



Faculty Development Programme (FDP)

On

5G Wireless Communications

18th to 23rd December 2017

Jointly Organized by

Electronics & ICT Academy, NIT Warangal

And

Department of Electronics and Communication and Engineering

JNTUH College of Engineering Hyderabad

(Sponsored by MeitY, Govt. of India.)



Preamble

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy role is to offer faculty development programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

About the Workshop

Representatives of industries and academia have started looking into the technological developments of the next generation (5G), as the rollout of 4G mobile communication networks takes place. Many research projects involving infrastructure manufacturers, mobile network operators, and academic institutions, have been launched recently to set the foundations of 5G wireless communication. The number of smart phone users is already touching two billion worldwide. In order to support high QoS requirements, ITU proposed IMT- 2020, which is setting the stage for 5G wireless technologies. The 5G technologies aim to support broadband data rate more than 5 Gbps, latency less than 1 ms for high mobile users and high energy efficiency. Establishing and maintaining a successful wireless communication link among the users with simultaneously achieved all 5G objectives becomes challenging. In this FDP, we shall discuss the technologies that are being proposed for candidate of 5G communication

Major Course Contents

- Introduction to 5G
- Wireless channel, Diversity, Massive MIMO
- OFDM, Multiple access techniques
- LTE, LTE advanced
- 5G Security, MAC layer
- Software defined radio,
- Cognitive radio
- Heterogeneous Network
- Cooperative Communication, CoMP
- Software Defined Network
- Green Communication

Structure of the Course: The theory for the topics specified in the,, Course Contents is covered over 30 hours in classroom sessions and 10 hours lab sessions.

Resource Persons: The programme will be conducted by the faculty members of NIT Warangal. Academicians in the field concerned from IITs/NITs are invited to deliver lectures. Speakers from industries are also expected as part of the course.

Eligibility: The programme is open to the faculty of engineering colleges from Electronics and communication Engineering, Electrical Engineering, and other allied disciplines in Telangana, Andhra Pradesh, Karnataka states and Goa. Industry personnel working in the allied disciplines can also attend.

Pre-Requisites: Basics knowledge of Communication and Networks

Accommodation: Accommodation is arranged for outstation participants at JNTUH campus. Working Lunch, Tea & Snacks and Dinner would be provided during the training period at JNTUH campus. No TA/DA will be paid to the participants.

How to apply:

A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with demand draft) should reach the coordinator by speed post. It is also mandatory to send scanned

application form and demand draft through e-mail to fivejntuh@gmail.com as selection will be intimated only through mail.

Registration Fee Particulars

Faculty and Research Scholars from Telangana, Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Goa	Rs. 2500/-
Faculty of SC/ST Category from Telangana, Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Goa	Rs. 1250/- (SC/ ST participants should submit the copy of their caste certificate to claim the concession along with application form)
Industry Participants	Rs. 7500/-
Participants from other states	Rs. 8500/-

SC/ST concession is only for faculty of mentioned states. Research Scholars are not eligible for SC/ST concession.

The participants have to send a crossed demand draft (DD) drawn in favour of "Director, NIT Warangal" payable at SBI, NIT Warangal or

On-line Mode:

Account Name: Electronics & ICT Academy NITW

Account No: 62423775910, IFSC: SBIN0020149

Selection Criteria: Selection will be made on *first-come-first-served basis*. The maximum number of participants will be **50 (fifty)**. Additionally, 10 candidates from industry are allowed to participate. The list of selected candidates will be notified in the institute web site www.jntuhceh.ac.in and also will be sent to their personal e-mail ids. In case a candidate is not selected, the demand draft will be sent back. A test will be conducted at the end of the course. The Participants will be issued certificates on successful completion of the course along with grade. Reservations are followed for selecting candidates as per GOI norms.

Venue: Dept. of ECE, JNTUHCEH, Hyderabad.

Important dates:

The last date for submission of application is 10.12.2017

Selection list intimation/ display before 15.12.2017

About NITW & JNTUHCEH:

National Institute of Technology (formerly Regional Engineering College) Warangal is the first among 17 RECs setup as joint venture of the Government of India and the State Government. Over the years the college has established itself as a premier Institution imparting technical education of a very high standard leading to the award of B.Tech. degrees in various branches of engineering and M.Tech. and Ph.D. programs in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

Jawaharlal Nehru Technological University, the first Technological University of India, was established on 2nd October 1972 in Andhra Pradesh with headquarters located in the historical city of Hyderabad. This University is one of the premier Universities of India accredited by NAAC with 'A' Grade. After successful period of 36 years, JNTU was divided into four different universities by Govt. of Andhra Pradesh, through Act No.30, Dt. 24th September, 2008. One of the constituent colleges of the University "JNTUH College of Engineering, Hyderabad" has proved as a pioneer in streamlining the excellence of some of the leading organizations of the industry, by churning out the finest professionals with a resolve to scale greater heights in the technological scenario, every year

APPLICATION FORM
Electronics and ICT Academy
Faculty Development Programme
On
5G Wireless Communications
18th to 23rd December 2017

1. Name:

SPONSORSHIP CERTIFICATE

2. Designation:

3. Institution:

Dr./Mr./Ms.....

4. Email:

is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on **5G Wireless Communications**. Sponsored by **Electronics & ICT Academy** from 18th to 23th December, 2017 at JNTUHCEH, Hyderabad.

5. DD No:

Bank:

Date:

6. Address for Correspondence

Place:

Date:

7. Educational Qualifications with specialization:

8. Subjects taught so far:

Signature of Head of Institution
(with seal)

9. No. of refresher courses/workshops attended:

Address for correspondence

Post your application form with DD to

10. Experience (in years)

Teaching: Research: Industry:

11. Accommodation required: YES / NO

12. Are you belong to SC/ST: YES/NO

Dr. B. N. Bhandari
Department of Electronics & Communication
Engineering
JNTUHCH,
Kukatpally, Hyderabad, Telangana 500085

(If yes, please specify and attach a copy of caste certificate to claim the concession)

Mail the scanned copies of filled-in and duly signed application form with DD to

jrk.nitw@nitw.ac.in, fivegntuh@gmail.com

For more information visit: <http://nitw.ac.in/eict/>

Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Place:

For any enquiry contact:

Mobile: 0 8332969363, 949031662

Land line: 0870-2462444

Date:

Signature of the applicant

Coordinators

Dr. J. Ravi Kumar
Department of ECE,
Electronics & ICT Academy and
NATIONAL INSTITUTE OF TECHNOLOGY
WARANGAL – 506 004 (Telangana State)

Dr. B. N. Bhandari
Department of ECE, JNTUHCH
Hyderabad