DEPARTMENT OF ECE

NEWSLETTER

MAY-JUNE-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

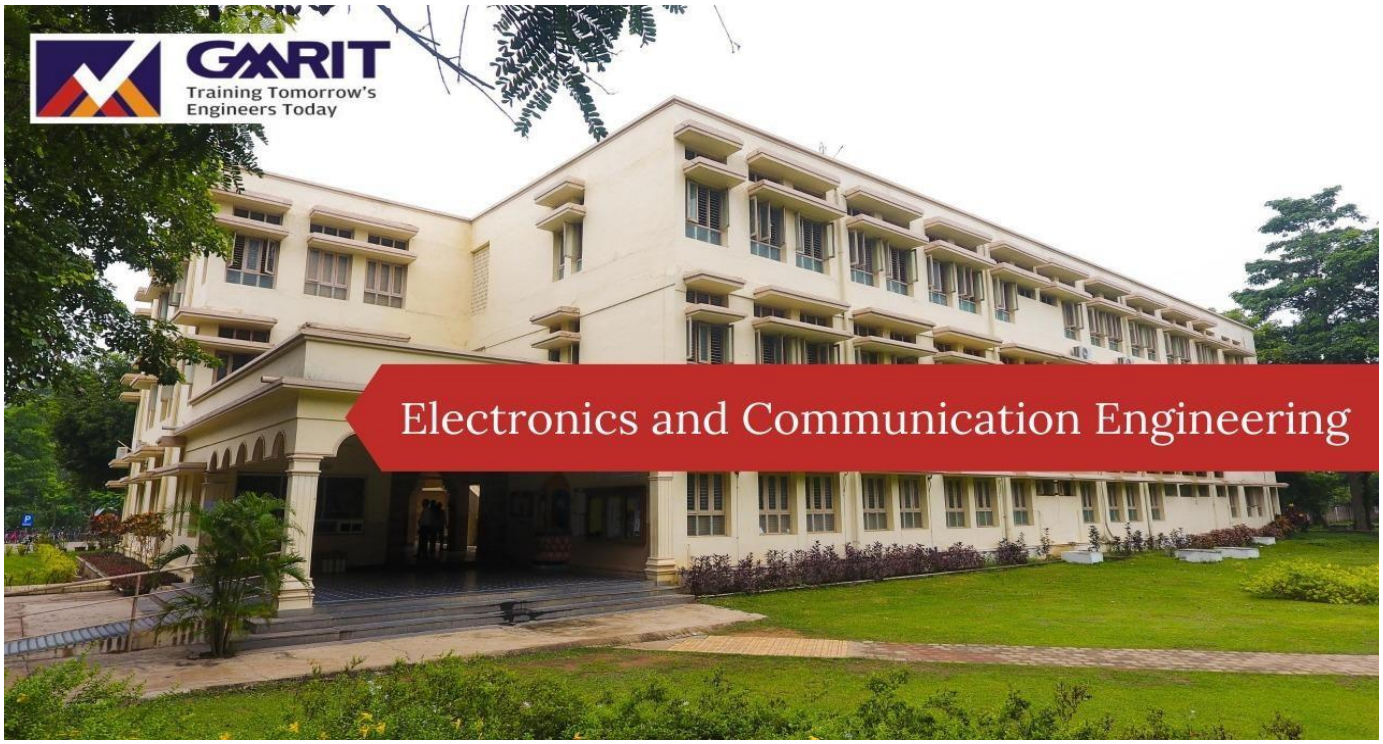
Ms. R. Gnanaprasuna
3rd ECE C

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

- 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. FACULTY PUBLICATIONS & ACHIEVEMENTS

1. Dr. B. Anil Kumar published a journal entitled “Neural Processing Letters” Histo-Quartic Graph and Stack Entropy-Based Deep Neural Network Method for Brain and Tumor Segmentation on 26.04.2023, Volume No. 11, Issue No.1, Page No. 1-23, Publisher: Springer Nature, ISSN No. 13704621, Indexing: SCI

3. SEMINARS AND WORKSHOPS ATTENDED

1. Dr. A. Sudhakar presented a paper entitled “Design of Slot Antenna with Circular Stub for Dual Band Applications” in ICRICET 2023, at Vignan Institute of Technology, Visakhapatnam on 20.05.2023.

4. OTHERS

1. Dr. G. Nooka Raju attended a online FDP course titled “Introduction to the Internet of Things and Embedded Systems” University of California, date of Completion 09.06.2023 (17 Weeks).
2. Dr. G. Nooka Raju attended a online FDP course titled “Programming for Everybody (Getting Started with Python)” University of Michigan, date of completion 07.06.2023 (31 Weeks).
3. Sri. P. Kalyan Chakravarthi attended a online FDP Course titled “Software Defined Networking” the university of Chicago, date of Completion 30.05.2023 (8 Weeks).