Maze Competition Description and Rules 

*Event Description*:

In this contest the contestant, or team of contestants, must design and build an autonomous robotic “mouse” capable of traversing a maze of standard dimensions from a specified corner to its centre in the shortest time. The team must submit a presentation along with the TDP. The team has to showcase their presentation on the first day of the event make sure that it is a power-point presentation.

Team Size: Maximum 4 members, Minimum 1 members

# Objective

In this competition, the mission of the autonomous Micromouse (robot) is to negotiate a maze from specified corner to its centre in the shortest possible time.

## Contest eligibility

1. Both an individual and a team can register for the maze solving competition.
2. A team may consist of up to four people.

# 3. Rules for the Micromouse

1. A Micromouse shall be self-contained (no remote controls).
2. A Micromouse shall not leave any part of its body behind while negotiating the maze.
3. A Micromouse shall not jump over, fly over, climb, scratch, cut, burn, mark, damage, or destroy the walls of the maze.
4. A Micromouse shall not be larger, either in length or in width, than 16 centimetres. The dimensions of a Micromouse that changes its geometry during a run shall not be greater than 16 cm x 16 cm. There are no restrictions on the height of a Micromouse.
5. A Micromouse's body must entirely block time measuring system light beam with a diameter of 3 mm at the height of 3 cm.
6. Any violation of these rules will constitute immediate disqualification.

# 4. Rules for the maze

1. The maze is composed of 18 cm x 18 cm unit squares and comprises up to 16 x 16 unit squares. The walls of the maze are 5 cm high and 1.2 cm thick (assume 5 tolerance for mazes). Thus, the distance from wall to wall within a square is 16.8 cm. The outside wall encloses the entire maze.
2. The start of the maze is located at one of the four corners. The start square is bounded on three sides by walls. The start line is located between the first and second squares. The destination goal is the four 18 cm x 18 cm cells at the centre of the maze. The finish line is at the entrance to the destination square.
3. Multiple paths to the destination square are allowed and are to be expected. The destination square has only one entrance and it will be positioned so that a wall hugging mouse will not be able to find it.

# 5. Rules for the competition

1. Each contesting Micromouse is allocated a total of 10 minutes of access to the final maze. Any time used to adjust a mouse between runs is included in the 10 minutes. Each run (from the start cell to the centre zone) in which a mouse successfully reaches the destination square is given a run time. The minimum time shall be the mouse's official time. Based on the official time ,TDP and presentation of the teams points will be awarded and the team with the highest points will be considered the winner.
2. Each run shall be made from the starting square. The operator may abort a run at any time. If an operator touches the Micromouse during a run, it is deemed aborted, and the mouse must be removed from the maze. If a mouse has already crossed the finish
3. After the maze is disclosed, the operator shall not feed information on the maze into the Micromouse.
4. The contestants are allowed to:

* change switch positions;
* adjust sensors;
* make repairs in case the Micromouse breaks down.

1. The run timer will start when front edge of the mouse crosses the start line and stops when the front edge of the mouse crosses the finish line.