

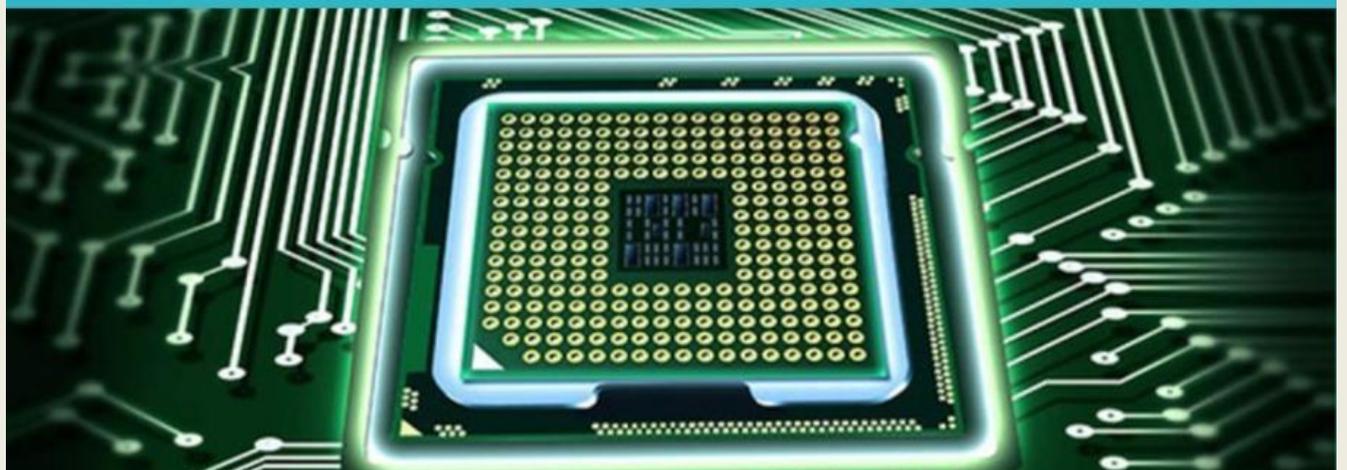


CMR TECHNICAL CAMPUS

Department of Electronics and Communication Engineering

INSIGHT 2024

-Annual Magazine
2024 Edition



ESTD: 2009



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Approved by AICTE, New Delhi and JNTU Hyderabad

Department of Electronics and Communication Engineering

Annual Magazine(2024-2025)

Chief Editor

Prof.S.Mallesha

HOD-ECE

Magazine Coordinator

Dr.P.Sireesha

Professor- ECE

Supporting Students: Sindu ,Eshwar,Spoorthi

ABOUT THE DEPARTMENT

VISION

The Department of Electronics and Communication Engineering endeavors to become a center of academic excellence and research

MISSION

To provide the students with the state of art technologies to meet the growing challenges of the industry and Society.

To promote research and consultancy through constant interaction with the outside world

To inculcate self-learning abilities, team spirit, and professional ethics among the students to serve the society

Department of Electronics and Communication Engineering in CMRTC is popularly known as 'Branch of Consistency'. Consistency in all perspectives. In the current world scenario of Digitalization, Media & Communication, 5G Technologies and many more advancements in technologies related to automation, an ECE Graduate plays an important role in building of Nation through Science & Technology. The skills acquired by the students of ECE has landed them in many reputed companies like Mentor Graphics, L&T metro, DSP, Bosch, TCS, Hyundai, etc.. The experienced faculty are the driving force of the department. The Department offers **M.Tech in Embedded Systems** with an intake of 12.

Few Achievements of the Department are:

- Department is accredited thrice by National Board of Accreditation [NBA], New Delhi.
- 55 Patents filed by the Department till date.
- Over 200 Papers published in reputed Journals.
- Established 03 Research Centres: 1. Centre for VLSI & Embedded System Design
2. Centre for Signal & Image processing
3. Centre for advanced Communication System
- Signed MoUs with more than 20 Companies.
- Won 1st prize in Robotics Competition held by IIT Hyderabad, BITs Hyderabad.
- More than 2000 students are facilitated with Internship in companies like HAL, NRSC, BDL, NFC, DRDL, BHEL, ECIL, etc.
- Received funding from government bodies to a tune of 1Crore.
- Industrial Visits to Satellite launch station SreeHarikota, NRSC Shadnagar, Door Darshan Kendra, Ramanthapur, Air force Station, Hakimpet, Hyderabad Radio Station, L&T Metro Signalling and Control station, Nagole and many more places.
- Highest package of 11 lacks in Microsoft.
- Ongoing Consultancy work worth of 16 Lakhs.
- Over 400 students cleared the NPTEL certified Course with Elite Rating.

- Equipment worth 43.5 L from National Instrument laboratory under DST- FIST Scheme.



Shri C.Gopal Reddy, Chairman

B.E (ECE), Manipal Institute of Technology

It is rightly said by our Bharat Ratna, Dr. APJ Abdul Kalam “Dream is not that which you see while sleeping, it is something that does not let you sleep.” Yes!!! Indeed, it was my dream, goal and ambition, to establish a Knowledge Center, a Temple of learning, i.e., “CMR Group of Institutions”, which can be witnessed today on sprawling area of 70 acres on Medchal Road, Hyderabad. Currently under CMR Group of Institutions, which was established in the year 2002, have 04 Engineering Colleges and 01 Pharmacy College with over 16000 students studying in various streams of Engineering, Management and Pharmacy. The thirst for Excellence & Service has never subdued among us, thus we wish to make deeper inroads in the field of education by venturing into university, named “CMR Global University”, which will be seeing the light of day soon.

As it is said, Rome is not built in a day; CMR is also not built in a day. 20 years of dedication, commitment and hard work has resulted in CMR Group of Institutions. One of the strengths of CMRGI is its strong Alumni. Till date, CMRGI has successfully produced over 18000 Engineers and 4500 Managers and 1200 Pharmacists. As the Tagline of the Group goes, “Think Placements, Think CMR”, we have been the pioneers in training and placing the students in many reputed companies with good packages. I feel proud to see my students’ donning prominent roles in many of the reputed companies.



Smt.C.Vasantha Latha,Secretary

As narrated by Swami Vivekananda, **“We want the education by which character is formed, the strength of mind is increased, the intellect is expanded, and by which one can stand on one’s own feet”**, we at CMR Technical Campus, believe quality education has the power to transform not only individuals but societies and the nation in large.

Our endeavor at CMRTC is to provide the right blend of education and all such necessary components which make students stay in the campus fruitful. The existence of various associations and Clubs, Departmental Associations, Professional Chapters in the campus ensure all-round development which an individual requires. Being in the field of Education for more than a decade, I strongly feel, Education is the key for women to achieve economic independence. CMRTC strongly supports women’s education and all such measures for their safety are taken care by our well functional Women Empowerment Cell of the institute. I extend a warm welcome to Engineering and Management aspirants to join CMR Technical Campus.



Dr.A.Raji Reddy ,Director

Dr. A. Raji Reddy, is a 1990 Batch Mechanical Engineer from Nagpur University. He obtained his Masters' Degree from Regional Engineering College [NIT] Warangal in the year 1992 and Doctoral degree from Osmania University in Mechanical Engineering with Solar Energy as specialization in the year 2008. In his 28 years of service, he has served in various capacities of administration, research, and academic roles. He even has two years of Industrial experiences in M/s. Ashok Ley Land Ltd., (Ductron Casting Unit), Uppal, Hyderabad.

Currently he has 10 Patents filed on his name and is Investigator of 03 Research Projects to the tune of Rs. 90 Lakh as Grant from Govt. of India. He has successfully guided 10 M. Tech Projects and is currently guiding 03 Research Scholars for their Ph.D. His research areas include solar thermal applications, Biomass conversion technologies, Solar cooking and Heat transfer. There are over 40 Research Articles to his credit in peer reviewed & reputed Journals & Conferences. He is reviewer of few Elsevier published Journals. Recognitions and awards have been part of his career, which highlights the dedication and commitment he has laid down in fulfilling the responsibilities assigned to him. He is entitled as life member of Indian Society for Technical Education, Solar Energy Society of India and International Solar Energy Society of India. It was indeed an avenue to receive an award from Deputy Chief Minister of Telangana for effective leadership qualities in 2018. Received Acharya Ratna Award from Indian Servers in the year 2019. Received Bhishma Acharya Award from Andhra University in the year 2022.



Dr. D T V Dharmajee Rao

**Professor of CSE & Dean Academics
dean.academics1@cmrtc.ac.in**

Dr. D.T.V. Dharamajee Rao is currently working as Professor in the Department of Computer Science and Engineering and Dean (Academics) at CMR Technical Campus, Kandlakoya (V), Medchal Road, Hyderabad- 501401. He received B.Tech in Computer Science and Engineering in 1993 and M.Tech. in Computer Science and Technology in 2001 from Andhra University Visakhapatnam and Ph.D. degree in Computer Science and Engineering on the topic “Computational Acceleration of Deep Neural Network Training Algorithm for Data Classification” in 2020 from JNTU, Kakinada, Andhra Pradesh.

He has over 26 years of teaching experience. During his teaching career, he taught various subjects like AIML, Data Mining, Computer Networks, Database Management Systems, Operating Systems, C, C++, and JAVA Programming, etc.

He got published more than 24 papers in National, International Conferences and Journals. His current Research interests include Artificial Intelligence, Machine Learning, Deep Learning, Data Mining and High Performance Computing (OpenMP, MPI, PThreads, CBLAS, CUBLAS, and CUDA). He guided 38 B.Tech. Students Project Batches and 20 M.Tech. Students. He played active role in organizing a couple of FDPs, seminars and conferences in the field of Computer Science and Engineering, convened various technical and cultural fests and annual day celebrations successfully. Further, he has actively monitored entire campus ICT Networking process for several years in previous organization.



Prof.S.Mallesh, Head of Department-ECE

Sudhamalla Mallesh, currently working as an Assistant Professor and Heading the Department of Electronics & Communication Engineering. He received his B. Tech. and M.Tech from JNTU,Hyderabad. Currently he is pursuing his Ph.D. He has 16years of Teaching and research experience. His area of Specialization includes Signal, Image and Video Processing, Embedded Systems and IoT. He has published 15 papers in reputed peer-reviewed Journals and International Conferences Life time member of IETE, ISTE and Member of IEEE. He worked as convener for several Faculty Development Programs conducted by the department in association with premier institutes like IITs & NITS and worked as convener for several Conferences.

He worked as Institute level JNTUH-TEQIP-III coordinator, JNTUH-MIS Officer. Worked as Department IQAC Coordinator and having experience in the preparation of NBA-SAR and NAAC-SSR. Under his guidance department Centres are executing various Activities like proposal writing for different funding agencies, research publication, Execution of students' academic project in the Centres, conducting incubation and innovation activates and organizing Faculty development programs and conferences on regular intervals.



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Department of Electronics and Communication Engineering

Program Educational Objectives(PEO)

S.NO	Program Educational Objectives(PEO)
PEO1	Progress in professional career and higher education in Electronics and Communication Engineering and allied fields.
PEO2	Demonstrate self learning skills, team spirit and professional ethics for beneficial development of the society.
PEO3	Solve real life problems of Electronics and Communication Engineering and allied fields resulting in significant societal benefit.

Program Specific Objectives

S.NO	Program Specific Objectives(PSO)
PSO1	An ability to understand the concepts of basic Electronics & Communication Engineering and to apply them to various areas like Signal processing, VLSI, Embedded systems, Communication Systems, Digital & Analog Devices.
PSO2	An ability to solve complex Electronics and Communication Engineering problems, using latest hardware and software tools, along with analytical skills to arrive cost effective and appropriate solutions.
PSO3	The Graduates will be Equipped with necessary soft skills, aptitude and technical skills to work in the core industry and IT sector as an individual or as a team member.

Program Outcomes(PO)

S.NO	Program Outcomes(PO)
PO1	To apply the knowledge of Mathematics, Science, and Engineering concepts in solving Complex Engineering problems.
PO2	Identify, formulate, and solve complex problems to achieve demonstrated conclusions using mathematical principles and engineering sciences.
PO3	To design solutions for complex engineering problems with appropriate consideration for society.

PO4	To use research-based knowledge and research methods including the design of experiments to provide valid conclusions.
PO5	To select and apply appropriate techniques for the design & analysis of systems using modern CAD tools
PO6	Apply the contextual knowledge to assess societal, health, safety, and cultural issues and endure the consequent responsibilities relevant to the professional engineering practice.
PO7	To understand that the solutions have to be provided taking the environmental issues and sustainability into consideration.
PO8	Develop consciousness of professional, ethical, and social responsibilities as experts in the field of Engineering
PO9	To function effectively either as a member or a leader in multidisciplinary activities.
PO10	To communicate effectively to both the peers and the others
PO11	To apply engineering & management principles in their own / team projects in a multidisciplinary environment.
PO12	To Realize the need for lifelong learning and engage them to adopt technological change.

Faculty Publications/Conference Attended/Patent Published

S.No	Publication Type	2024-25
1	Journals(SCI/WOS/SCOPUS)	6
2	Conferences	50
3	Patent Grant/Published	6

Ph.D Guideship

S.no	Name of Faculty	University	Year
1	Dr.K.Bharath Kumar	2025	JNTU Hyderabad
2	Dr.Ch.Sudhamani	2024	VTU University
3	Dr.Sudha Arvind	2024	VTU University
4	Dr.P.Sireesha	2024	VTU University

Faculty Development Programmes Attended/NPTEL FDP Attended:

2024-2025	26
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Faculty Development Programmes Organised:

2024-2025	2
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Faculty Acheivements:

1. Dr.K.Bharat Kumar, Dr.P.Sireesha ,Abdul Naqi,A.Sridivya Received NPTEL Domain star in Computer Sciences Engineering in October 2024.

Faculty SWAYAM-NPTEL Online Course Certifications:10

Membership of Professional Bodies:41

Faculty Attended FDP:27

Faculty Development Programmes Organised:2

Academic Toppers

Sno.	Hall Ticket No.	Branch	Name of the Student	CGPA
1	217R5A04A8	ECE	RAJULAPATI MEGHANA	8.79
2	217R5A0406	ECE	VANTALA SHIVANI	8.78
3	217R5A04A5	ECE	PENTALA SURESH	8.62

PLACEMENTS :

Total No: of Students Placed: 67

Higher Studies:3

Internships

Total Internships :101

NPTEL/IITB Students Certifications

NPTEL	3
IIT B	10

Events Organised

1. Technovation-Project Expo Conducted on July 27 2024

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ECE Department in Association with
IIC 6.0
organizing
TECHNOVATION
"PROJECT EXPO"
under IETE
on
27-07-2024

FREE REGISTRATION

Register by scanning the QR code

Win Exciting Prizes

D. Sreekanth
Sri Divya
IIC Co-ordinators
CMR TECHNICAL CAMPUS
Hyderabad

Dr. Suraya Mubeen
Dr. Mohana Lakshmi
Project Co-ordinators
CMR TECHNICAL CAMPUS
Hyderabad

Dr. Sudha Arvind
Convener, IIC
CMR TECHNICAL CAMPUS
Hyderabad

Dr. G. Srikanth
HOD of ECE
CMR TECHNICAL CAMPUS
Hyderabad

Dr. K. Srujan Raju
Vice President, IIC
CMR TECHNICAL CAMPUS
Hyderabad

Dr. M. Ahmed Ali Baig
President, IIC
CMR TECHNICAL CAMPUS
Hyderabad

Dr. A. Raji Reddy
Director
CMR TECHNICAL CAMPUS
Hyderabad



2. INFOSYS Spring Board Maker LAB Training Held on 19/10/2024 & 20/10/2024



3. Event Conducted in NATIONAL SMALL INDUSTRIES CORPORATION, Hyderabad



4. Project Expo conducted on March 26 & 27 2025 In Collaboration with IIC and ISTE

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DEPARTMENT OF ECE IN ASSOCIATION WITH ISTE STUDENT CHAPTER ORGANIZING
PROJECT EXPO-2025

Registration Fee: Rs.200/Team
 (ISTE members will get 20% off on registration fee)
9885867222
 Phone or G-Pay Number

Scan me to Register

26th March 2025
10:30 AM to 3:00 PM

Venue:
3rd Floor-B Block
ECE Department

Instructions to the Participants:

- Maximum 3 to 4 participants are allowed per team.
- There will be separate track for Software and Prototype projects.
- Projects will be evaluated by the Domain experts.
- Winners will be awarded with exciting Prizes and Certificates.

All the registered participants and their project mentor will receive Participation Certificates.

Chief Patron: Shri. C. Gopal Reddy	HOD ECE: Prof. S. Mallesh-9849716818	Student Coordinators: G. Aravind Kumar-9346272961 K. Sathwik-9948822470
Patrons: Smt. C. Vasantha Latha Mr. Abhinav Chamakura	Program Convener: Dr. Ch. Sudhamani-9885867222	S. Ramu MAMV Ramana
Mentor ECE: Dr. A. Raji Reddy Dr. G. Srikanth	Program Coordinators: Dr. Bandi Doss Dr. Suraya Mubeen Dr. K. Mohana Lakshmi	A. Spoorthi S. Varsha U. Chandan M. Navya Sree





Association Events

1. Introducing the Association of ECE to the 2nd years.



2. Cool Teasers - Heated Discussion



3. Discussion forum on Leadership Skills



IIC NSS/NCC /ISTE/IETE/ROBOTIC/INNOVATIVE Events Conducted

S.no	Name of Faculty	Students Participated	Event Name	Dates
1	Dr. Chilakala Sudhamani,D.Sreekanth	25	IIC Event National Education Policy Seminar 2020	3/08/2024
2	Dr.K. Bharath Kumar	300	Robotics Club Engineers Day	14/09/2024
3	Dr. Chilakala Sudhamani,D.Sreekanth	20	IIC PODCAST Competition	2/12/2024
4	Dr.K. Bharath Kumar	800	Robotics Club Drone Zone Workshop	17/02/2025
5	Dr. Chilakala Sudhamani	56	Innovations in Electronics: Shaping the Future of Technology-IIC	22/02/2025
6	Dr. Chilakala Sudhamani,D.Sreekanth	200	Project Expo in collaboration with IIC and ISTE	26/03/2025- 27/03/2025
7	Dr.K. Bharath Kumar	40	Robotics Club Projects Outreach Program in Schools	30/01/2025

IIC Events

1. Session Topic: Innovations in Electronics: Shaping the Future of Technology-22/02/2025



2. IDEATHON HACK4SDG Event 20/10/2024

Finance & Consulting Club IIT Hyderabad

AIESEC

NXT WAVE™

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INSTITUTION'S INNOVATION COUNCIL

AIESEC IN HYDERABAD AND IIC 7.0 ECE-CMRTC
presents
IDEATHON HACK4SDG
ONLINE CONTEST

STEP 01 Register for prelims

STEP 02 "Prelims" at CMRTC

STEP 03 Final Hackathon at IIT Hyderabad on 26th October, 2024

PRELIMS ROUND DETAILS
20th October, 2024
Make a team (max 6 members)

10 BEST TEAMS FROM THE COLLEGE WILL BE PROMOTED TO FINAL ROUND AT IIT HYDERABAD

SCAN ME

100% Registration for Prelims FREE

D. Sreekanth Sri Divya IIC Co-ordinators CMR TECHNICAL CAMPUS Hyderabad	S. Mallesh In charge-HOD of ECE CMR TECHNICAL CAMPUS Hyderabad	Dr. Sudha Arvind Convener, IIC CMR TECHNICAL CAMPUS Hyderabad
Dr. K. Srujan Raju Vice President, IIC CMR TECHNICAL CAMPUS Hyderabad	Dr. M. Ahmed Ali Baig President, IIC CMR TECHNICAL CAMPUS Hyderabad	Dr. A. Raji Reddy Director CMR TECHNICAL CAMPUS Hyderabad

3. Organized innovation and Entrepreneurship outreach program in school by engaging active Atal Tinker and School Innovative Council (SIC).



Student Participation

S. No	Name of The Student	Roll Number	Sports/Cultural/Project Expo/Technical Event	Duration (From-To) (dd/mm/yyyy-dd/mm/yyyy)
1	T.Sai Rithwik	237R1A0463	Essay Writing	14 th September 2024
2	Mudimela Jyotsna Goud h	237R1A04A5	C test	November 22nd 2024
3	T.Sai Rithwik	237R1A0463	Hashgraph Developer Course	November 22nd 2024
4	C.Praveen, B.Pranitha	217R1A04C1, 217R1A04A4	ICCICVJIT Conference Hyderabad	November 22-23 rd 2024
5	Mudimela Jyotsna Goud h, Manaswini Sakhamud, T.Sai Rithwik	237R1A04A5 237R1A04B7 237R1A0463	Hacktronic, Anurag University	10,11 February 2025

6	C.Praveen, B.Pranitha	217R1A04C1, 217R1A04A4	AISTM ,MLRIT Conference	March8-9 th 2025
7	Manaswini Sakhamud	237R1A04B7	Spoken Tutorial Project, IIT Bombay,Scilab test	March 25th 2025
8	S.Sukanth	237R1A04B8	Spoken Tutorial Project, IIT Bombay,Scilab test	March 25th 2025
9	Mudimela Jyotsna Goud h	237R1A04A5	Spoken Tutorial Project, IIT Bombay,Scilab test	March 25th 2025
10	Putchu Venkata sravanthi	237R1A04B6	Spoken Tutorial Project, IIT Bombay, Scilab test	March 25th 2025
11	V.S.Chandana	227R1A04C8	Spoken Tutorial Project, IIT Bombay, eSIM	March 25th 2025

Workshop /Seminar attended/Internships/Eduskills (students):8

Participation in Inter-Institute Events by Students of the program of Study:80