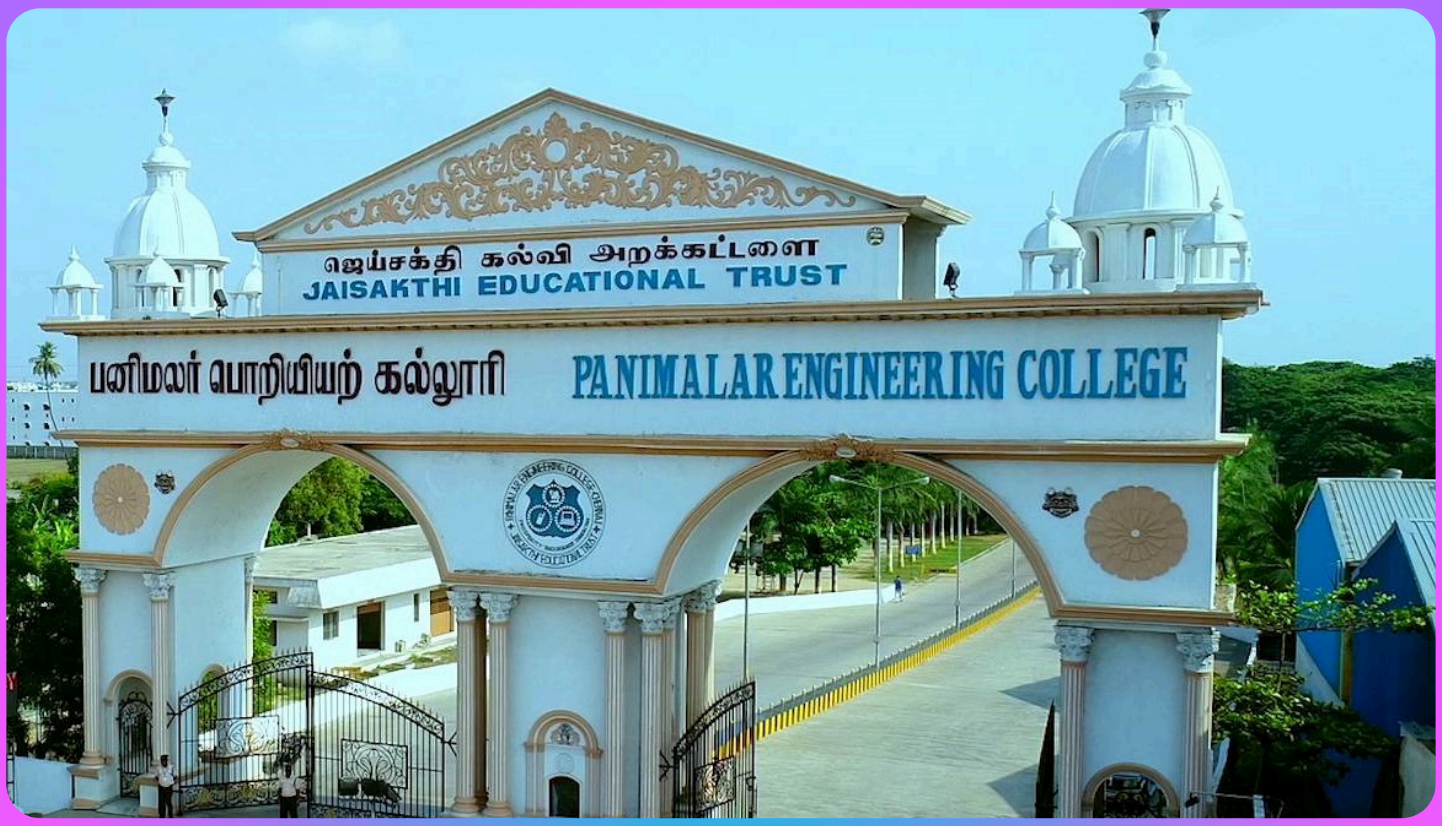
PANIMALAR ENGINEERING COLLEGE

An Autonomous Institution

Affiliated to Anna University, Chennai

(JAISAKTHI EDUCATIONAL TRUST)



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INNOVATRONIX

2022 - 2023

NEWS LETTER

SEPTEMBER - 2022

Volume: 19 **Issue: 1**

Website: https://panimalar.ac.in

MESSAGE

Dr. P. Chinnadurai, M.A., Ph.D.
Secretary & Correspondent

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

Dr. C. Sakthi Kumar, M.E., Ph.D.
Director

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

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. Saranyasree Sakthi Kumar, B.E., M.B.A., Ph.D.
Director

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 news letter 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.
Prof. & HOD / 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 semester along with the incredible achievements of our students and staff. We humbly hope that this newsletter will be giving you an excellent insight on the various achievements by the members of our department.

FACULTY EDITOR : Dr. S.SHIBU, M.E, Ph.D.

STUDENT EDITOR : JOSHUA JOHN.S(IV ECE)
AJAY PRASAD.B(IV 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 Electronics 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.

PO5: 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.

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.

PO8: 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.

PO10: 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 of excellence 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, post graduate 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 32 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.

Our department has various technical and non-technical clubs that provide opportunities for students to explore their interests, develop 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.

STUDENT ACHEIVEMENTS

MURUGESAN A, III ECE won FIRST PLACE in How stuff works in INTER COLLEGE TECHNICAL SYMPOSIUM on 7/5/22 organized by Madras Institute of Technology.

WORKSHOP AND HANDS ON TRAINING

Si.No	Type of Collaborative Activity	Name of the Collaborating Agency with Contact Details	Duration	Nature of the Activity	Number of the Participant
1.	Hands on Training	Mr. Ranjith Kumar Director,CCTI, Coimbatore.	11.07.22 to 14.07.22, 4 days	Arduino PCB Design and Programming	40
2.	Hands on Training	Mr. Krishna kumar New Technology Mobile Service and training, Coimbatore	21.09.22 and 22.09. 22, 2 Days 26.09. 22 and 27.09. 22, 2 Days	Hands on Training "Chip Level Testing & Debugging for all Mobile Devices"	198
TOTAL					238

STUDENTS EVENTS PARTICIPATED AY 2022-23

Sl. No	Name of the Student	Title	Name of the Event	Organization	Duration
1.	CHANDRASE KAR T M	Blochchain Workshop	Blochchain Workshop	Chainlink	05.05.22 to 07.05.22
2.	NISHALINI T.P.	Electric Vehicle	Electric Vehicle	Chennai Institute Of Technology	27.05.22
3.	YUVANESH G	Trainee	Trainee	Flextronics Technologies India Pvt Ltd	04-07-2022 to 07-07-2022
4.	YUVANBALA B	Face Recognition Using Deep Learning	Face Recognition Using Deep Learning	FLEX	04-07-2022 to 07-07-2022
5.	DHATCHAYINI B	Backend Web Page Devlopment	Backend Web Page Devlopment	TCR Innovation	16-06-2022 to 07-09-2022
6.	MANOJ K G	Make Your Own Arduino PCB Design And Programming For Real Time Applications	Make Your Own Arduino PCB Design And Programming For Real Time Applications	Panimalar Engineering Collge	11-07-22 to 14-07-22
7.	SWETHA N S	Make Your Own Arduino PCB Design And Programming For Real Time Applications	Make Your Own Arduino PCB Design And Programming For Real Time Applications	Crystal Clear Technology And Innovation, In PEC	11.07.2022 to 17.07.2022
8.	PRASANNA VENKATESH S	Afc	Afc	Chennai Metro Rail Limited	19-07-2022 to 29-07-2022
9.	SUBHA LAKSHMI M	Embedded Systems	Inplant Training	Codebind Technologies	04.08.2022 to 08.08.2022

STUDENTS EVENTS PARTICIPATED AY 2022-23

Sl. No	Name of the Student	Title	Name of the Event	Organization	Duration
10.	MADHUMITA .K	Embedded Systems	Embedded Systems	Codebind Technologies	10-08-2022 to 14-08-2022
11.	G.ADITHIYA	Advanced Diploma In Python Programming	Advanced Diploma In Python Programming	CSC Computer Education	06.08.2022
12.	HARITHAA S	Embedded	Embedded	Codebind Technologies	10-08-2022 to 14-08-2022
13.	MAGHESH K	_	_	VERZEO	02 .09 .2022 to 07.09.2022
14.	VINISHA P	Chip Level Testing & Debugging For All Mobile Devices	Hands On Training	Panimalar Engineering College	21.09.2022 to 22.09.2022
15.	AJAYKUMAR A	Chip Level Service And Debugging Of All Mobile Devices	Chip Level Service And Debugging Of All Mobile Devices	New Technologies Mobile Service And Training Institute	26.09.22 to 27.09.22
16.	ARUN E	Chip Level Service And Debugging Of All Mobile Devices	Chip Level Service And Debugging Of All Mobile Devices	New Technologies Mobile Service And Training Institute	26.09.22 to 27.09.22
17.	KANCHARLA BHARATH KUMAR	Pcb Design Using Kicad Prototype Developement & Fabrication	Pcb Design Using Kicad Prototype Developement & Fabrication	Panimalar Engineering College	28.9.22 to 30.09.22