

DEPARTMENT OF ECE NEWSLETTER

MAR-APRIL 2025

Faculty Members:

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Professor & HOD



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Assistant Professor



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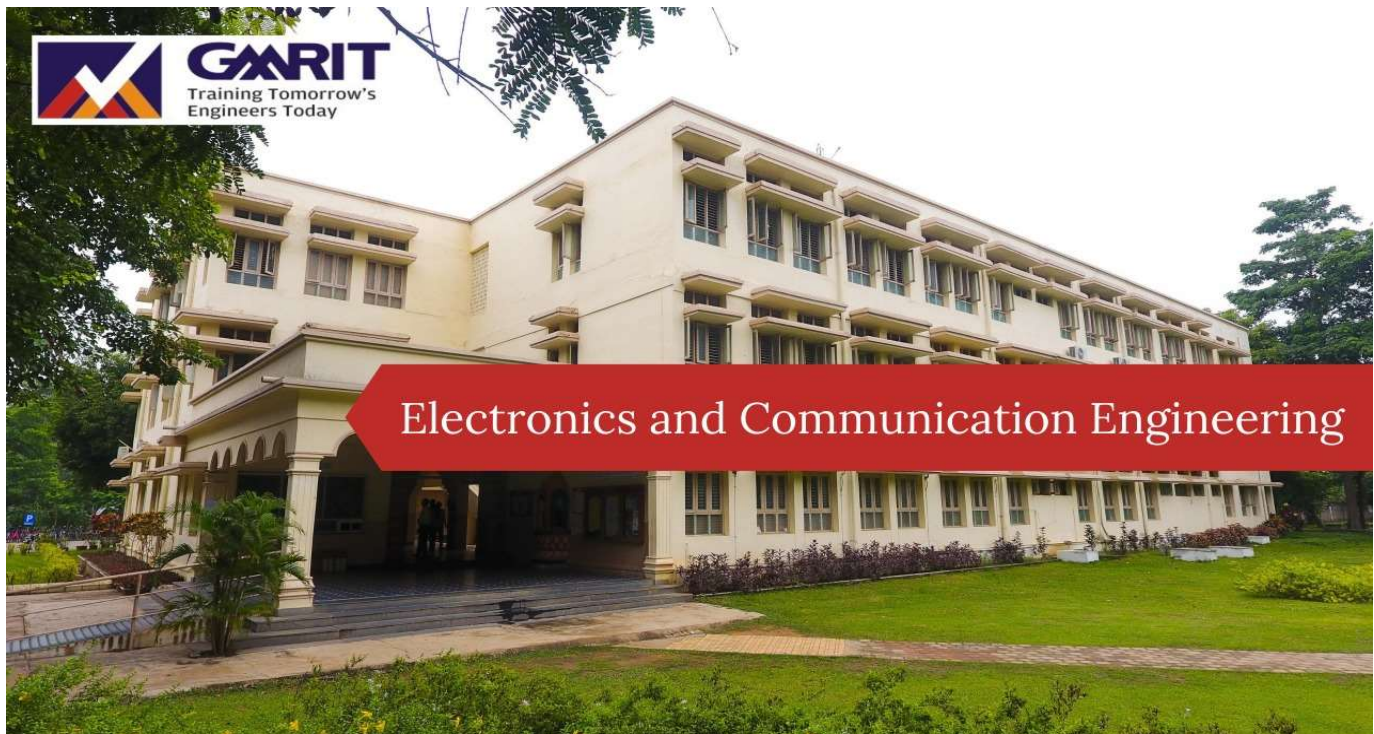
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1.1. OVERVIEW

Electronics & Communication Engineering Department provides students with a solid scientific/technical background and research capabilities in the design, development and manufacture of electronic devices and systems used in a wide spectrum of applications. The applications spans from household appliances to sophisticated satellite communication, from electronic ignition to neural networks and signal processing chips. The Department integrates academic discipline with project-based engineering applications, classroom learning and theory with real world experiences. Annual intake of this Department is 180 students.



1.2. VISION

To be a nationally preferred department of learning for students and teachers alike, with dual commitment to research and serving students in an atmosphere of innovation and critical thinking.

1.3. MISSION

To provide high-quality education in Electronics & Communication Engineering to prepare the graduates for a rewarding career in Electronics & Communication Engineering and related industries, in tune with evolving needs of the industry.

To prepare the students to become thinking professionals and good citizens who would apply their knowledge critically and innovatively to solve professional and social problems.

1.4. PROGRAMME EDUCATIONAL OBJECTIVES (PEO'S)

1. Embrace technical and professional skills with the spirit of learning, critical thinking while acquiring the fundamentals in science and technology. (PEO1)
2. Contemplate real life problems, design and develop novel products that are technically viable, economically feasible and socially acceptable. (PEO2)
3. Encompass ethical values, exhibit soft skills in management & teamwork acquiring leadership qualities. (PEO3)

1.5. PROGRAMME OUTCOMES (PO'S)

At the end of the Programme, a graduate will be able to

- PO 1. Apply the knowledge of basic sciences and fundamental engineering concepts in solving engineering problems.
- PO 2. Identify and define engineering problems, conduct experiments and investigate to analyze and interpret data to arrive at substantial conclusions.
- PO 3. Propose an appropriate solution for engineering problems complying with functional constraints such as economic, environmental, societal, ethical, safety and sustainability.
- PO 4. Perform investigations, design and conduct experiments, analyze and interpret the results to provide valid conclusions.
- PO 5. Select/develop and apply appropriate techniques and IT tools for the design & analysis of the systems.
- PO 6. Give reasoning and assess societal, health, legal and cultural issues with competency in professional engineering practice.
- PO 7. Demonstrate professional skills and contextual reasoning to assess environmental/societal issues for sustainable development.
- PO 8. Demonstrate Knowledge of professional and ethical practices.
- PO 9. Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary situations.

PO 10. Communicate effectively among engineering community, being able to comprehend and write effectively reports, presentation and give / receive clear instructions.

PO 11. Demonstrate and apply engineering & management principles in their own / team projects in multidisciplinary environment.

PO 12. Recognize the need for, and have the ability to engage in independent and lifelong learning.

PSO 1. Apply the knowledge of technological evolutions, model / characterize devices and design the integrated circuits to build analog and digital systems. (Program Specific)

PSO 2. Understand and apply the fundamentals of communication and signal processing to develop systems wrapped with industry standard protocols and standards. (Program Specific)

1.6. FACILITIES & INFRASTRUCTURE

- ❖ Analog & Digital Communication Lab
- ❖ Integrated Circuit & Pulse Digital Circuits Lab
- ❖ Electronic Device Circuits Lab
- ❖ Microwave & Optical Communication Lab
- ❖ Microprocessor & Micro Controller Lab
- ❖ ECAD Lab
- ❖ Basic Electronics Lab
- ❖ Digital Signal Processing Lab
- ❖ Drone Lab

1.7. MAJOR COURSES

- ❖ Digital Signal Processing
- ❖ Radar Engineering
- ❖ Computer Organisation
- ❖ Electronic Devices and Circuits
- ❖ Analog and Digital Circuits

- ❖ Microwaves
- ❖ VLSI
- ❖ Satellite Communication
- ❖ Cellular Mobile Communication
- ❖ Optical Communication
- ❖ Management Science
- ❖ Pulse & Digital Circuits and Integrated Circuits
- ❖ Electromagnetic Waves
- ❖ Antennas
- ❖ Microprocessors
- ❖ Digital Image Processing
- ❖ Embedded Systems Design and IoT
- ❖ RTL coding Techniques
- ❖ ASIC verification using system Verilog
- ❖ Electronics for Agriculture

2.STUDENT ACTIVITIES

PROFESSIONAL SOCIETY ACTIVITIES

IETE EVENTS:

1. The IETE Student Forum (ISF) at GMRIT organized an exciting event titled "Riddles and Rescue" on August 21, 2025, in the ECE Seminar Hall. The event received generous support from the Head of the Department, Dr. V. Jagan Naveen, and the Faculty Coordinator, Dr.TVS.Diwakar. A total of 38 enthusiastic students actively participated, with the event designed to sharpen their cognitive abilities and technical skills.



Winners :

24345A0411 - M.Sankara Rao

24341A04F5 - R.Praveen Kumar

Runners :

24341A0486 - K.Bhargavi

24341A0491 - L.Sri Lalitha Priya

This event was organised by IETE STUDENT FORUM coordinators V.Vaishnavi 3rd year (ECE), G.Dharmendhra 3rd year(ECE), M.Kusumanjali 3rd year (ECE), SK.Abdul Rahiman 3rd year (ECE), T.Santoshi 2nd year (ECE), G.J.G.Prakash 2nd year (ECE), S.Jyothika 2nd year (ECE), MD.Abdul Zafar 2nd year (ECE).

ISTE EVENTS:

1. The Indian Society for Technical Education (ISTE) organized "Brainy Bingo" on August 20, featuring two engaging rounds. The first round, A Housie-style quiz where participants mark answers on their tickets as questions are called out, which improves their listening skills. The second round Participants rotate to music, pick numbers, and face elimination for wrong answers until one per team advances to the rapid-fire round, assessing technical and general knowledge and problem-solving skills. This unique mix of entertainment and academics highlighted the creativity, strategy, and intellectual strength and the teamwork of the participants.

Number of participants : 35

Conducted by Student coordinators :

B. Vaasanthi (24341A0405)

P. Kavya (24341A04E0)

P. Ved Nayan (24341A04E4)



2. The Indian Society for Technical Education (ISTE) organized “Clash of Concepts” on August 12, featuring two engaging rounds. The first round, Movie Buff Challenge, tested participants movie knowledge through visual clues, fostering fun and teamwork. The second round focused on core ECE subjects like EDC, LCD, and Signals & Systems, assessing technical knowledge and problem-solving skills. This unique mix of entertainment and academics highlighted the creativity, strategy, and intellectual strength of the participants.

Number of participants : 32

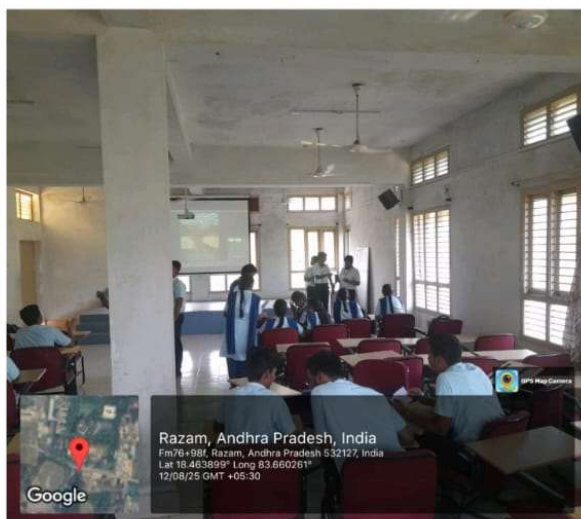
Faculty coordinator : DR.G.Nookaraju

Conducted by Student coordinators :

B. Vaasanthi (24341A0405)

P. Kavya (24341A04E0)

P. Ved Nayan (24341A04E4)



3. FACULTY PUBLICATIONS & ACHIEVEMENTS

SEMINARS & WORKSHOPS

- Dr. J.V. Suman [et...al.] attend a Conference on “Integrated Approaches for Agricultural Landscape Monitoring and Plant Disease Management”, ASIANCON 2024 Date of :24-08-2024, PIMPRI CHINCHWAD COLLEGE OF ENGINEERING & RESEARCH, Pune. Published on 21.01.25.

PAPER PUBLICATIONS

- Dr. Ravi Kumar Palla [et al.] Paper entitled on “A Circular CPW Fed Patch Antenna with an L-Shape and Two Semi-Circular Shaped Slots for L, Ku and K-Bands”, Journal of nano- and electronic physics publisher Sumy State University, date of Publication 27-06-2025, Volume No:17, Issue No:3, Pages: 1-4, ISSN No: 2306-4277. Indexing: Scopus, Impact Factor:1.
- Dr. Nagandla Prasad [et al.] entitled published on “Design and Analysis of an Antenna with Circular Typed Slots for 5G Millimeter-Wave Applications”, Publisher Springer date of Publication 10-07-2025.
- Dr. Ravi Kumar Palla [et al.] entitled published on “Millimeter Wave and Terahertz Devices for 5G and 6G systems”, Publisher Springer date of Publication 10-07-2025.
- 4. Dr.V.Jagan Naveen [et al.] Paper entitled on Improving electrocardiography signal quality: introducing an efficient approach for noise removal published in Int. J. Computational Vision and Robotics, Vol. 15, No. 4, 2025 pages 417-430, DOI: 10.1504/IJCVR.2025.147494 Publisher Inderscience Indexing: Scopus

CONFERENCES

- Dr. J.V. Suman [et.al.] Paper entitled on “Low Power and High Speed Hybrid Adder Design Using 10T XOR–XNOR Logic” International Conference SoCPaR 2023 Date of Conference 13-12-2023, Organized by Mohan Babu University, Tirupati
- Dr. J.V. Suman [et.al.] Paper entitled on “Design and Performance Comparison of Approximate Multipliers” 5th International Conference Pervasive Computing and Social Networking (ICPCSN-2025) Date of Conference 14-05-2025, Organized by Salem, India.
- Mr. Kalyan Chakravarthi & Dr. S.N.Das Paper entitled on “AI based Optimized low latency solution for path selection in an Ad-hoc Network” 2025 International Conference advances in Modern Age Technologies for Health and Engineering Science (AMATHE) Date of Conference 24-04-2025, Organized by PES Institute of Shivamogga, Karnataka.

- Mr. B.M.S. Sreenivasa Rao Paper entitled on “IoT-Based Inventory Management and Control for Smart Refrigerators Systems” 23rd International Conference Hybrid Intelligent Systems Organized by Mohan Babu University, Tirupati

VISITORS –GUEST FACULTY- GUEST LECTURES

- Guest Lecture on “Emerging Fields of Sensors and its Applications” by Sri Ome Prakash Gurrapu, Sr. Embedded Engineer.

PATENTS

- Dr. N. Chandra Sekhar have a Patent title on “Automated Modular Flood Barrier System With Real-time Sensing And Adaptive Deployment”, Patent No:202541048509 date of Grant 06-06-2025, Agency name Official Journal Of The Patent Office -India

OTHERS

- Dr. T.V.S. Divakar attend a 5 days online FDP on “Micro Teaching for Enhancing Teacher's Performance” Starting date from 23-06-2025 to 27-06-2025. Organized by GMRIT, Rajam
- Dr. T. Geetamma attend a online 20 days FDP on “QT-05 Quantum Computation” Starting date from 11-07-2025 to 02-08-2025., organized by MNIT Jaipur
- Dr. K. Sreelakshmi attend a online 9 days FDP on “Recent Trends in Antenna Design for 5G & 6G Applications, 2025 ” Starting date from 28-07-2025 to 05-08-2025, organized by EICT Academy Training academy, MNIT Jaipur
- Dr. Ch. Babji Prasad attend a 2 days FDP on “Design Thinking” Starting date from 05-07-2025 to 06-07-2025., organized by GMRIT RAJAM
- Dr. Yogesh Mishra attend a online 38 weeks FDP on “Firmware Engineering ” LearnKonnnect portal date of completion 14-08-2025., organized by L&T EduTech.
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- Dr. T.V.S D have a patent titled on “Ai-powered Code Autocompletion Engine for Intelligent Software Development ”, Patent No:1235978, date of grant 14-08-2025, Agency Innovation, Science and Economic Development Canada
- Dr. T. Geetamma have a patent titled on “Advanced Error Correction Algorithm for Quantum Computing Systems”, Patent No:202541061839, date of grant 11-07-2025, Agency name India Utility Patent.
- Dr J. Venkata Suman have a patent titled on “A system and method for real-time environmental monitoring using wireless sensor networks”, Patent No:202541069959, date of grant 01-08-2025, Agency name India.
- Dr. K. Sreelakshmi have a patent titled on “Reconfigurable Octaband Antenna for Wireless Portable Systems ”, Patent No:461147001, date of grant 13-08-2025. Agency name Government of India.