



National Institute of Electronics & Information
Technology Near IIT Patna, Amhara, Bihta,
Patna(Bihar) -801106

Details of the Course

Name of The Course: Industrial Training & Internship in IoT using Raspberry Pi

Duration (in Hrs.): 40

Fee (in Rs.): Rs 1983/-

Eligibility: Diploma/B.Sc./B.Tech In Electronics, Electrical, Instrumentation Engineering, Computer Science, IT or its equivalent. (Completed or Pursuing).

Course Content:

IoT Evolution, IoT Terminologies, IoT Building Blocks, IoT Architecture, IoT Applications, Scope and Case Studies, Introduction to Sensors, Working Principle, Types of Sensors, Sensors for IoT, Basic of microprocessor and microcontroller, Single Board Computer, Introduction to Raspberry Pi, RaspberryPi Board: Hardware Layout and Pinouts, Operating Systems on RaspberryPi, Booting RPi, Interacting and configuring the RPi OS, Networking the RPi, Remote access, Introduction to Python Programming, Python IDE installation, Variable Declaration, Python Data Types, Mutability and Immutability, Operators, String, List, Dictionary, Tuple, Conditional Statement, File Handling in Python, Function in Python, Variable Argument Function, Python Builtin Functions, Module and Package in Python, Python packages for IoT, Rpi Hardware interfaces, GPIO and interfacing peripherals, Sensor Interfacing, Programming Raspberry Pi for IoT application using python, Webserver, Node-RED, Wiring Pi, MQTT, Thingspeak, Thingspeak MQTT API, IoT application development using RPi