Ministry of Electronics and Information Technology (MeitY)
Govt. of India supports its
Electronics and ICT Academies to organize Faculty Development Programme **on**
5G Communication during 11th – 15th June, 2018 at
IIT Guwahati, IIT Roorkee, IIITDM Jabalpur, MNIT Jaipur, NIT Patna and NIT Warangal

About Summer Courses

Faculty Development Programmes in core areas of Electronics and Information & Communication Technology (ICT) streams have been planned by academies for delivery during Summer (i.e., May - June 2018). All these summer courses will be offered through National Knowledge Network (NKN) by inviting experts from IITs, NITs, IIITs and other premier institutes/industries. In addition, local course coordinators at respective academies /identified remote centers will take care of sessions on design oriented/activity linked problems/ assignments/ case studies and quiz test(s).

These courses will be delivered at E & ICT Academies/identified centers through NKN infrastructure. Candidates could apply for training at academy locations or identified centers as per the convenience.

Course 6: 5G Communication

Principal Coordinator-Academy	Support Coordinator - Academy	Participating Academies and Local Coordinator Details
Prof. Ratnajit Bhattacharya ratnajit@iitg.ernet.in IIT Guwahati	*Dr. Vinod Pankajakshan* vinodfec@iitr.ac.in IIT Roorkee	**IIT Guwahati -** *Dr. Santosh Biswas* santosh_biswas@iitg.ernet.in
		IIT Roorkee - *Dr. Vinod Pankajakshan* vinodfec@iitr.ac.in
		NIT Patna - *Dr. Seemant Saha & Dr. Bharat Gupta* seemanti@nitp.ac.in & bharat@nitp.ac.in
		NIT Warangal - *Dr. J. Ravi Kumar* jrk@nitw.ac.in
		IIITDM Jabalpur - *Dr. Biswajeet Mukherjee* b.mukherjee@iiitdmj.ac.in

Module details of 5G Communication

S.No.	Module Name	Topics
1.	**Introduction to 5G**	**Evolution of Wireless Communication technology generations, Roadmap to 5G: targeted specifications and Radio access technologies for 5G- Massive MIMO and millimetre wave.**
2.	**Modulation Techniques**	**Modulation techniques and waveform design for 5G communication Hands-on: Modulation techniques and waveform design for 5G communication.**
3.	**Antennas in 5G**	**Role of Antennas in 5G and RF subsystem for 5G Hands-on: Antennas and RF subsystem for 5G**
4.	**Trends in Software Defined Networking**	**Hyperdense small cell deployment for capacity improvement, Self organizing network, Machine type communication, Cooperative communication and cognitive radio Hands-on: Cooperative communica- tion and cognitive radio.**

5.	5G Internet and Security	5G Internet, Security for 5G Communications and Unified, 5G Broadcast- Broadband Architecture. Hands-on: Security for 5G Communications

Registration Fee: No Registration fee is charged for attending this programme planned at any designated academies/Remote centers. However, candidate should submit a refundable Demand Draft of Rs.1000/- along with application and the same will be handed over to participant on the last day of the training. Satisfactory Certificate will be given subject to fulfillment of attending all sessions, submission of assignments and clearing the test(s).

Last Date of Registration: 28th May'2018.

Lodging and Boarding will be provided free of cost at the Academy.

Participants can also attend the course at the following Remote Nodal Center

1.Maulana Azad National Institute of Technology (MANIT), Bhopal, Madhya Pradesh.

Remote Center Coordinator: Dr. Lalita Gupta

Email: gupta.lalita@gmail.com