



ADHIYAMAAN
COLLEGE OF ENGINEERING
AUTONOMOUS

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

TECHNICAL NEWSLETTER
(INTERNAL CIRCULATION)

GENESIS

JUNE-DEC., 2022

HIYAMAAN COLLEGE OF 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.



MESSAGE FROM PRINCIPAL

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 thought-provoking 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***



MESSAGE FROM HOD

It gives me immense pleasure to introduce our very own Department Bulletin- Newsletter "Genesis", volume 01, Issue 1 Jun-Dec,2022

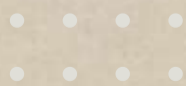
The Department of Electronics and Communication Engineering has highly qualified and experienced professors who are experts in their own discipline. We are privileged to produce promising "techno-wizards" for the engineering society.

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 Jun-Dec,2022. 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**



MESSAGE FROM EDITORIAL TEAM

I feel very proud to share few words about Newsletter “Genesis”

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.

Mrs.B.UMA
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.

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



**JOE LAWRENCE S
(CHIEF EDITOR)**



SANTHOSH NARMAL AKASH



MONISHA S



AISHWARYA S

Departmental Activities

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

1. Dr. A.SUMATHI, “Efficient routing and performance amelioration using Hybrid Diffusion Clustering Scheme in heterogeneous wireless sensor network”, International Journal of Communication Systems,
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133200346&doi=10.1002%2fdac.5281&partnerID=40&md5=6c88271f5cfa691a7e88f0e6e3858f4f>
<https://doi.org/10.1002/dac.5281>

2. Dr. A.SUMATHI, “HOFT-MP: A Multipath Routing Algorithm Using Hybrid Optimal Fault Tolerant System for WSNs Using Optimization Techniques”, Neural Processing Letters,
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129799765&doi=10.1007%2fs11063-022-10852-3&partnerID=40&md5=5616c071c6a03948411457a6785e5222>

3. DR.T.MENAKADEVI, “ Information retrieval through a knowledge base system: Semantic web based approach in South-Eastern Coastal areas of India” Songklanakarin Journal of Science and Technology
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85129180560&partnerID=40&md5=3aa9769940a1266a1049369e8d64545d>

4. DR.T.MENAKADEVI, “ Mobility speed prediction using ARIMA and RNN for random walk mobility model in mobile ad hoc networks” Concurrency and Computation: Practice and Experience,
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85115844601&doi=10.1002%2fcpe.6625&partnerID=40&md5=3029c389e883da3c0d1ce4810066722f>

PATENTS

1. Dr. R. Poovendran-IoT Driven AI-Based Intelligent Streetlight Monitoring System Using Micro Controller-202241014455 A

2. Dr. R. Poovendran-WSN, AI, based real time Vehicle Automation and Enhanced Safety, Security and Tracking System by IoT Networks-202241015571 A

SHORT-TERM COURSES OFFERED:

Course:-Powering IOT using Arduino/ Raspberry Pi

Convenor:-Dr.S.Sumathi

Co-ordinator:-Mr. P. Manivannan,Mr.K.Rajesh Kumar

No.of.students:-134

WORKSHOP PHOTOS



***A Two-Day Hands-on Workshop on Powering IoT
using Arduino/Raspberry Pi***

LIST OF WORKSHOPS ON INTELLECTUAL PROPERTY RIGHTS(IPR)

1."Overview of Intellectual Property Rights (IPR)" on 20.09.2022
Organizing Secretary:-Dr.S.Sumathi, Co-ordinator:-Mrs.B.Uma
No. of participants:-50

COURSE MODULES DEVELOPED BY FACULTY MEMBERS

1.**Dr. S. SUMATHI** - <https://www.youtube.com/watch?v=ozMGwPalpuM>

2.**Mr.E.SAKTHIVEL**- https://drive.google.com/file/d/1bt2AfOkQtYb7YATmvT83zDBNIRbJeqTw/view?usp=share_link

3.**Mrs.C.STEFFI**-https://drive.google.com/file/d/1LtOF_idt8zsSMTy31ux0qH38UuBVCdOR/view?usp=share_link

CO-CURRICULAR ACTIVITIES

1.Madhumitha.S- Paper Presentation- National Symposium- SIMATS school of Engineering, Chennai- **Won Best Paper Award**

2. Uthay Kumar V- Paper Presentation- National Symposium- SASURIE

College of Engineering, Tirupur- **Won Best Paper Award**

3. Kavin Y- Paper Presentation- National Symposium- SASURIE College of Engineering, Tirupur-**Won Best Paper Award**

4. Sriranjani S- Paper Presentation & Technical Quiz Electra'23-National Symposium- Karunya Institute of Technology And Science , Coimbatore- **2nd Prize.**

5.Theja S- Paper Presentation- National Symposium- Hindustan Institute of Technology- **3rd Prize**

6.Adlin Jessie T- Paper Presentation- National Symposium- SIMATS school of Engineering, Chennai- **3rd Prize**

7.Jaswanth Reddy G- Paper Presentation- National Symposium- Sri Sairam College of Engineering, Bangalore- **3rd Prize**

8.Kokila V- Paper Presentation- National Symposium- Sri Sairam College of Engineering, Bangalore- **3rd Prize**

9.Monisha M- Paper Presentation- National Symposium- Sri Sairam College of Engineering, Bangalore- **3rd Prize**

10.Harish Babu P-Paper Presentation-National Symposium- Sri Sairam College of Engineering, Bangalore-**3rd Prize**

11.Ravi D-Paper Presentation-National Symposium-Sri Sairam College of Engineering, Bangalore-**3rd Prize**

CO-CURRICULAR ACTIVITIES AWARDS/CERTIFICATES



CO-CURRICULAR ACTIVITIES AWARDS/CERTIFICATES



EXTRA CURRICULAR ACTIVITIES

1.HARISH V-SPORTS-CRICKET-MNM JAIN ENGINEERING COLLEGE, CHENNAI-STATE LEVEL-3RD PRIZE

2.GOKULNATH M-SPORTS-CRICKET-MNM JAIN ENGINEERING COLLEGE, CHENNAI-STATE LEVEL-3RD PRIZE

3.KIRAN V-SPORTS-CRICKET-MNM JAIN ENGINEERING COLLEGE, CHENNAI-STATE LEVEL-3RD PRIZE

4.MAHENDRAN.G-SPORTS-CRICKET-MNM JAIN ENGINEERING COLLEGE, CHENNAI-STATE LEVEL-3RD PRIZE

5.JAYASURYA R-SPORTS-CRICKET-MNM JAIN ENGINEERING COLLEGE, CHENNAI-STATE LEVEL-3RD PRIZE

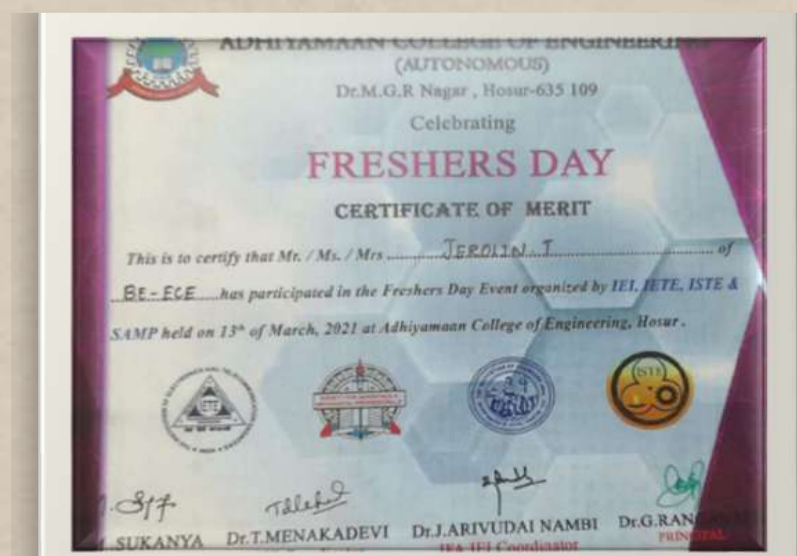
6.ROHITH M-SPORTS-CRICKET-MNM JAIN ENGINEERING COLLEGE, CHENNAI-STATE LEVEL-3RD PRIZE

Extra Curricular Activities

Sports - Cricket



Extra Curricular Activities



STUDENT'S SKETCH ARTS



NAME: SUGANTH S N
YEAR : I
CLASS: ECE - C



NAME: SHASHAKHAN S
YEAR : I
CLASS: ECE - B

STUDENT'S PHOTOGRAPHY

NAME: SRIRITHI GOPIKA V
YEAR : I
CLASS: ECE - C



NAME: JOE LAWARANCE
YEAR : IV
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 thought-provoking 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