

Obstacle Course

Time required: 60 minutes

Please read all the directions carefully before beginning the assignment.

1. Comment your code as shown in the tutorials and other code examples.
2. Follow all directions carefully and accurately.
3. Think of the directions as minimum requirements.

Use Arduino programming to successfully navigate an obstacle course by dead reckoning. Dead reckoning means to navigate without any outside input, like a sensor. A simple example: place an object, start the robot from a certain point, go around the object and return to the starting point.

Add this program to your last Default Program to navigate the Obstacle Course. This program includes the blocks that will drive your robot a certain distance, and turn at a specific angle. You may want to include an if statement like the remote control block to control when it starts, and stops.

Requirements

1. Use CalibrateMovement to calibrate your robot.
2. Measure the distances and angles in the obstacle course.
3. Navigate without sensors.
4. There must be a minimum of three obstacles to navigate around and between.

Assignment Submission

- **All students** → Attach finished programs to the assignment in Blackboard.
- **In class assignment submission** → Demonstrate in person.
- **Online submission** → A link to a YouTube video recording showing the assignment placed in the submission area in BlackBoard.