

**A ONE- WEEK FACULTY
DEVELOPMENT PROGRAMME**

on

**“Antenna Design and Simulation using CST-EM
Tool”**

From 30.06.2025 to 05.07.2025

ORGANIZED BY

**Department of Electronics & Communication
Engineering**

ABOUT THE INSTITUTION

CMR College of Engineering & Technology is sponsored by the MGR Educational Society, which was established in 2002. It is approved by AICTE and affiliated to JNTUH. CMRCET offering 7 UG Engineering programmes and 5 PG programmes. CMRCET is ranked among the top few premier institutions in the state of Telangana & holds NIRF ranking less than 300 and accredited by NAAC with A+ grade.

The Institute is committed in assuring quality service to all its stake holders viz parents, students, alumni, employees, employers and the community. Commitment and dedication are merged into our policy of continual quality improvement by establishing and implementing mechanisms and modalities, ensuring accountability at all levels, transparency in procedures and access to information and services.

ABOUT THE DEPARTMENT

The Department of ECE was established in 2002. The department offers B.Tech in ECE, M.Tech in Embedded Systems and also recognized as a Research Centre by JNTUH to offer Ph.D. The B. Tech ECE Program has been granted NBA accreditation three time in 2008, 2014, and in 2021 under Tier-I valid up to 2027. The Department of ECE is sponsored by DST-FIST with a funding of ₹30 lakhs and has received various R&D project grants totaling up to ₹1 Crore. The department has state-of-the-art laboratories equipped with advanced tools and software include Cadence, Xilinx, Vivado, CST Studio Suite, LabVIEW, MATLAB and P-Spice.

A ONE - WEEK FDP on

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ABOUT THE FDP

This Faculty Development Program is designed to equip participants with comprehensive knowledge of recent advancements and challenges in antenna design and simulation using CST EM (Electromagnetic) Studio. The FDP focuses on creating, analyzing, and optimizing antennas for various applications through CST simulations.

Enhancing Knowledge of Emerging Technologies:

Participants will gain exposure to the process of modeling, simulating, and optimizing antenna designs to meet specific performance requirements. The program emphasizes on emerging trends in antenna technology, especially in the areas like 5G,MIMO, IoT, satellite communications, and UWB systems.

Through the hands-on sessions, participants will work on real-time antenna simulation setups using CST Studio. These sessions will help to strengthen their understanding of simulation techniques, optimization strategies, and performance analysis for practical applications. The hands on sessions are handled by Jyoti Electronics, Ahmedabad.



Chief Patrons

Sri Ch. Malla Reddy

Founder Chairman, CMRCET

Sri Ch. Gopal Reddy

Secretary & Correspondent-CMRCET

Sri Ch. Abhinav Reddy

CEO, CMRGI

Patrons

Major Dr. V.A. Narayana

Director, CMRCET

Dr. A. Seshu Kumar

Principal, CMRCET

Convenor

Dr. P. Raveendra Babu

Professor & HOD-ECE

Co-Convenors

Dr. M. Nagaraju Naik

Professor of ECE, CMRCET

Dr.B.Premalatha

Professor of ECE, CMRCET

Coordinators

Mrs. Shaik Wafiya

Asst. Professor of ECE, CMRCET

Mobile: 9959734717

Mr. B. Venkataramanaiah

Asst. Professor of ECE, CMRCET

Mobile: 8019028369

Programme Schedule
30.06.2025 to 05.07.2025

Day-1 (30-06-2025) (FN)

- Inauguration followed by Recent Trends in Antenna Technology.

Day-1 (30-06-2025) (AN)

- Fundamentals of Electromagnetics.

Day-2 (01-07-2025) (FN)

- Antenna Theory.

Day-2 (01-07-2025) (AN)

- Hands on session on Dipole Antenna using CST-EM Tool

Day-3 (02-07-2025) (FN)

- Design challenges and issues on Dielectric Resonator Antenna.

Day-3 (02-07-2025) (AN)

- Hands on session on yagi-Uda Antenna.

Day-4 (03-07-2025) (FN)

- Advanced Antenna Array Pattern Synthesis for Wireless communications.

Day-4 (03-07-2025) (AN)

- Hands on session on Rectangular & Circular Microstrip patch antennas using CST-EM Tool.

Day-5 (04-07-2025)(FN)

- Next - Generation Antennas: Exploring UWB, Fractal Designs, MIMO and Meta surfaces.

Day-5 (04-07-2025)(AN)

- Hands on session on Horn antenna.

Day-6 (05-07-2025)(FN) & (AN)

- EBG Structured Antennas.
- Applications of CST in RF Industry
- Valedictory.

List of Speakers

1. Dr. D. Ramakrishna,

Professor & HOD, ECE, UCE-OU, Hyderabad

2. Dr. K. Jaya sankar

Former Vice President, IETE & Dean(R &D),
Methodist College of Engg & Tech, Hyd.

3. Dr. Runa Kumari

Professor of EE Dept., BITS Pilani, Hyd.

4. Prof. Gopi Ram

Asst. Professor of ECE, NIT Warangal.

5. Dr. Rajender Daggulu

Scientist-F, RCI, DRDO

6. Dr.P. Raveendrababu

Professor & HOD, ECE,CMRCET

7. Dr. B. Premalatha

Professor, ECE, CMRCET

8. Technical Team, Jyoti Electronics

Ahmedabad

Who can attend:

- Faculty/Industry Persons
- Research Scholars/ PG Student

Registration Link

<https://forms.gle/4oRjxpD7jNCv5Rhy7>

Note: Maximum 20 seats are available.
First cum First serve basis

Whats-app Link

<https://chat.whatsapp.com/DebYIbBWGVIKQDG4zvSPkQ>

Registration Fee : INR 750/-



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Registration Form

Name :

Designation:.....

Department:.....

Institution / Industry :.....

Address for communication:.....
.....
.....

Mobile Number:.....

Email:.....

Signature of the Participant

Date:

Place:

Principal/ Director