

# ROBO-MAZE

INCEPTUM 2K14

## **Theme**

A maze is a tour puzzle in the form of a complex branching passage through which the solver must find a route. The pathways and walls in a maze are fixed. Maze denotes a complex and confusing series of pathways. A maze solver robot is used to find an appropriate path. It is an autonomous vehicle 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, maze solving robot which traverses to find an exit path in the least possible time. The "path" is simply a route which the robot has to find starting from the start point 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 one and only one round.

## **Arena Specification**

Arena size shall not be more than 4m x 4m. Arena will consist of 15-20cm high walls and 25cm wide path. The track will have three way junctions, intersections, and dead ends. Bots will be placed on start point from where they must start solving the maze and reach the end point in minimum possible time. Arena 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 the start of the event.