

## National Institute of Electronics and Information Technology Chandigarh

An Autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MeitY), Government of India

Birla Farms, Adj. to IIT Ropar, Rupnagar, Punjab

**L** 01881-257008

## Six months Industrial Training Program in

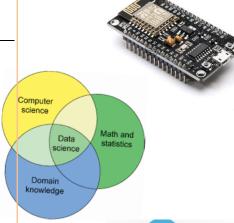
## **Internet of Things (IoT)**

under joint certification with IIT Ropar

## **Contents**

- Fundamentals of Electronic Components & it's working
- Basics of Electronic measuring, Testing tools
- **IoT** Introduction, Architecture, Protocols, Applications
- Arduino IDE, Basics of Embedded C Programming
- Interfacing LED, Push Button, Buzzer, LCD, NodeMCU, Serial communication, etc.
- Interfacing Analog and Digital Sensors
- Protocols Bluetooth, I2C, SPI, etc.
- Web services, Posting sensor/s data to web server, JSON.
- Introduction to 8051/ARM7 Microcontroller
- Minor Project
- Virtualization and Cloud computing
- Web server Introduction, installation, configuration
- Linux Operating System
- Raspberry Pi Introduction, Installation, Applications.
- Programming with Pi (GPIO pins) using **Python**
- Python packages- NumPy, Pandas, Matplotlib
- Introduction to Industrial IoT (IIoT)
- Machine Learning(scikit-learn) using Python
- Introduction to Augmented and Virtual Reality (AVR)
- Major Project



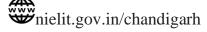






**Contact** 

- Dr. Sarwan Singh (9815621657)
- Prakash Pratik, M.S IIT(Mandi) (9805081099) Reception 01881-257008







Online Registration

for more information on courses

<u>Short Term Course</u> <u>Long Term Course</u>