

ANSH INFOTECH

Development | Training | Consultancy
An ISO Certified company 9001:2015

Course Name – **IOT**

Category - **Professional**

Duration - **4 Months**

COURSE CONTENT

ARDUINO

- Introduction to iot
- Introduction to arduino
- Introduction to microcontrollers
- Difference b/w microcontrollers and microprocessors
- Installation of arduino ide
- Introduction to arduino software coding
- Understanding the basic syntax of if-else,loops,functions,and arrays
- Blinking an led with arduino
- Playing with leds
- Understanding basic interfacing of input and output devices

NODEMCU

- Understanding wifi modules
- Introduction to Nodemcu
- Blinking an led with nodemcu
- Working with leds
- Playing with RGB leds
- Understanding buttons
- Interfacing keypad
- Interfacing LCD I2C
- Experiment with Sensors(rain sensor,temperature,humidity,soil moisture,pir,ir etc)
- Understanding eeprom
- Understanding interrupts in nodemcu
- Interfacing output devices(motors)
- Interfacing oled display
- Interfacing relay and controlling home appliances
- Understanding watchdog and stability modes in nodemcu
- Deep sleep mode in node mcu
- Pulse width modulation in nodemcu
- Connecting to networks
- Make an access point
- IP and Host name
- Run a web server on node mcu
- Introduction to mit app inventor

Email – info@anshinfotech.org

Website – www.anshinfotech.org

+91-84278-99400

+91-94171-68347

ANSH INFOTECH

Development | Training | Consultancy

An ISO Certified company 9001:2015

- Making simple apps in mit app inventor
- Connect nodemcu to your own app
- Control ESP8266 with your android app
- Get sensor data from nodemcu with your android phone
- Client- server communication with two boards
- Monitor a sensor network
- Wifi network scanner with nodemcu
- Button to control an led
- Robot controlled with an Android app over wifi
- Make an app which stop charging your phone
- Introduction to basic python client
- Communicate with a python client
- Communicate with a python server
- Send sensor data to excel file(csv)
- Network time protocol
- Posting iot system status on facebook
- Intro to cloud platforms
- Sending sensor data to thingspeak cloud
- Send tweet to twitter
- Sending an iot email to your email id
- Control nodemcu with an android app through the internet
- Get data the internet with your android app
- MQTT: sending data to a remote server
- MQTT: getting data from a remote server
- Sending an sms to your phone
- Control nodemcu with your facebook messenger
- Json parsing of iot data
- Get weather condition and forecast on your app
- Send data to google sheet
- Voice control with your google assistant
- Creating a sensor network

RASPBERRY PI

- SETTING UP ENVIRONMENT FOR RASPBERRY PI
- First python program
- Understanding basic linux commands
- Blinking an led
- Take a photo and send email
- Control the Rpi with your app
- Interfacing some input devices and sensors
- Interfacing some output actuators
- Send sensor data to cloud
- Making a web server with Rpi

Email – info@anshinfotech.org

Website – www.anshinfotech.org

+91-84278-99400

+91-94171-68347