

FACULTY DEVELOPMENT PROGRAM
on
**Internet of Things (IoT) with
cloud applications**

Organised by

**Electronics & ICT Academy IIT
Roorkee**



**Graphic Era Deemed to be
University**



Jan 07, 2019 - Jan 11, 2019

Experts from Academia/Industry

Xtrans Solutions

Guest Lecture
(IIT Roorkee)

Supported by

Ministry of Electronics & Information Technology
Government of India



Venue

**Graphic Era Deemed to be University,
Bell Road, Clement Town
Dehradun, Uttarakhand**

Why IoT?

IoT is next Industrial Revolution which is going to change our lives in ways never imagined before. Made up of millions of sensors and devices that generate unending streams of data, IoT is useful to improve our lives and our businesses in a lot of ways. You can explore many real-life examples of IoT devices that are commercially available, and you will have a glimpse of the future of the Internet of Things. This course will help you to gain adequate knowledge on the Internet of Things. You will learn various IoT cloud platforms available such as AWS IoT, Ubidots and ARTIK and also gets hands-on exposure on various IoT hardware platforms such as Marvell, Cypress, Raspberry Pi, etc.

Objective of the Course

- Introduction of Internet of Things (IoT).
- Overview of Embedded Technology, Hardware and Sensors.
- Understanding of IoT and major machine-to-machine (M2M) communication protocols.
- Learn various IoT cloud platforms available such as AWS IoT, Ubidots and IBM Bluemix.

Program Features

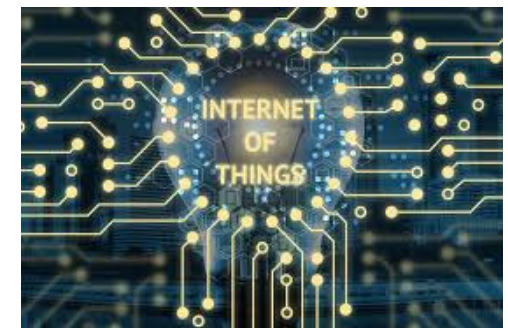
- The program is split into lectures and lab sessions.
- Quizzes and project work for enhanced learning.
- Hands-on experience on basic & advanced-level topics.
- Interaction & learning with experts from academia & industry.
- Certificates to the participants by EICT Academy, IITR.

Focus Area

- Introduction to IoT.
- IoT Hardwares and Sensors.
- IoT Cloud Protocols and Ubidots (IoT Cloud platform).
- IoT Standards and Hardware Protocols.
- AWS IoT (IoT Cloud platform).
- Cybersecurity and Privacy.
- Creating your own Cloud platform.
- Raspberry Pi 3 Demo with pH Sensor and Ubidots.
- Demo on Environmental Monitoring System.
- Demo on Cypress WICED IoT hardware platform.
- Demo on Cypress WICED with IBM Bluemix.

Benefits and Outcomes of the Course

- Understand the scope of IoT across various industries.
- Demonstrate various use cases of IoT.
- Design solutions for integrating smart objects into IoT frameworks.
- Design IoT services for applications, evaluate and analyze performances of IoT systems.
- Design an end-to-end IoT project for demonstrating sensor-cloud integration.



Coordinators

- Dr. Sanjeev Manhas, PI, EICT, IIT Roorkee
- Dr. Preeti Mishra, Associate Prof. CSE Dept. Graphic Era Deemed to be University

Who Can Attend ?

Program is open to faculty members/research scholars/PG students from colleges/universities, and industry personnel working in the concerned/allied discipline.

Registration Fee

Faculty members/Research scholars: ₹ 1,500/-
Industry person: ₹ 2,000/-

How to make payment

Offline: DD in favor of "Dean SRIC IIT Roorkee"
payable at Roorkee
"OR"

Online: (<https://www.onlinesbi.com/prelogin/icollecthome.htm?corpID=365641>)

Read the instruction for payment before filling the online registration form.

How to Apply

Step 1: Make Payment

Step 2: Participants may fill registration form through Academy website (<http://eict.iitr.ac.in>).
OR

Step 2: Send a duly filled-in registration form along with Demand Draft to Academy address.

Mr. Prateek Sharma, EICT Academy, ECE
Department, IIT Roorkee-247667

Important Dates



**Last Date For
Registration:
01-Jan-2019**



EICT Academy IITR

Electronics and ICT Academy (E&ICT) at IIT Roorkee (funded by Ministry of Electronics and Information Technology) aims to enrich and upgrade teaching and research competences of engineering faculties of institutes/colleges by conducting courses and workshops in fundamentals as well as emerging areas of E&ICT and enabled areas. The programs are conducted by well-known industry partners, resource persons from leading academia and experts from renowned R&D organizations.



Activities of the Academy

- Specialized training on basic and advanced level topics with hands-on experience in the emerging areas of Electronics & ICT.
- Setup the activity centers to conduct FDPs locally at institutes/colleges.
- Curriculum development for the industry.
- Continuing Education Programme for students/working professionals.
- Design, develop and delivery of specialized modules for specific research areas in industry.

Faculty Development Program
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REGISTRATION FORM

Applicant Name _____

Gender: _____

Category (GEN/OBC/SC/ST): _____

Designation: _____

Name and Address of the
Organizatio/Institute: _____

City/Town: _____

Email: _____

Phone Number: _____

Do you need Accommodation?
(Yes/No): _____

DD Number: _____

Date: _____

Issuing Bank: _____

Payable at: _____

Signature of the Applicant

Contact Us

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