

Arduino Workshop 2.0

`**It is not a guided session, so feel
free to hop in and out based on your
respective schedules.`



Content for today's workshop!

9am-12pm

Obstacle Course

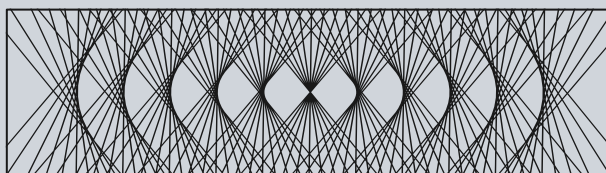
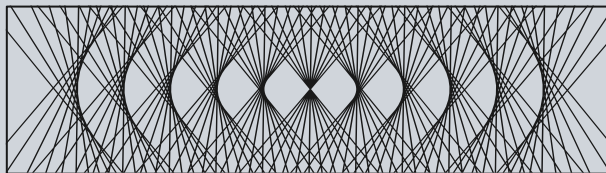
12pm-1pm

Break Time

1pm-6pm

Precision Course





Objectives

To allow Robocon members to improve their knowledge in automated and manual controlled robots, which will help support the programming and understanding of the ER and RR.



Obstacle Course

Navigate the walled obstacle course using ultrasonic sensors and servo motors.



Challenge 1

- Program the robot to automatically navigate an obstacle course using the ultrasonic sensor
- Make use of the servo sensor to turn the robot's "vision"
- All navigation must be automatic



Break Time!



Precision Course

- Program a serial controller on the Arduino IDE by checking it through the serial monitor
- Adjust the sensitivity of the serial controller based on your preference
- Navigate the course



Challenge 2

Try adjusting the turtle robot's sensitivity to be as precise as possible.

As you navigate the playing field, ensure your robot does not touch the obstacles.

Hint: (Use Ultrasonic Sensors)



Thanks!

