

## **Internet of Things using Raspberry PI:**

This is an introductory course which will enable students to learn basics of Internet of Things using Raspberry PI. There will be live interactive classes with practical demonstration online.

**Who can attend:** Degree/Diploma in electronics and IT or NIELIT O/A level or anybody who has basics of Programming.

### **Course content:**

- Introduction to Raspberry PI, different versions and features
- Assembly, setting up and basic commands
- Hardware basics, controlling IO pins and programming in python
- Control of electronics using GPIO with practical
- Control of brightness of LED using Pulse Wide Modulation with practical
- Interfacing DHT11 sensor
- Basics of Internet of Things
- Controlling GPIO using web interface
- Machine to machine communication, MQTT
- Writing Publish, Subscribe client programs
- Remote monitoring of temperature and humidity using mobile with practical
- Live streaming through web

**Duration:** 1 week @ 3 hrs per day

**Course fee** Rs 1,000/-

**Course Start Date:** 3 October 2022

**Last Date for Registration and Payment:** 5<sup>th</sup> October 2022

### **Minimum requirements**

- Attendees must have a Raspberry PI system with a good internet connection and basic programming knowledge.

### **Faculty Profile**

Thokchom Sunil Kumar Singh  
Scientist D

### **Contact Number**

8788107405

Email: [thsunil@nielit.gov.in](mailto:thsunil@nielit.gov.in)

### **Admission**

Candidates can apply online registration through the given link:

<https://forms.gle/vAzTH6ExsaBRqm5GA>

### **Mode of payment**

Payment transaction may be done to the bank account using any mode of payment.

<b>Account Name</b>	<b>: DIRECTOR NIELIT</b>
Account Number	11808303031
IFSC Code	SBIN0006183
Bank Name	SBI
Branch	CHUCHUYIMLANG

**Certificate:** Certificate will be issued to all candidates who attend the course.