Certificate course in Internet of Things (IoT)

Internet of things (IOT)
6 Weeks Online Course

6 Weeks / 90 Hrs. (3 Hrs. per day)
Timing: - 02:00 PM to 05:00 PM
Medium of Instruction: Bilingual (English & Hindi)

Objective

The Course is aimed at molding candidates to skill about the use of IoT in daily life devices and make some new innovative devices using available sensors and embedded systems. After completing this course, students will be able to identify and articulate IoT business opportunities across a broad spectrum of industries.

Eligibility

10+2 passed with Basic Knowledge of any programming Language.

Prerequisites

✓ Candidate must have latest computer/laptop with preferably 2 GB RAM or higher and Graphics Card (2 GB)
✓ Software: Arduino IDE (can be downloaded from website)
✓ Internet connection with good speed *(preferably 2 Mbps or higher)*

Course Fees

Rs. 2450/- incl. GST& all other charges.

Certificate

Certificate will be provided to the participants, based on minimum 75% attendance and on performance (minimum 50% marks) in the online test, conducted at the end of the course.

Methodology

✓ Instructor-led live classes.
✓ Instructor-led hands-on lab sessions.
✓ Content Access through e-Learning portal.
✓ Assessment and Certification

How to Apply?

Step-1: Read the course structure & course requirements carefully.

Step-2: Visit the Registration portal and click on apply button.

Step-3: Create your login credentials and fill up all the details, see the preview and submit the form.

Step-4: Login with your credentials to verify the mobile number, email ID and then upload the documents, Lock the profile and Pay the Fees online, using ATM-Debit Card / Credit Card / Internet Banking / UPI etc.

Course Content

Day	Topic	Day	Topic	Day	Topic
Day #01	Brief Introduction of IOT, IOT components, Architecture and Classifications	Day #02	Microcontroller Fundamentals, Introduction to Arduino Microcontroller, Working on Arduino IDE	Day #03	Learning basics of sketch programming, Introduction LED based programming
Day #04	Condition based LED programming using Arduino	Day #05	Pattern based programs using Arduino and LED, Introduction to potentiometer	Day #06	Working with 16X2 LCD display, Adding LCD Library to IDE
Day #07	Working with 7 segment display, Adding 7 segment display library	Day #08	Working with 7 segment display, displaying single and double digits, showing 1-99 and 99-1 numbers Making timer/counter	Day #09	Working with Radio frequency identification (RFID) device
Day #10	Introduction to Actuators	Day #11	Introduction to Sensors, Difference between Analog and Digital Sensor	Day #12	Demonstrating Ultrasonic Sensor
Day #13	Data acquisition using PLX/DAQ	Day #14	Demonstrating PIR Motion Sensor, IR sensor, Flame Sensor	Day #15	Demonstrating Gas Sensor, Temperature Sensor
Day #16	Demonstrating Humidity Sensor, DHT11 Sensor	Day #17	Understanding networks LAN/WAN basics, IP Addressing Scheme	Day #18	Working with Ethernet Shield
Day #19	Using HTML form and Ethernet Shield Controlling devices using URL	Day #20	Introduction to Android Studio, Download and installation, discussion on menu and toolbar	Day #21	Making first android Activity, Working with button, text view, edit text etc.
Day #22	Understating different (Bluetooth & Internet) permissions to XML file, Making .apk file	Day #23	Introduction to Bluetooth Device (HC-05), 2 switch relays	Day #24	Working with Microcontroller WiFi Device (NodeMCU) -ESP8266
Day #25	Introduction to cloud computing, Sign in- Adafruit IO	Day #26	Using NodeMCU (ESP8266) module sending data to cloud server	Day #27	Sending data to Adafruit -IO using feed to the mentioned blocks, analyzing real time data of sensors at Adafruit, sending multiple sensor data through multiple feed and analyzing it using different blocks
Day #28	Working with Google Assistant Service, Home automation using Google Assistant Service	Day #29	Sign-in to IFTTT, working with Google Applets using if this then that (IFTTT),	Day #30	implementing Email , SMS, android notification using IFTTT service. IOT TEST

Course Coordinator

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