

## **Internet Of Things (IOT) Course Content (30 Days)**

### **1. Introduction to the Internet of Things**

- 1.1 The Internet of Things.
- 1.2 The Basics of Sensors & Actuators.

### **2.The Arduino Platform**

- 2.1 The Arduino Open-Microcontroller Platform.
- 2.2 Arduino Basics.
- 2.3 Arduino Board Layout & Architecture.
- 2.4 Introduction to various Functions.
- 2.5 Reading from Sensors.
- 2.6 Programming fundamentals (C language).
- 2.7 Arduino Programming & Interface of Sensors.
- 2.8 Interfacing sensors with Arduino.
- 2.9 Programming Arduino.

### **3.Programming the AVR**

### **4.Embedded C for AVR.**

### **5.Reading from Sensors.**

### **6.Talking to your Android Phone with Arduino.**

### **7.Connecting Arduino with Mobile Device.**

### **8.Integrating ESP Module & Testing DHCP Connection.**

### **9.Creating Program for Localhost Web Server for controlling devices.**

### **10.Use Arduino to Upload free data from Environmental Sensors to Server.**

### **11.Making Wifi controlled Automation SYSTEM.**

### **12.Making multiple device interface over the WIFI network**

## **Live Project**

- Simple LED Program for Arduino.
- Integrating Sensors & Reading Environmental Physical Values.
- Reading Environmental Values on Android Smartphone.