

# Syllabus for 6 weeks IoT Training

## ❖ **Module 1**

- Introduction to Internet of Things
- Architecture of Internet of Things
- Introduction to Sensors & Actuators
- Introduction to MQTT protocol

## ❖ **Module 2**

- Introduction to Arduino
- Setting up Arduino IDE
- Interfacing of LED With Arduino
- Interfacing of LCD With Arduino
- Interfacing of Seven Segment With Arduino
- Interfacing of Servo Motor with Arduino

## ❖ **Module 3**

- Introduction to NodeMcu and ESP8266-01
- Setting up environment for Nodemcu
- Flashing Firmware on ESP8266-01
- Connecting to wifi n/w
- NodeMcu as a web server
- Using different Libraries with NodeMcu

## ❖ **Module 4**

- Introduction to Raspberry Pi
- Installing Operating System on Raspberry pi
- Installing Real Vnc on Raspberry pi
- Use Raspberry pi as a access point
- Installing MQTT server on Raspberry pi
- Installing Node-Red on Raspberry pi
- Installing Node-Red Dashboard on Raspberry pi

## ❖ **Module 5**

- Major Project on Home Automation