DEPARTMENT OF ECE

NEWSLETTER

MARCH-APRIL-2023

FACULTY MEMBERS:

Dr. V. Jagan Naveen
Professor & HOD

Dr. B. Anil Kumar
Assistant Professor

Mr. M Bala Krishna
Assistant Professor

STUDENT MEMBERS:

Ms. M. Hari Chandana
3rd ECE B

Ms. V. Harika
3rd ECE C

Mr. N. Pavan Kumar
3rd ECE B

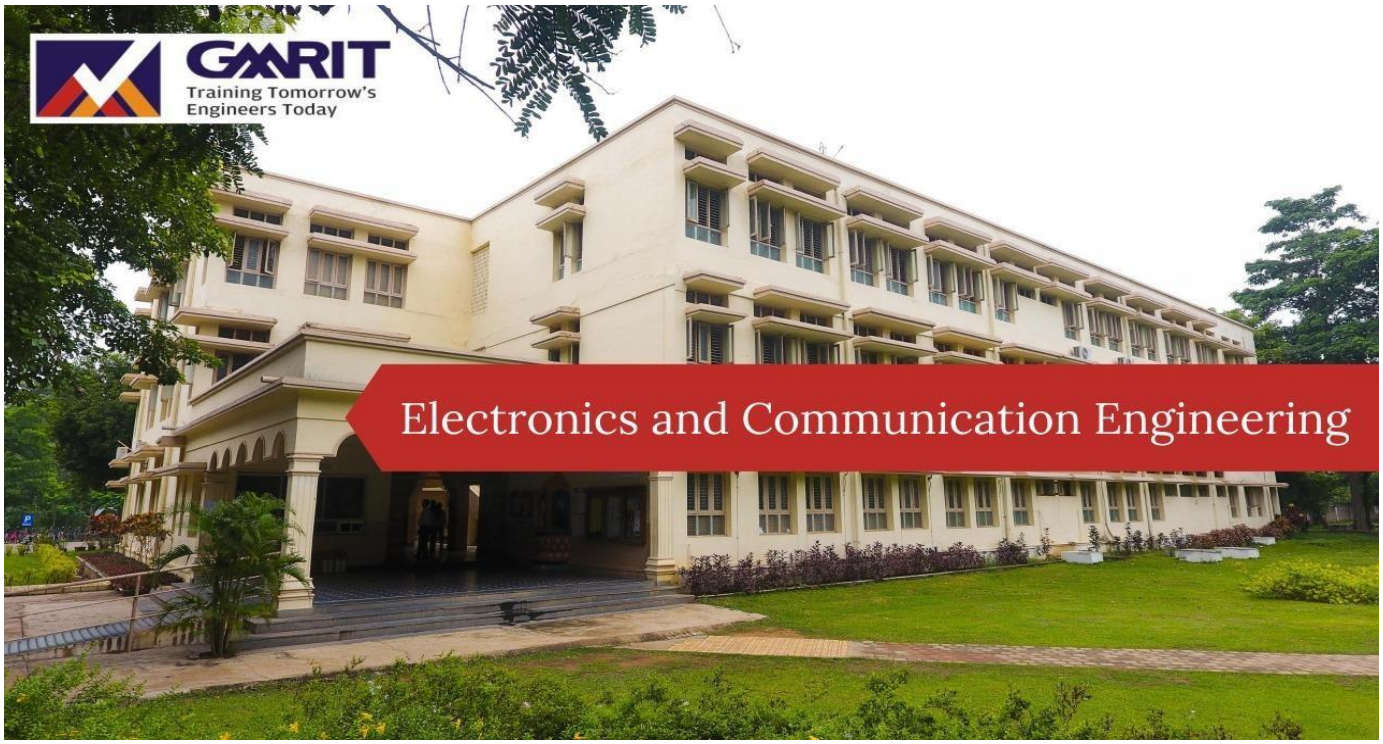
Ms. R. Gnanaprasuna
3rd ECE C

TABLE OF CONTENTS

1. ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

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 clears 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

1.7. MAJOR COURSES

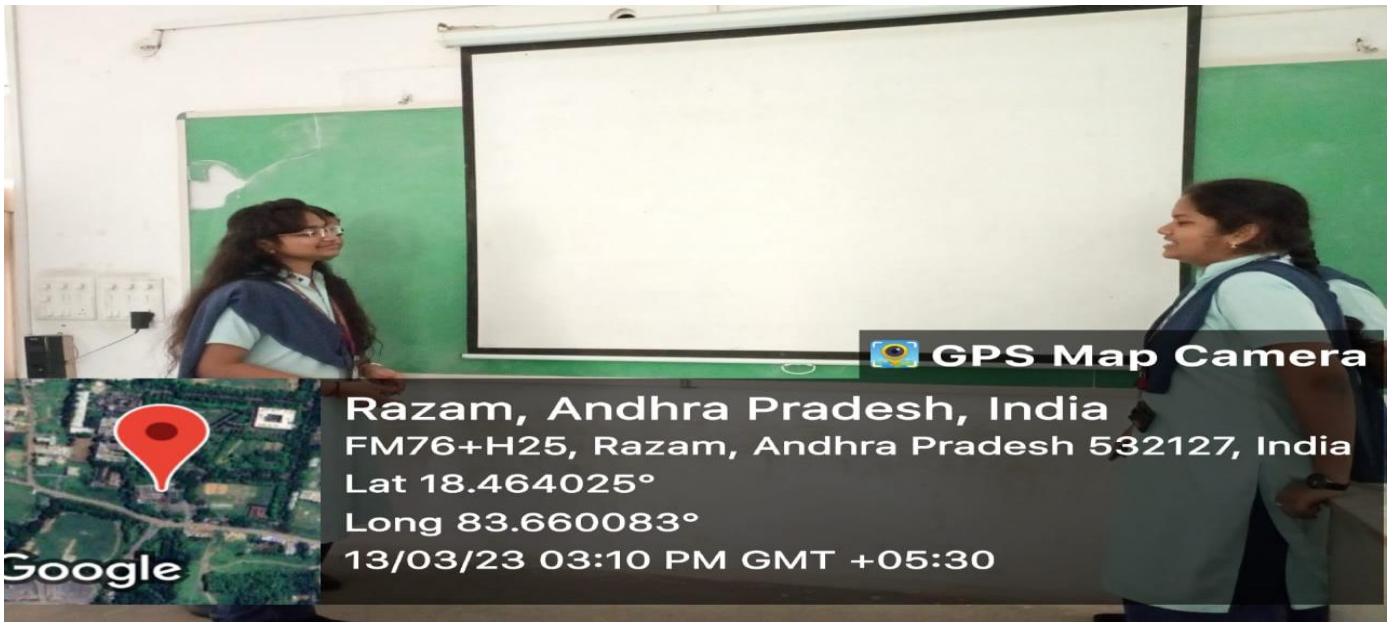
- Digital Signal Processing
- Radar Engineering
- Computer Organisation
- Electronic Devices and Circuits
- Analog and Digital Circuits

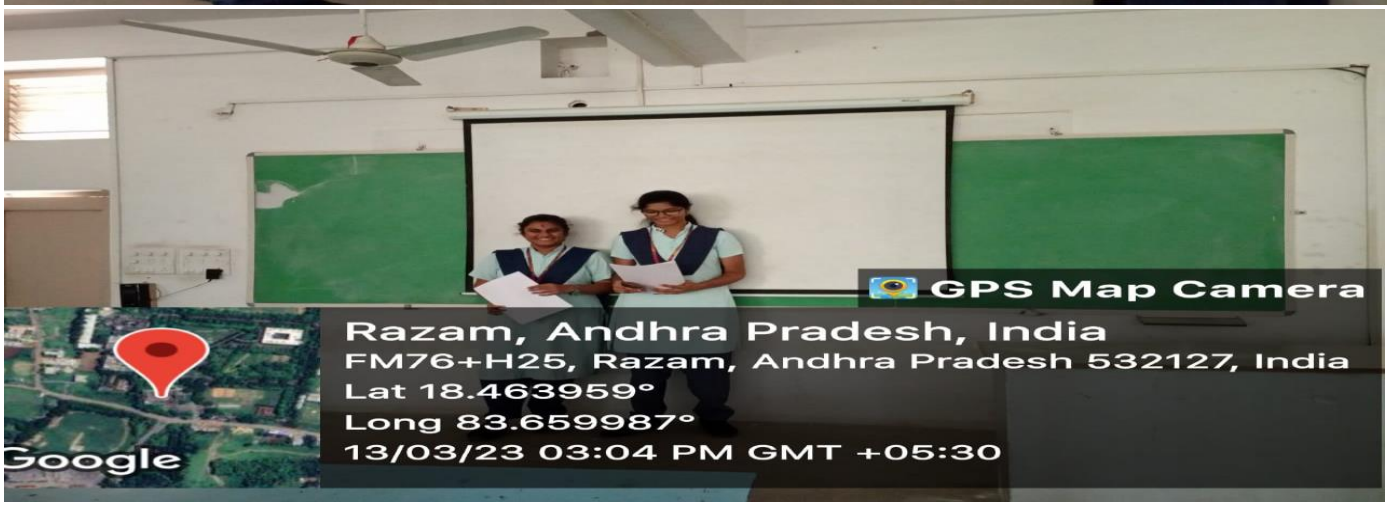
- Microwaves
- VLSI
- Satellite Communication
- Cellular Mobile Communication
- Optical Communication
- Management Science
- Pulse & Digital Circuits and Integrated Circuits
- Electromagnetic Waves
- Antennas
- Microprocessors
- Digital Image Processing
- Embedded Systems Design and IoT
- RTL coding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

2.STUDENT ACTIVITIES

PROFESSIONAL CHAPTER ACTIVITIES:

The ISTE coordinators will host the **"TECHTALKS**, on March 13. Students from the second year of ECE take part actively. Achievement certificates were given to both winners and runners-up.

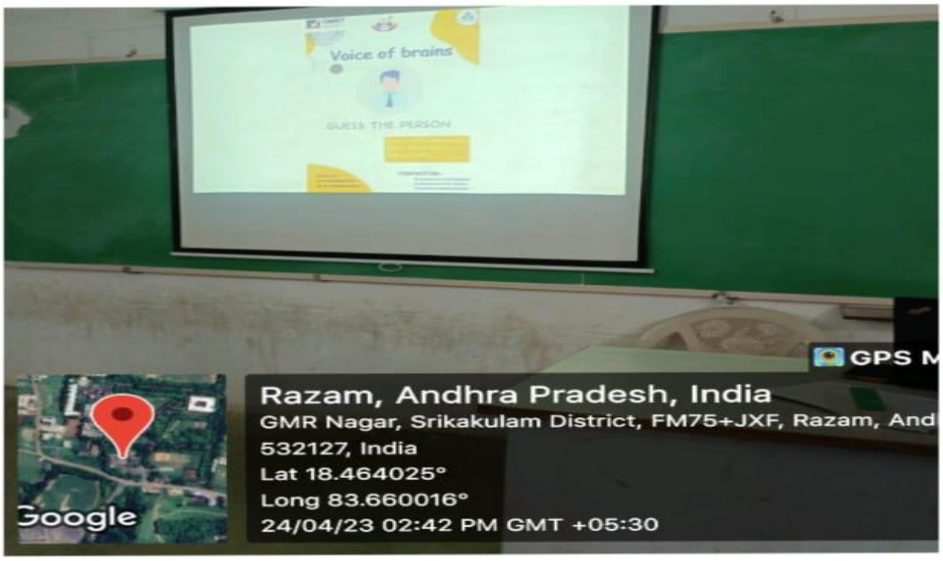




IETE Events

In the month of March, the IETE conducted the event **PRESENT YOUR POINT**, which enhances the thinking skills, Presenting skills and communication skills.

In the month of April, we have conducted the event VOICE OF BRAINS which improves logical thinking.



IE(I) Events:

The **"Circutthon"** event was conducted on April 3rd. This event is to enhance the cognitive Skills of the student.

HAM CLUB:

The HAM Club has conducted an event Titled QUIZZARD OF COMMUNICATION on March 6th. This event improves the communication skills.

3. FACULTY PUBLICATIONS & ACHIEVEMENTS

1. Dr. B. Anil Kumar, (2023, April) SMART PARKING MODEL BASED ON IOT USING FCFS PRIORITY MECHANISM Volume No. 10 Issue No. 4, Page No.558, JETIR,, ISSN No.ISSN-2349-5162, Indexing UGC, impact factor: 7.95.

2. Dr. T. Geetamma (2023, March) CLASSIFICATION OF DIABETIC FOOT ULCER USING EFFICIENTNET B0 (JETIR), Volume No. 10, Issue No. 3, Page Nos. i41 to i46, Publisher : JETIR, ISSN No. 2349-5162, , Indexing UGC, Impact factor : 7.95.

3. Dr. TVS. Divakar (2023, April) Design and analysis of phased antenna array for 5G communication JETIR, Volume No.10, ISSN No.4, Page No. 597-601 ISSN Nos. 2349-5162, Indexing: UGC CARE, Impact factor: 0.

4. SEMINARS AND WORKSHOPS ATTENDED

1. Dr. K. Kalyan Sundar, presented a paper entitled “A Linear Array of Dropper-shaped Wide-band Printed Radiators for Ku-band Applications” in ICCDC-2023, Haldia Institute of Technology, Haldia, West Bengal.on 3/3/2023.

2. Dr. TVS Divakar, Dr. A. Sudhakar prepared Funded Project Report s (asPI) “ Design and Development of a Plasma Antenna at Tera Hertz Frequency using Neural Networks” , Agency SER B-CRG , Amount 5013120, Date of Submission 3/14/2023.

5. OTHERS

1. Dr. G.B.S. R. Naidu patent published title of “Life decease detection in crops using image processing and machine learning for agriculture applications “ patent No. 202341026339, Date of Publication 3/31/2023, Agency: Indian patent.

2. Dr. G.B.S. R. Naidu attended on online STC Course “AIML & Deep Learning applications” , NITW & JNTUH, completion on 31.03.2023 to 04.04.2023 (5 days).

3. Dr. Yogesh Mishra attended on online course “Design of High-frequency Antennas for Real-time Applications (DHARA-2023)”, V R Siddhartha Engineering College Vijayawada and GMR Institute of Technology Rajam, completion on 14.03.2023 to 18.03.2023 (5 days).

4. Dr. Ravi Shankar Saxena attended on online course “Design of High-frequency Antennas for Real-time Applications (DHARA-2023)”, V R Siddhartha Engineering College Vijayawada and GMR Institute of Technology Rajam, completion on 14.03.2023 to 18.03.2023 (5 days).