



# Recent Trends in Antenna Design for 5G & 6G Applications

**28<sup>th</sup> July – 05<sup>th</sup> August 2025**



## Chairman, EICT Academy & Director MNIT Jaipur

Prof. Narayana Prasad Padhy

## Chief Investigator, EICT Academy

Prof. Vineet Sahula, ECE

## Coordinator, EICT Academy

Dr. Satyasai Jagannath Nanda, ECE

## Co- Chief Investigators, EICT Academy

Prof. Lava Bhargava, ECE

Prof. Pilli Emmanuel Shubhakar, CSE

Dr. Ravi Kumar Maddila, ECE

## Objective (Electronics & ICT Academy-Phase II)

1) To conduct specialized FDPs for faculty/mentor training in line with the vision of MeitY by promoting emerging areas of technology and other high-priority areas that are pillars of both the "Make in India" and the "Digital India" programs.

2) To promote synergy and collaboration with industry, academia, universities and other institutions of learning, especially in emerging technology areas.

3) To support the National Policy on Electronics 2019 (NPE 2019) which envisions positioning India as a global hub for ESDM sector, including MeitY Schemes/policies such as Programme for Semiconductors and Display Fab Ecosystem; India AI; National Programme on AI, Production Linked Incentive Scheme for IT Hardware & Large-Scale Electronics Manufacturing; EMC; SPECS; Chips to System (C2S); etc.

4) To promote standardization of FDPs through Joint Faculty Development Programmes.

5) To support the vision of the National Education Policy (NEP 2020), which mandates that Indian educators go through at least 50 hours in professional development programmes per year.

6) To design, develop & deliver specialised FDPs on emerging technologies/ niche areas/ specialised modules for specific research areas for Faculty in Higher Education Institutions (HEI), besides FDPs on multi-disciplinary areas connected with ICT tools and technologies and other digital hybrid domains, covering a wide spectrum of engineering and non-engineering colleges, polytechnics, ITIs, and PGT educators.

An intensive 40 Hours Training Programme in hybrid mode is being organized for faculty and doctoral students of engineering and technological institutions. It is also open to working professionals from industry/organizations. The main theme of training program will be oriented around exploring the state of the art methods for antenna design challenges and their solutions for 5G & 6G applications. This course is in alignment with the recommendations of DoT & UGC under the Bharat 6G Vision.

## Experts/Speakers-

1. Prof. N. P. Yadav, Hubei Polytechnic University, Huangshi, China

2. Prof. Ravi Kumar Gangwar, IIT(ISM) Dhanbad

3. Prof. Kumar Vaibhav Shrivastava, IIT Kanpur

4. Prof. Rajveer Singh Yaduvanshi, NSUT Delhi

Consent from other experts from IITs/IITs/NITs/CFTIs are awaiting.

5. Dr. Akhilesh Mohan, IIT Roorkee

6. Dr. Soumava Mukherjee, IIT Jodhpur

7. Dr. V. S. Gangwar, LRDE Bangalore

8. Dr. Taimoor Khan, NIT Silchar

## Programme Modules:

**Module 1: Antenna Element Design for 5G/6G Applications :** Antenna Element Based on Conventional Materials, frequency dependent materials and Phase Change Materials, SIW Based Antenna, Active antennas, Reconfigurable antenna, wearable antenna, IoT Antenna

**Module 2: MIMO Antenna Design for 5G/6G Applications :** MIMO implementations and applications

**Module 3: Antenna Array Design for 5G/6G Applications :** Beam Steering Antenna Array, Phased Array Antenna, Antenna feeds and reflector and reflectarray antennas, Reconfigurable and adaptive antennas and arrays, Integrated antenna systems for MMW and THz.

**Simulation/ Labrotary : Software :** Antenna Element, MIMO Antenna, SIW Antenna, Antenna Array

## Principal Coordinator:

Dr. Sarthak Singhal		7376157421(M)
Dr. Reena Kumari	<a href="mailto:fdp.academy@mnit.ac.in">fdp.academy@mnit.ac.in</a>	9102733142 (M)
Prof. M. M. Sharma		9413346999 (M)

## Registration:

Registration is open to faculty, working professionals, industry persons, doctoral, postgraduate and graduate students. Participants will be admitted on first-come first-served basis. Register online at <http://online.mnit.ac.in/eict/>

## Registration Fee:

Mode of programme	Academia (faculty/Students): India/SAARC/Africa	Others: India/SAARC/Africa	Rest of the world
Online	Rs. 500/-	Rs. 1500/-	US \$ 60/-
Classroom	Rs. 2000/-	Rs. 4000/-	--

- (A) Fee once paid will not be refunded back.
- (B) The fee covers online participation in the programme, tutorial notes and examination, certification charges etc.
- (C) The registration amount may be paid through online mode- NEFT/UPI/Cards/SWIFT, provided at the registration portal.
- (D) Detailed schedule will be shared after receiving registration form.



**MNIT Jaipur** one of the oldest NITs, the institute has a rich heritage of sixty years producing world class engineers, managers, architects and scientists. Ranked 43rd nationally in the NIRF ranking-2024 (Engineering), the institute offers learning opportunities for undergraduate, postgraduate students, and researchers in various domains. Having a lush green campus of over 317 acres within the heart of the pink city, close to Jaipur International Airport, the campus offers a safe and lively environment. A world class teaching infrastructure, state-of-art laboratories welcome you at the campus. The institute has a vision to impart education of international standards and conduct research at the cutting edge of technology.