

# Arduino Electronics

## Module 1:

- Learning about Arduino
- Different sensors/components and their working
- coding an Arduino / setting up the IDE
- Led projects
- RGB Led project

## Module 2:

- Working with the ultrasonic distance sensor
- Working with servo motor
- Turning led on/off using ultrasonic sensor
- Rotating servo motor using ultrasonic

## Module 3:

- Working with lcd module
- Final project: Parking lot system

## Components/ modules required:

The following are the components required for the workshop. The number is with respect to the number of participants (12 participants/6groups).

- Arduino board: 6
- Led: 12
- RGB led: 6
- Ultrasonic distance sensor: 6
- Servo motor: 6
- Lcd module with I2C: 6
- Jumper cables
- Bread board: 6
- Resistors: 12