

Internet of Things

Course on Internet of Things

6 Weeks In-Campus Course

Duration: - 6 Weeks (90 Hours)

Batch Size: 30

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.

10+2 qualified with Basic Knowledge of Computers

Eligibility

Prerequisites

Candidate must have knowledge of Computers & Programming Language

Rs. 7080/- incl. GST & all other charges.

Course Fees

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.

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

Methodology

How to Apply?

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

Step-2: Visit the Registration portal (<https://reg.nielitvte.edu.in/>) 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, and android notification using IFTTT service. IOT TEST |

Course Coordinator

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Course Co-Coordinator

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CLICK HERE FOR REGISTRATION

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