ELECTROZ INEWS LETTER July'24- April'25, 4th May 2025

DEPARTMENT OF ELECTRONICS & COMMUNICATION MARIAN ENGINEERING COLLEGE , KAZHAKUTTOM

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VISION OF THE DEPARTMENT

"The Department of Electronics & Communication Engineering to be recognized at national & international level by creating engineers capable of accepting the challenges of ever-changing technologies for the betterment of the mankind".

MISSION OF THE DEPARTMENT

- To promote a rigorous learning environment for both theory and practice, and help the students develop professional and communication skills.
- To foster research, innovation & entrepreneur skills in faculty and students for the benefit of society.

FROM DESK OF HEAD OF THE DEPARTMENT



Staff Editor In Charge VINITHA B ELZA HOD,ECE

Dear Students and Faculty Members,

As we embark upon the academic year 2025-2026, I extend my warmest greetings to each one of you. This year promises to be a journey of discovery, innovation, and growth as we continue our pursuit of excellence in engineering education.

To our esteemed faculty members: your dedication and guidance are instrumental in shaping the minds that will lead tomorrow's innovations. Your commitment to imparting knowledge and fostering critical thinking is truly commendable. I urge you to continue inspiring our students with your passion and expertise.

To our talented students: you are the heart of our institution. Your enthusiasm, curiosity, and determination are the driving forces behind our collective success. Embrace the challenges and opportunities that come your way this academic year. Let your creativity flourish, and let your passion for engineering propel you towards new heights.

Together, let us uphold the values of integrity, collaboration, and academic excellence that define our institution. Let us strive not only for personal success but also for the betterment of society through the application of our engineering skills and knowledge. As we commence this new chapter, I wish each and every one of you a fulfilling and rewarding academic year. May you find success in all your endeavours, both inside and outside the classroom. Remember, each challenge is an opportunity to learn and grow.

With heartfelt congratulations, best wishes and prayers to the Almighty for the new academic year '25-'26.

WELCOME TO DEPARTMENT OF ELECTRONICS



Dr. Shanthi K.J.

Former

- Associate Professor at SCT College of Engg, TVM
- Professor and Head, Department of Medical Electronics at Dr. Ambedkar Institute of Technology Bangalore, Autonomous Institute affiliated to VTU, Karnataka



Former

 Assistant Professor, CSE at Mohandas College of Engineering and Technology

MARIAN CENTER OF EXCELLENCE IN AI & ML

As a part of MoU with UST renewed by April 2024, an orientation session was given to the students by Dr. M. Manoj & Dr. Manu Mohan. 47 students registered for this years program. Sessions started by the mid of May and got completed by June end. As an outcome students were given opportunities to attend interview at UST. 16 students got placed this year. All of them joined and as per company feedback, their performance is excellent.



• Distribution of Offer Letter



• First Slot Selected Students

DEPARTMENT ACTIVITIES



On 29th July, 2024, an Expert Talk session by Dr. Arun P.L (College of Engineering, Perumon) on the topics "Digital Revolution : Navigating the Future" and "DSP: Where Signals meet Intelligence" was organized by the Department of Electronics for the 2022-2026 and

2023-2027 batch students of Electronic and Communication and Electronics and Computer Engineering.

On 22nd August, 2024 the Department had organized an expert talk session on Today and Future Electric Vehicles for the Green world by Mr. Hari Prabodhan . His experience on this area for the past 18 years at Texas has inspired and motivated students to bring out innovative ideas on project works.



STUDENT WORKSHOPS



On 25th and 26th September, 2024 the 2023-2027 ECE and ES students had participated in a workshop on Arduino basics and advanced, conducted by Nrvara Infotech Company . The resource persons were Mr. Padmakumar S. and Mr. Vijin D'cruz.

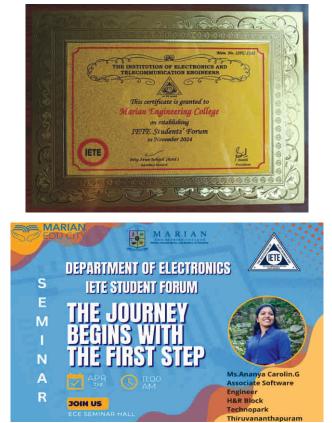
MOTIVATIONAL SESSION

• A very inspiring session by Ms. Sangeetha Elizabeth Paniker (Corporate trainer for MNC's for the past 20 years as well an Entrepreneur and Director of SharpSkills) was given to the students of EC and ECS on 3rd October, 2024



Session by Ms. Sangeetha Elizabeth Paniker on 3rd October, 2024

• The Department of Electronics launched the IETE Student Forum (ISF) on 20th February, 2025 at IEDC Hall. Dr. Sreelal Sreedharan Pillai, IETE Secretary, inaugurated the forum. Rev. Fr. Dr. A. R. John, Manager, and Dr. A. Samson graced the occasion. Kudos to Prof. Glastin Y. V and ISF student members for making the event a success!



• On 3rd April, 2025 the first ISF activity "The Journey Begins with the First Step", was taken by Ms.Ananya Carolene G, Associate Software Engineer, H & R Block for the ISF members



• The Department of EC in collaboration with Networkz System organizes "VLSI Awareness Session for S6 students of EC and ES on 19-2-2025 at EC Seminar Hall. VLSI design is a crucial aspect of electronics and computer science involving the creation of IC'S and microprocessors.

• ALUMNI INTERACTIONS









 The Department of Electronics organized an industry visit to the Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) on March 6, 2025. The visit focused on the biomedical area, providing students with valuable exposure to cutting-edge technology and research in the field.



 One day visit to IIM Trichy by Dr.M. Manoj and team of S1 students. The team interacted with Prof. Rajesh (From Strategic Management) and Prof Vinod (From HR Dept.). They trained our students on methodologies they can practice to be a true professional.



The Department of ECE and ECS had taken Oath against drug abuse on 25-3-25

MOU SIGNED



 MoU signing on 4-4-25, between Sree Chithira Thirunal Institute of Science & Technology and Marian Engineering College (Dept. Of Electronics & IEDC). The MoU will facilitate hand holding of innovative projects in the field of Medical Electronics from Marian.



21-25 EC CLASS GROUP SPACECLUB ACTIVITIES

In honor of National Space Day Celebrations (NSpD24), the Space Club of Department of Electronics had hosted a Rocket Model Making and Chart Presentation Competition on 7th August, 2024 to celebrate India's Space accomplishments with a special focus on the successful Chandrayaan -3 Mission. Our students of all departments contributed effectively. The Space club coordinators of the department are Prof.Ramola Joy and Prof. Simi M.S. Also members of Space club went to St.Josephs school to display their exhibits as part of Outreach Program on 9th August, 2024.

NISH ACTIVITIES(AUXILLIUM CLUB)

• On 9th August 2024 and 16th August 2024, a group of 20 students were permitted for their industrial visit at NISH.





Exclusive expert talk on 14-3-25 on Emerging Trends in Electronics: *Next-Gen Electronics Powering Possibilities!* Dive into the latest advancements, innovations, and career insights in the field of electronics with *Rony Alex Thomas, SoC Design Verification Engineer at Intel.



 One batch (Fiza Akbar ,Fida Noushad, Nayana R,Gouri Krishna SS of 2021-2025 EC final year students have started the final year project in association with Assistive Technology at NISH.



• The Auxilium Club (NISH) of the Department of Electronics organized the Student Design Challenge 'Assisto-matic', at IEDC Hall on 8-4-25. 15 teams of about 60 students of S2 from various branches came together to tackle the assistive theme provided by NISH. 10 teams were selected for final presentation. The theme for presentation and evaluation was given by NISH

Prize winners were : **First** : A Vishnu Priyan, Anandhu A B, Rahul Lal , Mohammed Irfan (S2me), **Second** : Anlin A Anupama Sreekumar Navami U Jasmin (S2ah), **Third** : 1. Arafa N, Blesto Basil Joy, Najmal Khan, Mahek Mariam Azad (S2es) And 2. Anisha Rachel Allen, A Harsha, Amaniya, Anaswar S R(S2es)

 The Auxilium Club of Department of Electronics organized an 'Expert Talk by Lead Project Managers of Assistive Technology- NISH, on 28-1-25. They had engaged students with live demos and interactive discussions. Prof. Subha P. S (In Charge of club) and team had arranged this Exceptional experience for the students of S4 ECE and ES.(2023-2027)





 Dr. A. Samson ,Dr.Shanthi K .J,. Subha P.S and Vinitha B. Elza, made an official visit to the National Institute of Speech and Hearing (NISH) today 11-2-25, to meet the Executive Director Dr. Suja K.,to discuss the conference proceedings.

The visit likely aimed to ensure a successful conference and establish a strong partnership between the Department of Electronics and NISH.

KBAIC (KERALA BLOCKCHAIN ACADEMY INNOVATION CLUB)



• On 18th February 2025, the 2022-2026 batch students of the KBAIC club had given a session on BLOCKCHAIN Technology for the department juniors.

DEPARTMENT ACHIEVEMENTS



 Congratulations to Dr.M.Manoj(HoD-ES/Prof.ECE), for his hard work and sincerity for bridging the collaboration through signing MoU between Marian Engineering College and Swinburne University on 11th September, 2024.



" Congratulations Dr. M. Manoj"

- Warmest Felicitations on successfully completing your MBA! with Dual Specialization in HR & Marketing from Kerala University.
- Wishing you continued success, growth and accomplishment in all your future endeavours.

For receiving the **Kerala State Second Position Award in Mu-learn** from Sri. K N Balagopal, Finance Minister of Kerala



 As part of Outreach program the students of S6 ECE (22-26) Nevin John, Vaishnav R.S and Tarun have visited schools namely St.Roch's (for their 100 years completion) and Bharatiya Vidya Bhavan in the month of November 2024, for displaying and teaching their work on Drone and its applications to school the students

Two teams of students from EC department namely Johann John Isaac (22-26EC), Nandana S Chandran (21-25EC) and Adithi P.Nair (23-27 EC) have participated in the Ideathon Challenge organized by ISA VISWA Prajnana Trust on 9th November, 2024 and presented their ideas on designing and leveraging AI at YMCA, Statue.



Presentation by Adithi P.Nair (23-27 EC)



 Congratulation to B.Rishikesh Varier (22-26 ECS) for being titled as Mr. Trivandrum, by participating in Trivandrum District Body Building Championship in the month of December 2024





Presentation by Johann John Isaac (22-26EC) , Nandana S Chandran (21-25EC)



Aarsha Arther (21-25EC) was awarded as the Best NSS volunteer secretary of Marian Engineering College for the year 2024-25

 Congratulations Johann John Isaac (2022-2026 ECE) for bagging 1st Place in Design Unlocked-_Organized by Catalyst Mar Baselios IEDC.

A one-day UI/UX bootcamp was held on 1st February, featuring insightful sessions from various speakers covering different aspects of design. The event provided a comprehensive overview of UI/UX principles, trends, and best practices, setting the stage for a mini hackathon that took place on 2nd February. Teams had around 5 hours, from 9:30 AM to 3:30 PM, to brainstorm, design, and develop their prototypes, applying the skills and knowledge gained from the bootcamp to craft innovative, user-friendly solutions.

Johann Jose Issac(S6 ECE) from Marian Engineering College along with a team of 4 students from Mar Baselios College of Engineering & Technology won first prize for the mini hackathon worth a cash prize of 3000 Rupees







Congratulation to B.Rishikesh Varier (22-26 ECS) for being titled as Mr. Kerala, after the Mr. Trivandrum title in the month of December 2024



• Congratulations Steve of S2 (2024-2028 EC)

The Logo Unveiling Ceremony of Computer Science Dept. for their International Conference was successfully held, with ICFOSS Director Dr. Sunil T. T doing the honors. The highlight of the ceremony was the unveiling of the winning logo, designed by the talented Steve. Congratulations to Steve on his outstanding creativity and for being selected as the best logo Designer.

ELECTRONICS ASSOCIATION ACTIVITIES

The Department of Electronics and Communication & Electronics and Computer had lit the lamp as part of inaugural ceremony - Electronics Association on 29th August, 2024. The Chief Guest of the day was Ms. Archa Mohan (Developer-III, Software Engineering, UST- Kochi). She is also our dedicated Alumnus of 2015-2019 ECE. Principal Dr. Abdul Nizar addressed the audience followed by the both department heads and Association Chairperson.



On 15/10/2024 Electronics Association of Marian Engineering College conducted a Microcontroller-based Project-making competition called "Code Craft Challenge". There were a total of 16 entries. The judging panel included Mr. Akash B, IoT Solution Architect at WETEEG, Mrs Minnu C Jayan, (Faculty Coordinator AP, ECE), Ms. Preetha S L (Faculty Coordinator AP, ES). First prize winners were Shreyas S Krishna, Sacheth Sivaprasad, and Kiran P. (22-26 ECS) who were awarded by the title "Techy of the Year". Second prize winners were Diya Udayakumar, Ancy K R, Alameen H N, Abhishek S. S of S3 EC (23-27 ECE). Participants gained valuable experience in project development and presentation, while attendees were inspired by the creativity and innovation on display.



First prize winners Shreyas S Krishna, Sacheth Sivaprasad, and Kiran P. of S5 ECS (22-26) were awarded Alameen H N, Abhishek S S of S3 EC (23-27 EC) the title "Techy of the Year"



Second prize winners Diya Udayakumar, Ancy K R,

On 10th October 2024 at IEDC Seminar Hall Electronics Association conducted an event named "Gateway to Success" which was an interactive session by Dr. A. Jegatheesh (M.E,MBA(EDU).,PHD). In this session students experienced the importance of GATE and ways to crack the GATE competitive exams. They also learned the shortcuts and the how to get good cutoff in the GATE exams in an easier way



Up skilling & Career Development workshop

Kompetenzen Technologies in association with Electronics association conducted a half day program for career development which helped to equip students with essential soft skills including communication, team work, time management, adaptability and career development strategies.

Nearly 50 students gained out of this session. A team of 3 trainers handled the session. It included interactive sessions with engaging activities such as storytelling, role play and team building exercises.





FACULTY DEVELOPMENT PROGRAMME ON SOFTWARE DEFINED RADIO (SDR)

A full day session on SDR was facilitated by DEEBU U S, Dept of ECE, College of Engineering, Attingal. The session started by a welcome speech by Viswa Suman,Student Member and session commenced by 10am. 6 Staffs and 10 students attended the session which helped them to conduct experiments in Communication Lab.



TECH EXPO 2025

On 20-03-2025, the Department of Electronics organized an exciting and informative Tech Expo at the Project Room of ECE block SM.

It was inaugurated by the Principal, Dr.Abdul Nizar M and he congratulated the team and expressed that the event aimed to showcase the talents and innovations of our students, especially their final year project needs exposure. Thus it will be able to foster interest in technology, and provide a platform for students to exhibit their projects and research in various technological fields.



FIRST PRIZE : Integrated fire and smoke detection with automated vehicle safety system

Team members : Nourin A,Shenaz Fathima, Aarsha arther, Abhi Uday Guide : Ramola Joy P

SECOND PRIZE : NPK Finder

Team Members: Vimal victor, Savinkumar J, Abhiram A B, Vinu Joseph Guide:Vinitha B Elza



Winners were awarded with a a cash prize of Rs.1000/- and Rs.500/- respectively

FDP PARTICIPATIONS / JOURNAL & CONFERENCE PUBLICATIONS

FDP PARTICIPATED

- **Ms. Lorinda E** has participated in 5 day FDP organised by AICTE and MIC on INNOVATION AND ENTREPRENEURSHIP from 7th 11th April, 2025at Kerala University of Digital Science,Innovation and Technology.
- **Ms. Lorinda E** has participated in 3day FDP on Engineering Entrepreneurship and IPR from 6th-8th January 2025 at Marian Engineering College
- **Ms.Vinitha B Elza, (Asso.Prof., ECE)** has participated in one week FDP on 'Technological Advancements in synthesis of Novel Materials" organized by Dept. of Mechanical Engineering, Chaitanya Bharathi Institute of Technology (A), Hyderabad from 5th to 10th August, 2024
- **Dr. M. Manoj (Professor-ECE, HoD-ECS)** has played a **pivotal role as resource person** for "Lean Start Up and Minimum Viable Product" on 29th October, 2024 and "Innovation & Prototype Validation" on 3rd November, 2024 at VTM NSS College, Dhanuvachapuram.
- **Mr.Evan Kumar (AP, ECE),** has participated in 5 day FDP on "Smart Sensor Systems: IOT based Sensor Design, Development and Applications in Electrical Engineering "from 18th November to 22nd November, at Managlam College of Engineering.

- **Dr. M. Manoj (Professor-ECE, HoD-ECS)** has also served as the **resource person** for "Idea to Tangible Product: The path way", on 7th December, 2024 at College of Engineering, Attingal.
- **Ms.Vinitha B Elza (Asso. Prof., ECE)** has participated in ATAL FDP on 3D Printing and Design at College of Engineering, Trivandrum from 9/12/24 to 14/12/24.
- Ms.Ramola Joy P. (Asso. Prof., ECE), Ms.Sreena V.G (AP,ECE), Ms.Dhanya Mathew (AP,ECE) and Ms.Ann Mathew(AP,ECS), M.Nurul Hidaya (AP, ECS), Mr. Glastin Y.V. (AP, ECE) have participated in FDP on Advancing Intelligent Automation : The Convergence of IoT, ML and Robotics held from 2/12/24 to 6/12/24, organized by department of ECE, Vidya Academy of Science and Technology in collaboration with ISTE, IE(I) & IQAC VAST Chapter.
- Ms.Minnu Jayan C.(AP,ECE), Ms.Preetha S.L (AP,ECS), Mr.Evan Kumar G(AP,ECE) and Ms.Anusha A.V (AP,ECS) have participated in ATAL FDP on Beyond 5G: Research Directions and Opportunities held from 2/12/24 to 7/12/24 at Mar Baselious College of Engineering and Technology.
- **Ms. Nurul Hidaya (AP, ECS), Mr. Glastin Y. V(AP, ECE)** has participated in 3 day FDP on Development Program on IT workshop, KTU from 9th to 11th January, 2025 at St. Thomas Institute of Science and Technology.
- **Ms. Simi M.S., Ms.Preetha S.L,Ms. Minnu Jayan C** has participated in the 5 Day FDP on Exploring AI Paradigms: ML,DL and Research Perspectives, organised by Department of ECE, College of Engineering ,Muttathara from 10th to 14th March, 2025.
- **Dr.M.Manoj** has participated in the AICTE Sponsored 5 day FDP in Innovation and Entrepreneurship from 24th to 28th March, 2025 at IIITK, Kottayam.
- All EC Department faculty, has participated in the 1 day FDP on Software Defined Radio (SDR) on 21st March, 2025 at Department of ECE, Marian Engineering College.

CONFERENCE & JOURNAL PUBLICATIONS

- Abhiram S.P, S.Umamaheshwari, Muhammed Shybin M.S., Aromal Saju Campbell (2020-2024 ECE) and Prof. Sreena V.G (AP, ECE), Prof. Raji N.R (NISH) had published a paper on 16th September, 2024, titled "Si-LERT(Assistive device for hearing impaired drivers", in IEEE Explore (Scopus Indexed).
- Ms. Vinitha B Elza (Asso.Prof., ECE) has published the paper titled "Impedance spectroscopy analysis of low-cost mixed halide MAPbI1-xClx, highly efficient FAPbI3 and non-toxic lead-free CsBi3I10 perovskite solar cells: A comparative numerical analysis using SCAPS-1D", in Electrochimica Acta by Elsevier publishers which is made available online on 22nd Dec, 2024. https://doi.org/10.1016/j.electacta.2024.145559
- Ms. Simi M.S., has published the paper titled "EEG and Head Movement Controlled Wheel Chair" in IJRASET, Vol.13, Issue III, March 2025. Paper ID:IJRASET67860
- Ms. Simi M.S., has published the paper titled "Real Time Accident Detection and Alcohol Monitoring using a Smart Helmet" in IJERT, Vol.14, Issue 4, April 2025. Paper ID:IJERTV14IS040043
- Ms. Preetha S.L., has published the paper titled "Sewage Cleaning Robot" in IJRASET, Vol.13, Issue III, March 2025. Paper ID:IJRASET67891
- Ms. Preetha S.L., has published the paper titled "Anti-Drowning Inflatable system" in IJRASET, Vol.13, Issue III, March 2025. Paper ID:IJRASET67806
- Ms.Sreena V.G, has published "SI-LERT (Assistive Device for Hearing Impaired Drivers)" in IEEE Explore.
- Ms.Minnu Jayan C. has published "Wheelchair Mounted Robotic Arm for Drink Assist", in IJRASET, ISSN No:2321-9653, DOI: 10.22214/IJRASET
- Ms.Vinitha B Elza , has presented the paper titled "Simulation of High-Efficiency All-Perovskite Tandem Solar Cells: A Comparative Study of Lead-Free and Low-Lead Perovskite Materials" in the 8th International Conference on Nanoscience and Nanotechnology (ICONN-2025) organized by Department of Physics and Nanotechnology, SRMIST, India during March 24 26, 2025.
- Ms.Ann Mathew, has published a paper titled "Comparative Analysis of Optimization Algorithms for Data Routing in Lung Cancer Detection", in the Conference Proceedings of International Conference on Emerging Technologies in Engineering and Applied Sciences, ICETEAS-2025.

Ms. Dhanya Mathew, has published a paper titled "Comparative Analysis of Optimization Algorithms for Data Routing in Breast Cancer Detection", in the Conference Proceedings of International Conference on Emerging Technologies in Engineering and Applied Sciences, ICETEAS-2025.

PLACEMENTS 21-25 ECE

sa	Full Name	Placement Offers from
MCE21EC020	Fiza Akbar	H&R Block
MCE21EC010	Ann Marie Pereira	Quest Global, Academor, Grantley
MCE21EC045	Sudarsanan A	Nissan Digital, Zigbill, Launched
MCE21EC036	Nourin A	Grantley, Coding Cult
MCE21EC030	Namitha Ps	Zigbill
MCE21EC044	S Lavanya	UST, Grantley, Coding Cult
MCE21EC031	Nandana S Chandran	UST, Teachnook, Qspiders, Grantley
MCE21EC005	Akshay Sudheer H	Academor Edutech, Qspiders
MCE21EC029	Mohammed Sherhan S	Quest Global, Grantley
MCE21EC032	Nathasha F Almeda	Grantley
LMCE21EC051	Leona Dennis	Teachnook, Grantley, Launched, CODING CULT
MCE21EC037	N S Anakha	Launched, Kodnest
MCE21EC002	Abhiram A B	Grantley
MCE21EC001	Aarsha Arther	Academor Edutech, Zigbill
MCE21EC046	Vimal Victor	Grantley
MCE21EC041	Savin Kumar J	Grantley
MCE21EC008	Amritha B S	Teachnook, Grantley, Maintec Technologies
MCE21EC009	Anjana S	Corizo, Maintec /technologies
MCE21EC015	Avinash Sudheer H	Academor Edutech
MCE21EC027	Mary Ealeesha Rainald	Academor Edutech
MCE21EC026	Krishna Dev M P	Grantley, Launched
MCE21EC034	Nikhitha Yesudas	Grantley
MCE21EC003	Abhi Uday S	Launched
MCE21EC018	Darshan Sunil Patil	Tech Mahindra, Launched
MCE21EC013	Aswin A	Tech Mahindra, Grantley

25 Students of 2021-2025 ECE batch were placed out of total 44 with 52 placement offers.

Staff Editor
VINITHA B ELZA

Student Editor JOHANN JOSE ISAAC