5-Day FACULTY DEVELOPMENT PROGRAM (FDP)

ON

Innovative Antenna Design for Advanced Communication Technologies: From Concept to Implementation (Online)

(08-12-2025 to 12-12-2025)

Organized by

CENTRE FOR TRAINING AND LEARNING, NIT Warangal

(Established under the PMMMNMTT Scheme, Ministry of Education, Govt. of India)

in association with

Dayananda Sagar University Bengaluru

Preamble:

The Centre for Training and Learning (CTL) has been established at NIT Warangal with grants from the Ministry of Education, through its scheme *"Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)".* Under this Scheme, a separate building has been built exclusively for the CTL activities, with the state-of-art training facilities that include a studio for production and uploading of video and e-lectures on various subjects of higher education, training halls to train the faculty in various theme areas of Science and Technology, humanities and social sciences, linguistics and communication skills, pedagogy and cognition evaluation, etc. among others. One of the important objectives of the Centre is to conduct training programmes for the aspiring, newly inducted and in-service faculty in science, engineering, social sciences disciplines in higher education. Other activities of the CTL include preparation of print and e-learning materials, offering on-line courses, curriculum design, carrying out research in educational technology and pedagogy and integrating with ICT into teaching-learning process. The CTL has special programmes of training for the marginalized and women-faculty.

About FDP:

Innovative antenna design plays a crucial role in the development of advanced communication technologies. The process begins with identifying system requirements and conceptualizing novel designs to meet high performance, efficiency, and compactness. Modern techniques such as metamaterials, microstrip patches, and MIMO (Multiple Input Multiple Output) are incorporated to enhance bandwidth, radiation patterns, and signal strength. Simulation tools aid in optimizing designs, while real-world implementation requires precise fabrication and testing. Advanced antennas are vital in 5G, IoT, and satellite communications, ensuring seamless connectivity, low latency, and robust signal reception, driving progress in modern telecommunication systems.

Major Course Contents:

- Reflectarray Antennas / Active Phased Array
- Journey of mm-wave and 6G
- Metamaterial-Based Antenna
- Advanced Electromagnetic Materials for Absorber
- High-Order MIMO Antenna / Beam-Steerable Antenna
- SIW Antenna for IoT / Reconfigurable DRA MIMO Antenna
- THz Sensors / Metamaterial Antennas for 5G&6G Communication
- 3D Printing Antennas

Faculty conducting this programme:

The programme will be conducted by the faculty members from NIT Warangal and Academicians in the concerned field from IITs/NITs/IIITs have been invited to deliver lectures in the programme.

Registration Fee Particulars:

Faculty	**Rs.1180/-**
Students / Research Scholars	**Rs. 590/-**
Industry Participants	**Rs.2360/-**

Registration fees includes GST. Participants need to pay the registration fees online using the following details

Online Transfer Details

Account Name: **HEAD, CTL NITW**
Account No: **40376545007**
IFSC: **SBIN0020149**
Bank and Branch: **SBI, NIT (REC) Warangal**

How to apply:

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

https://forms.gle/PEwwzB7BaBFuj4kx5

Selection Criteria:

Selection will be done based on first-come-first-serve to a minimum number of 50 (fifty) Faculty/industry participants. Additionally, students/PhD scholars are allowed to participate. The list of selected participants will be intimated through e-mail. In case the candidate is not selected, the registration amount will be refunded. Candidates will be issued certificates on successful completion of the course.

Important dates:

Last date (Application & DD)	05th Dec 2025
Selection List by E- mail	06th Dec 2025

About NIT Warangal:

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 31 post-graduate programs besides doctoral programmes. About 5000 students across the country and about 500 international students study on the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure in the form of state of the art library, seminar halls, guest houses and research laboratories.

About Dayananda Sagar University:

Dayananda Sagar Institutions founded in the 60s by one such visionary, late Sri Dayananda Sagar committed to take knowledge to the people, transforms today's students into responsible citizens and professional leaders of tomorrow. Universities of great legacy across the world are the invaluable contribution of certain visionaries to the world. Research, Innovation and Incubation (spread over 25,000 sft of industry quality labs) form the core of DSU. Dayananda Sagar University would offer courses in Engineering, Computer Applications, Sciences, Arts and Management in the Bachelors, Masters and Ph.D levels. Supporting the academic activities are the Centers of Excellence in ICT, Health Care, Energy and Life Science, among other fast evolving fields of study.

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1. Name :
2. Designation :
3. Institution :
4. Email :
5. Mobile No :
6. Payment Details
   Reference No:
   Amount:
   Bank :
   Date:
7. Address for Correspondence:
8. Educational Qualification:
9. Subjects taught so far:
10. No. of refresher courses/workshops attended:
11. Experience (in years):
12. Teaching: Research: Industry:

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.

Date:
Place: **Signature of the Applicant**

SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on **"Innovative Antenna Design for Advanced Communication Technologies: From Concept to Implementation"**, sponsored by the Centre for Training and Learning (CTL) during **08-12 December 2025** online.

Signature of Head of Institution (with seal)

Address for correspondence

Prof. D. Vakula (Professor)
ECE Department
NIT Warangal
Tenalgana, india, 506004
Ph.No: 9490378554;
E-Mail: vakula@nitw.ac.in

Dr. Ramesh A (Assistant Professor)
ECE Department
DSU Bengaluru
Bengaluru 562112
Ph.No. 7995921223
E-mail: ramesh.a-ece@dsu.edu.in

It is requested to all the delegates that, after completion of application form, all the payment details, screenshot of the payment and scanned application form must be uploaded in the following online registration link.

Registration Link: https://forms.gle/PEwwzB7BaBFuj4kx5

For more details about CTL of NIT Warangal, please visit:https://nitw.ac.in/ctlcenter

For more enquiries please contact:

Prof. D. Vakula (Professor)
ECE Department
NIT Warangal
Tenalgana, india, 506004
Ph.No: 9490378554;
E-mail: vakula@nitw.ac.in

Dr. Ramesh A (Assistant Professor)
ECE Department
DSU Bengaluru
Bengaluru 562112
Ph.No. 7995921223
E-mail: ramesh.a-ece@dsu.edu.in

Prof. M. Sailaja Kumari
Professor of EE and Head, CTL
Mobile: 0870 2462685
Email: ctl_hod@nitw.ac.in

Coordinators

Dr. Ramesh A (Assistant Professor)
ECE Department DSU Bengaluru
Mobile: **7995921223**
Email:ramesh.a-ece@dsu.edu.in

Co-Coordinators

Prof. D. Vakula (Professor)
ECE Department
NIT Warangal
Tenalgana, india, 506004
Ph.No: 9490378554
E-Mail: vakula@nitw.ac.in