

DEPARTMENT OF ECE NEWSLETTER

NOV-DEC 2025

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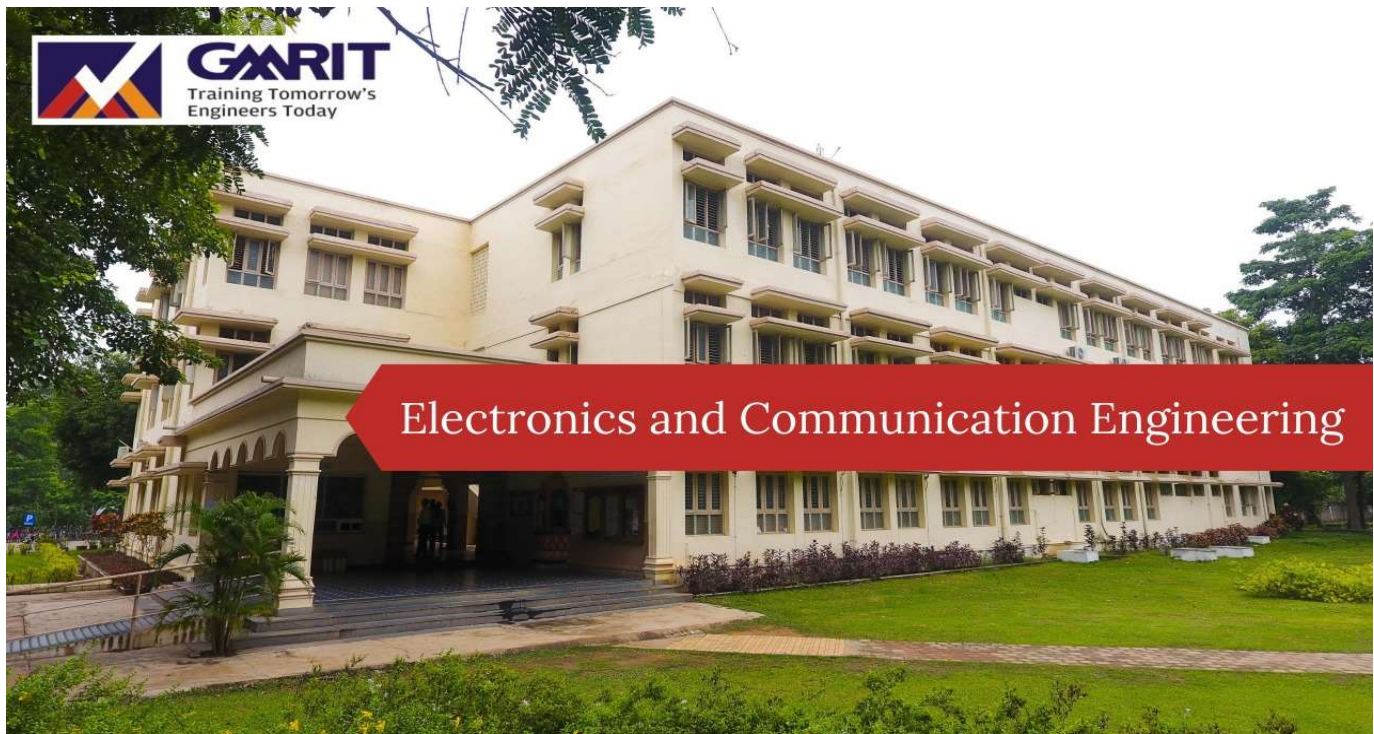
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1.1. OVERVIEW

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

PLACEMENT DETAILS

Company Name	No. of Students Attended	No. of Students Placed	Package	Date
SILICONUS	Online	4	3.00 Lakhs	04.12.2025
Aviotron Aerospace	34	20	3.6-3.8 Lakhs	05.12.2025
TTEC	56	10	3.00-3.3 Lakhs	24.12.2025

3. FACULTY PUBLICATIONS & ACHIEVEMENTS

SEMINARS & WORKSHOPS

- Dr. N. Prasad attended 6days FDP Programme entitled on “ETCCS”, Starting date:10-11-2025 date of completion15-11-2025, Organized by GURUnanak
- Dr. N. Prasad attended 5days FDP Programme entitled on “Futuristic Tools, Techniques and Application for Signal, Image & Communication Systems”, hosted by GMRIT&NITW Starting date:22-09-2025 date of completion 26-11-2025, Organized by GMRIT,Rajam
- Dr. D. Suresh attended 84days FDP Programme entitled on “5G Wireless Standard Design” Starting date: JULY,2025 Ending date October, 2025, IIT Kanpur.
- Dr. Siva Singari attended 60days FDP Programme entitled on “Artificial Intelligence: Search Methods for Problem Solving” Starting date: 01-07-2025 date of completion31-10-2025 NPTEL.
- Dr. Siva Singari attended 5days FDP Programme entitled on “Futuristic Tools, Techniques and Application for Signal, Image & Communication Systems” Starting date: 22-09-2025 date of completion 26-09-2025 Hosted by GMRIT.

- Dr. B. Anil Kumar attended 5days FDP Programme entitled on “ATAL FDP on Robotics for Industry 4.0: Enabling Smart Manufacturing” Starting date 17-11-2025 Ending date 22-11-2025, SRI VENKATESWARA COLLEGE OF ENGINEERING
- Dr. K.Sreelakshmi attended 84days FDP Programme entitled on “Introduction to Machine Learning” Starting date 01-07-2025 date of completion 15-10-2025 NPTEL.
- Dr. P. Ravi Kumar attended 60days FDP Programme entitled on “Introduction to Machine Learning” Starting date: 21-07-2025 date of completion 20-10-2025. IIT, MADRAS.
- Dr.T. Anil Kumar attended 6days FDP Programme entitled on “IEEE Region 10 Young Professionals Volunteer Collective 2025 - Cohort 1” Starting date: 17-08-2025 date of completion 12-10-2025, IEEE Region 10 Young Professionals.
- Dr. Yogesh Mishra attended 5days FDP Programme entitled on “QNX Everywhere” Starting date: 03-11-2025 date of completion 07-11-2025, Kumaraguru College of Technology, Coimbatore.
- Dr. N. Prasad attended online course on “Embedded software engineering” 8 weeks date of completion of Course 01-11-2025. Portal in L&T Edutech.
- Dr. D. Suresh online course attended on “5G Wireless Standard Design” 12 weeks date of completion of Course 01-11-2025. Portal in NPTEL, IIT Kharagpur.
- Dr. A. Siva Sangari online course attended on “Artificial Intelligence: Search Methods for Problem Solving” 60 weeks date of completion of Course 31-10-2025. Portal in NPTEL, IIT Madras.
- Dr. K. Sreelakshmi online course attended on “Introduction to Machine Learning” 12 weeks date of completion of Course 21-11-2025. Portal in NPTEL, IIT Madras.
- Dr. P. Ravi Kumar online course attended on “INTRODUCTION TO MACHINE LEARNING” 12 weeks date of completion of Course 18-10-2025. Portal in NPTEL, IIT.
- 16. Dr. Yogesh Mishra online course attended on “Introduction to Internet of Things” 12 weeks date of completion of Course 20-11-2025. Portal SWYAM.
- Dr. BABJI PRASAD CHAPA attended 1day FDP Programme entitled on “Pre-Summit Event of the AI Impact Summit India 2026- “A Seminar on Impact of AI on Teaching-Learning Process and Pedagogy””, Starting date:20-12-2025 date of completion 20-12-2025, Organized by GMR Institute of Technology, Rajam
- Dr. BABJI PRASAD CHAPA has participated in the five-day National Seminar on “Quantum Computing: Applications in Electronics and Communication – QuACE-2K25,” organized by the Department of Electronics and Communication Engineering, held from 15th to 19th December 2025 at Dhanekula Institute of Engineering & Technology (Autonomous), Vijayawada, sponsored by the Anusandhan National Research Foundation in association with the IEEE Guntur Subsection and IETE Vijayawada Section.
- Dr. T. Anil Kumar attended 1day FDP Programme entitled on “Pre-Summit Event of the AI Impact Summit India 2026- “A Seminar on Impact of AI on Teaching-Learning Process and

Pedagogy""", Starting date:20-12-2025 date of completion 20-12-2025, Organized by GMR Institute of Technology, Rajam.

- Dr. J.V. Suman attended 1day FDP Programme entitled on "Pre-Summit Event of the AI Impact Summit India 2026- "A Seminar on Impact of AI on Teaching-Learning Process and Pedagogy""", Starting date: 20-12-2025 date of completion 20-12-2025, Organized by GMR Institute of Technology, Rajam.

PAPER PUBLICATIONS

- Dr. Yogesh Misra [et.al] Paper entitled on "A CNN-Driven Image Analysis Approach For Accurate Detection of Plant Leaf Diseases", International Journal of Engineering, Science and Information Technology date of publication :01-09-2025, Voume:5, Issue No:4, Page No: 235-243 , Publisher Malikussaleh University, Indonesia, ISSN No: 2775-2674 Inexing: Scopus. Impact factor:0.18.
- Dr. A. Siva Sangari Paper entitled on "Iot powered smart cradle for infant care and vaccination monitoring system ", Journal of Archives for Technical Sciences date of publication :12-09-2025, Voume:33, Issue No:2, Page No 65-72 , Publisher Tehnički institut Bijeljina, ISSN No1840-4855 Inexing: ESCI, Impact factor 0.2.
- Dr. Yogesh Misra [et.al] entitled on Paper "A new offloading technique to maximize multi-user performance in edge computing using blockchain technology in the internet of things", International Journal of Applied Mathematics (IJAM)date of publication : 01-10-2025, Voume:38, Issue No:4, Page No: 855-867, Publisher (IJAM), ISSN No: 314-8060 Inexing: Scopus. Impact factor:0.3.
- Vinay Varma, TVS Divakar entitled on Paper "Improving User Experience for the Visually Impaired in Online Forms", International Journal of IJRPR, Date of Publication 15-10-2025, Volume No:6, Issue Number:10, Page Number:1526-1534, Publisher IJRPR, ISSN number:2582-7421.
- Dr. A. Siva Sangari [et al.] Paper entitled on "JOOBO: Deep Learning with Jaya One-to-One Optimization Based Breast Cancer Detection by Histopathological Images" , Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Publisher Springer Nature, Date of publication 05-12-2025, Volume:49, Issue No:04, Page No: 1-26. ISSN No 2228-6179, Indexing: SCIE.
- Dr. N. Chandrasekhar [et al.] Paper entitled on "Coronary artery disease detection using deep integration of vision transformer and extended LSTM from cardiac multi-modal images",

Alexandria Engineering Journal, Publisher Elsevier, Date of publication 01-12-2025, Volume: 133, Issue No:1110-0168, Page No: 615-626. ISSN No 1110-0168, Impact Factor: 6.8, Indexing: SCIE.

- Dr. N. Prasad [et al.] Paper entitled on “A graphene-based broadband metamaterial absorber for terahertz applications at far-infrared (FIR) region”, Diamond & Related Materials Journal, Publisher Elsevier, Date of publication 10-09-2025, Volume: 1, Issue No:1, Page No: 1-15. ISSN No 0925-9635, Impact Factor: 6.4, Indexing: SCIE.
- Mr. P. V. Muralikrishna, Kadiyam Sridevi and T. Venkata Ramana Paper entitled on “Performance Analysis of Cache Enabled Millimeter Wave Downlink Time Division Duplexing Networks with Coordinated Base Stations”, MDPI-ELECTRONICS Journal, Publisher MDPI, Date of publication 04-12-2025, Volume: 14, Issue No:23, Page No: 1-16. ISSN No 2079-9292, Impact Factor 2.6, Indexing: SCIE.
- Mr. P V Muralikrishna, Kadiyam Sridevi, T.Venkata Ramana Paper entitled on “INTERNATIONAL JOURNAL OF MICROWAVE AND OPTICAL TECHNOLOGY”, Publisher IJMOT, Date of publication 05-12-2025, Volume: 20, Issue No:6, Page No: 619-630. ISSN No 1553-0396, Impact Factor 0.6, Indexing: SCOPUS.
- Dr. T. Geetamma Paper entitled on “Emotion Prediction Using Deep Learning” 2025 International Conference on Intelligent and Secure Engineering Solutions (CISES), Date of Conference 11-08-2025, Organized by Greater Noida Gautam Budh Nagar, India
- Jami Venkata Suman, Omprakash Gurrapu, K. Swaroopa Paper entitled on “Wearable Health Monitoring System using Embedded Sensors and Edge Computing” 2025 International Conference on Intelligent Communication Networks and Computational Techniques (ICICNCT), Date of Conference 05-09-2025, Organized by Guru Nanak Dev Engineering College, Bidar.

CONFERENCES

- Dr. Jagan Naveen V has presented paper entitled on “A CNN-Transformer Hybrid for Precise Object Detection in UAV Aerial Imagery” in 2025 IEEE 3rd Global Conference on Wireless Computing and Networking (GCWCN) during 22nd to 23rd November 2025.
- Dr. Nagandla Prasad Paper entitled on “A graphene-based broadband metamaterial absorber for terahertz applications at far-infrared (FIR) region”, Journal of Diamond & Related Materials, Date of Publication 10-08-2025, Volume No:160, issue No.1, Page No:1-16, Publisher Elsevier, ISSN No: 0925-9635, Indexing SCI, Impact factor:5.4.
- Dr. Ravi Shankar Saxena [et al.] Paper entitled on Defected Ground Structure (DGS) Based MIMO Antenna Array With Decent Isolation Characteristics for Satellite Communications in Unified S-Band (USB) ion”, Journal of Radio Science Research Article, Date of Publication 12-11-2025, Volume No:60, issue No.11, Page No:1-17, Publisher Wiley, ISSN No: 1944-799X, Indexing SCI, Impact factor:1.5.

- Dr. J. Venkata Suman [et al.] Paper entitled on “AI and Sustainable Agriculture Through Cost–Benefit Analysis of Smart Irrigation Systems”, Journal of Research on World Agricultural Economy, Date of Publication 16-09-2025, Volume No:6, issue No.4, Page No:266-279, Publisher Nan Yang Academy of Sciences Pte. Ltd., ISSN No: 2737-4785, Indexing scopus/esci, Impact factor:1.1.
- Dr. Yogesh Misra [et al.] Paper entitled on “Smart Parcel Delivery Receiving Box for Secure Parcel Drop-Off”, International Journal of Research Publication and Reviews, Date of Publication 30-11-2025, Volume No:6, issue No.10, Page No:5853-5860, Publisher IJRPR, ISSN No: 2582-7421, Indexing google, Impact factor: 6.844
- Dr. A. Siva Sangari [et al.] Paper entitled on “Detection and Classification of Brain Tumor Based on Convolutional Deep Learning Techniques” 23rd International Conference on Hybrid Intelligent Systems (HIS 2023), Date of Conference 13-12-2023, Organized by Mohan Babu University, Tirupati.
- Dr. K. Sreelakshmi Paper entitled on “Design and Deployment of IoT Assisted Computational Strategies in Wireless Sensor Networks for Efficient Smart Infrastructure Management” International Conference on Data-Processing and Networking, Date of Conference 07-11-2025, Organized by Canadian Institute of Technology, Tirana, Albania, Canada.
- Dr. K. Sreelakshmi Paper entitled on “Gain-constrained LCMV ISAC Transmit Beamforming with Low Sidelobes on ULA” 7th International Conference on Intelligent Communication, Control and Devices, Date of Conference 10-10-2025, Organized by Electrical Cluster, School of Advanced Engineering, at UPES, Bidholi Campus
- Dr. K. Sreelakshmi Paper entitled on “Gain-constrained LCMV ISAC Transmit Beamforming with Low Side lobes on ULA” 7th International Conference on Intelligent Communication, Control and Devices, Date of Conference 10-10-2025, Organized by Electrical Cluster, School of Advanced Engineering, at UPES, Bidholi Campus
- R. Sivaranjani, Jami Venkata Suman Paper entitled on “Image Classification using Quantum Convolutional Neural Network (QCNN)” Conference ICMCTC, Date of Conference 10-04-2025, Organized by Kuala Lumpur, Malaysia.
- Manikyala Rao Tankala, Jami Venkata Suman Paper entitled on “A Comparative Analysis of Deep Learning Transformers and Classical Approaches in IoT Security” Conference ICMCTC, Date of Conference 10-04-2025, Organized by Kuala Lumpur, Malaysia.
- Dr. Jami Venkata Suman Paper entitled on “Smart Agriculture: Integrating AI and IoT in Embedded Systems” Conference ICMCTC, Date of Conference 10-04-2025, Organized by Kuala Lumpur, Malaysia.

PATENTS

- Dr. K . Sreelaksmi have a titled on Patent “MULTIPLE-INPUT MULTIPLE-OUTPUT (MIMO) MULTIBAND ANTENNA FOR 5G APPLICATIONS” Patent No: 466407, Date of Publication/ grant 21-10-2025, The patent Office, Government of India.
- Dr. J. Venkaa Suman have a titled on Patent “IOT BASED HIGH GAIN ANTENNA FOR 5G COMMUNICATIONS” Patent No: 470392, Date of Publication/ grant 03-11-2025 IPR INDIA.
- Dr. J. Venkaa Suman have a titled on Patent “A SYSTEM AND METHOD FOR REAL-TIME ENVIRONMENTAL MONITORING USING 3 ADAPTIVE WIRELESS SENSOR NETWORKS” Patent No 202541086570, Date of Publication/ grant 17-10-2025, IPR INDIA.
- Mr. Abishek Reddy and Dr. Jagan Naveen have a Book titled on “Adversarial Machine learning: The Double - Edged Sword of AI in Cybersecurity”, SCIENTIFIC INTERNATIONAL PUBLISHING HOUSE published on 02-12-2025.
- Dr. Siva Sangari have a titled on Patent “MACHINE LEARNING–ENABLED 6G IOT SYSTEM FOR GREEN EV ECOSYSTEM AND REAL-TIME AIR QUALITY ANALYTICS” Patent No: 202541101711, Date of Publication / grant 25-12-2025, The patent Office Indian Patent.
- Dr. J.V. Suman have a titled on Patent “A SYSTEM AND METHOD FOR WEARABLE CARDIAC ECG SIGNAL RECORDING AND REAL-TIME ABNORMALITY DETECTION ” Patent No: 202541114209 , Date of Publication / grant 05-12-2025, IPR, INDIA.
- Dr. J.V. Suman have a titled on Patent “GATE-LEVEL POWER ESTIMATOR WITH PATH-SENSITIVE GLITCH MODELING” Patent No: 202541115109 , Date of Publication / grant 05-12-2025, IPR, INDIA.

OTHERS