

Event Rules

The robots must be designed and built taking the following rules into consideration. These rules will apply at the RobotOlympiad competition. Time penalties are not applied at the viva demonstration but in order to show you have fully met the design brief, your robot must complete the specified task without making any mistakes.

Orienteering

1. Bot starts completely behind the line
2. 5 second penalty for knocking over a gate. Gates are placed 14cm apart in *slalom* format
3. Falling off the see-saw carries a 5 second penalty and the bot must go back to the beginning of the ramp
4. Bot must completely cross the line at the end of the run
5. Not having the token when finishing carries a 5 second penalty
6. The run is completed when the token is dropped behind the start line; not being able to drop the token carries a 5 second penalty

Maze solver

1. Bot must start outside the maze
2. Clock starts when the bot crosses the threshold
3. Can't touch the bot once it enters the maze
4. Clock stops when the bot completely exits the maze
5. Can pick up the bot when it exits the maze
6. All three times are added together, shortest overall time wins
7. 5 second penalty for knocking over a wall – clipping is ok as long as the wall doesn't fall over. Walls will be reset at the **end of each run**.
8. If the bot does not exit through the finishing line, a penalty time will be used. This time will be the longest time taken by any of the 4 bots in any of the 3 runs.

Pied Piper

1. Rover must reach the LED before the end of the music; if not, the distance is measured to the rover at the time the music stops.
2. Distance is measured from the closest part of the robot to the LED
3. There is a 5cm penalty added to the final distance for touching the speaker or the LED stand.

Gymnastics

1. Rover must stay within the 2m x 2m box marked out on the floor
2. Any malfunctions that may arise during the performance will influence the judges' marks