

Electronics & ICT Academy

IIT Roorkee

FACULTY DEVELOPMENT PROGRAM ON

"Basic IoT Applications"



In Association with

Tula's Institute, The Engineering &
Management College Dhoolkot,
Chakrata Road, Dehradun



Sep 25, 2017 - Sep 29, 2017

Experts from Academia/Industry

Dr. Meenakshi Rawat
ECE Department
IIT Roorkee

Mr. V. S. Ramesh
STEPS
TI University Program

Supported by

Ministry of Electronics & Information Technology
Government of India



Venue

Tula's Institute, The Engineering &
Management College Dhoolkot,
Chakrata Road, Dehradun
(Uttarakhand)

Objective of the Course

- Establishing basic concepts and key components of Internet of Things.
- Hands-on training in handling IoT building blocks using commercially available components.
- Understanding the interaction between cloud computation and sensors.
- Troubleshooting the errors while implementing IoT for practical applications.

Benefits and Outcomes of the Course

- Learning basic building blocks of IoT.
- Learning essential Embedded system basics applicable to IoT.
- Hands-on experience in wireless interface using RF.
- Hands-on experience in working Wi-Fi certified IoT kit using CC3200 ARM Cortex M4 32 bit microcontroller.
- Hands-on experience in cloud applications.

At the end of the program, participants will be able to:

- Identify and control key hardware components for IoT applications.
- Establish a connection and interact with sensor network and cloud.
- Apply IoT for different practical applications such as home automation, security etc.
- Upgrade IoT requirements in their host institute and train newcomers.

Focus Areas

- Overview of IoT and its roadmap, opportunities & challenges in implementing IoT Solutions.
- Connectivity Solutions using CC3200 Wi-Fi – accessing HTML page from HTTP web server and interfacing with the microcontroller for control applications.
- Updating real time user location to AT&T cloud platform with map visualization.
- Configuring MQTT client and server using the web browser and Android app.
- Working with CC3200 Wi-Fi certified 32-bit ARM Cortex M4 microcontroller.

Program Features

- The program is split into lectures and labs/hands-on sessions.
- Hands-on experience on basic and advanced-level topics.
- Interaction & learning with experts from academia & industry.
- Certificates to participants by E&ICT Academy IIT Roorkee.

Coordinators

Dr. Meenakshi Rawat
Local Coordinator
ECE Dept., IIT Roorkee

Dr. Sanjeev Manhas
P.I. E&ICT Academy
ECE Dept., IIT Roorkee

Dr. Pramod Kumar
Director, Tula's Institute



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: ₹ 2,500/-

Research scholars: ₹ 2,000/-

Persons from Industry: ₹ 3,000/-

Payment Details

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

Make Online Payment by NEFT/RTGS on given detail

Account Name: Research Project, IIT Roorkee

Account Number: 33012172097

IFSC code: SBIN0001069

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 Online

Registration:

20th Sep 2017

**Last Date For Receiving
Application: 21st Sep 2017**

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

on

"Basic IoT Applications"

Sep 25, 2017 - Sep 29, 2017



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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