



Blended Mode- FACULTY DEVELOPMENT PROGRAMME (FDP) ON

Communication Engineering Experimentation
(24 June 2024 – 05 July 2024)

Organised by

Electronics & ICT Academy, NIT Warangal

In Association With

Department of Electronics and Communication Engineering

Indian Institute of Information Technology Design and Manufacturing Kurnool

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)



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's 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 FDP:

This FDP aims to provide a strong theoretical background along with practical experience in the field of Communication engineering needs with hands-on experimentation in the hybrid form of interaction to the Faculty members of the Electronics and Communication department. It aims to provide the concepts of Advanced Signal generation and detection with the help of Signal Generators and Spectrum Analyzers along with Analog and Digital Communication experiments.

Major Course Contents:

- Introduction to Analog and Digital Communication
- Signal Transmission and Reception
- Modulation and Demodulations
- Realtime Signal Transmission and Reception
- Detailed hands on Signal Generation and Signal Analysis.
- The following Analog and Digital Modulation Techniques:
 - Amplitude Modulation and Demodulation, Frequency Modulation and Demodulation, Phase Modulation and Demodulation, SSB-SC, DSB-SC, VSB Modulation and Demodulation, Balanced Modulator, Pre-Emphasis & De-Emphasis, Characteristics of Mixer, Phase Locked Loop Synchronous Detector, Diode Detector Characteristics, Frequency Synthesizer, Digital Phase Detector.
 - Amplitude Shift Keying Modulation and Demodulation, Frequency Shift Keying Modulation and demodulation, Phase Shift Keying Modulation & Demodulation, Differential Phase Shift Keying Modulation & Demodulation, Pulse amplitude Modulation and demodulation, Pulse Width Modulation and Demodulation, Pulse Position Modulation and Demodulation, Pulse Code Modulation & Demodulation, Differential Pulse Code Modulation & Demodulation, Delta Modulation & Demodulation.

Faculty conducting this programme:

The programme will be conducted by the faculty members from IIITDM Kurnool; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

How to apply:

Participants are required to fill the online registration form by clicking on the following link:

<https://forms.gle/ZRTmcgB6Y26ujeN6>

Coordinators:

Prof. P. Srihari Rao,
Professor,
Department of Electronics and Communication Engineering,
National Institute of Technology, Warangal,
Telangana, India.
Contact Details: 91-9441342324
Email: patri@nitw.ac.in

Registration Fee Particulars:

Faculty and Research Scholars	Rs.1500/-
Industry Participants	Rs.4500/-

Participants need to pay the Registration Fee Online using the following details

Online Transfer Details	
Account Name:	Electronics & ICT Academy NITW
Account No:	62423775910
IFSC:	SBIN0020149
Bank and Branch:	State Bank of India, NIT(REC) Warangal

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important Dates:

Last date (Application & Fee)	15 June 2024
Selection List by E- mail	17 June 2024
Duration	24 June 2024 – 05 July 2024

About NIT Warangal:

National Institute of Technology, 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 Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph.D programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

About IIITDM Kurnool:

Indian Institute of Information Technology Design and Manufacturing, Kurnool (IIITDMK) was announced in 2014 after receiving the assent of President of India to the Institutes of Information Technology Act, 2014. The IIITDM Kurnool campus is located far away from the bustling life of the metropolis in the mineral-rich mountain trails of the Rayalaseema region of Andhra Pradesh. The campus is situated atop a hill that oversees Kurnool City. This institute offers B.Tech, M.Tech and PhD programmes in the departments of Electronics and Communication Engineering, Computer Science and Engineering, and Mechanical Engineering. IIITDM Kurnool has been granted various national projects under the schemes of Drones, 5G Communication, and Chips to Start

Dr. K.Krishna Naik,
Associate Professor,
Department of Electronics and Communication Engineering,
Indian Institute of Information Technology Design and Manufacturing Kurnool (IIITDMKI), Kurnool, A.P., India
Contact details: +91-8275203259
Email Id: krishnanaik@iiitk.ac.in