NIELIT Chandigarh

Internet of Things

About NIELIT

NIELIT is an autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MeitY), Government of India. NIELIT Chandigarh was established in 1978 to provide professional services in the areas of Information, Electronics & Communication Technology (IECT). NIELIT Chandigarh is engaged in development of industry oriented quality education and training programmes in the state-of-the-art areas. It is an IT and Electronics Organisation with clear cut strategies and its various operations are aimed at giving its customers a total package of IT Solutions and products.

About Course

The explosive growth of the "Internet of Things" is changing our world and the rapid drop in price for typical IoT components is allowing people to innovate new designs and products at home. In this first class in the specialization you will learn the importance of IoT in society, the current components of typical IoT devices and trends for the future. IoT design considerations, constraints and interfacing between the physical world and your device will also be covered.

Course Objective

The learner will learn the key elements and strong knowledge of Internet of things. You will also learn how to make design trade-offs between hardware and software. Further, the learner will learn to develop immutable and decentralized application.

Brief Contents

- IoT–Introduction, Applications, Communication, Protocols, Architecture
- Basic Electronic circuits and Components
- Arduino IDE And Basics C Programming Structure
- Working with Analog Input –Interfacing Potentiometer, LDR, DHT 11, Relay, PIR, Ultrasonic sensor, Bluetooth Module
- Working with Serial Communication, LCD, Keypad
- Working with Serial Communication, LCD, Keypad
- Webserver- Introduction, Installation, configuration.
- Posting sensor(s) data to web server
- Interfacing NodeMCU with Web services
- Create JSON Object, Send JSON data to REST API over HTTP

Eligibility

Any under-graduate with knowledge of any one programming language

Duration

4 Weeks

For further details, Contact:

Facility at Chandigarh
IETE Building, Sector 30-B, Chandigarh 160030
Phone: 0172-2650121, Mobile: 7087235365, 8988377112
Email: trainining.chd@nielit.gov.in

Permanent Campus
BadaPhull, Birla Farms, Ropar-140001
Phone: 01881-257005,257006 Mobile: 7087235365, 8988377112
Visit: www.nielit.gov.in/chandigarh