



Electronics & ICT (E&ICT) Academy, IIT Roorkee, Uttarakhand 247667
An Initiative of Ministry of Electronics & Information Technology (MeitY), Govt. of India

Dean Academic

152.
29/3/2017



Building blocks for 5G communication: IoT, SDR and sensor networks

Organized by Electronics and ICT Academy IIT Roorkee

Experts from Academia/Industry

- ❖ Texas Instruments, Industry Experts
- ❖ Keysight Technologies, Industry Experts
- ❖ MATLAB, Industry Experts
- ❖ Dr. Meenakshi Rawat (IITR)
- ❖ Dr. P.M. Pradhan (IITR)

Eligibility: Faculty members, scientists, research scholars, limited no. of M.Tech, B.Tech (Final Year) in ECE/EE/CS/IT disciplines.

Course Date: April 10-14, 2017

Last Date for Registration: 5th April 2017.

Venue: ECE Dept. IIT Roorkee

Supported By

**Ministry of Electronics and Information Technology
(MeitY), Government of India**

About E&ICT Academy

- ❖ Electronics and Information Communication Technology (E&ICT) Academy is an initiative of MeitY, Ministry of Communications and IT, Govt. of India for quality improvement of faculty members, research scholars and post-graduate students.
- ❖ E&ICT Academy IITR is one of the seven such academies at various IITs and NITs approved by Govt. of India.
- ❖ E&ICT Academy IITR aims to bring in depth erudition in the form of theoretical and practical exposure to the trainees.
- ❖ Promote development of entrepreneurship adeptness and facilitation of start-ups.

Benefits and Outcomes of the Course

- ❖ Job-oriented software defined radio (SDR) applications with the focus on 4G/5G communication.
- ❖ Learn basic building blocks of Internet-of-things (IoT) for 5G communication.
- ❖ Hand-on-Experience in IoT kits using Wi-Fi environment.
- ❖ Distributed signal processing for wireless sensor networks.
- ❖ Enhance employability by training individuals in handling commercial equipment's and simulators (**Keysight Technologies**) for software defined radio and hands-on experience in IoT kits (**Texas Instruments**).

Course Program

- ☐ The program is split into lectures and labs/hands-on sessions.
- ☐ Course evaluation by quizzes and project work.
- ☐ Certificates with grades to participants by E&ICT Academy IITR.

Course Contents:

- ❖ Concepts and components of transceiver front ends and advanced applications with low-cost SDR implementation.
- ❖ Fundamentals of IoT and its hands-on laboratory.
- ❖ Distributed signal processing for sensor networks.
- ❖ Design and hardware implementation using MATLAB and SDR techniques. Implementation using vector signal analyzer and vector signal generator with commercial power amplifiers.
- ❖ **Contact Hours:** Five days (Theory, Hands-on, Tutorials)

How To Apply

Online: The participant may log on to the E&ICT academy IITR (website: <http://eict.iitr.ac.in>) and fill-up the application form.

By Email: Send scanned copy of the filled-in application form duly endorsed by the forwarding authority to E&ICT Academy IITR (Email: eict@iitr.ac.in, eictiitr@gmail.com).

Registration form in this brochure can also be downloaded from academy website.

Registration Form

Name of the Applicant :

Gender:

Category (Please tick): GEN/OBC/SC/ST

Designation:

Name and Address of the Organization/Institute:

City/Town:

Email:

Phone Number:

Mobile Number:

Do you need Accommodation? (Yes/No):

DD Number: Date:

Issuing Bank: Payable at:

Signature of the Applicant:

Signature and Seal of the Forwarding Authority

Name:

Designation:

Registration Fee

Rs 2000 (with food and accommodation) for participants from academia, industry and research organisations.

Accommodation will be made in KIH guest house

Mode of Payment: Demand Draft in the name of "DEAN SRIC IIT ROORKEE"

Contact Details

For more details please log on to E&ICT academy IITR (website: <http://eict.iitr.ac.in>)

Course Coordinators:

❖ Dr. Meenakshi Rawat (IITR)

❖ Dr. Sanjeev Manhas (PI IITR)

Email: eict@iitr.ac.in, eictiitr@gmail.com

Phone No: +91-1332-286457, Mob No: +91-7078627392

Affix stamp
size
photograph