ELECTROZ NEWSLETTER Aug'22- July'23, 4th SEPTEMBER 2023

DEPARTMENT OF ELECTRONICS & COMMUNICATION MARIAN ENGINEERING COLLEGE , KAZHAKUTTØM

CONTENTS:

- Vision, Mission
- From HoD's Desk
- CoE-AIML
- Department
 Achievements
- Faculty Development Program participations
- Conference/ Journal publications
- Department Association Activities.
- FDP at Department
- Admission &
 Placement Details
- Department
 Laboratories and
 Additional facility

VISION OF THE DEPARTMENT

"Emerge as a centre for quality education and research, to grow in pace with the rapidly changing technologies and create Electronics and Communication Engineers capable of accepting new challenges for the service of mankind."

MISSION OF THE DEPARTMENT

- Impart quality education based on the curriculum, contemporary technologies, value based education that helps students groom into a highly competent Electronics and Communication Engineer.
- Constantly motivate students and faculty members to generate ideas and accept the challenges to provide solution for social needs and to endow competent professionals to undertake research and developmental activities.
- Promote academic growth for students by encouraging post-graduate and research programs.

FROM DESK OF HEAD OF THE DEPARTMENT:



Staff Editor In Charge VINITHA B ELZA HOD,ECE

I am delighted to extend my warmest greetings to all of you. It brings me immense joy to announce that our dedicated efforts and unwavering commitment to excellence have borne fruit, as we proudly celebrate our department's recent NBA accreditation. This achievement is a testament to your hard work, dedication, and collective spirit. Your relentless pursuit of academic and research excellence has propelled us to new heights. I also share with you the excitement of officially welcoming our new branch Electronics and Computer Engineering, a testament to our department's growth and the expanding horizons of knowledge we offer. As we stand on the threshold of these remarkable accomplishments, let us continue to foster an environment of innovation, curiosity, and collaboration. Congratulations to each and every one of you; this success belongs to us all.

With heartfelt congratulations, best wishes and prayers to the Almighty for the new academic year '23-'24.

Greetings to Staff and Students

MARIAN CENTER OF EXCELLENCE IN AI & ML

Marian Center of Excellence (CoE) in AI & ML was Campus during the academic year 2022-23. 83 students established by Dept. of ECE, in the year 21-22 for scaling up the skill set of students through out of the syllabus learning, industry and live project exposure. CoE collaborates with UST, a leading multinational company for attaining its vision. Two batches of students were trained by UST in the fundamental of AI & ML, The sessions happened at Marian Engineering College



were trained in the sector.

INDUSTRIAL VISITS

A campus visit to UST was conducted. CoE students visited UST and interacted with the resource persons from the company and got an insight on company functioning & project execution



UST visit on 14th March, 2023

PLACEMENTS THROUGH COE

As a result of enhanced skill sets, students enrolled in CoE are easily getting placed in various organization, 29

students were placed in various companies. UST hired 16 students from the second batch itself.



Offer letter distribution ceremony held on 13th July, 2023.

DEPARTMENT ACHIEVEMENTS



The NBA team visited the Dept. of ECE from 2nd to 4th December, 2022 and was declared as Accredited by January 2023.



An Institution level Campus–wide Offline Hackathon 'HackX' was organized by IEDC, MEC for the Marian students as a platform for young innovators to showcase their talents. Team of First year, Second year and Third year students of ECE won the 1^{st} and 2^{nd} runner up.

FDP PARTICIPATIONS/ JOURNAL & CONFERENCE PUBLICATIONS

FACULTY NAME	FDP ATTENDED	NAME OF THE FDP
Ms. Preetha S 1 Minnu Jayan C Simi M.S	6 days STTP organized by the Dept of CSE, Marian engineering Engineering college, Thiruvananthapuram from 29.8.22 to 3.9.22	ARTIFICIAL INTELLIGENCE & APPLICATIONS
Subha P S Minnu Jayan C Simi M S Preetha S L Ramola Joy P Evankumar G Mary Sunitha	3 days FDP organized by the Dept of ECE, MBCCET,Peermade from 30.1.23 to 1.2.23	Strategies for teaching - learning in the context of NEP-2020
Minnu Jayan C	Online certfificate course organized by the Centre for Artificial Intelligence,TKM College of Engg from 26.8.22 to31.8.22	Deep Learning For Beginners
Evan Kumar G	Two weeks fdp organized by the Dept of ECE, Amal Jyothy College of Engineering ,Kanjirapally from 27.2.23 to 10.3.23	MATLAB & SDR Hands on for communication engineering lab
Preetha S.L Simi M.S	FDP organized by the Dept of ECE, CMR Institute of Technology, Bengaluru from 8.5.23 to 13.5.23	Artificial Intelligence & Machine Learning for Image Analysis - Matlab and Python perspective

CONFERENCE PUBLICATIONS

Survey on the Control Techniques used in Process Control", in IEEE International Conference on Innovations in Engineering & Technology (ICIET-2023) at Ilahia college of engineering & Technology Muvattupuzha on 13th and 14th July, 2023.

Proceedings of 2023 IEEE Interna-Engineering & Technology

(ICIET-2023)

Minnu Jayan C (AP,ECE), presented and published a paper entitled "A Review on Various Control echniques used in Industries", in International Conference on Emerging Technologies in Engineering and Applied Sciences(ICETEAS 2023), Noorul Islam Centre for Higher Education, Kumaracoil on 12th and 13th April 2023.

Proceedings of International Conference on Emerging Technologies in Engineering and Applied

Sciences (ICETEAS 2023).

Minnu Jayan C (AP,ECE), presented a paper entitled RIPRESO: ELE-PHANT PROTECTION SYSTEM AGAINST COLLISION WITH TRAINS, International Conference on Advanced Wireless Communication and Pervasive Technologies

and published, a paper entitled "A Peermade on 25th and 26th May, Kanyakumari. 2023.

Ms. Vinitha B Elza (Asso.P,ECE), presented paper entitled "A Compresented and published a paper parative Study on Machine Learning entitled 'Perspective on machine Based Retinal Disease Detection learning based investigated materials Using Retinal Images", in the to realize Stable-Eficient-Toxin International Conference On free(S-E-T) perovskite solar cells', in Advanced Research in Information International Conference on Materi- and Communication Technologies (als tional Conference on Innovations in ing(ICMISM -23), Vishnu Institute April, 2023 organized by Dept. of of Technology, Andra Pradesh on CSE and ECE, JP College of Engi-16th and 17th Dec 2022.

Materials Today: proceedings

Ms. Vinitha B Elza (Asso.P,ECE), presented paper entitled 'Numerical Analysis for Thermal Stability Evaluation of Perovskite Solar Cell using SCAPS-1D', in 7th International onference on Nanoscience(and Nanotechnology (ICONN -2023) ,SRMIST DURING MARCH 27-29,2023

Ms. Ramola Joy P.(Asso.P, ECE), presented paper entitled "A Review on Retinal Disease Detection Methods using CNN from Fundus Image of the Retina", in the International Conference On Emerging Technologies in Engineering and Applied Sciences (ICETEAS 2023) on 12th and 13th April, 2023 organized by

Minnu Jayan C (AP, ECE), presented (ICAWCPT-23), MBCCET, Dept. of ECE, NICHE,

Ms. Ramola Joy P.(Asso.P, ECE), and Sustainable Manufactur- ICARICT 2023) on 19th and 20th neering. Tenkasi.

DOI: 10.1016/j.matpr.2023.04.640 Ms. Subha P.S (Asso.P, ECE), presented paper entitled "A Review on ECG Signal Denoising Techniques", in the In the International Conference On Emerging Technologies in Engineering and Applied Sciences (ICETEAS 2023) on 12th and 13th April,2023 organized by Dept. of ECE, NICHE, Kanyakumari.

> Ms. Subha P.S (Asso.P, ECE), presented paper entitled "Analysis of ECG Signal Denoising Techniques", in the International Conference On Advanced Research in Information and Communication Technologies (ICARICT 2023) on 19th and 20th April, 2023 organized by Dept. of CSE and ECE, JP College of Engineering, Tenkasi.

ELECTRONICS ASSOCIATION ACTIVITIES

• On 29/11/2022, the Electronics chief guests Anoop Mathew Principal, Dr. J. David and Dean, Dr.

Association was inaugurated with Uluvathu (Developer II Software A. Samson. Felicitation was by the newly elected office bearers. The Engineering at UST, Co-Founder Parvathy Gopan (Chairman, ECE program began with prayer and and CTO at ZetGo, IEEEian) and association) and Jithin Thomas welcome address by Nandana. S. Alan Mathew Uluvathu (ETL (Secretary, ECE association) and Chandran (Student), presidential Developer at Guidehouse, Co- vote of thanks was given by Adithya address by Manager, Fr. Wilfred. E Founder of ZetGo, IEEEian). Later A. S. (Joint Secretary, ECE followed by a keynote speech of the followed by a message from association).







• On 11/04/2023, a talk on "Career Building through Internship Programs" was organized by Electronics association. The speaker was Dr. Sreejith B. J, Assistant Professor, Dept. of Mechanical Engineering, SCT College of Engineering, Former assistant director of KTU. • On 12/12/2022, a Drawing Competition on the theme of "Sustainable Development for Science and Technology" was conducted by the Electronics Association. The event aimed to encourage students to creatively express their ideas about sustainable development in the context of science and technology through their artwork. First prize: Nayana, Second prize: Krishna Dev. Winners were awarded with cash prize and certificates. Participation certificates were also provided.



• On 07/12/2022, a talk on "Introduction to app development and entrepreneurship" was organized by the Electronics Association exclusively for S3 ECE students. The speaker was Dr. Abhishek. S, Managing Director, Deals Breezee Private Ltd.



• The event "2 - day hands on workshop of IoT, AI &ML", by Electronics association in collaboration with Inspira Marian IEDC was held on 11th and 12th April, 2023. At the UST Sponsored Lab of ECE Department. The workshop mainly focused on creating modules in arduino and raspberry pi. Name of the event: 2-day hands on workshop of IoT, AI, & ML Date: 11-April-2023, 12-April- 2023, Venue: UST sponsored lab - ECE department



• On 27/04/2023, the Electronics Association organized a comprehensive and hands-on Web Development Workshop Class at AOC Lab. The workshop aimed to equip participants with the fundamental skills and knowledge required to design and develop functional websites. The class catered to individuals in enhancing their k n o w l e d g e i n w e b development.





On 26th June, Department of ECE organized an exciting and informative Project Exhibition 'Tech Expo' at Project Room of the department. The event aimed to showcase the talents and innovations of our students, foster interest in technology, and provide a platform for students to exhibit their projects and research in various technological fields.

FDP ORGANIZED by the DEPARTMENT

3 day FDP in AI and ROBOTICS was organized by the Department from August 31^{st} to September 2^{nd} , 2022.



Expert Sessions By: Mr. Athul Chandrasenan ,CTO Jishnu K.S., Embedded System Deve Mr. Thushar Tom, Robotics Enginee

ADMISSION @ ECE

YEAR	ADMITTED STUDENTS
2019-2023	55%
vis2020-2024	65%
2021-2025	78%
2022-2026	98%



PLACEMENTS 19-23 ECE

