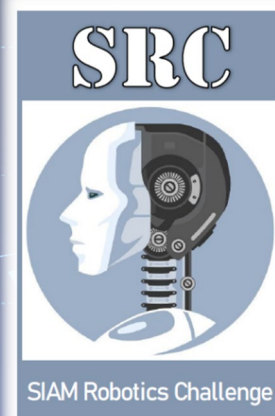


SIAM Robotics Challenge

2022



University Category

Task outline

The task is robot navigation with pick and place functionality. The robot should have the ability to recognize the object's color and stack it to a given order. Navigation should be performed on the black color path on a white surface (arena). You will be getting the necessary information about the robot dimensions, specifications, and other information in the task document. You can calibrate robot sensors and tune your code in the test rounds. During the evaluation round, you have to upload your final code. You have **3** attempts to finish the task. **During that 3 attempts, you are not allowed to change the robot program.** In each attempt, you have to place the robot at the starting location of the arena. A team's final ranking will be based on completed milestones and the timing of the fastest run. The

- Straight line following (Black)
- 90-degree turns
- Distance measurement
- Color detection (4 colors)
- Automatic controlling (PID)
- Fast motion

General rules for the competition

- ❖ Each team can have a maximum **5** participants.
- ❖ Judges can ask any explanation about the robot and the code.
- ❖ Final judging criteria will be given at the evaluation phase.
- ❖ Decisions of the judges will be the final.