

ECE HERALD

DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING
PRESENTS

VOLUME 3 | ISSUE 1
NOVEMBER 2024

WHERE CREATIVITY MEETS TECHNOLOGY

VISION

- ◆ To produce professionally competent, ethically sound and socially responsible Electronics and Communication Engineers.

MISSION

- ◆ Provide excellent infrastructure and lab facilities for quality education.
- ◆ Promote industry-academic interactions to keep up with technological advancements.
- ◆ Develop interpersonal skills and social responsibility among students through project-based and team-based learning.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- ◆ Exemplify technical competence in designing, analyzing, testing and fabricating electronic circuits.
- ◆ Acquire leadership qualities, rapport, communication skills in the organization and adapt to changing professional and societal needs.
- ◆ Work effectively as individuals and as team members in multidisciplinary projects.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- ◆ Define, design, implement, model, and test electronic circuits and systems that perform signal processing functions.
- ◆ Segregate and select appropriate technologies for implementation of a modern communication system.

PROGRAM OUTCOMES (POs)

- ◆ **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- ◆ **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.
- ◆ **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.
- ◆ **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.
- ◆ **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- ◆ **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.
- ◆ **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.
- ◆ **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ◆ **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ◆ **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.
- ◆ **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.
- ◆ **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.

EVENTS

CONVOCAATION CEREMONY 2024

◆ On July 6, 2024, the convocation for the 2020-24 batch took place. Dr. Jacob Chandapillai, Chief Innovation Officer at IIT Palakkad, served as the chief guest. During the event, Dhyana Biju TK was recognized as the department topper, and all graduates were awarded their degrees.



CELEBRATING NATIONAL SPACE DAY 2024

◆ On August 9, 2024, the Department of Electronics and Communication Engineering organized **Spacify 2k24** as part of the National Space Day (NSpD - 2024) celebrations organized by ISRO. The event featured a quiz, a painting contest, a short story writing competition, and a poster design challenge, allowing participants to showcase their creativity and knowledge about space. The event was coordinated by Mrs. Athira V, Assistant Professor in the ECE Department.



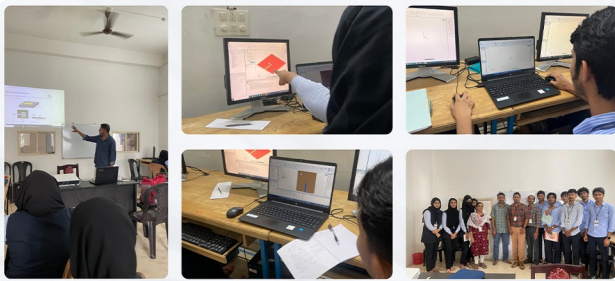
INDUSTRY TALK ON WORKPLACE SAFETY

◆ On August 16, 2024, the Department of Electronics and Communication Engineering (ECE) hosted an industry talk titled "Enhancing Workplace Safety: Insights from Industrial Safety Engineering," led by Mr. Karthik Rohil, Senior Manager (HSE), Tata Motors Ltd. The event was coordinated by Ms. Sreetha Sreedhar K., Assistant Professor in the ECE Department.



TWO-DAY WORKSHOP ON ANTENNA DESIGN AND SIMULATION

◆ The Department of ECE organized a Two-Day Workshop on Antenna Design and Simulation Using HFSS on August 29 - 30, 2024. Aimed at S7 ECE students, the workshop focused on enhancing their understanding of antenna theory and practical simulation techniques with HFSS software. Mr. Binesh K, Assistant Professor at CoET, served as the resource person, sharing his expertise in the field. Ms. Sreetha Sreedhar K, Assistant Professor in the ECE Department, coordinated the event to ensure its smooth execution.



NEW TITLE AND LOGO UNVEILED FOR THE ELECTRONICS DEPARTMENT ASSOCIATION

◆ On September 9, 2024, the Electronics Department Association of the Electronics and Communication Engineering Department launched its new title and logo during the inauguration ceremony of the 2024 - 28 batch. The unveiling was led by Mr. Ashok Rajan, Senior Vice President and Global Head of Cargo and Logistics Solutions at IBS Softwares. The new logo, designed by Abhay Rithik from the 2021-25 batch, symbolizes the association's dedication to innovation and progress. The latest issue of **ECE HERALD** - Department Newsletter was also released during the function.



ROBOTIC CHALLENGE- OBSTACLE AVOIDANCE

◆ The ECE and CSE departments organized a Robotic Challenge on September 09, 2024, with the theme of obstacle avoidance. Students showcased their creativity and technical skills by designing robots to navigate a challenging obstacle layout. The event encouraged teamwork and provided a competitive atmosphere for participants to demonstrate their abilities. The event was coordinated by Mr. Manu Thomas, Ms. Sindhu K, and Ms. Shimna A.



UI/UX WORKSHOP

◆ The IEEE Student Branch held a hands-on UI/UX workshop for 1st-year students from September 10-12, 2024, led by Navaneeth Narayanan and Krishnendhu S Nair (2022 - 26 ECE Batch). The workshop covered key design concepts and practical skills using Figma, guiding participants from user research and wireframing to prototyping. By the end, students had gained a solid foundation in creating

functional and visually engaging interfaces.



TWO-DAY WORKSHOP ON ADVANCED EMBEDDED SYSTEMS AND IOT

◆ The Department of Electronics and Communication Engineering, in collaboration with Impulse (Electronics Department Association) and IEDC STM, held a Two-Day Workshop on Advanced Embedded Systems and IoT for S5 ECE students on September 27-28, 2024. This workshop provided hands-on experience and in-depth knowledge of embedded systems and IoT, essential technologies for modern innovation. Mr. Kathiru Santhikumar, CEO of Thinkfotech Innovations, offered valuable industry expertise and perspectives throughout the sessions. The event was coordinated by Mr. Manu Thomas, Assistant Professor in the ECE Department, ensuring its success.

EXPERT TALK ON “ENGINEER TO ENTREPRENEUR”-TRANSFORMING IDEAS INTO REALITY

◆ On October 23, 2024, the Department of Electronics and Communication Engineering hosted an expert talk titled "Engineer to Entrepreneur: Transforming Ideas into Reality." The event was organized in association with IEDC and Impulse (Electronics Department Association). Akhil Raj, CEO of AIMY LUMINARIES PVT. LTD, was the speaker. The session was coordinated by Mr. Manu Thomas, Assistant Professor in the ECE Department.



DEPARTMENT TOPPERS

S8



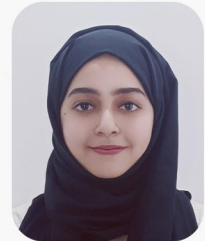
Pranav Raj K



Dhyan Biju T K



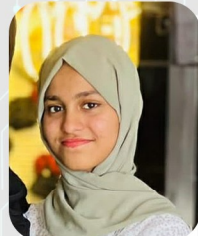
Erin Ruksheed



K Sana Fathima



**Fathimathu
Safa P P**



**Fathimathu
Sana P P**



**P Mohammed
Iymen Irshad**



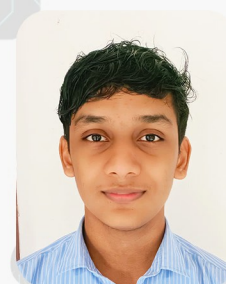
Sana T P

S4



Marjana T

S2



Muhd. Mishal P



Amshiga Ranjith



Anujith K



Muhd. Hanan



Diya A P

ACHIEVEMENTS

STAFF ACHIEVEMENTS

- ◆ Mr. Manu Thomas, Ms. Athira V, Ms. Arya C, Ms. Sreetha Sreedhar K and Ms. Arsha C Dinesh participated in a five-day Faculty Development Program (FDP) on "Entrepreneurship Education: Bridging Academia and Industry." The program was organized by IEDC, St. Thomas College of Engineering and Technology, Chengannur, from October 7 to October 11, 2024.
- ◆ Dr. Anetha Mary Soman, Mr. Nithin C, and Mr. Manu Thomas received certificates of appreciation for achieving Elite Plus Silver in the NPTEL exam.
- ◆ Ms. Athira V participated in the five days FDP on Artificial Intelligence and Machine Learning organized by Department of Artificial Intelligence, METs School of Engineering in association with Pencil Blitz from 1st October 2024 to 5th October 2024.

STUDENT ACHIEVEMENTS

- ◆ Navaneeth Narayanan of 2022-26 batch ECE has successfully completed the short term training programme on Digital system Design with HDL (DSDHDL) organized by Department of Electronics and Communication Engineering, NIT Calicut during 13 July - 4 August 2024.
- ◆ Anujith K and Gautham Krishna have successfully participated in RBI@90 Nationwide Online quiz 2024 on 19 September 2024.

◆ Navaneeth Narayanan & Krishnendhu S Nair of 2022-26 batch ECE has successfully completed the Online Certification Course on Verilog HDL, jointly organized by the Department of Electronics and Communication Engineering, TKM College of Engineering, and IEEE CASS TKMCE SB, with technical support from VLSI Connect.

◆ Yadhukrishnan M, Abhimanyu K Vinayan, Thejus Anil, Muhammed Hanan Bin Siraj, Karthik R Shenoy, Alen M, Ameghi P K, Anandu M V, Akshay Vinod, Diya A P, Muhammed Mishal P, Parthiv Arun, Samanyu N Jils of 2023-27 batch ECE has successfully completed the C Training offered by the Spoken Tutorial Project, IIT Bombay.

SMASHING SUCCESS

◆ Selected to represent the FZone Team in the KTU Interzonal Volleyball Tournament.



Akarsh K P



Abhinav Anil

DEBATE CHAMPS

◆ Navaneeth Narayanan, Gopika Latheesh, and Anujith K, 5THsemester ECE students, along with Sidan Muneer, 5THsemester CSE student, secured first prize in INNOWAR, organized by IEDC STM on October 28, 2024.

NPTEL ACHIEVERS

Top performers in the NPTEL course (Digital Circuits) July - October 2024

ELITE



Amshiga Ranjith



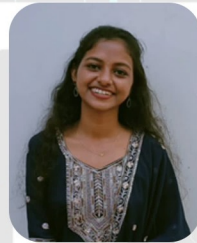
Navaneeth Narayanan



Alen M



Krishnendhu S Nair



Jyothika V



Parthiv Arun



Ameghi P K

IMPULSE

EDITORIAL TEAM

Ms. Sreetha Sreedhar K (Asst. Prof)

Navaneeth Narayanan (S5 ECE)

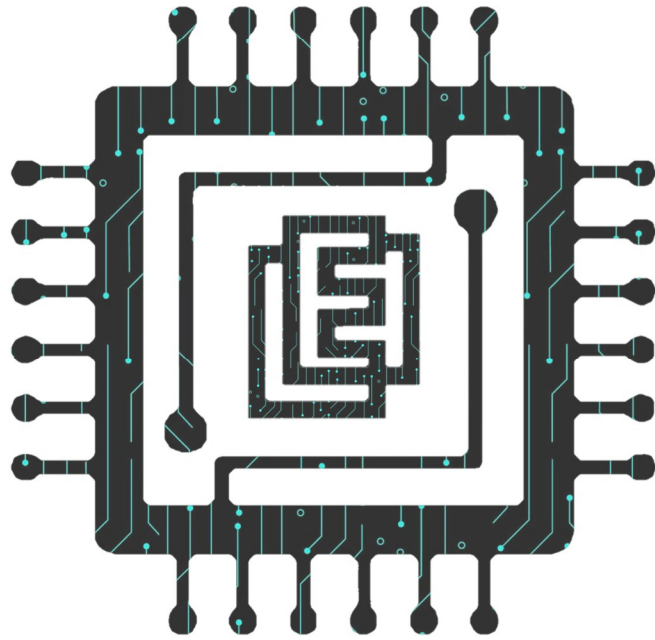
K Sana Fathima (S7 ECE)

Krishnendu S Nair (S5 ECE)

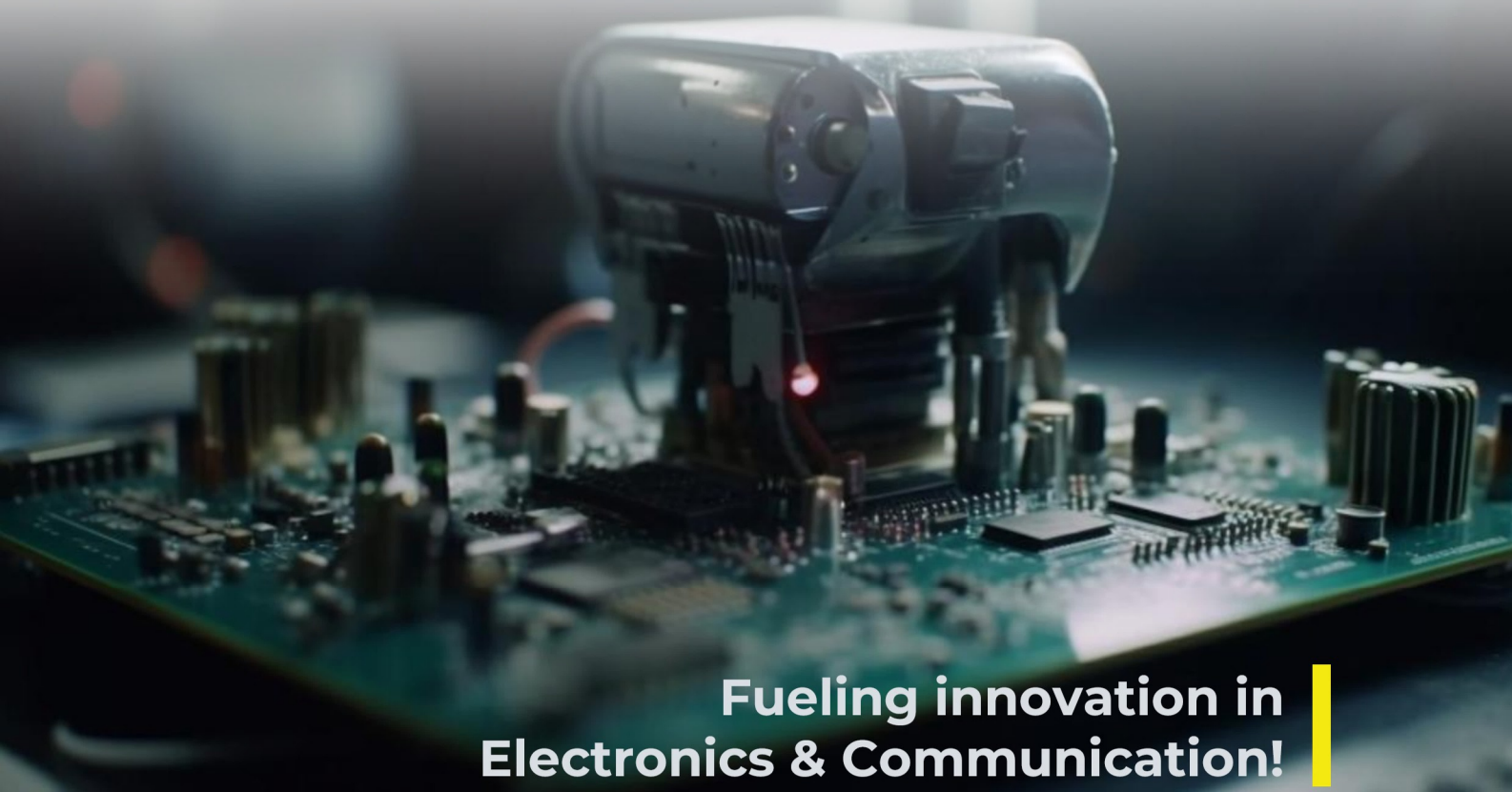
Abhay Rithik (S7 ECE)

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IMPULSE



**Fueling innovation in
Electronics & Communication!**