



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING INNOVATRONIX

2024 - 2025 NEWS LETTER

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Message



Dr. P. Chinnadurai, M.A., Ph.D.

Secretary & Correspondent, Panimalar Group of Institutions

Success is all about respecting the past and creating the future. I wish the Panimalar group of institutions the very best in delivering quality education to all walks of the society.



Dr. C. Sakthi Kumar M.E., Ph.D. Director, Panimalar Group of Institutions

As we speak, technology around us changes. Innovation has become the buzzword. We at Panimalar group of institutions, create and carve out a niche for the students, and we make them believe that "education for life" rather than "education for living".



Mrs. C. Vijayarajeswari
Director, Panimalar Group of Institutions One of the greatest challenges and opportunities in the modern

day is preparing today's students for tomorrow's needs. We tutelage the students to embrace the change and move forward in this competitive environment.



Dr. Saranya Sree Sakthi Kumar B.E., M.B.A., Ph. D.

Director, Panimalar Group of Institutions At Panimalar, we identify student's potential, convert them into talent and elevate the talent to infinite possibilities. We condition the students for the challenges ahead and groom them to be responsible citizens.

Message



Dr. K. Mani, M.E, Ph.D. Principal

I am pleased to share with you the newsletter from Department of ECE, Panimalar Engineering College. You will be delighted to go through this volume that will connect you to the many activities of this dynamic department. Let this newsletter and series of such letters keep us all continuously informed about all the developments of the department in the years to come. I wish the Head of the Department, all the staff and students of the department for having taken the best initiatives in bringing out this Newsletter.

Dr. S. Rajakumar M.E, Ph.D. Professor & Head of the Department, ECE

On behalf of the Department of ECE, Panimalar Engineering College, it gives us immense pleasure in presenting this newsletter. It was exhilarating being the editors of this issue. This newsletter focuses on the happenings of the academic year along with the incredible achievements of our students and staff. We hope that this newsletter will be giving you an excellent insight on the various achievements by the members of our department.



FACULTY EDITOR: DR.M.PREM KUMAR, M.E, PH.D

DR.S.SHIBU, M.E, PH.D

STUDENT EDITOR: ROSHAN R (III ECE)

POOVARASAN P (III ECE)

MUKESH T (III ECE)



VISION

To provide world class quality education and excelling research activities in electronics and communication engineering with strong ethical values and social challenges.

MISSION



M1: To impart high quality technical education by investing in faculty development and resources.

M2: To adapt best teaching and learning process with strong state of art facilities for academic and research activities.

M3: To enhance national and international collaborative activities for evolving indigenous technological solutions to meet social needs, nurture leadership and entrepreneurship qualities with ethical means.

M4: To facilitate partnership with leading core industries and R&Ds for global outreach.

PEOS OF THE ECE PROGRAM



PEO1: Core Competencies

To prepare the graduates in fostering electronics and communication engineering principles to provide socially relevant and sustainable engineering solution.

PEO2: Professional Integrity

To gain adequate knowledge to become good professional in electronic and communication engineering associated industries, higher education and research.

PEO3: Research & Global Responsibilities

To prepare graduates in an area of specialization, ethically develop innovative and research oriented methodologies to enhance the adaptability of technological and social challenges.

PROGRAM OUTCOMES (POS)

PO1: Engineering knowledge:

Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis:

Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions:

Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems:

Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

P05: Modern tool usage:

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society:

Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.



PROGRAM OUTCOMES (POS)



PO7: Environment and sustainability:

Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

P08: Ethics:

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work:

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

P010: Communication:

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance:

Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning:

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



PROGRAM SPECIFIC OUTCOMES (PSOS)



PSO1: Graduates should demonstrate an understanding of the basic concepts in the primary area of Electronics and Communication Engineering, including: analysis of circuits containing both active and passive components, electronic systems, control systems, electromagnetic systems, digital systems, computer applications, and communications

PSO2: Graduates should demonstrate the ability to utilize the mathematics and the fundamental knowledge of Electronics and Communication Engineering to design complex systems which may contain both software and hardware components to meet the desired needs.

PSO3: The graduates are capable of excelling in Electronics and Communication Engineering industry/Academic/Software companies through professional careers.



ABOUT THE DEPARTMENT



Panimalar Engineering College affiliated to Anna University, Chennai, was established in the year of 2000. The Department of Electronics and Communication Engineering offers the following programs.

B.E. – Electronics and Communication Engineering (4 Years)

M.E. – Communication Systems (2 Years)

Ph.D. – Electronics and Communication Engineering (Full time / Part time).

The main focus of the ECE department is to impart technical education that meets international standards in the field of Electronics and Communication for the benefit of the society. The department has three centres of excellence to promote research and development with industry collaboration.

Centre of excellence in Robotics and IoT helps to foster innovation and develop industrial automation solutions. Centre of Excellence in Drones helps to train and upskill students for the future of unmanned aerial vehicle technology to make them industry ready and empower their technical skills in the drone technology space. Centre for Research on Reconfigurable Wireless Technologies is developed to promote research and publications in various domains spanning from basics of circuits to emerging 6G wireless technologies.

Undergraduate students, Postgraduate students and Research scholars of the department are well qualified to meet the demands of the Industry and Research Organization. Our department is equipped with eminent faculty members who are expertise in various technical domains. The total strength of regular teaching faculty members in the department is 72, of which 33 of them are doctorates and all the remaining staff members are qualified with Masters Degree. The research activities are carried out by a group of expert research members.

The overall focus of the department is to

- Emphasis elemental knowledge of the subjects.
- Provide exposure to the emerging technologies.
- Inculcate strong research and development activities.

Opposition of students to explore their interests, leadership skills, and engage in community service. We also emphasize soft skills training, including communication and personality development, ensuring that our students are well prepared for the professional world.



STAFF ACHIEVEMENTS



Mr. M. Arun, Assistant Professor, ECE received the IEEE MGA Young Professional Achievement Award 2023 from IEEE MGA.



Mr. M. Arun, Assistant Professor, ECE, delivered the Talk in the Webinar on IEEE Membership Benefits and Funding opportunities at Kongu Engineering College on 04.05.2024.



Mr. M. Arun, Assistant Professor, ECE received the IETE Exemplary Contribution Award 2022-2024 from IETE Chennai Centre in the IETE Zonal Seminar (South) & ISF Congress at Sri Sairam Engineering College on 27.07.2024.



Dr. S. Deepa, Professor ECE & Mr. M. Arun, Assistant Professor, ECE received the Vibrant ISF Award for the academic year 2022-2023 from IETE Chennai Centre in the IETE Zonal Seminar (South) & ISF Congress at Sri Sairam Engineering College on 27.07.2024.



Dr. S. Deepa, Professor ECE received the Best ISF Coordinator Award for the academic year 2022-2023 from IETE Chennai Centre in the IETE Zonal Seminar (South) & ISF Congress at Sri Sairam Engineering College on 27.07.2024.



Mr. M. Arun, Assistant Professor, ECE received the Best ISF Coordinator Award for the academic year 2022-2023 from IETE Chennai Centre in the IETE Zonal Seminar (South) & ISF Congress at Sri Sairam Engineering College on 27.07.2024.



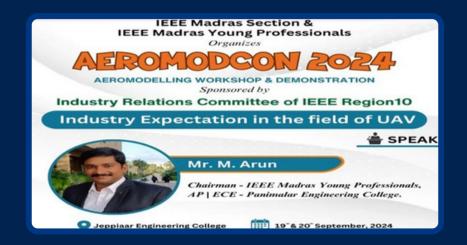
Mr. M. Arun, Assistant Professor, ECE, delivered the talk on IEEE Membership Drive – Grab it Now at Sri Krishna College of Technology on 14.08.2024.



Mr. M. Arun, Assistant Professor, ECE, acted as a Resource Person for Quintessence NEXUS 1.0 event at Sri Sairam Engineering College on 28.08.2024.



Mr. M. Arun, Assistant Professor, ECE received the Vibrant Pilot Award for Panimalar Engineering College from IEEE YESIST 12 at Tunis Science Centre, Tunisia on 08.09.2024.



Mr. M. Arun, Assistant Professor, ECE, delivered the Talk on Industry Expectation in the field of UAB in AEROMODCON 24 – Aeromodelling workshop at Jeppiaar Engineering College on 19.09.2024.



Mr. M. Arun, Assistant Professor, ECE, delivered a Talk on Innovation in Action in IEEE MGA Young Professional Sponsored Student Transition Elevation Programme organized by IEEE MAS YP at Panimalar Engineering College on 27.09.2024.



Mr. M. Arun, Assistant Professor, ECE, acted as a Guest of Honour at UPSKILL 24 event at Sri Krishna College of Engineering and Technology and also delivered a Talk on Impact of IEEE on Professional Life in the Panel Discussion on 28.09.2024.

STUDENT ACHIEVEMENTS

Academic Year 2024 - 2025



Ms. Harini M, Ms. Harshini J, and Ms. Janaki S of II ECE won the Second Prize for presenting their paper titled "Smart Shopping Cart" in the IETE Zonal Seminar (South) & ISF Congress – Paper Presentation event, organized by IETE Chennai Centre at Sri Sairam Engineering College, Chennai, on 26th & 27th July 2024.



Ms. Shandhini M, Ms. Shahana M, Ms. Logashree S, Ms. Loghithaa G, Ms. Oviya S, Ms. Nirosha D, and Ms. Subhaharin P of III ECE won the IETE Best Student Volunteer Award from the Institution of Electronics and Telecommunication Engineers for their proactive support, service, and volunteering in activities conducted at IETE Chennai Centre during 2022-2024. The award was presented at the IETE Zonal Seminar (South Zone) and ISF Congress held at Sri Sairam Engineering College on 26.07.2024.



Mr. Dheeraj of III ECE Won the Best Ambassador Award & also received the Best Institution Award from IEEE Computer Society at CSIS 2024 at SRM Institute of Science and Technology on 31.07.2024.



Ms. Shandhini M, Ms. Logashree S, Ms. Loghithaa G, Ms. Oviya S, and Ms. Subhaharin P of III ECE presented the Best Practices of PEC WIE Affinity Group and secured the IEEE MAS Best WIE AG Award at the Connecting the Dots 3.0 event organized by the IEEE Madras Section WIE Affinity Group at St. Joseph's College of Engineering on 07.09.2024.



Mr. Jayanth & Team Won Rs. 1000 for winning Honorary Mention award for presenting their Research Paper in ECE dept. Symposium held at Dr. MGR Educational & Research Institute on 13.9.2024



Team Aviator Won the Best Innovation Award & Rs. 3000 Cash Award at Hack -O-Holics Hackathon at St. Josephs Institute of Technology 13& 14 September 2024



Ms. Harini M, Ms. Harshini J, and Ms. Janaki S of II ECE won Second Prize in the IDEA SURGE event at Samarpana 2K24, held at Sri Sairam Institute of Technology on 24.09.2024.



Mr. Dheeraj & Team Won the IEEE SPAX Forge Up Entrepreneurship Award for Dedication and Outstanding Contribution to the event's performance from Jeppiaar Engineering College

PROFESSIONAL SOCIETY EVENTS ORGANIZED 2024-2025

S. No	Date	Name of the Event / Event Title	No of Students Participated	Resource Person
1.	01.07.2024	Webinar on Simulation of AC DC Hybrid Microgrid	80	Ms. Shravani Mathur, Associate Professor &Ambassador, IEEE Women-in-IES 2024
2.	04.07.2024	Webinar on Winning with WIE - Opportunities and Benefits	85	Dr. S. Harivardhagini, Chair-WIE,IEEE Hyderabad Section(2024,2023), Professor & Head, EIE Department CVR College of Engineering, Hyderabad
3.	05.07.2024	Webinar on Move with Purpose	75	Ms.Mary Ellen Randall, 2025 IEEE President Elect Candidate President at Ascot Technologies
4.	06.07.2024	Webinar on AI and Deep Learning for 4IR Technologies	85	Dr.Celia Shahnaz, Professor, ECE, BUET, Bangladesh, 2023-24 IEEE Women in Engineering Committee Chair.
5.	08.07.2024	Webinar on Empowering Women Leaders: Strategies for Success And Inclusion	85	Dr. Zuhaina Zakaria, Dean, Institute of Postgraduate Studies, UiTM, Malaysia

S. No	Date	Name of the Event / Event Title	No of Students Participated	Resource Person
6.	08.07.2024	Webinar on Engineering Leadership and the Future of Work	70	Mrs. Leslie Martinich, IEEE Distinguished Lecturer, Founder and President, Competitive Focus Lead Faculty, Engineering leadership Certificate Program, University of Texas at Austin
7.	09.07.2024	Webinar on Women in Smart Cities 55		Dr. Surekha Deshmukh, Chairman IEEE Pune Section
8.	31.07.2024	Workshop on Designing Your College Roadmap as a Student: From Campus to Global Intern	60	Mr. Aryan, IEEE REM Scholar 2022, Past Research intern at IMEC Belgium & NUS-SERIS Singapore
9.	09.08.2024	Webinar on Industry Readiness	56	Mr. P. Lakshman Prakash, General Manager & Global Hr Head, Internet of Things(IoT) and Digital Engineering, TCS
10.	09.08.2024	Webinar on Navigating the Engineering Landscape: Skills and Strategies for Success	55	Mr. Binesh Kumar, Technical Project Lead at Atom Power Inc, Charlotte, North Carolina, USA
11.	11.08.2024	Webinar on Next-Gen IoT Solutions: Leveraging VLSI Technology	60	Mr.Samuel Tensingh, Department of Biomedical Engineering University of Sydney, Australia
12.	14.08.2024	Webinar on Data Analysis Roadmap and Beginner Bootcamp	55	Ms.Harshini Garapati, Data Analyst at CVS Health, Master's in Computer Science, Texas, United States

S. No	Date	Name of the Event / Event Title	No of Students Participated	Resource Person
13.	24.08.2024	Webinar on Satellite Communication and their role in enabling 6G Technologies	55	Texas, United States Dr.Gunasekaran Thangavel, University of Technology and Supplied Sciences, Muscat
14.	01.09.2024	Webinar on Navigating global semiconductor 65 industry and what to expect		Ms.Simran Khokha, Product Manager, Infineon Technologies, Germany
15.	14.09.2024	Seminar on Digital Manufacturing and Industry 5.0	80	Prof.R K Amit, Department of Management Studies, IIT Madras. Mr.S Ramachandran, Principal, Consultant, Infosys Knowledge Institute. Mr. V Venkatraman, Founder & CEO, Embridge Solutions Pvt. Ltd. Mr. H R Mohan, IEEE Ambassador & Chair- Events, IEEE CS Madras. Prof. Kulwant Pawar, Nottingham University, Business School, UK
16.	21.09.2024	Webinar on Soft Skills for Engineers: Communication, Teamwork and Leadership	62	Mr. Mithresh Gunaseelan, Execom Member, IEEE Madras Young Professionals Advisor, IEEE PIT SB



Webinar on Move with Purpose as a series of IEEE WIE Day 2024 celebration by Ms.Mary Ellen Randall,2025 IEEE President Elect Candidate President at Ascot Technologies on 05.07.2024.



Webinar on AI and Deep Learning for 4IR Technologies as a series of IEEE WIE Day 2024 celebration by Dr.Celia Shahnaz, Professor, Dept of ECE,BUET,Bangladesh,2023-24 IEEE Women in Engineering Committee Chair on 06.07.2024.



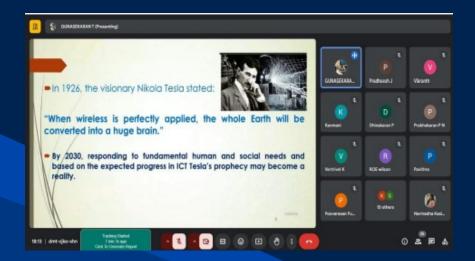
Webinar on Empowering Women Leaders: Strategies for Success And Inclusion as a part of IEEE WIE Day 2024 celebration by Dr.Zuhaina Zakaria, Dean, Institute of Postgraduate Studies, UiTM, Malaysia on 08.07.2024.



Webinar on Next-Gen IoT Solutions: Leveraging VLSI Technology by Mr. Samuel Tensingh, University of Sydney, Australia on 11.08.2024.



Seminar on Digital Manufacturing and Industry 5.0



Webinar on Satellite Communication and their role in enabling 6G Technologies by Dr.Gunasekaran Thangavel, University of Technology and Supplied Sciences, IEEE Senior Member, Life Member ISTE, Muscat on 24.08.2024.



Webinar on Navigating global semiconductor industry and what to expect as a part of International Webinar Series by Ms.Simran Khokha, Product Manager, Infineon Technologies, Germany on 01.09.2024.



Webinar on Soft Skills for Engineers: Communication, Teamwork and Leadership as a part of IEEE Day 2024 by Mr. Mithresh Gunaseelan, Execom Member, IEEE Madras Young Professionals on 21.09.2024.

CLUB ACTIVITIES EVENTS CONDUCTED

ACADEMIC YEAR 2024-25

S. No	Club Organized	Name of the Program / Event	Date	Resource Person/ Chief Guest / Expert Details
1.	Design Club	Hands on Training in Web Development	7.8.2024 to 8.8.2024	Mr. Mohsin Ahmed Founder & CEO, Infomatronics, Chennai
2.	Design Club	Hands on Training in Web Development	21.8.2024 to 22.8.2024	Mr. Mohsin Ahmed Founder & CEO, Infomatronics,Chennai
3.	Design Club	Workshop on Image Processing using MATLAB	22.08.2024 to 23.08.2024	Dr.N.R.Shanker, M.Tech.,Ph.D., Manager Director, Chase Technologies Avadi, Chennai
4.	AI Club	Workshop on AI Drones and its applications	09.09.2024 to 10.09.2024	Mr. Damodaran, CEO, AVIATORQ
5.	Radio Club	Training on Chip Level Testing & Debugging for all Mobile Devices	09.09.2024 & 10.09.2024, 11.09.2024 & 12.09.2024, 18.09.2024 & 19.09.2024, 20.09.2024 & 21.09.2024	Mr. Karthi, Trainer, New Technology Mobile & Laptop Service Training Institute, Coimbatore.
6.	IR Club	Workshop on Machine Learning using MATLAB	24.9.2024 to 25.9.2024	Ms.Priyanka, CEO of SkillX



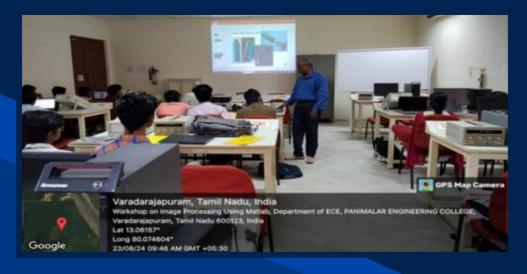
Workshop on Machine Learning using MATLAB



Workshop on AI Drones and its Applications



Hands on Training in Web Development



Workshop on Image Processing using MATLAB

INDUSTRIAL VISIT

ACADEMIC YEAR 2024-2025

Industrial Visit – Retech Pvt. Ltd., , Chennai, II – Year Students , 20/07/2024





Hands on Training in Web Development from 7.8.2024 to 8.8.2024







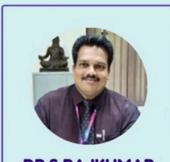
2-DAYS HANDS ON TRAINING IN WEB DEVELOPMENT

IN ASSOCIATED WITH DESIGN CLUB, DEPARTMENT OF ECE, PANIMALAR ENGINEERING COLLEGE, CHENNAI

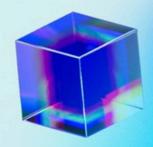
GUEST LECTURE BY



FOUNDER & CEO INFOMATRONICS



DR S RAJKUMAR HOD - DEPT OF ECE PANIMALAR ENGG COLLEGE



FACILITIES

- Interactive Hands-on Sessions
- Expert-led Demonstrations
- Networking Opportunities

Event Coordinator: Dr. D. Kalaiyarasi.

For More Information:

- +91 8015430304 Mohsin Ahmed N
- +91 93606 97219 Naveen S

7th & 8th Aug, 2024

Limited

40 Seats Only

Infomatronics Project Services Poonamallee, Chennai - 600 123



www.infomatronics.in





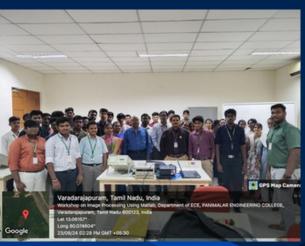
Workshop on Image Processing using MATLAB from 22.08.2024 to 23.08.2024











Hands on Training in Web Development from 21.8.2024 to 22.8.2024







Project Expo 2024 - 2025







Department of Electronics & Communication Engineering Organised Microcontroller & Interfacing Laboratory Mini Project Expo "Chip Craft 2k24" on30-09-2024

Sports Activities



Panimalar Engineering College, Department of Electronics and Communication Engineering Won the Overall Championship Girls in Intramural Sports and Game Event - 2024