



# ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON Cutting-Edge RF/mm-Wave and THz Antenna Technologies for modern Defence, Space and 5G/ 6G Wireless Applications (15<sup>th</sup> May – 24<sup>th</sup> May 2025)



**Organised by**  
**Electronics & ICT Academy (Hub), NIT Warangal**

**in association with**

**E&ICT Academy (Spoke), NIT Raipur, Raipur-492010, Chhattisgarh**

**Sponsored by**

**Ministry of Electronics and Information Technology (MeitY), GoI**

The FDP explores advanced antenna technologies, emphasizing RF/mm-wave, THz systems, and metamaterials for antenna applications, with uses in defence, space, and next-generation wireless networks. Tailored for engineering professionals and academics, the program integrates expert-led insights, hands-on training, and real-world case studies to advance design, simulation, and implementation skills. Participants will acquire cutting-edge expertise, tackle high-frequency communication challenges, and investigate future opportunities. This will enable them to drive innovation in this rapidly evolving field and contribute to developing next-generation communication systems. This program equips individuals to lead and excel in the dynamic realm of advanced antenna technologies.

## Major Course Content:

- Fundamentals of RF, mm-Wave, and THz Antenna Technologies.
- Metamaterials for Advanced Antenna Applications.
- Dual and Circularly Polarized Antennas.
- Antenna Optimization Techniques for High-Frequency Systems.
- MIMO Antenna Design for Modern Wireless Networks.
- Antennas for 5G, 6G, and IoT Applications.
- Antenna Systems for Defense and Space Applications.
- Emerging Trends in mm-Wave and THz Communication.
- Beamforming and Phased Array Antenna Systems.
- Reconfigurable and Smart Antenna Technologies.
- Hands-on training in Next-Generation Antennas Design.

## Faculty Conducting this Programme:

The program will be coordinated by the faculty members from NIT Raipur and NIT Warangal. Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the program. Speakers from industries are also expected to deliver as a part of the course.

## Fee Particulars:

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

Faculty	Rs. 750/-
Industry Participants	Rs. 2250/-

## Online Transfer Details:

Account Name: **Electronics & ICT Academy NITW**

Account No.: **62423775910**

IFSC: **SBIN0020149**

Bank & Branch: **State Bank of India, NIT(REC) Warangal**

## How to apply:

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

<https://forms.gle/N9ekQ9348ufsYMuh7>

## Selection Criteria:

Selection will be based on a first-come, first-served basis, with a maximum limit of 50 participants. Upon successful completion of the course, candidates will receive a certificate of completion.

## Important Dates:

Last date (Application)	<b>30.04.2025</b>
Selection List by E-mail	<b>02.05.2025</b>
Duration	<b>15.05.2025 to 24.05.2025</b>

## About NIT Warangal:

National Institute of Technology, Warangal, is the first among 17 RECs set up as a 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 B.Tech degrees in various branches of engineering, M.Tech., and Ph.D. programs in various specializations. All B. Tech and M. Tech programs of NIT Warangal are NBA accredited.

## About NIT Raipur:

National Institute of Technology (NIT) Raipur, formerly known as Government Engineering College (GEC) Raipur, was established in 1956. The institute has established its unique identity for the development of high-quality human and knowledge resources. It was declared as 'National Institute of Technology' by the Government of India on 1st December 2005 and then an 'Institute of National Importance' in May 2007 vide the National Institute of Technology Act 2007. NIT Raipur now offers 12 UG and 16 PG programs. In addition to the UG and PG programs, NIT Raipur also offers Ph.D.in 18 disciplines of science and technology. For details about the institute please visit us at [www.nitr.ac.in](http://www.nitr.ac.in)

## Coordinators

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