



MARRI LAXMAN REDDY **INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

Department of Electronics and communication engineering

BROCHURE-2022



ELECTRONICS & COMMUNICATION ENGINEERING

Electronics and communication engineering

The Electronics and Communication Engineering is one of the core engineering majors and it represents a rapidly developing field, including wireless communications, micro- and nano-electronics. The Department of Electronics and Communication Engineering was established in the year 2009 with the intake of 60 students and rapidly growing. The intake number has been increased to 216 by 2012. In 2012, the department started M.Tech program with specialization in embedded systems with an intake of 24. The department has got various international and national certifications which enhances the rank of the department. The department has got accreditation from NAAC with 'A' grade in 2015 and NBA in 2016.

The department has produced more than 600 graduates till now. The main objective of this course is to provide students with very strong insight of electronics and communication areas as well as related aspects. The department has very well trained faculties with 06 Professors, 14 Associate Professors and 30 Assistant Professors. The faculties are qualified and proficient with a wide range of experience in academics and industry. The faculty members of our department have published a large number of research papers in referred journals like IEEE, Elsevier etc.

It is one of the most significant branches of engineering which has always been in demand. The department is known for its efficacy and holds a strong reputation. Various workshops, guest lectures and FDP programs were organized by the department time to time for enhancing the knowledge and quality of students as well as the faculties. The department aims primarily at excellence not only in theoretical but also in experimental research in Embedded Systems, Signal Processing, VLSI Design, Communications, RF & Microwave, Antennas, etc.

Vision and Mission of the Department

Our Vision

Imparting quality technical education through research, innovation and team work for a lasting technology development in the area of Electronics and Communication Engineering.

Our Mission

To develop a strong centre of excellence for education and research with excellent infrastructure and well qualified faculties to instill in them a passion for knowledge.

To achieve the Mission the department will

1. Establish a unique learning environment to enable the students to face the challenges of the Electronics and Communication Engineering field.
2. Promote the establishment of centre of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students.
3. Provide ethical and value based education by promoting activities addressing the societal needs.
4. Enable students to develop skills to solve complex technological problems of current times and also provide a framework for promoting collaborative and multidisciplinary activities.

PEO's & PO's

PROGRAMME EDUCATIONAL OBJECTIVES

PEO 1: Have successful careers in Industry.

PEO 2: Show excellence in higher studies/ Research.

PEO 3: Show good competency towards Entrepreneurship.

PROGRAM OUTCOMES

- a An ability to apply knowledge of Science, Mathematics, Engineering & Computing fundamentals for the solutions of Complex Engineering problems
- b An ability to identify, formulate, research literature and analyze complex engineering problems using first principles of mathematics and engineering sciences.
- c An ability to design solutions to complex process or program to meet desired needs.
- d Ability to use research-based knowledge and research methods including design of experiments to provide valid conclusions.
- e An ability to use appropriate techniques, skills and tools necessary for computing practice.
- f Ability to apply reasoning informed by the contextual knowledge to assess social issues, consequences & responsibilities relevant to the professional engineering practice.
- g Ability to understand the impact of engineering solutions in a global, economic, environmental, and societal context with sustainability.
- h An understanding of professional, ethical, Social issues and responsibilities.
- i An ability to function as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
- j An ability to communicate effectively on complex engineering activities within the engineering community.
- k Ability to demonstrate and understanding of the engineering and management principles as a member and leader in a team.
- l Ability to engage in independent and lifelong learning in the context of technological change.

PROGRAM SPECIFIC OUTCOMES

- PSO1 Analyze and design analog & digital circuits or systems for a given specification and function.
- PSO2 Implement functional blocks of hardware-software co-designs for signal processing and communication applications.

ECE Labs

1. Analog Communications Lab
2. Analog Electronics Lab
3. Basic Simulation Lab
4. Digital Signal Processing Lab
5. Electronic Devices and Circuits lab
6. IC Applications and HDL Simulation Lab
7. Microprocessor and Microcontroller Lab
8. Microwave and Digital communications Lab
9. Pulse and Digital circuits lab
10. Robotics Lab

Faculty Achievements

S.No.	Faculty	Authors	Title	Year
1	D. Malathi Rani	Kumar G.K., Rani D.M., Neeraja K., Philip J.	Food Calorie Estimation System Using ImageAI w	2022
2	Dr. G. Amarnath	Amarnath G., Sharmila V., Sreenivasulu Y., K	AllnN/GaN HEMT on Silicon Substrate with GD-F	2022
3	Dr. G. Amarnath	K Dharavath, A Gaini, V Adla	A Parallel Deep Learning Approach for Age Invar	2022
4	Dr. G. Amarnath	P Mahesh, N Ankitha, M Tarakesh, K Dharav	A Simulation Study of COVID-19 Out Break as an	2022
5	Dr. G. Amarnath	Talukdar J., Amarnath G., Mummaneni K.	Flicker Noise Analysis of Non-uniform Body TFET	2022
6	Dr. G. Amarnath	Amarnath G., Guduri M., Vinod A., Krishnas	Numerical Simulation-Based Comparative Study	2022
7	Dr. G. Amarnath	Amarnath G., Guduri M., Vinod A., Kavichar	Study of Temperature Effect on MOS-HEMT Sma	2022
8	Dr. G. Amarnath	Krishnasamy M., Shinde J.R., Mohammad H	Design and Analysis of FEM Novel X-Shaped Broa	2022
9	Dr. G. Amarnath	Sravani K.G., Sai N.Y., Billscott M., Reddy P.G	Designing of RF-MEMS Capacitive Contact Shunt	2022
10	Dr. N. Srinivas	Nallagonda S., Prathyusha O.L., Ranjeeth M	Performance of Generalized $\hat{\tau}$ - $\hat{\tau}$ Fading for Ene	2022
11	Dr. N. Srinivas	Nallagonda S., Bhowmick A., Prasad B.	On Selection of Parameters for Cooperative Spec	2022
12	Dr. N. Udayakumar	Shivakumar N., Kumar N.U., Bachu S., Kuma	Remote Sensing and Natural Image Dehazing usi	2022
13	Dr. N. Udayakumar	Sweatha A., Udaya Kumar N., Bachu S.	Drivable Area and Road Anomaly Segmentation	2022
14	Dr. Srinivas Bachu	Akanksha M.N.V., Bachu S., Kumar M.A., Ku	Implementation of Potential Leukemia Detection	2022
15	Dr. Srinivas Bachu	Jhansi M., Bachu S., Kumar N.U., Kumar M.A	IODTDLCNN: Implementation of Object Detectio	2022
16	E. Sreenivasulu	Lal A.H., Sreenivasulu E., Kumar M.A., Bachu	Implementation of Brain Tumor Detection with D	2022
17	H. Sangeetha	Sangeeta H., Kumar P.A., Srinivasulu K., Kart	Fungus Detection System Built in an Efficient and	2022
18	I. Adum Babu	Reddy B.S., Babu I.A., Bachu S.	Implementation of Medical Image Watermarking	2022
19	K. Nagabhushanam	Meghana K., Nagabushanam K., Bachu S.	Implementation of Computer Aided System for A	2022
20	K. Nagamani	Nagamani K., Divya K., Sujatha K., Bonagiri K	Adaptive histogram equalization of wavelet sub	2022
21	S. K. Himabindhu	Sravana J., Hima Bindhu S.K., Sharvani K., Sa	Implementation of Spurious Power Suppression	2022

“I don’t spend my time pontificating about high-concept things; I spend my time solving engineering and manufacturing problems.”

- Elon Musk



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GROUP OF INSTITUTIONS

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