

MARIAN MOMENTS

Newsletter of Marian Engineering College, Kazhakuttom



Engg. College Code
MCE

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VISION OF THE INSTITUTE

To be an institution offering quality technical education and promoting research with strong ethical values for public good

MISSION OF THE INSTITUTE

To mould the young men and women into technologically up to date, socially conscious and morally sound individuals by providing an inspiring environment of learning for the welfare of the society

MESSAGE FROM THE MANAGER



Dear Marian Engineering College Community,

I am delighted to present this issue of our newsletter, which encapsulates the vibrant and dynamic activities that took place in our institution during the months of April, May, and June. This edition is packed with a myriad of events that highlight the diverse cultural and academic pursuits of our students and faculty.

In today's rapidly evolving world, the importance of interdisciplinary research in the field of engineering cannot be overstated. By integrating knowledge from various disciplines, we can tackle complex real-world problems more effectively. For instance, the development of autonomous vehicles requires a confluence of expertise in mechanical engineering, electrical, electronics, computer science, and artificial intelligence. Similarly, advancements in renewable energy technologies demand collaboration between electrical, electronics mechanical and civil engineers.

Our institution is committed to fostering an environment that encourages such collaborative efforts. Through various initiatives and projects, we aim to equip our students with the skills and mindset needed to excel in interdisciplinary research. This not only enhances their academic experience but also prepares them to contribute meaningfully to society.

I extend my heartfelt gratitude to all the contributors of this edition, whose hard work and dedication have made it possible. Your efforts continue to showcase the best of Marian Engineering College, and I am proud of all that we have achieved together.

Best regards,

Rev. Dr. A R John
Manager

MESSAGE FROM THE PRINCIPAL



"AI is a tool, and the choice of how it is deployed lies with us," stated Oren Etzioni, a professor of Computer Science at Harvard University and the founding CEO of the Allen Institute for Artificial Intelligence. The advent of Artificial Intelligence (AI) has brought a significant paradigm shift to the field of engineering, offering both challenges and opportunities for engineering students. There are numerous challenges associated with the deployment and use of AI, including the displacement of engineering jobs, the continuous need for engineers to skill up in AI technology, and concerns regarding safety, social impact, and ethics.

Simultaneously, AI presents promising opportunities. It empowers engineers to concentrate on high-value tasks, enhancing their productivity and augmenting their work. AI-driven innovation opens new avenues for research and development. Furthermore, engineers can utilize AI to address complex challenges and develop sustainable solutions.

To thrive in this AI-enabled world, engineering students must:

- Embrace lifelong learning and continuously up-skill to complement AI.
- Cultivate essential human skills such as creativity, empathy, and collaboration.
- Focus on developing domain expertise and engaging in high-value tasks.
- Maintain adaptability and remain open to integrating new technologies.

By adopting these strategies, engineering students can harness the potential of AI to foster innovation, create new opportunities, and contribute to shaping a better future.

Best regards,

Dr. Abdul Nizar M
Principal

MOU WITH HEX20

Marian Engineering College signed MOU with HEX20. HEX20 specializes in building cost effective and reliable satellite platforms, mission services, and their subsystems for use in academic, commercial, Government missions and applications world-wide. As part of the agreement, HEX20 will be setting up a ground station on our campus for satellite tracking and other mission controls. The ground station will be handled by a group of selected students, who will be working as interns. Successful interns will have an opportunity to get placed in HEX20.



FACULTY EMPOWERMENT PROGRAM

The faculty empowerment program on 3-7-24 featured a talk on Academic Leadership by Dr. Lenin Raj, Manager at Jubilee Hospital. Dr. Raj highlighted the importance of fostering a culture of innovation and accountability within academic institutions.



Following this, Rev. Dr. A.R. John, Manager delivered an insightful talk on Academic Resilience. He emphasized that resilience in academia involves not only adapting to change but also anticipating and preparing for future

challenges to maintain academic integrity and quality education.

Subsequently, the Heads of various departments presented their Department Strategic Plans, showcasing their goals, strategies, and initiatives aimed at enhancing academic performance and student engagement. The afternoon session was rich with presentations on key activities and collaborations:



- **Achievements of college in 2023-24.** Dr. Samson A., Dean of Academics, presented the achievements of MEC for the academic year 2023-24. The 2024 batch admission rate and pass percentages of the BTech 2024 graduating class were higher compared to previous years.
- **IEDC & International Collaboration:** Presented by Dr. Manoj from the ECE Department, who highlighted the college's ongoing and future international partnerships and the impact of IEDC activities on innovation and entrepreneurship.
- **CGPU Activities:** Dr. Manu Mohan provided an overview of the Career Guidance and Placement Unit (CGPU) initiatives, focusing on student placement statistics and strategies
- **Projects & Research:** Dr. Vishnu B.R. discussed the various research projects underway and the significance of fostering a robust research culture within the college.
- **IQAC:** Dr. Vijayalekshmy elaborated on the Internal Quality Assurance Cell's (IQAC) activities from January -June 2024 to maintain and enhance academic standards.

- **Admission Status:** The report on admission status was presented by Bursar, Fr Jim Carvin detailing current enrolment statistics and trends.

The Faculty Empowerment Program was a resounding success. The program provided a valuable platform for faculty members to enhance their skills and knowledge through engaging sessions and insightful discussions.

PATENTS

➤ INSTITUTIONAL PATENT

Marian Engineering College receives its first institutional patent for the invention "Walker for Uneven Plane". The invention was done by a team consisting of Dr. Manoj. M(IEDC Nodal Officer & Professor-ECE), Mr. Maneesh. T(Asst. Professor-ME) & Mr. Akash. R. Nair(Student)



Patent No :539811
Date of grant :29-5-2024

➤ DESIGN PATENT

Dr. Sheeja Agustin (Professor, CSE Department) got a certificate of registration of design on "Pest Control Device for Agricultural Farms"

Design No: 412940-001
Date of Issue : 29-5-2024



➤ PATENT

Dr. Shreelekshmi R (Professor, CSE Department) got patent on "Method and User Terminal For Determining Authenticity of Image Data"



Patent No: 533557
Date of grant :18-04-2024

➤ UK DESIGN PATENT

Dr. Aswathy SU (Professor, CSE Department) got a certificate of registration of design on "Artificial Intelligence based Delivery Robotic Device"

Design Number :6319707
Date of Grant :30-10-2023



TEJASVI 2024

College hosted its annual fest, "TEJASVI 2024," on the 9th of May, bringing together students, faculty, and guests with vibrant celebrations, competitions, and performances. TEJASVI 2024 was dedicated to inter-collegiate competitions, creating an atmosphere of friendly rivalry and artistic expression. Students from various colleges participated in an array of events, including:

- **Duet Dance:** Pairs from different colleges showcased their synchronization and dance skills, presenting a range of styles from classical to contemporary.
- **Chore video:** Teams competed by combining choreography and video production, highlighting their creativity and technical prowess.
- **Songs:** Solo and group singers performed, covering genres from classical to pop, enthraling the audience with their vocal talents.

- **Personality Contest:** Participants demonstrated their confidence, poise, and charisma, vying for the title of the most charismatic personality.
- **Fashion Show:** Students strutted down the runway in creative and stylish outfits, showcasing their fashion sense and design skills.



The competitions were fierce but friendly, with participants putting their best foot forward. The energy and enthusiasm of the students were palpable, making the day a memorable one for all attendees



COLLEGE DAY

The events of College Day on 10th May commenced at 9:00 am with blessings from the Almighty in the Main Auditorium. The Inaugural Ceremony began at 10:30 am, featuring Chief Guests Smt. Mini Antony IAS (Secretary, Co-operative and Cultural Affairs, Minority Welfare Information and Public Relations Department) and Rev. Msgr. Eugene H. Pereira (Vicar General, Metropolitan Archdiocese of Thiruvananthapuram).

The inaugural Ceremony commenced with the blessing of the new pathway, followed by a welcome address from Rev. Fr. Dr. A.R. John (Manager). The Presidential Address was delivered by Rev. Msgr. Eugene H. Pereira, and the Inaugural Address and Lamp Lighting Ceremony were conducted by Chief Guest Smt. Mini Antony IAS. Dr. A. Samson offered a felicitation, and Principal Dr. Abdul Nizar M. presented the College Report. The event also included the release of the Marian News Bulletin and the distribution of prizes to class toppers, 100% attendance holders, university rank holders, and faculty members with more than 90% credit subject scores. The Inaugural Ceremony concluded with a vote of thanks by Mr. Pranav Jayan (Student Chairman).



After the inaugural ceremony, the day featured a series of performances by both students and faculty, showcasing a wide array of talents:



Student Performances: Students displayed their skills in music, dance, drama, and more. Each act

was a testament to the hard work and dedication of the participants, leaving the audience in awe.

Faculty Performances: Not to be outdone, the faculty members also took the stage, proving that talent knows no age. Their performances were well-received, adding a unique flavour to the event.



The highlight of the day was the professional show, which included performances by two renowned acts:

PAGLI: The band delivered a powerful performance, energizing the crowd with their dynamic music and stage presence. Their blend of genres and engaging performance style was a hit among the audience.

Hanna Shine: Known for her western dance routines, Hanna Shine captivated the audience with her graceful and energetic performance, adding a touch of glamour and excitement to the event.

STUDY KIT DISTRIBUTION TO STAFF

The Study Kit Distribution to the staff of Marian Engineering College was held at the IEDC hall on May 29, 2024. The program aimed to express love and gratitude to the last grade staff for their dedicated service. The event began with a silent prayer. Ms. Sowmya K.P., Coordinator of Institutional Values and Best Practices for NAAC Accreditation, delivered the welcome address and explained the program's relevance. She emphasized that distributing study kits to the children of the last grade staff is an exercise in

value education, which is essential in today's context.

Rev. Dr. A. R. John, the Manager, addressed the gathering and distributed the study kits to the staff. He highlighted the importance of fostering a giving attitude among both staff and students. Mr. Ullas Innocent Raj expressed his gratitude to the management for approving this activity as a best practice for NAAC accreditation



and thanked everyone who contributed generously to the program. The event benefitted 55 staff members and their 101 children.

KTU BTECH STATE TOPPER (2020-24 BATCH) - ELECTRICAL AND ELECTRONICS ENGINEERING

Ms. Shehina Maheen S from the Department of Electrical & Electronics Engineering achieved the highest CGPA of 9.71 in the entire state of Kerala for the 2020-24 batch. She also secured the highest CGPA among all students of all branches in the college for the same batch.



KTU BTECH (2020-24 BATCH) RESULTS

In the B.Tech 2020-24 Batch KTU examination results, the college achieved a 51% overall pass percentage. It ranked first among all self-financing colleges in Trivandrum and 23rd in the state.

100% PASS IN S8 EXAMINATIONS (2020-24 BATCH ELECTRICAL & ELECTRONICS ENGINEERING)

Department of Electrical & Electronics Engineering secured 100 % pass in the S8 Examination held in May 2024 (2019 Scheme).

MARIAN TECHNOLOGY INNOVATION CONTEST - MTIC 2024 AWARD

Akul Balakrishnan, Nandini D.S, Nobiya Noyal, Naziya N.J of 2020-2024 Electronics & Communication Engineering Department has bagged First place at College Level and Department level for the Marian Technology Innovation Contest MTIC 2024, held on 5th June, 2024. They were awarded with cash prize of Rs 10,000/-



ACME BEST PAPER AWARD

Abhijith R, Sabeer B S and Anagha C S, Final year CE students guided by Prof. Karuna P has received ACME Best paper award with a prize money of 5k on the topic "Geopolymer concrete mix for 3D printing" in "COLLOQUIUM 2024"



FIRST PRIZE IN MINI PROJECT PRESENTATION

Abhijith U. ,Sandra S. S. Sanjana A. J. , N. Sathiya, S6 students of Department of Civil Engineering guided by Prof Renju C. M. and Prof Abhijith R. P. has secured First place (prize money of 10k)for Mini Project Presentation titled "Design of a Sustainable Flood Resistant Structure of a Building Using Low Cost Materials" , conducted by Mahaguru Institute of Technology Alappuzha (April 2024)



WINNERS- INTER-COLLEGIATE TECHNO CULTURAL FEST

Neha Gomez & Mrinal Sharma of S6R1 won second prize for the event "Duo Dance" in the inter-collegiate techno cultural fest, Yagna Dhruva, conducted by LBS Institute of Technology for women on 06-04-2024.



INTERSHIP- METEY ENGINEERING AND CONSULTANCY, HYDERABAD

Sandra S S, Abhijith U., Athul A, Bijay B., Devika Praveena Shaji of S6CE and Shreyas K, Adheena Johnson of S4CE has completed internship at Metey Engineering and Consultancy, Hyderabad on Prefabricated Construction Technology from 2nd to 6th May 2024.



NATIONAL SERVICE SCHEME (NSS)-ACTIVITIES

➤ MARIAN ENGINEERING COLLEGE NSS UNIT LENDS A HELPING HAND TO MONSOON VICTIMS



Braving a week-long heavy rain, rising sea levels, and coastal erosion, the NSS volunteers of Marian Engineering College arrived at the coastal camp with food supplies for the residents affected by these calamities. Many people, having lost their homes to the monsoon disasters, were staying at nearby rehabilitation centers.



Understanding the plight of those suffering from the monsoon damage, the NSS volunteers distributed food supplies in the areas of South Kollamkode and Paruthiyoor. The distribution

effort was led by the Manager Fr. Dr. A.R. John, the Bursar Fr. Jim Carvin, Father Ebin Stanley, program coordinator Deepak Peter, and volunteer secretaries Akansha Silva and Arjun Mahesh.

CAREER GUIDANCE AND PLACEMENT UNIT – CGPU

College has achieved a record-breaking milestone in its placement history, securing 211 offers. Out of the 284 final year (2020-24 batch) students, 142 students successfully secured placements.

Program	Registered	Placed	% Placement	Offers
CSE	117	75	64.1	110
CE	70	15	21.4	24
EEE	19	10	52.6	16
ECE	43	29	67.4	43
ME	40	13	32.5	13

INSTITUTION OF ENGINEERS INDIA (IEI) AND AMERICAN SOCIETY FOR CIVIL ENGINEERS (ASCE) STUDENT CHAPTERS -ACTIVITIES

➤ 3D BIM MODELLING



IEI and ASCE student chapters of Department of Civil Engineering organised the 3D BIM modelling using Revit and building design workshop (5 days) for Students by providing practical knowledge and hands-on experience that significantly enhanced learning. The course is certified by Auto desk and conducted by Habilete Learning Solutions Pvt Ltd in April 2024



➤ LEADERSHIP & ENTREPRENEURSHIP ENRICHMENT PROGRAM (LEEP 2024)



IEI and ASCE student chapters of the Department, in collaboration with EY Global Delivery Services is organizing free training on Leadership & Entrepreneurship for students of all branches on June 20. The event was inaugurated by Mr Kannan MVG IFS. Mr Pradeep D Associate Director at EY, Mr Visudh V S, Assistant Director at EY and Ms Gouri Priya Associate manager EY took sessions on the occasion



➤ TALK ON -‘NAVIGATING EXCELLENCE’

IEI & ASCE students chapter organised a lecture on : “ Navigating Excellence- Empowering future Civil Engineers with Career insights and Essential Skills for Civil Engineering students on 19-4-2024. The session was engaged by Dr Kishore P, Managing Director Habilete.



MARIAN INSPIRA IEDC

➤ EDEN 3.0 - HACKATHON



The software hackathon held on May 13-14 at MEC, in collaboration with μ Learn, saw the participation of 12 teams. Team ‘Zest’ from Mar Baselios College clinched the first place, while Team ‘Technicianz’ from Providence College of Engineering secured the second spot. Team ‘Vsnake’ from Marian Engineering College came in third. The event showcased impressive talent and innovation from all participating teams.



IEEE -ACTIVITIES

➤ ‘OVERCRAFT’

‘Overcraft’ is a workshop event conducted by IEEE SB MCE on 23-04-2024 in Marian Engineering College. It was an acknowledged event where participants were taught to create editorials, writings and documents much more quickly and easily with the help of the tool Overleaf.



Participants : 80

Speaker: Dr.Shereef R.M, Professor-College of Engineering Trivandrum.



IEEE PES -ACTIVITIES

➤ CROSSWATTS-SOLVING ELECTRIC PUZZLE TOGETHER

IEEE PES SB MCE conducted an online crossword competition as part of IEEE PES Day 2024 on 25th April 2024. The competition was a puzzle based crossword with the theme given “Electric Vehicles”. The event was successful with a total registration of 40 students. The winner of the competition was Gowtham Krishna S from S2 CS-R2



DEPARTMENT OF COMPUTER SCIENCE & ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

➤ “WELCOME”

Dr. R. Shreelekshmi, Rtd Head of the Department, CSE, CET joined and took charge as Head of the Department of Computer



Science & Engineering at MEC in June 2024

Prof Balu John, Retd Professor & Head of Department, CSE, CET joined our college as Head of the Department of Artificial Intelligence & Machine Learning in June 2024.



Aswathy AL joined as Asst, Professor (Adhoc) in AH Dept.



Nora Jobai joined as Asst, Professor (Adhoc) in AH D ept



➤ NATIONAL CONFERENCE

Department organized the Second National Conference on Emerging Technologies in Smart Systems , (NCETSS '24) on 2nd May 2024. Sri. Rajesh Kumar K., Delivery Head - Automotive Projects, Tata Elxsi has inaugurated the ceremony and has delivered the keynote address. There were 22 papers accepted and presented.



➤ ASSOCIATION ACTIVITIES

• LOGO DESIGN COMPETITION



Association of Computers Science organized a Logo Designing Competition for the Event named Second National Conference on Emerging Technologies in Smart Systems on 07/04/24. Arjun H from S4AH won the competition.

➤ TRAINING PROGRAMS

• GEN AI STUDY JAM

Gen AI Study Jam event, part of the Cloud Study Jams Series organized by Google Developer Students Club (GDSC) of MEC focused on building with Generative AI on Google Cloud (23-04-2024)

• BUILD WITH AI

Build With AI Event, a collaboration between GDSC MEC and GDSC College of Engineering Chengannur, was successfully conducted to provide intermediate- level training on large language models (LLMs) on 19-05-2024.



➤ PROJECT FUNDING



Adarsh Varghese Manu, Anand B and Archa Sekhar of S8 CSE (R2) got financial assistance of Rs. 25,000 from Kerala Technological University for their project “Classroom

Monitoring System” under the guidance of Ms.Reeja S L.

➤ FACULTY ACHIEVEMENTS

Ms. Hema S Mahesh completed NPTEL Online Certification on “Deep Learning” with “Elite” certificate.



➤ μLEARN



μLearn gave an orientation session for first year students on 08-04-2024 and 09-04-2024 and the team engaged new μlearners to know more about the vast world through μLearn.

• ASSOCIATE-GTECH μLEARN

Adithya A R of S4 R1, has recently been promoted to the role of Associate in the Campus and Community Initiative at GTech μLearn. This new position highlights her dedication and significant contributions to enhancing educational and community engagement within the organization.



➤ TECHNICAL TALK

Dr. Aswathy S U, (Professor, AI & ML Dept) delivered a talk on “A focus to AI Applications in Civil Engineering & Geotechnical Engineering” at Marian Engineering College hosted by Civil Engineering Department on 03-04-2024.

➤ INDUSTRIAL VISIT

S6 CSE R2 conducted their Industrial Visit from 26-04-2024 to 03-05-2024 Successfully. Places of Visit - Agra, Rishikesh, Manali, Delhi. Industry Visit - Hero MotoCorp Gurgaon Factory (India's leading manufacturer of 2 - wheelers)



S6 CSE R1 conducted their Industrial Visit from 27-04-2024 to 07-05-2024 Successfully. Places of Visit - Taj Mahal and Agra, Rishikesh, Manali and Industry Visit - Delhi Metro Museum .



➤ PAPER PUBLICATIONS

- Dr. R. Shreelekshmi published a paper “Edwards curve digital signature algorithm for video integrity verification on blockchain framework”, Science & Justice, Volume 64, Issue 4, 2024, Pages 367-376, ISSN 1355-0306, <https://doi.org/10.1016/j.scijus.2024.04.008>
- Dr. R. Shreelekshmi published a paper “A prototype for sentence classification using statistical methods, Software Impacts”, Volume 20, 2024, 100651, ISSN 2665-9638,

<https://doi.org/10.1016/j.simpa.2024.100651>

- Dr. Aswathy S U published a paper entitled “Quantum Computing, Qubits with Artificial Intelligence, and Blockchain Technologies: A Roadmap for the future “ in Automated Secure Computing for Next Generation Systems, 367-384, 2024
- Gopika Subash and Dr. Sheeja Agustin published a manuscript entitled “Brain tumour detection system” published in International Research Journal of Engineering & Technology, Volume 11, Issue 6, June 2024.
- Anusree A S, Bijoy Abraham J S, Greeshma Ann Joseph, Jude Joseph Maxwell and Dr. Sheeja Agustin published a paper “ Anomaly Detection in Launch Vehicle Systems during simulations using machine learning “ in strad research, ISSN: 0039-2049 <https://doi.org/10.5281/Zenodo.11108830>

➤ FDP/WEBINAR/WORKSHOP ATTENDED

- Ms. Keerthi Krishnan participated in the FDP on Cyber Security and it's tools organized by dept. of CSE, School of Management Sciences, Lucknow on every Sunday from May 12th to June 9th 2024 and she also participated in online workshop on Data Analytics and AI organized by the Centre for Computer Science and Information Technology, University of Calicut on 15th June 2024
- Ms. Keerthi Krishnan participated in the Industry Academic Alliance Program on Immersive technologies (AR, VR, and MR) conducted by ARK Solutions Pvt Ltd in association with ICT Academy of Kerala held on June 19, 2024, in Trivandrum and she also attended SPOC Felicitation cum awareness workshop organized by NPTEL in IIT Madras on 22nd June 2024.
- Ms. Hema S Mahesh participated in an online workshops on Data Analytics & AI organized by Centre for Computer Science & Information Technology (CCSIT), Manjeri,

University of Calicut in association with IPSR solution limited on 15-06-2024.

- Ms. Reeja S L participated in the IPR centre and startup cell inauguration function and startup & IPR Awareness sessions organized by APJ Abdul Kalam Technological University on 19 -06-2024, held at Mascot Hotel, Trivandrum.

DEPARTMENT OF CIVIL ENGINEERING

➤ HEAD OF THE DEPARTMENT

Dr Rani V – Associate Professor took charge as Head of the Department from July 2024



➤ MTECH – S3 RESULT

Mtech 2022 curriculum first batch four students scored 10 CGPA and one student above 9 CGPA in third semester results. Congratulations to our students for the excellent performance.



➤ CENTRE COORDINATOR-KEAM 2024

Mr. Kannan K. was the centre coordinator for KEAM 2024.

➤ MENTOR-EXAM PREPARATION

Ms. Greeshma T. was the mentor in Exam Prep for the year 2024 for μ Learn, a GTech initiative.

➤ RESOURCE PERSON

- Lecture on ‘Geopolymer Concrete- A material for Sustainable Development’ was delivered by Ms Renju CM at IEI Kerala State Centre, Trivandrum on 24th April 2024.



- Mr Abhijith RP presented a topic in the CONFEST 2024 - A premier Conclave for construction Industry Professionals at Hycinth Hotel, Trivandrum on 11th May 2024.

➤ MTIC AWARD

Abhijith R, Sabeer B S, Prarthana Jayan and Anagha C S, Final year CE students guided by Ms Karuna P has MTIC Award for best project at Department of Civil Engineering, Marian Engineering College.

➤ PROJECT FUNDING

- Theertha B, Aparna S Nair, Lekshmi Sudharman, Vishnu A S and Gokul Krishna V S guided by Dr. Rani V. has received funding for project on the topic “**Spatial distribution and beach morphological studies with the application of geotextiles in coastal areas of Trivandrum**” with a funding of Rs. 35000/- under CERD.
- Abhijith R, Sabeer B S, Prarthana Jayan and Anagha C S guided by Ms Karuna P has received funding for project on the topic “**Development of 3D printable sustainable geopolymer mix with glass powder as**

partial replacement” with a funding of Rs. 27140.

➤ BHOOMITRASENA CLUB

- A documentary making competition on “Wetland Across Kerala” was organised as a apart of World Wetland Day. Abhijith and Sandra of S5C scored first position and Fabena of S2AH scored second position.
- A webinar on “Deep Water Horizon Oil Spill” was organised on 8/2/24 in association with Prof. Shimna Manoharan of BMS Institute of Technology & Management, Bengaluru.
- Forest walk on “ARIPPA FOREST” was conducted on 24/2/24 as a part of World Forest Day



➤ REVIEWER

- Mr. Kannan K. was the reviewer for International Conference of emerging trends and technologies organized by Model Engineering College during 11th to 13th April 2024
- The board of JETIR grants Mr Abhijith R P as an active Review member of the Journal of Emerging Technologies and Innovative Research (ISSN: 2349-5162) holding member ID: 224116.
- The board of JETIR grants Ms Renju C M as an active Review member of the esteemed Journal of Emerging Technologies and Innovative Research (ISSN: 2349-5162) holding member ID: 224103.

➤ BOOK CHAPTER

- Mr Abhijith R P & Ms Renju C M has published chapter entitled “Mitigation of Urban Flood in Kerala” in the edited book on “Modern Research in Engineering & Technology” bearing “ISBN 978-81-19820-15-3” in April 2024.

➤ ARTICLE PUBLISHED

- Mr. Abhijith R P and Ms Renju C M has published an article titled” Sustainable Materials to Improve Life span of Road Pavements” in a National Magazine, Construction Philosophy, Volume no 05, Issue 04, April 2024.

➤ PAPER PUBLICATIONS / PAPER PRESENTED

- Vaishnavi Chandran, Dr. Rani V have published a paper on the topic “Prediction of coastal erosion rates using AI technology” in International Research Journal of Engineering and Technology on June 2024
- Gokul Nath, Dr. Rani V., have published a paper on the topic “Combined effect of steel fibres and Ground Granulated Blast Furnace Slag on Clayey soil” in International Research Journal of Engineering and Technology on May 2024
- Rijo Varghese. Ms Tara Leander have published a paper on the topic “Bearing capacity of soil with Carbon fiber on welded wire mesh” in International Research Journal of Engineering and Technology on May 2024
- Helen Thomas, Ms Revathy V S, have published a paper on the topic “Optimising soils stability: effects of organic matter and jute fibres on piping resistance of soil” in International Research Journal of Engineering and Technology on May 2024
- Karthikam Satheesh G, Ms Magi N S, have published a paper on the topic “Bearing capacity improvement using coir geogrids tubes infilled with coconut shell chips” in

International Research Journal of Engineering and Technology on May 2024

- Abhijith R, Sabeer B S, Anagha C S, Prarthana Jayan and Ms Karuna P. presented a paper on “3D printable geopolymers concrete” at National Conference on Advancing sustainability in Civil Engineering Practices held at St. Thomas Institute of Science and Technology- ASCP’24. ISBN : 978-93-340-4196-5
- Aravind, Aleena, Asna, Abhishek and Ms Karuna P. presented a paper on “Enhancement of wastewater treatment using palm oil clinker” at National Conference on Advancing sustainability in Civil Engineering Practices held at St. Thomas Institute of Science and Technology- ASCP’24. ISBN : 978-93-340-4196-5.
- Mr. Abhijith R P published a paper entitled “Review of Geographical Information System in Transportation Planning” in the International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Volume 13, Issue 7, July 2024, bearing e-ISSN:2319-8753,p-ISSN:2347-6710.
- Mr Abhijith RP, Ms Renju C M published a paper entitled “Study on the Strength Behavior of Concrete with Plastic as Coarse Aggregate” in the Journal of Emerging Technologies and Innovative Research (JETIR), (ISSN: 2349-5162) UGC Approved (Journal No: 63975), Published in Volume 11 Issue 7, July-2024

➤ FDP ATTENDED

- Mr Abhijith R P has participated in the five days Faculty Development Program on “Recent Advances in Structural Engineering and Material Science (RASEMS)” organized by Department of Civil Engineering, Jorhat Engineering College, Jorhat, Assam on 25th June 2024 to 29th June 2024.
- Mr Abhijith R P attended the online sessions of plenary and keynote lecture of International conference on Geo-Disasters and Construction Engineering (ICGCE 2024)

from June 7th & 8th 2024, Waterloo, Ontario, Canada.

- Mr Abhijith R P participated in the short term training Program on “Advances in Material Processing and Design (AMPD 2024)” organized by Department of Mechanical Engineering, Sardar Vallabhai National Institute of Technology, NIT Surat during 13th May 2024 to 17th May 2024.
- Mr Abhijith R P participated in the five days Faculty Development Program on “Geo-Informatics in Disaster Management” organized by Department of Civil Engineering, Jorhat Engineering College, Jorhat, Assam on 18th June 2024 to 22nd June 2024.
- Mr Abhijith R P participated in one day online seminar on “Nature based Sustainable Solutions for Environmental Pollution – Air, Water and Soil Reclamation” organized by Centre for Clean Environment (CCE) Vellore Institute of Technology (VIT) , Vellore on June 5, 2024.
- Mr Abhijith R P Participated in the skill training workshop on the title “AI Tools and Advanced Excel for Enhancing Paper Writing and Project Report” Jointly organized by Vidya Vihar Institute of Technology, Purnea, Bihar, India & RSP science Hub, Coimbatore, Tamil Nadu, India on 25-05-2024.
- Mr Abhijith R P participated in the Faculty Development Program on “Happy Workspace” on 18th May 2024 organized by Department of Civil Engineering in Gregorian Institute of Technology, Kangazha, Kottayam.
- Ms Renju C M attended Self Sponsored short training program on “Advances in Material Processing and Design (AMPD-2024)” organized by the Department of Mechanical Engineering Sardar Vallabhdbhai National Institute of Technology, NIT Surat from 13th-17th May 2024.
- Ms Renju C M attended the Online Plenary and Keynote Lecture of the “International Conference on Geo-Disasters and

Construction Engineering (ICGCE 2024)" on the 7th and 8th of June held at Waterloo, Ontario, Canada.

- Ms Renju C M attended One week online Faculty Development Program on "Geo-Informatics in Disaster Management" organized by the Civil Engineering Department from 18th to 22nd of June at Jorhat Engineering College, Assam
- Mr. Kannan K. attended FDP on "Environmental Pollution: Monitoring and Control" organized by Dept. of CE, AdiShankara Institute of Engineering and Technology on 2nd and 3rd July 2024.
- Ms Tara Leander attended FDP on Engineering Next- Gen Materials organized by The Department of Science and Humanities, Mar Baselios College of Engineering and Technology from 18th to 22nd June 2024.
- Ms Sanobiya B S attended FDP on Engineering Next- Gen Materials organized by The Department of Science and Humanities, Mar Baselios College of Engineering and Technology from 18th to 22nd June 2024.
- Ms Aswathy Sasikumar attended FDP on Engineering Next- Gen Materials organized by The Department of Science and Humanities, Mar Baselios College of Engineering and Technology from 18th to 22nd June 2024.
- Ms Karuna P attended FDP on Engineering Next- Gen Materials organized by The Department of Science and Humanities, Mar Baselios College of Engineering and Technology from 18th to 22nd June 2024.
- Ms Revathy V S attended FDP on Engineering Next- Gen Materials organized by The Department of Science and Humanities, Mar Baselios College of Engineering and Technology from 18th to 22nd June 2024.
- Prof. Deepthi Dennison attended FDP on "LIDAR – Applications in advanced

Surveying" by Department of Civil Engineering, Mar Baselios College of Engineering & Technology from 8/1/24 to 12/1/24.

➤ CONFERENCE/WEBINARS ATTENDED

- Ms Greeshma T. attended a webinar on "FDR- Executive Challenges and Quality Control on 8th June 2024 conducted by Turtle Smart Solutions L.L.P
- Mr. Kannan K. attended IGS Technical Webinar-27, Rendezvous on the topic "Significance of Field Testing of Innovative Materials used in the Base and Sub Base Layers of Flexible pavement" on 8th April 2024 organised by IGS, Kochi Chapter.
- Mr. Kannan K. attended IGS Technical Webinar-29, Rendezvous 2.0 on the topic "Engineering India's Tallest Bungy Jumping Tower including Geotechnics of its Foundation at Shivpuri, Rishikesh" on 10th June 2024 organised by IGS, Kochi Chapter.

➤ INDUSTRIAL VISIT

Third year students of Department had their industrial visit to Delhi Metro Museum located at Patel Chowk Metro station, Delhi on 3rd May 2024. During visit they experienced advanced public transportation, miniature models, interactive displays and operations of metro system.



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

➤ MTIC AWARD

Abhirami V Nair, Abhishek S V, Adithyan M S and Revathy A K of S8 EEE, won MTIC Best Project Award from EEE department for the

project “Face Recognition and Traffic Light control for visually impaired” guided by Prof.R.Harikumar (HOD, EEE).



➤ PROJECT EXPO



The Students of S4, S6 and S8 of EEE department participated in a one-day project expo in April 2024 conducted by the department.

➤ REVIEWER

Ms Valsa Basil and Ms. Geena S were reviewers of International Conference on E mobility, Power Control and Smart grid, from 18/4/2024 to 20/4/2024, conducted by Mar Baselios College of Engineering, Nalanchira.

➤ FDP ATTENDED

Ms. Valsa Basil and Ms. Thangathamarai N.G.S attended 5 days online FDP on Mathematical Advances in Electrical Engineering: Challenges and Exploration at Mangalam College of Engineering from 18/7/2024 to 22/7/2024.

➤ FAREWELL TO FINAL YEAR STUDENTS



Department arranged a Farewell party for the S8 students in April 2024.

➤ PAPER PUBLICATIONS / PRESENTED /ACCEPTED

- Ms. Valsa Basil and Abhijith A (S8 EEE) presented a paper as part of International Conference on Smart Innovations in Electrical Engineering ICSIEE-24, held in May 2024.
- Ms. Valsa Basil & Abhijith A (S8 EEE) published a paper “Failure Modes and Effects Analysis of Power Transformers” in the proceedings of International Conference on Smart Innovations in Electrical Engineering ICSIEE-24, ISBN:978-93-92504-58-7, held at Mangalam college of Engineering.
- Abhirami V Nair, Abhishek S V, Adithyan M S and Revathy A K of S8 EEE, published a paper “Face Recognition and Traffic Light control for visually impaired”, in the International Journal of Creative Research Thoughts, Paper ID - IJCRT_259231, ISSN: 2320-2882, on 04/5/2024.
- Shehina Maheen, Jobin D Jose, Joel James Zecharia and Sidharth S of S8 EEE, Mr Deepu RS - paper “Re-edifying a petrol boat into electrical, provided with solar”, accepted in the International Journal of Creative Research Thoughts, Paper ID - IJCRT_259133, ISSN: 2320-2882, (AP, EEE) on 02/5/2024.
- Nijin V S, Bhavana B J and Gautham Suresh of S8 EEE - paper “Retrofitting of scooter into an electric motorcycle”, accepted in the International Journal of Computer Science Trends and Technology, April 2024 volume 12 issue 2, ISSN: 2347-8578, on 02/5/2024.
- Alwin J H, Ashik Muhammed Ansar and Sankeerthana V of S8 EEE, Ms Geena S - paper “Analyzing energy usage and conservation measures at MEC”, accepted in TIJER -International Research Journal ,ISSN: 2349-9249, on 02/5/2024

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING & ELECTRONICS AND COMPUTER ENGINEERING

➤ AWARD - FACULTY

Prof. Sreena V.G, Prof. Dhanya Mathew and Prof. Evan Kumar of Department of Electronics were awarded for College day celebrations for producing top score result more than 90% for the subjects taught in the academic year 23-24.

➤ AWARD - STUDENTS

Aswin J.S, Abhiram A.B, Savin, Ben S. Clive, Sherhan of 2021-2025 ECE batch participated in ECHO (Electronic Components Hackathon) on 5th April 2024 at CET, and bagged the Second Prize Position with cash prize of Rs 5000/-for their project “Arduino Based Wearable Glass for Drivers”, that detects driver drowsiness to enhance road safety through timely alerts and automatic braking.

➤ INDUSTRIAL VISIT

The Faculty of Department of Electronics, visited the United Electrical Industries Ltd. On 14th June, 2024.



➤ ORGANISED TRAINING PROGRAM

On 22nd and 23rd April, 2024 the Kerala Block Chain Academy in collaboration with Department of ECE, organized a 2 day training program coordinated by Ms Minnu Jayan C. and Ms .Preetha S.L for the registered students of ECE, ES and EEE. The Resource persons were Nikhil V Chandran R&D Engineer, Sumi Maria Abraham R&D Engineer and Niraja Shenoy

R&D Engineer from Digital University of Kerala. The Block chain certificates were received by 16 students out of the 21 registered candidates.



➤ FAREWELL TO FINAL YEAR STUDENTS



The 2020-2024 ECE final batch students were bid Adieu on 3rd June 2024, a small sent-off party was arranged by the department faculty.

➤ PROJECT EXHIBITION -TECH EXPO 2024



On 07-05-2024, the Department organized an exciting and informative Tech Expo at Project Room (Main Project of S8 students) and Microcontroller Lab (Mini project of S6 students). 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.

➤ PAPER PUBLICATIONS

- Ms. Preetha S.L has Published A Paper Titled “ Rescue Assisting UAV”, In The International Journal Of Progressive Research In Engineering Management And Science (Ijprems),Vol. 04, Issue 06, June 2024, Pp: 321-330 E-Issn :2583-1062 Impact Factor: 5.725
- Ms Minnu Jayan C. . has presented a paper in an International conference "IEEE International Conference on Innovations in Engg and Technology" paper titled " A Survey on the control techniques used in Process Control" 13-14 July 2023
- Ms Vinitha B Elza has presented and published in proceedings a paper entitled ‘Impedance Spectroscopy Analysis of Low-Cost mixed halide MAPbI_{1-x}Cl_x, Highly Efficient FAPbI₃ and Non-Toxic Lead-free CsBiI₁₀ Perovskite Solar Cells: A Comparative Numerical Analysis using SCAPS-1D’,in the International Conference on advanced Functional Materials and Devices , AFMD 2024 held by SRM from 26th to 28th February, 2024
- Fiza Akbar (2021-2025 ECE) and Naziya N.J (2020-2024 ECE), had published a paper on May 2024, titled “ IOT based Smart Crib”, in International Journal of Advanced Research in Science , Communication and Technology (IJARSCT). They both were selected as Research Interns by AStar-Telecom-360.

➤ FDP ATTENDED

- Ms. Preetha S.L has participated in 5 days FDP on Digital Manufacturing organized by Mahaguru institute of technology, from 15.6.24 to 19.6.24

- Ms. Minnu Jayan C has participated in Online Workshop on Data Analytics & AI organized by Centre for Computer Science and Information Technology (CCSIT), Manjeri, University of Calicut on June 15th 2024
- Ms. Vinitha B Elza, has participated in two day workshop on ‘Triboelectric Nano generator and Super capacitor’ organized by Dept. of Mechanical Engineering, College of Engineering Trivandrum from 23rd to 24th March, 2024

➤ CENTRE OF EXCELLENCE IN ARTIFICIAL INTELLIGENCE & MACHINE LEARNING -ACTIVITIES

- As part of Centre of Excellence (CoE) Activities Marian CoE and UST has renewed the MoU signing on 29th April, 2024.



- The 2020-2024 placed students of UST through CoE ,were given the offer letters on 11th June , 2024



DEPARTMENT OF MECHANICAL ENGINEERING

➤ EXPERT TALK

- Dr. Arun Kumar V delivered an Expert talk on "Molecular Dynamics Fundamentals, LAMMPS, VMD Tutorial", for PG students, Amrita Vishwa Vidyapeetham (Amrita University), Amritapuri, Kollam, June 2024.
- Dr. Arun Kumar V delivered an Expert talk on "Molecular Dynamics for Nano fluids and Heat Transfer"; Expert lecture for PG students, Amrita Vishwa Vidyapeetham (Amrita University), Amritapuri, Kollam, May 2024.
- Dr. Arun Kumar V delivered an Expert talk-3 on "Fundamentals on the internet of things & Introduction to Arduino and Raspberry-Pi", to the students of St. Thomas Schools, Trivandrum, May 2024.

➤ REVIEWER

- Dr. Sonia S Raj. was the reviewer for 'International Conference on Research Advances in Engineering and Technology', ITechCET 2024 organized by Musaliar College of Engineering & Technology Pathanamthitta during 24th to 25th May 2024.

➤ PAPER PUBLICATIONS

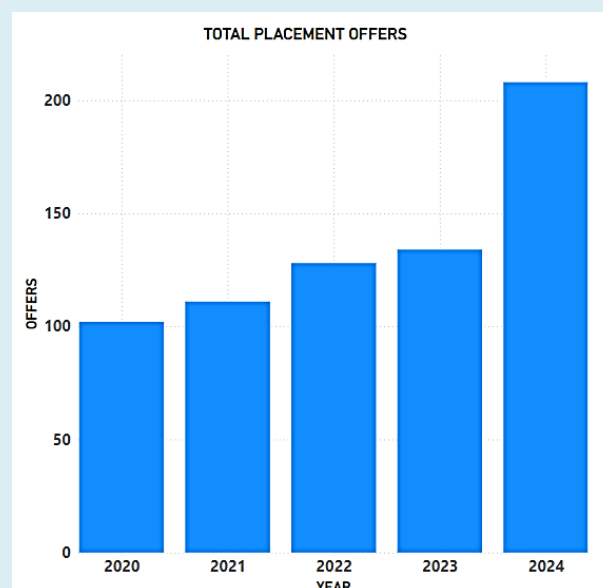
- Harish Kumar. B, Dr. Sonia S Raj published paper titled "Innovative Optimization in Construction Safety Resource Allocation with Evolutionary Game Modelling" in International Research Journal TIJER on June 2024.

➤ MTIC AWARD

- Abhiram Sankar S, Aswin R S, Atul Krishna R, Gokul Raj and Maneesh M of S8 ME, won MTIC Best Project Award from ME department for the project "Experimental Investigation on the effects of process parameters on battery cooling system in EVS using Aluminium Microchannels and Thermo electric cooling modules" guided by Dr Vishnu B R.

PLACEMENT STATISTICS

➤ TREND OVER THE LAST FIVE YEARS



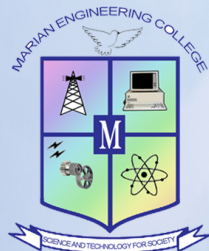
➤ MAJOR RECRUITERS 2024



As we wrap up this edition of our newsletter, we extend our heartfelt gratitude for your continued support and engagement. Stay tuned for more updates, inspiring stories, and valuable insights in our next issue. Until then, stay safe and stay connected!

Warm regards,

Marian Moments Editorial Team



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Geo Technical Engineering (18 seats)

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(60 seats)

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