

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING





VISION

To develop well-disciplined and competent engineers who will excel in the field of Electronics and Communication Engineering.

MISSION

- To develop qualified technical personnel with a strong knowledge on basic engineering principles.
- To disseminate Innovative technical skills by fostering excellence in engineering education.
- To promote exemplary professional conduct, to be utilised for the betterment of the society.

The Programme defines Programme Educational Objectives, Programme Outcomes and Programme Specific Outcomes as follows:

I. PROGRAMME EDUCATIONAL OBJECTIVES [PEOs]

PEO 1: Graduates of the programme will demonstrate strong fundamental mathematical concepts, advance techniques & tools in the field of Electronics and Communication Engineering, eventually motivates them to pursue their higher studies, design and development of innovative, cost-effective products exhibiting a solid foundation to research-oriented methodologies.

PEO 2: Graduates of the programme will be proficient with a successful career in academia and industry for global competitiveness.

PEO 3: Graduates of the programme will exemplify with ethics and moral values, effective communication, Interdisciplinary approach, to solve engineering issues for broader societal benefits which paves way to entrepreneurship and leadership.

II. PROGRAM OUTCOMES [POs]

PO1: An ability to relate the knowledge of mathematics, science and engineering, to practical real-world applications.

PO2: An ability to identify, formulate and solve the engineering problems.

PO3: An ability to produce the efficient system design and components design for various applications.

PO4: An ability to conduct and investigate different experiments for analysis and synthesis purpose.

PO5: Excel in modern Engineering tools, Software's and other equipment's.

PO6: An understanding the Professional responsibility in this technological world.

PO7: An ability to perceive the impact of Professional Engineering Solution in societal and Environmental contexts and demonstrate the knowledge of, and need for sustainable development.

PO8: An ability to apprehend, code of conduct and ethical responsibilities.

PO9: An ability to work on multi-disciplinary task and team work.

PO10: Ability to write and communicate effectively in verbal, written form.

PO11: An understanding of Engineering Economics and Management principles to lead projects effectively.

PO12: An ability to develop confidence for self-education and for life-long learning.

III. PROGRAM SPECIFIC OUTCOMES [PSOs]

PSO1:An ability to apply the knowledge of mathematics, science and electronic fundamentals to find solutions for complex engineering problems in the design and development of systems in Analog and Digital electronics, VLSI Design, Embedded Systems, Communication, Signal Processing and other relevant domains.

PSO2:An ability to solve real world problems with optimal solutions using modern hardware and software tools in the domain of electronics and communication engineering.

PSO3:An ability to grasp the social-cognizance and environmental-wisdom with ethical responsibility to be an entrepreneur in a techno-savvy world by au courant with latest technologies.





It is a great privilege that Department of Electronics and Communication Engineering releases A Technical newsletter "Genesis".

I appreciate all the faculty members and students of the Department of Electronics and Communication Engineering for their endurance and hard work.

I believe that the activities in the newsletter will be thoughtprovoking which will help the students to come up with flying colors.

I am also happy that the Department of Electronics and Communication Engineering has organized more technical events. It provides me immense pleasure to see the hard work of the students and the faculty members which bear such golden fruit.

This newsletter contains several technical articles that gives a glimpse of the bright young minds. It also brings out the hidden talents of students and gives them a platform to express their talents.

My best wishes to all present here and I hope that "Genesis" will be a great success.

Dr. G. Ranganath Principal



It gives me immense pleasure to introduce our very own Department Bulletin- newsletter "Genesis", Volume-01, Issue-02, Jan-May, 2021

The Department of Electronics and Communication Engineering has highly qualified and experienced professors who are experts in their own discipline. We are privileged to produce promising "technowizards" for the engineering society.

The newsletter "Genesis" is an honor with great achievements. The newsletter consists of various Departmental Activities such as Workshops, Seminars, FDPs, Short-term Courses etc., that nourish our student's skills and knowledge of their subjects.

Added to that, Faculty achievements such as Publications in SCI/Scopus/UGC-Care listed Journals, Patents, Book/Book Chapters, FDPs Attended/Organized etc., during Jan-May,2021. The "Genesis" integrates many, in which students rise up to the situation and display their capabilities in organizing the events, their participation in Co-Curricular and Extra-Curricular activities, Awards and Recognitions etc.,

I extend a hearty appreciation to all the students and the staffs who have spent their time to time to complete "Genesis newsletter".

I wish you all the best.

DR.S.SUMATHI EDITOR-IN-CHIEF



I FEEL VERY PROUD TO SHARE FEW WORDS ABOUT GENESIS NEWSLETTER.

A LOT OF EFFORT HAS GONE INTO MAKING OF THIS ISSUE, WHEREIN ALL ASPECTS AND ACHIEVEMENTS OF THE DEPARTMENT ARE HIGHLIGHTED.

THIS NEWSLETTER INCLUDES THE ACTIVITIES OF FACULTY MEMBERS AND STUDENTS. THIS ISSUE IS A COMBINED EFFORT OF THE EDITORIAL TEAM, PARTICULARLY THE STUDENT EDITORS.

WE HOPE THAT THE READERS WILL FIND INTERESTING FACTS. THANK YOU ALL AND WISH YOU A GREAT SUCCESS.

M. ASHOK KUMAR ASSOCIATE EDITOR

MESSAGE FROM STUDENTS' EDITORIAL TEAM

STUDENT EDITORIAL TEAM, WOULD LIKE TO EXPRESS OUR SINCERE GRATITUDE FOR YOUR ONGOING SUPPORT AND CONTRIBUTIONS TO OUR PUBLICATION. YOUR EXPERTISE AND INSIGHTS HAVE ENRICHED OUR CONTENT, MAKING IT TRULY EXCEPTIONAL.



JOE LAWRENCE S (CHIEF EDITOR)

AS WE EMBARK ON ANOTHER EXCITING YEAR OF CREATING INFORMATIVE AND ENGAGING ARTICLES, WE LOOK FORWARD TO COLLABORATING WITH YOU TO SHOWCASE THE REMARKABLE ACHIEVEMENTS AND INNOVATIONS WITHIN THE ECE FIELD



SANTHOSH NARMAL AKASH

AISWARYA G



Departmental Activities

List of faculty publications along with DOI's and publication/citation details

1.DR.R.Poovendran-Design of Nano Thermoelectric Generator for Wireless Nano-Sensor Network-2020 International Conference on System, Computation, Automation and Networking, ICSCAN 2020https://www.scopus.com/inward/ record.uri?eid=2-s2.0-85098260915&doi=10.1109%2flCSCAN49426.2020.9262300 &partnerID=40&md5=bec23d5c1bedbefdbeee97c3d371827a

2.DR.R.Poovendran- Multi-Purpose Intelligent Drudgery Reducing Ecobot-2020 International Conference on System, Computation, Automation and Networking, ICSCAN 2020 https://www.scopus.com/inward/record.uri?eid=2-s2.0-85098 253726&doi=10.1109%2flCSCAN49426.2020.9262372&partner ID=40&md5=e17f96c0056478c3eef4599c279f22ee

3. DR.R.Poovendran-Architectural exploration of heterogeneous NoC with fault tolerant capacity-Architectural exploration of heterogeneous NoC with fault tolerant capacityhttps://www.scopus.com/inward/record.uri?eid=2-s2.0-85098237560&doi=10.1109%2flCSCAN49426.2020.9262453&partnerID=40&md5=b7c50fda3e5243c25038d369f240bc79

4.DR.T.Menakadevi_Resource-based routing protocol for mobile adhoc networks-Songklanakarin Journal of Science and Technologyhttps://www.scopus.com/inward/record.uri?eid=2-s2.0-85085686035&partnerID=40&md5=31b48a824065b1b0a2b730ad690f3ebd

5.David William Raj L.- Robotic Arm for Extricate Operation in Bore well-2020 International Conference on System, Computation, Automation and Networking, ICSCAN2020https://www.sc opus.com/inward/record.uri?eid=2-s2.0-85098286542&doi=10 .110 9%2flCSCAN49426.2020.9262297&partnerlD=40&md5=45d 9313a0384abaf0eab587183721293

LIST OF WORK SHOPS:

Workshop on "Leadership ,Innovation and Initiatives" Number of Participants: 15 Date: 27.06.2021

LIST OF SEMINARS CONDUCTED

Seminar on "Web Designing". Entrepreneurship Number of Participants: 90
Date: 23/03/2021

PEER-REVIEWED JOURNAL PUBLICATION BY STUDENTS

Name of the Journal: International Research Journal of Engineering and Technology

Volume: 8

Special Issue:1

Month & Year: April 2021
No. of Research Articles: 49

FACULTY DEVELOPMENT PROGRAM

1.Mr.M. Ashok Kumar, M.Maharaja, Mr.Martin Joel Rathnam, A.P.Nithyapriya, Mr.DAVID WILLIAM RAJ ShortTerm Training Program on "Joy of Learning with Virtual Lab"

Date: 05-01-2021 to 09-01-2021

FACULTY ACHIEVEMENTS

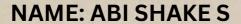
1.Francis Jeni Anto, & Dr. Sumathi, "Design and development of a prototype radio frequency applicator for post baking of biscuits", Journal of Electrical Engineering, ISSN: 1582-4594

2.N.Nirmala, Dr. A.Sumathi, "An area-efficient FFT Processor for the OFDMA transceiver communication system", Concurrency Computation: Practice and Experience, Special Issue, https://doi.org/10.1002/cpe.4875

3.GKS R. Gopinath- "Monitoring and recommendations of public transport using GPS data"
Lecture Notes on Data Engineering and Communications Technologies 28, 141-146

STUDENT'S PHOTOGRAPHY





YEAR: 2ND

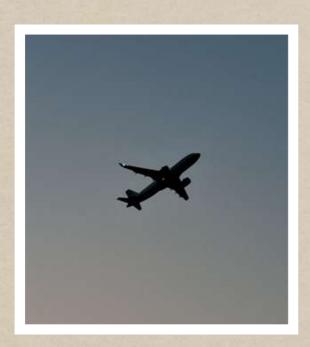
CLASS: ECE-C



NAME: SHILPA S

YEAR: 2ND

CLASS: ECE-C



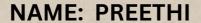
NAME: MURGAN S

YEAR: 3RD

CLASS: ECE-C

STUDENT'S SKETCH ARTS





YEAR: 1ST

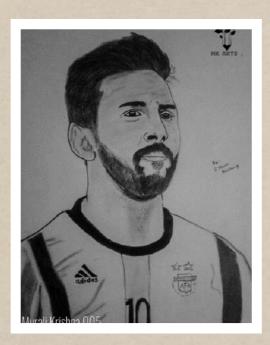
CLASS: ECE-B



NAME: PREETHI SHARAN

YEAR: 1ST

CLASS: ECE-B



NAME: SHEELA

YEAR: 2ND

CLASS: ECE-C

• "THIS NEWSLETTER IS MORE THAN INK ON PAPER; IT'S A TESTAMENT TO THE POWER OF RESEARCH AND THE BEAUTY OF LEARNING."

"As we wrap up another captivating edition of GENESIS, we want to express our heartfelt gratitude to our dedicated readers, talented contributors, and everyone who made this issue possible. It's been a journey filled with enlightening stories, breathtaking visuals, and thoughtprovoking insights. We hope these pages have transported you to new worlds, sparked your curiosity, and inspired your passions. Remember, the story never truly ends; it evolves with every turn of the page. Stay tuned for our next chapter, where we promise to continue bringing you the extraordinary, the remarkable, and the extraordinary. Until then, keep exploring, keep dreaming, and keep reading."

THANK YOU