

FOLLOW-ME (LFR)

INCEPTUM 2K14

Theme

A line following vehicle is an entry level autonomous vehicle that can navigate any course while following a on a contrasting background. An autonomous vehicle is a driverless car that can drive itself from one point to another without any external assistance. Navigation is accomplished by a system of sensors that drive the corresponding actuators on the vehicles.

Objective

Build an autonomous, line-following robot which traverses a given track in the least possible time. The "track" is simply a line which the robot has to follow from the start to the finishing point.

Details

All the students enrolled in high school, undergraduate, postgraduate (excluding PhD.) program at any recognized institute are eligible to participate. Each team can consist of maximum 4 members. Each team must declare a name for their machine at the time of competition. All participants must carry valid ID cards of their respective schools/colleges. There will be two rounds. Teams

completing Round One will be eligible to participate in Round Two.

Arena Specification

Arena size shall not be more than 3m x 2m. Arena will consist of 3cm thick track. The track will have black line on white background, white line on black background, alternative white and black lines, three way junctions, intersections, loops and dead end, acute turns and U-turns, curves. The track can be discontinuous. There will be different arenas for different rounds. Arenas will be unveiled only on the day of competition. Sample arenas will be put up on the website. Teams will be given sufficient time to calibrate their bot for arena before start of the event.