exceed 10kg 2. Bot should be made in such a way that it can be fitted into a 30x30x30 cm box at any point of time 3. It may be wired or wireless. 4. The track may contain elements over which a hovercraft may not be able to pass. 5. The electric potential difference between any two points on the bot should not exceed 15V (dc) at any point of time. AC charging ports will not be provided 6. Vehicle should not touch the bottom of the water section at any time. Bots taking advantage of the bottom of water section to move will be disqualified 7. Land and water sections will be as shown as in the figure. 8. Land may have humps of maximum height 2cm, may contain gravel and sand, also wedges and non-planar surfaces resembling all terrain characteristics 9. Bot can be brought back to a particular checkpoint with a time penalty. It will be team member’s responsibility to do so. 10. There may be obstacles including vortices in the water section. 11. A team may comprise maximum of four members 12. Only two members are allowed inside the race arena. 13. One person can be part of only one team 14. None of the teams are allowed to share the components of their bots (except batteries). The event organizers may check the bots at any time during the event. Any team violating the above rule would be disqualified immediately. 15. There can be slight changes from the track shown in figure. 16. Decision of organizing members will be final.

### JUDGING CRITERIA

### The bot finishing the track with minimum time elapse will be the winner. 2. There can be surprise elements which can add time penalties or reduce your time elapse in the track. 3. There will be a penalty of 10 seconds for each reset to the previous checkpoint. The stopwatch would be running all the time. One of the team member should call for “go back” at this time.

### Participation

Min: 1  
Max: 4