

on

"IoT-Technology, Applications and Implementation Perspectives"

Under the aegis of

**Electronics & ICT Academy
IIT Roorkee**



Apr 04, 2018 - Apr 08, 2018

Experts from Academia/Industry

Dr. P. K. Meher

Former Senior Research
Scientist Nanyang
Technological University,
Singapore

Dr. Ajay Kumar

Scientist-G, IRDE-
DRDO, Dehradun

Mr. Manoj Purohit
(Scientist-E, IRDE-
DRDO, Dehradun)

Dr. Brajesh Kumar Kaushik
Associate Prof. ECE Dept.
IIT Roorkee

Supported by

Ministry of Electronics & Information Technology
Government of India



Venue

IIT Roorkee

Why IoT ?

IoT is next digital revolution which is going to change our lives in ways never imagined before. 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 state of the art of IoT, its application and important implementation issues. You will also get hands-on exposure on various IoT hardware platforms.

Focus Areas

- Introduction to IoT and its implementation.
- Implementation of IoT and challenges.
- Security issues in IoT.
- Hardware design of IoT sensing and processing nodes.
- Machine intelligence and image processing in Smart Nodes of IoT.

Benefits and Outcomes of the Course

- The participants would be able to understand the state of the art of IoT architecture, underlying technologies, and main implementation issues including the IoT security.
- The participants would learn to use FPGA, Xilinx Vivado for machine intelligence and image processing.

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

- Upgrade the lab facilities in the area of digital design, VLSI-DSP, image processing.
- Supervise the students to work in the area of IoT and Image processing.

Objective of the Course

- To provide an overview of key concepts, technologies, application of IoT and its ecosystem.
- To present the state of the art of IoT architecture.
- To discuss the implementation of IoT and its issues including IoT security.
- To discuss the role of machine learning and image processing in IoT.
- Hands-on with the FPGA board, Xilinx Vivado, and Arduino for IoT applications.
- Development of image processing and AI-based smart nodes for IoT application.

Program Features

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

Coordinators

Dr. Sanjeev Manhas
(PI, E&ICT Academy,
ECE Dept, IITR)

Dr. Brajesh Kumar Kaushik
Associate Prof ECE Dept.
IIT Roorkee



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: ₹2,000/-

Research scholars: ₹2,000/-

Persons from Industry: Rs. 2,500/-

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:
31st Mar 2018**

**Last Date For Receiving
Application: 1st Apr 2018**



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

"IoT-Implementation, Application and Securities"



Apr 04, 2018 - Apr 08, 2018

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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