

IOT COURSE SYLLABUS

BEGINNER LEVEL

Course Duration - 18 hours

Fee: Rs. 5500 per head (with Arduino and IoT Shield, Wifi)

Rs. 4500 (for those who have attended our IoT workshop)

- IOT intro and overview
- Intro to Arduino board
- Interfacing Leds
- Serial Communication
- Interfacing with Sensors
 1. PIR
 2. Ultrasonic
 3. LDR
 4. Temperature sensor
- Interfacing LCD display
- Interfacing Relay
- Bluetooth communication
 1. Home Automation with text Control through Bluetooth
 2. Home Automation with Voice Control through Bluetooth
- Arduino as Web Server
- Connecting Arduino to cloud

Final project: Smart Connected Home – An Arduino project to connect your house to social media tools and give intelligence

INTERMEDIATE LEVEL

Course duration – 30 hours

Fee: Rs. 7500 per head (with Arduino, nodemcu and IoT shield)

Rs. 6500 (for those who have attended our IoT workshop)

- IOT intro and overview
- Intro to Arduino board
- Interfacing Leds
- Serial Communication
- Interfacing Sensors
 1. LDR
 2. Temperature sensor
- Interfacing LCD display
- Interfacing Relay
- Home Automation with text Control through Bluetooth
- Home Automation with Voice Control through Bluetooth
- Arduino as Web Server
- Connecting Arduino to cloud

Project 1 : Smart Connected Home – An Arduino project to connect your house to social media tools and give intelligence

- Intro to MIT APP INVENTOR
- Creating simple app for controlling appliance
- Intro to Nodemcu
- Interfacing LED

- Interfacing Sensor
 1. PIR
 2. Ultrasonic
- Intro to Google Firebase
- Interfacing Nodemcu with firebase

Project 2 : IoT with firebase show sensor data to Android app using Nodemcu



ADVANCED LEVEL

Highlights of the program

- 1) Get to learn different Embedded platforms - Arduino, Raspberry Pi ,Nodemcu
- 2) Use up to 5 sensors
- 3) Use 2 different IoT platforms
- 4) Development your own IoT Web platform using Python
- 5) Develop your own Mobile App for IoT
- 6) Do up to 4 different IoT projects using both Arduino , Raspberry Pi and Nodemcu
- 7) Get free guidance for IoT Hackathons and competitions

Course duration – 42 hours

Fee: Rs. 10000 per head (with Arduino,IoTshield ,Nodemcu)

Rs. 9000 (for those who have attended our IOT workshop)

- IOT intro and overview
- Intro to Arduino board
- Interfacing Leds
- Serial Communication
- Interfacing Sensors
 1. LDR
 2. Temperature sensor
- Interfacing LCD display
- Interfacing Relay
 1. Home Automation with text Control through Bluetooth

2. Home Automation with Voice Control through Bluetooth

- Arduino as Web Server
- Connecting Arduino to cloud

Project 1: Smart Connected Home – An Arduino project to connect your house to social media tools and give intelligence

- Intro to MIT APP INVENTOR
- Creating simple app for controlling appliance
- Intro to Nodemcu
- Interfacing LED
- Interfacing Sensor
 1. DHT11
 2. Ultrasonic
- Intro to Google Firebase
- Interfacing Nodemcu with firebase

Project 2 : IoT with firebase show sensor data to Android app using Nodemcu

- Raspberry Pi Basics – learn python with pi
- Raspberry Pi setup
- Interfacing leds in Pi
- Interfacing Sensors in Pi
 - PIR
- Interfacing relay
- INTRO TO FLASK
- Rpi as Server

- Connecting Pi to Cloud

Project 3: Smart Connected Home – An Rpi project to connect your house to social media tools and give intelligence

Project 4: Arduino as client and Raspi as server

FINAL PROJECT:

*****OWN PROJECT*****

