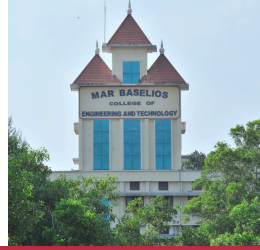




In Altum...

The MBCEET News Letter



Accredited by
NAAC
with 'A' Grade
since 2016

Mar Baselios College of Engineering and Technology (Autonomous)

Mar Ivanios Vidyanagar, Nalanchira, Thiruvananthapuram - 695 015.

College code : MBT

Five B Tech
Programmes
Accredited by
NBA
since 2016



MoU Signed with Hex20



Inauguration of OFFROADS'24



Industry connect program with Mr. Stefan Juraschek Former Vice President BMW



Visit by German Consul General and Deutsche Bahn delegates

PATENT SECURED

OUTSTANDING THESIS AWARD 2024 WINNERS

PATENT AWARDED



by Dr Neena Raj N. R
Asst. Prof. in CSE



Mr. Jyothis S.
M.Tech in CE



Dr. Jayasree S.
Prof. Dept. of CE



to Mr. Aaron K. B. (S6 MED),
Dr. Krishnamohan G. P. (S&H),
Ms. Amritha B. J. (ECD),
Dr. Dishore S. V. (EED),
Mr. Chandramohan B. (IEDC).

Message from the Director



Welcome to another exciting academic year of MBCET, a place where the future is shaped by

creativity, collaboration, and relentless curiosity. As we navigate the rapidly evolving landscape of Technology and Engineering, we find ourselves at the crossroads of opportunities and responsibility. Our commitment to fostering innovation, nurturing talent, and building a community of problem - solvers has never been more vital.

At Mar Baselios College of Engineering and Technology, we are committed to providing an environment where students can explore these frontier of knowledge, guided by a dynamic faculty with expertise across diverse disciplines. As we move forward, I ask all of you - students, faculty and alumni - to stay curious, be proactive and challenge yourselves to think beyond the conventional. The world needs Engineers who are not only technically proficient but also empathetic, socially responsible and visionary.

Let this academic year be one of growth, exploration and inspiration. Together we can shape a future where technology thrives in the spirit of collaboration.

Thank you for being a part of this exciting journey. All the best wishes .

Warm Regards,
Fr. John Varghese.

Principal's Desk



MBCET achieved some major milestones in its journey to excellence during the period April to September 2024. The first batch of B.Tech students under autonomy passed out this year and this was celebrated with the Course Completion Ceremony EXODOS

on 03 August 2024 . It was the 19th batch of B.Tech students since the College was established in 2002. The day also marked the course completion of the 11th batch of MTech students since the MTech Programmes started in 2012 and the 3rd batch under autonomy. With the College as a University approved Research Centre, two scholars registered in the College and guided by our faculty were awarded the PhD degree by the University. MBCET has been striving continuously to impart the right skills to the students through well-defined curriculum and courses under different programmes, designed with inputs from Industry Experts. This includes industry designed elective courses and theoretical learning followed by hands-on experience in Industry-sponsored labs. In spite of a global recession, thanks to the efforts of Placement Cell and the faculty, students received more than 375 offers and got placed in various reputed Industries including many core companies. On 02 September 2024, the College welcomed a new generation of students with Parodos 2024, the initiation Ceremony and the two weeks long AICTE mandated Student Induction Program. The progress of the Institution, in alignment with its Vision and Mission, is a collective effort of all the stakeholders and well-wishers. We acknowledge their contributions and look forward to their continued support and encouragement.

- Dr. S. Viswanatha Rao

Editor's Note.....



Nature seems to have lost its consoling serenity. Recently we witnessed Nature's fury in different places. Mundakkai- a village in Wayanad District has been uprooted in the fury of floods. In several parts of India such as Gujarat, North East floods spelt havoc. Europe, USA and China also had to experience the wrath of Nature. World Meteorological organization (WMO) confirmed an increase in temperature by 1.45° C in 2023 and in 2024 it is likely to increase. The impact of climate change affects the world differently. If one area faces floods, another area will be under drought and yet another will have to suffer earthquakes and hurricanes.

Besides these, the business of war thrives globally, prompted by the greed for power, killing innocents and creating refugees. Extremism spreads like a deadly disease across the world. Even individuals are impulsive and man seems to have lost reason and self-control. Human trafficking and atrocities against women and children are increasing. People are ruled by senses and not intellect. Man has lost the power of discrimination. Man prefers to be an island. In order to ensure peaceful life, the Upanishadic dictum, "Datta, Dayadvavn, Damyatha (Give, Sympathize and Control) has to be imbibed and put into practice. The young generation has to equip themselves accordingly.

- Dr. George Zacharia

Vision : To be an Institution moulding globally competent Professionals as epitomes of Noble Values.

Mission : To transform the Youth as technically competent, ethically sound and socially committed professionals, by providing a vibrant learning ambience, for the welfare of humanity.

FACULTY NOMINATED TO VARIOUS POSITIONS IN THE COLLEGE

- **Dr. S. Viswanatha Rao**, Professor assumed charge as the Principal.
- **Dr. M. J. Jayashree**, Professor assumed charge as the Dean (Academic Affairs- UG)
- **Dr. J. Jayakumari**, Professor assumed charge as International Liaison officer
- **Dr. Luxy Mathew**, Associate Professor assumed charge as the HoD of the department of ECE.

INDUSTRY-INSTITUTE COLLABORATION INITIATIVES

MoU Signed with Airport Authority of India

MBCET signed an MoU with the Airport Authority of India on 08 July 2024, marking a significant step towards enhancing Industry - Academia collaboration and promoting internship programs.

MoU with Hex20

MBCET signed an MoU with the Hex20, which is a Space startup in Technopark, Thiruvananthapuram, on 22 July 2024. This MoU will focus on providing industry exposure to students through internships and guest lectures, and integrating students into the space startup ecosystem. *(Photo on Cover)*

DONATING AWARD MONEY TO THE KERALA CHIEF MINISTER'S DISTRESS RELIEF FUND

Graduates of MBCET, **Mr. Adarsh S. L., Mr. Alen Alex, Mr. Dhanush Vijay, Mr. Shaheen Noushad** and **Mr. S. S. Akshay** contributed the award money received for Best Project to the Kerala Chief Minister's Distress Relief Fund. The students handed over the amount to **Shri. V. Sivankutty**, Hon'ble Minister of Kerala for the disaster relief operations in Wayanad. The team secured award for their project 'Valorization of Plastic Wastes using Thermo-Catalytic Plastic Pyrolysis' guided by **Ms. Radhika P.** Asst. Prof. CE.



INDUSTRY CONNECT PROGRAM WITH MR. STEFAN JURASCHEK FORMER VICE PRESIDENT BMW



An exclusive Industry connect program was organized by Acsia Technologies in association with IEEE and SAE India at College of

Engineering Thiruvananthapuram (CET), The event featured **Mr. Stefan Juraschek**, former Vice President of Research & Development (Electrical/Electronics) at BMW Group and Strategic Advisor to Acsia Technologies. Engaging with **Mr. Juraschek** provided valuable insights into the latest trends in automotive technology. The MBCET team was led by **Dr. S. Ushakumari, Mr. Vipinkumar K. C.,** and **Dr. Merlin George** along with student representatives - **Aswin G., Jency D. Dev, Jovina Rose, Nanditha V., Navaneeth M. S., Neha Anna Koshy, Rahul George Paul, Silpa C., Sona S., Sruthy Jose, Vaisakha Ashok Nair,** and **Neeraj Krishna** actively participated in the event. MBCET has a close collaboration with Acsia Technologies and **Mr. Stefan** came to see MBCET during his visit to India in February 2024.

PATENT SECURED

Dr. Neena Raj N. R. (Asst. Prof., Department of CSE) and **Dr. Shreelekshmi R.,** SPFU Director, DTE secured patent for their invention "Method And User Terminal For Determining Authenticity Of Image Data". *(Photo on Cover)*

DESIGN PATENT REGISTERED



Ms. Sreeja S. R. (Asst. Professor, Dept. of CSE), **Mr. Allen Manu Philip, Mr. Dilshan Dileep Shyni, Mr. Manikandan B. Nair** and **Ms. Medlyn Sairah Jacob** (2024 CSE Passout Batch) have acquired a design registration in respect to the application of the design to "Assistive Device for the Visually Impaired", on August 2024.

PATENT AWARDED

A Design Patent for 'Device for detecting Sodium Benzoate' was awarded by the Patent office Govt of India to the following authors **Mr. Aaron K. B.** (student, S6 MED), **Dr. Krishnamohan G. P.** (Faculty, S&H), **Ms. Amritha B. J.** (Faculty, ECD), **Dr. Dishore S. V.** (Faculty, EED), **Mr. Chandramohan B.** (IEDC). *(Photo on Cover)*

MOU WITH MERP SYSTEMS

MERP Systems has signed an MoU with MBCET on 12 June 2024. MERP Systems Inc. is a technology company that specializes in digital transformation solutions.

PATENTS RECEIVED

Dr. Dishore S. V., Assistant Professor, EED received design patent for "Banana Bunch Extraction Tool". This is his 3rd patent.

SPACE AVIONICS TEST AND EVALUATION LABORATORY(SATEL) (ACCREDITED BY VSSC)

On 29 May 2024, SATEL celebrated a remarkable technical achievement—the successful completion of testing 300 small avionic packages for VSSC. These packages are essential components for various space missions. The rigorous process included thermal, vibration, and electrical tests. **Fr. John Varghese**, Director, **Dr. Abraham T. Mathew**, former Principal, **Dr. Viswanatha Rao**, Principal and **Rev. Fr. Thomas Mukalumpurathu**, Finance Officer spoke on the occasion. They conveyed their appreciation to the core team of **Mr. Anoop K. Johnson**, **Mr Ajith Kumar S. M.**, **Ms. Manju Suresh**, **Mr. Vishnuchandran C. L.**, **Mr. Sajan S. S.** and all those who supported the team.



VISIT BY GERMAN CONSUL GENERAL AND DEUTSCHE BAHN DELEGATES

A delegation from the Deutsche Bahn (German Railways) visited our college on 26 June 2024 (Wednesday) to see the facilities, especially Civil and Mechanical Engineering Depts.. They interacted with some Professors and students. They showed interest in sourcing qualified Engineers for their projects in Germany and the following high-ranking officials from DB visited the campus - **Uwe Neumann**, Head of Infrastructure Procurement, DB AG, **Hr. Matthias Rolf Bühler**, Head of International Procurement Office Asia, DB AG. Their visit was coordinated by the German Consultancy company HandsOn and its CEO **Dr. Wilfried Krüger** as well as Business Head **Mr. Bernhard Krieger** also accompanied the delegates. The German Consul General **H. E. Achim Burkart** also joined the DB-Delegation. (Photo on Cover)

PROFESSIONAL BODIES COMPUTER SOCIETY OF INDIA (CSI) ACTIVITIES Invited Talk

Department in association with CSI SB and ACE organized a Talk session for second year and Third Year B.Tech students on Higher Education Prospects in IITs after B.Tech on 29 April 2024. **Dr. Venkatesh** (Professor and Head, IIT Guwahati) and **Dr. John Jose** (Associate Professor, IIT Guwahati) were the resource persons. Faculty Coordinators: **Ms. Deepthi K. Moorthy**, **Ms. Vishagini V.** Assistant Professors, Dept. of CSE.

ACTIVITIES OF IEEE POWER AND ENERGY SOCIETY (PES) STUDENT BRANCH CHAPTER

IEEE PES MBCET, in collaboration with T.I.M.E., organized a career orientation talk titled "ASCEND" on 21 March 2024 for the prefinal year students of Dept. of



Electrical and Electronics Engineering. The event, which focused on career options and higher education opportunities following a B.Tech degree, featured **Mr. Ajay Nair** Academic Head at T.I.M.E., as the keynote speaker. Student coordinators **Sarang G. S.** and **Alan Gabriel**, along with faculty coordinators **Ms. Sandhya P.** and **Mr. Anil J.**, played integral roles in coordinating the talk session.

In recognition of PES Day 2024, an intellectually stimulating quiz session centered on **Electric Vehicle (EV) Technologies** garnered participation from approximately 100 students. Demonstrating exceptional knowledge and prowess, **Nandana Anand P.**, (S4 CS)



emerged as the recipient of the first prize. Following closely, **Roshan George Koshi**, (S4 CS) secured the second prize. The third prize was awarded to **Gowri R. G.**, (S2 ME). Additionally, the event featured a distinguished expert talk session delving into the intricate realm of electric vehicles, providing invaluable insights to the attending audience.

The IEEE Power and Energy Society (PES), in collaboration with the Space Club at Mar Baselios College of Engineering and Technology (MBCET), organized an exciting poster and painting competition titled "COSMOS CANVAS" centered around the theme "Space" as part of the college's Space Week celebrations. First Prize was awarded to **Ms. Diya Dileep** from S3EC 2 and second prize to **Aneeta Sibi** from S3EL. Student Coordinators: **Savya Unnikrishnan** and **Vinayak V. Nair**. Faculty Coordinators : **Ms. Sandhya P.** and **Mr. Anil J.**, Asst. Professors, EED.



FIRST PRIZE
(Diya Dileep S3EC 2)



SECOND PRIZE
(Aneeta Sibi, S3 EL)

IEEE PES HIGH PERFORMING STUDENT BRANCH CHAPTER PROGRAM

IEEE PES Branch of MBCET is one among the selected colleges for a funding of 150 USD under IEEE PES high performing student branch programme.

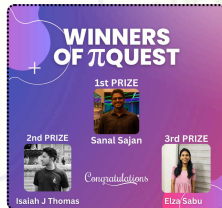
IET PROFESSIONAL BODY ACTIVITIES

The second session of **Fine Tune Talks**, organised by IET MBCET on 16 March, 2024, focused on Electric Vehicles and had over 26 participants. **Mr. Aswin R. B.**, Assistant Professor at MBCET, led the engaging two-hour session.



He covered various aspects of EVs, including design, environmental benefits, and adoption challenges, captivating the audience with his insights. The highlight of the event was a demonstration of a retrofitted electric auto, showcasing practical applications of EV technology.

IET MBCET organised the "Pi Quest" quiz competition on 14th March, 2024, in celebration of World Pi Day. Hosted on the Quizizz platform, around 100 students actively participated, showcasing their knowledge and talent. **Sanal Sajan** (S4 CS1), **Isaiah J. Thomas** (S2 CT), and **Elza Sabu** (S2 CS2) were selected as the top 3 winners. **Salin Shain** and **Sarang G. S.** were the student coordinators for the event.



On March 10, 2024, IET MBCET organized "**Frauenpower**," a photography competition celebrating Women's Day. The competition received an overwhelming response. The event was coordinated by **Arunesh J. B.** and **Shreya Shelji**.

IET TALK AT CET PARTICIPATION

IET MBCET has participated in a talk session organised by IET On-Campus CET on Lunar handled by **Dr. S. Geetha**, Scientist at ISRO. The



session did explain about the key changes that took place between Chandrayan 2 and Chandrayan 3. **Dr. Soumya A. V.**, faculty advisor IET MBCET along with 5 students **A Samyuktha Syam**, **Vishnupriya S.**, **Nevin Thomas**, **Abhishek S.** and **Sarang G. S.** actively participated in the interactive session.

IET OUTREACH PROGRAM

IET MBCET's recent outreach program on 14 April 2024, brought joy and warmth to the residents of Caramel Old Age Home in Aryand, Trivandrum, on the auspicious occasion of Vishu. The day was filled with music, featuring singing and violin performances.



DEPARTMENT OF CIVIL ENGINEERING

DEPARTMENT ACTIVITIES

CONSULTANCY WORKS

GPS Survey

GPS Survey ongoing along Ashtamudi lake as part of the consultancy work for PWD.



Soil Investigation



Soil Investigation done at Poojappura Central Jail and Konchiravila U P School as part of the consultancy works of the Department of Civil Engineering for PWD.

NPTEL COURSE COMPLETION

- **Dr. Neethu Roy**, Dean (Research & Consultancy), successfully completed the 12 week NPTEL course on NBA Accreditation and Teaching-Learning in Engineering (NATE) with Elite certification, conducted by Indian Institute of Science Bangalore and 12 week course on Traffic Engineering with Elite certification, conducted by Indian institute of Technology Kharagpur during January to April 2024.
- **Ms. Akhila A. M.**, Assistant professor, Department of CE, successfully completed the 12 week NPTEL course on Data Analysis and Decision Making - I with Elite certification, conducted by Indian institute of Technology Kharagpur during January to April 2024.

TRAINING PROGRAMME ON BIM

Dr. Alice Thomas, faculty of the Civil Engineering Department, completed a three week training programme conducted by KTU on Building Information Modeling.

FACULTY ENABLEMENT PROGRAMME

Dr. Manju Dominic, Professor CE Department completed a 5 day Faculty Enablement Program (FEP) Phase 3 on Artificial intelligence using Infosys Springboard platform from 24 to 28 June 2024.

PAPER PUBLICATION

- **Lekshmi Chandran M.**, faculty of CE Department, published the work, 'Effect of Poisson's Ratio of Developed Coir Latex Composite' co-authored by **Dr. Jaya V.** and **Dr. K. Balan** in the Material Circular Economy, July 2024, Volume 6, article number 42. <https://doi.org/10.1007/s42824-024-00125-w>.
- **Lekshmi Chandran, M., David Cicin Iraniose., Anna Angel Thankachan., Hima S. V. Kumar., S. S. Vaibhav., Jaya, V., Balan, K.**, published the work 'Effect of Latex Content on Morphological Behaviour of Coir-Latex Composite'. Material Circular Economy, July 2024 Volume 6, article number 41. <https://doi.org/10.1007/s42824-024-00126-9>

ATTENDED INTERNATIONAL CONFERENCE

Faculty of Civil Engineering Department, **Dr. Anupama Krishna D.** attended the 9th World Congress on Civil, Structural and Environmental Engineering (CSEE 2024), conducted in London, United Kingdom, from 14 to 16 April 2024 in online mode and



presented the paper titled 'Behaviour of Reinforced Concrete Frames under Various Load Conditions with Pre-Applied Elevated Temperature'. Co authors: **Dr. Priyadarsini R. S.** (College of Engineering, Trivandrum and **Dr. Narayana S.**, Marian Engineering College, Trivandrum.

ATTENDED FDP

- **Mr. Govind U. P.**, faculty of the Civil Engineering Department, completed the 5 day Faculty Development Program on "Counselling and Academic Mentoring" organized by the Human Resources Development Center (HRDC) of the University from 20 to 24 May 2024.
- **Mr. Sijo M. Saji, Ms. Diana Alice Sugunan, Mr. Divyaprasad S. P. and Ms. Indhu Luke** attended a one week online faculty development programme titled "Recent Advances and Research Scope in Geotechnical Engineering" organized by the Department of Civil Engineering, Jorhat Engineering College, Assam from 3 to 7 June 2024

FACULTY AS RESOURCE PERSON

Mr. Sreeju Nair S. B., AP CED, delivered a knowledge sharing session on the topic 'Numerical Analysis and Modelling of Composite Materials' under the MoU with UiTM on 27 June 2024. The session was a collaborative teaching implemented between two countries for the course Mechanics of Composite Materials at College of Engineering, Shah Alam, Malaysia.



SKILL DEVELOPMENT PROGRAMME

The Department of Civil Engineering organized a 5-day Skill Development Programme on Revit Architecture by Intercad Systems, Pvt. Ltd for the third-semester B.Tech students from 1st to 6th July 2024. The Faculty Coordinators were **Mr. Sijo M. Saji** and **Ms. Indhu Luke**, Assistant Professors, Civil Department.



BUILDING INFORMATION MODELING

The Department of CE organised a 5 day Skill Development Programme on "Building Information Modeling" by Bimlabs



Engineering Services Pvt. Ltd. for the fifth and seventh semester B.Tech students from 8 to 12 July 2024. The faculty coordinators were **Mr. Sijo M. Saji** and **Ms. Indhu Luke**, Assistant Professors, CE Department.

SKILL DEVELOPMENT PROGRAMME ON BIM



A 3-day Skill Development Programme on 'Building Information Modeling' for S8 students was organized by the Department of CE, in association with CAD CENTER, Thiruvananthapuram from 4 to 6 April 2024. The resource persons were **Mr. Midhun S.** and **Mr. Vijeesh Kumar V.**, Technical Assistants, CAD CENTER, Thiruvananthapuram. The Faculty Coordinators: **Mr. U. P. Govind, Mr. Divyaprasad S. P. and Dr. Alice Thomas**, Assistant Professors, CED. Student Coordinators: **Mr. Reghu Nandan S.** and **Mr. Balu Sankar B. S.** S8CE.

CAREER GUIDANCE SESSION

A career guidance talk was given to S4 and S6 B.Tech students of the CE department on 17 May.



Mr. Jacob Thomas, Delivery Manager of TCS was the guest speaker for the event. The talk was coordinated by **Ms. Radhika P.** and **Dr. Alice Thomas**.

LABORATORY TRAINING PROGRAMME



The Department, organized a 5 day Laboratory Training programme from June 28 to July 5 2024. Technical staff from the

Dept. and other Institutions attended the programme. The sessions were handled by the faculties of the Civil Engineering Department. **Dr. Anupama Krishna D.** and **Mr. Divyaprasad S. P.**, Assistant Professors, CED Coordinated the event.

STUDENTS' ACHIEVEMENT



OUTSTANDING THESIS AWARD 2024

Mr. Jyothis S., M.Tech Structural Engineering student and **Dr. Jayasree S.**, Professor Department of Civil Engineering won the Outstanding Thesis Award under the PG category (2nd Prize) organized by the ASCE India Section Southern Region, for the topic 'Strength and Behaviour of RCC and Alkali Activated Sustainable Concrete Deep Beams with openings'. The recipients were invited to Mahindra University, Jeedimetla, Hyderabad to receive the award on 19 August 2024. (Photo on Cover)

OUTREACH ACTIVITIES

Outreach Cell of CE Department organised a creative workshop 'AAKAR' from 22 to 24 May 2024 focussing highschool and higher secondary school students. Outreach Cell also organised sessions on 'Stress Free Entrance' delivered by **Dr. A. Basheer Kutty**, Clinical Psychologist and former



Assoc. Prof., Govt. Medical College, Trivandrum and 'Tips to Write KEAM Entrance' delivered by **Mr. Saneesh Janardhanan**, Faculty at Xylem Coaching Center on 25 May 2024. Co-ordinators: **Dr. Alice Thomas** and **Ms Rakhi J. H.**

WORLD ENVIRONMENT DAY CELEBRATIONS

As part of the World Environment Day (June 5) celebrations, Nature club (Prakruthi) distributed 100 saplings to MBCET Staff Members on 6 June 2024. **Dr. Jaya S. Pillai** and **Ms. Akhila A. M.** were the coordinators of the program.



PROJECT EXPO - AAKRITI 2024



Department of Civil Engineering conducted the Project expo "Aakriti 2024" on 22 May 2024 which showcased the innovative projects developed by the final year students. **Dr. Abraham T. Mathew**, Principal and **Dr. S. Viswanatha Rao**, Vice Principal, jointly inaugurated the event. **Er. Sreekumaran Nair**, Former Chief Engineer, Kerala Water Authority and **Dr. Gicy M. Kovoov**, Dean, Prof. (Retd), MIT, Karnataka and **Dr. K. Muraliedharan Nair** Professor & Dean (Administration), MBCET evaluated the teams. Co-ordinators: **Dr. Jaya S. Pillai** and **Ms. Jean Molly Simon** coordinated the event.

ACTIVITIES OF PROFESSIONAL BODIES

IPA ACTIVITY

Two day workshop on fundamentals of plumbing



Indian Plumbing Association- MBCET Students Chapter in association with Jayamatha pvt ITI organised a two-day workshop on fundamentals of plumbing from 11 to 12 March 2024. The inauguration was done by **Er. Renny Koipuram** IPA trivandrum Chapter Chairman. **Dr. Abraham T. Mathew**, Principal, **Dr. Viswanatha Rao**, Vice Principal **Dr. Jisha S. V.**, HoD, **Dr. Neethu Roy**, Dean (R&D) along with faculties and staff graced the occasion with their presence."

IGS ACTIVITY : EXPERT TALK

Expert talk on Importance of Field Work in Geology

An expert talk on "Importance of Field Work in Geology" was conducted in association with the IGS student chapter MBCET, on 10 May 2024 for the S4 B. Tech students. **Dr. G.**



Bindu, Superintending Hydrogeologist (Retd.) and **Dr. Lal Thompson**, Senior Hydrogeologist (GWD), were the guest speakers. Co-ordinators: **Ms. Radhika P.** and **Ms. Rintu Johnson**.

CESA ACTIVITY

Teacher's Day Celebration

Civil Engineering Students Association CESA coordinated the Teachers Day celebration in the Department on 5 September 2024. In a unique initiative, final-year students took the



lead by conducting classes for the junior students. Following the classroom sessions, students expressed their gratitude by distributing handmade cards and sweets to the teachers.

INDUSTRIAL VISITS

Field visit to District Planning Committee office Kudappanakunnu

A field visit was organized by the Dept. of CE for the Fourth Semester B.Tech students on 15 March 2024. The students were taken to the construction site of the District Planning Committee office in Kudappanakunnu, as part



of the course work of 'Geotechnical Engineering I'. Co-ordinators: **Ms. Lekshmi Chandran M.** and **Ms. Ann George** Asst. Professors, CED.

Visit to RWDI Trivandrum

Second Semester M.Tech Structural Engineering and Transportation Engineering students visited RWDI Consulting Engineers Pvt.



Ltd. in KINFRA Film and IT Park on 13 March. **Mr. Rahul P. S.**, Managing Director, RWDI Trivandrum explained the working of 3D printers and Wind Tunnel Tests. **Dr. Jisha S. V.**, HoD CE coordinated the visit. Faculty Members: **Ms. Diana Alice Sugunan**, **Dr. Minu Ann Peter**, **Ms. Jomi James** and **Mr. Nitin S.** accompanied the students.

Visit to LPSC, ISRO Valiamala

On 22 March 2024, a group consisting of first-year M.Tech students specializing in Structural Engineering and Transportation Engineering

from the Dept. of CE, accompanied by six faculty members, visited the Liquid Propulsion Systems Centre (LPSC) situated in Valiyamala.



One of the highlights of the visit was the interactive sessions with LPSC Engineers and Scientists. The students and faculties could visit various facilities including the Mechanical Analysis Lab, Sloshing Laboratory, Creep Testing Facility, Shake Table Testing Facility, among others. The industrial visit was initiated by **Dr. Jisha S. V.**, Head of CED. **Dr. A. K. Asraff**, the Deputy Director of Mechanical Design and Analysis at LPSC, facilitated and organized all the required arrangements for the visit.

Visit to Soil Museum



Dept. of CE in association with IGS MBCET Student Chapter conducted an Industrial Visit to the State Soil Museum and Soil Information Center, Parottukonam, Thiruvananthapuram on 19 April 2024. **Ms. Rintu Johnson** and **Ms. Radhika P.** coordinated the visit and **Ms. Diana Alice Sugunan** and **Ms. Alice Thomas** accompanied the students.

Site visit to Padmanabhapuram Palace



As part of the curriculum of functional design of buildings, a group of Elective students from the Department visited Padmanabhapuram Palace to study the Kerala Traditional Architecture on 25 May 2024.

EXPERT TALKS

Talk on "Importance of Soil Testing"

An expert talk on "Importance of Soil Testing" was conducted by the Department of Civil Engineering, on 11 March 2024. **Dr. Greeshma Nizy**



Eujine, CEO and Geotechnical Consultant GeoEra Infrastructures, was the guest speaker. **Dr. Greeshma Nizy Eujine** delivered sessions covering a range of field test. The event was coordinated by **Ms. Lekshmi Chandran M.** and **Ms. Ann George**.

Talk on 'Fundamental Rights & IPR'

An expert talk was held on the topic 'Fundamental Rights & IPR' for the course 'Professional Ethics & Constitution of India', organized by the Department of Civil Engineering on 15 March 2024. The talk was delivered by **Adv. Reeya Susan John**, Assistant Professor, Mar Gregorios College of Law, Thiruvananthapuram. The Coordinators were **Ms. Indhu Luke** and **Mr. Divyaprasad S. P.**, Assistant Professors, CED.



Talk on 'Tips and Tactics for Filing a Successful Patent Application'

An expert talk was organised on the topic 'Tips and Tactics for Filing a Successful Patent Application' for the final year B Tech. students and faculties of Civil Engineering Department, on 11 March 2024. The speaker of the session was **Dr. Nidhi M. B.**, Professor, Department of Mechanical Engineering, MBCET. The session was coordinated by **Dr. Jisha S. V.**, HoD, CED.

Talk on 'Modern Trends in ATC Tower Construction'

An expert talk on the topic "Modern Trends in ATC Tower Construction" was organised by the Department of Civil Engineering for the S4 Civil Engineering students as a part of their curriculum activities on 8 April 2024. The session was handled by **Mr. Unni Bhaskar**, Managing Director, UNO Technologies Pvt. Ltd. The event was coordinated by the faculties **Ms. Anupama Krishnan** and **Ms. Jomy James**, Asst. Professors in CE.

Talk on Impact of Geological factors in Civil Engineering Constructions

An expert talk on "Impact of Geological factors in Civil Engineering constructions" was conducted by the Dept. of Civil Engineering, on 17 May 2024 for the fourth-semester B.Tech students. **Dr. Thara K. G.**, Former Head of Disaster Management Center, Govt. of Kerala, was the guest speaker for the event. The session covered the importance of geological factors in the construction of dams and reservoirs, tunnels etc. and also discussed the problems encountered on site. The event was coordinated by the faculties **Ms. Radhika P.** and **Ms. Rintu Johnson**, Asst. Professors in CE.



Talk on Bridge Design

An expert talk on "Bridge Design" was conducted by the Department of Civil Engineering, on 10 May 2024 for the M.Tech Structural Engineering students. **Er. Saju S.**, Director Chief Design Office, PWD, Thiruvananthapuram, was the guest speaker. The session covered the topics, Planning and Geometric Design and Selection Criteria of Bridges. Co-ordinator: **Dr. S. Jayasree**, Professor in charge Government Consultancy Works CE dept. MBCET.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DEPARTMENT ACTIVITIES

NEWLY JOINED FACULTY



Ms. Bibi Annie Oommen



Ms. Jayalekshmi J.

PROJECT EXPO

Project Expo for final year students to demonstrate their projects was conducted by the Dept. of CSE in association with



CSI SB and ACE MBCET on 22 April 2024 at Pascal Hall. The exhibited projects were evaluated by our chief guests, **Ms. Kiran Mariam George**, Associate Software Engineer Experion Technologies, and **Mr. Bharat Suchith**, Lisec Austria Currently working as Lead Software Engineer at Dubai. Prize for best project was bagged by the teams Metaverse Tourism - **C. Rachana**, **Chris Dylan John**, **Sandhra Sanjeev**, **Varsha Renjith** S8 CS2 and Collevo-College Management App - **Ben George Netto**, **Noel Varughese**, **R. Sreelekshmi**, **Sanidh Idicula Vargheese** from S8 CS1. Faculty Coordinators: **Ms. Deepthi K. Moorthy**, **Ms. Vishagini V.** Assistant Professors, Dept. of CSE.

WORKSHOP ON FLUTTER

As a part of HASH'24, the Technical Fest organised by the Dept. the first workshop of the series was conducted by Tomatrix Technologies on 13 March 2024. 60 students attended the session.



MOTIVATIONAL TALK SESSION

On 18 August 2024, an online motivational talk session was organized by the Department in association with CSI SB MBCET, **Dr. Giby Geevarughese**, Associate Professor in Psychology, Mar



Theophilus Training College was the speaker. 81 students attended the session. Faculty Coordinator: **Ms. Deepthi K. Moorthy** (Asst. Professor, Dept. of CSE).

DIGITAL DEFENDERS



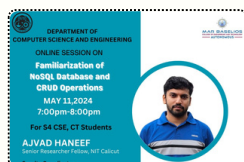
The "Digital Defenders" - Security Awareness Strengthening Programme was hosted by MBCET and jointly conducted by the Kerala Security Audit and Assurance Centre (KSAAC) and Digital University Kerala. The topics of discussion included Password Security, Hacking, Hackers and Ethics, Phishing, Cryptography, Steganography, Hashing and Salting, Digital Signature and Certificates and Dark Web.

DEFINE HACK

The Department organized Define Hack - a 24 hour Hackathon as part of Hash 2024, the inter-college technical fest on 20 & 21 April 2024. 136 participants from various colleges, in and outside Kerala attended. **Mr. Anand Pillai**, **Mr. Kevin Abey Issac**, **Mr. Shiv Sanjay** and **Mr. Adithya Smitha Raj** (S4CS2) won first place for the "Define Hackathon 2024" for their Project: "Fact Checking Extension". Winners were selected by the judges from reputed companies like Google, TCS, Certia, Hubble Bubble, Unibotix Innovations, H&R Block and Qburst. The title sponsors were UST, MBCETAA (MBCET Alumni Association), Devfolio, Polygon, Wolfram Language, Hover Robotics and Polygon. Student Co-ordinator: **Ms. Neha Elizabeth Syam** Faculty co-ordinators: **Dr. Tessy Mathew** and **Dr. Anne Dickson**.

FAMILIARISATION OF NOSQL DATABASE AND CRUD OPERATIONS

The Dept. organized a session titled "Familiarisation of NoSQL Database and CRUD Operations" on 11 May 2024. The session was delivered



by **Mr. Ajvid Haneef**, Senior Research Fellow at NIT Calicut. Faculty Coordinators : **Ms. Gauri Shree V. K.**, **Ms. Merlin George** , and **Ms. Sreeja S. R.**

5 DAY HANDS-ON WORKSHOP ON ADVANCED PYTHON PROGRAMMING

The Department organized a five day hands-on workshop on Advanced Python programming from 1 to 6 July 2024. 53 students participated in the workshop. The sessions are handled by **Mr. Arundev Vamadevan**, **Mr. Jobin Selvanose**, **Mr. Edwin Jose George**, and **Ms. Kesia Mary Joies**. Faculty Coordinators: **Dr. Tessy Mathew** and **Dr. Neena Raj N. R.**

SMART INDIA HACKATHON 2024 PRELIMS

On 7 and 8 September 2024, the Mar Baselios College of Engineering and Technology hosted the SIH Prelims Internal Hackathon. Faculty coordinators **Ms. Dhanya L. K.** (Asst Prof CSE) and **Ms. Anjali S.** (Asst. Prof CSE). **Mr. Arun J. S.** (Asst Prof ECE) provided mentoring sessions to the students. **Mr. Ferwin Lopez S7 CS1** was the student coordinator. There were 47 teams of 282 participants.

A VISIT TO INTEGRATED COMMAND AND CONTROL CENTER

Dr. Jisha John and **Dr. Jesna Mohan** attended the meeting convened at ICC (Integrated Command and Control Centre) to discuss the projects initiated by the Department of CSE, with Smart City. A demo of the projects was given by the students to the officials.

INDUSTRIAL VISIT TO UST

The Department of Computer Science & Engineering organized an industrial visit to UST, for the third-year students of the Department, on 20 August 2024. The students were accompanied by the faculty members: **Ms. Sreeja S. R.** & **Dr. Merlin George**.

CODE-PREDICT

CSI SB MBCET in association with Department of CSE conducted coding competition CODE-PREDICT, C Output Prediction Quiz on 2 March 2024.



The event was organized exclusively for 1st year students. Faculty Coordinator: **Deepthi K. Moorthy** Student coordinator: **Varsha Renjith** Winners **Advaith Manoj S2 CS2** **Jithin Rajesh S2CT** **Adithyan J S2CT**.

KERALA HACKRUN (CYBER SECURITY AWARENESS CAMPAIGN)

The Department in association with Techbyheart conducted Kerala HackRun, a comprehensive Cyber Security Awareness campaign. On 6 March 2024 a Seminar on Cyber Security Awareness was

conducted. The session was inaugurated by **Shri. P Vijayan IPS**, Inspector General of Police. The sessions were handled by **Mr. Sreenath Gopinath** Director and chairman co-founder Techbyheart, **Mr. Shakeel Ahammed**- Kerala HackRun Captain, **Mr. Dhanoop R.** Associate member at National cyber safety security standards. **Dr. Abraham T. Mathew** Principal, **Fr. John Varghese** Bursar, **Dr. S. Viswanatha Rao** Vice Principal, **Mr. Ramjith R. P.** Assistant Professor in CSE addressed the gathering. Around 240 students of CSED, CT, ECED attended the session. The event was coordinated by **Mr. Ramjith R. P.**, Assistant Professor in CSE.

FOSS CELL ACTIVITIES

FOSS TECH VENTURE AWARENESS SESSION

The FOSS Tech Venture Awareness session, organized by ICFOSS, took place at Vishweshwara Hall on 6 March 2024. **Dr. Abraham T. Mathew**, Principal and ICFOSS Program Head **Mr. Srinivasan R.** delivered the keynote address. The session featured insightful discussions on IoT, Drones, and Cybersecurity. **Jaison Jacob**, **Ajaya Jose**, and **Gopika T. G.** led the discourse on Open IoT, while **Sidharth Mohan Nair** and **Francis Rohan John** covered Open Drone, and **Gokhil A. B.** addressed Cybersecurity. **Dr. S. Vishwanatha Rao**, Vice Principal, facilitated the event. 140 students from various colleges in Trivandrum, participated in the event. The resource persons were honored by **Fr. John Varghese**, Bursar. The faculty coordinators were **Ms. Dhanya L. K.** and **Dr. Priya Mariam** (Asst. Professors, Dept. of CSE), and student coordinators were **Aadhithya S. L.** and **Amritha Manoj** (S4 CT).



ALUMNI GROUP ACTIVITIES

ALUMNUS TALK



The Department organized an alumnus talk on the topic "Pursuing Higher Studies at IITs: Opportunities and Insights" in association with CSI and ACE on 15 May 2024. The session was handled by **Mr. Amal Joe**, Software Engineer at Qburst.

ALUMNUS INTERACTION - SIP

The Department organized an alumni talk by **Mr. Rinse Sambrukutty** (2017-2021 Batch) as part of the Student induction program for the first year CSE (Artificial Intelligence) students.

ALUMNI ACHIEVEMENT

Mr. Amal Joe of CSE(2019-2023 batch) joined IIT Bombay for his higher studies.



Mr. Neeraj Nirmal of CSE(2013-2017 batch) joined University of Cambridge for Masters of Studies in Artificial Intelligence Ethics and Society.



FACULTY ACHIEVEMENTS

PHD AWARDED

Dr. Merlin George, Asst. Prof., Dept. of Computer Science & Engineering, and was awarded with Doctoral degree by NIT Calicut, in August 2024. She also won 1st prize in the Art of Teaching 3.0 competition organized by uLearn.



PROJECT FUNDING

Ms. Devi Priya V. S., Assistant Professor, Department of CSE and **Dr. Sibi Chakkaravarthy** S,VIT-AP is granted with a project funding of Rs 7 Lakhs from the prestigious Center for Hardware Security



CERTIFICATION OF INFOSYS SPRINGBOARD.

Dr. Tessy Mathew, Prof., CSED, **Dr. Jesna Mohan**, Associate Professor, **Dr. Priya Mariam Raju**, **Dr. Neena Raj N. R.**, **Ms. Krishna L.** and **Dr. Merlin George**, Asst. Professors in CSE completed the Certification by Infosys Springboard.

PARTICIPATION IN CONFERENCES/ SYMPOSIA/ WORKSHOPS/ SEMINARS

ATTENDED THE INTERNATIONAL CONCLAVE

Dr. Tessy Mathew (Prof.), **Dr. Jesna Mohan** (Assoc. Prof.), **Ms. Poorna B. R.** and **Ms. Vijitha Robinson** (Assistant Professors), Dept. of Computer Science and Engineering, attended the International Conclave on AI and Robotics for Enabling Healthcare Singularity held on 21 April 2024 at Thiruvananthapuram.

FDP ATTENDED

- **Dr. Tessy Mathew**, Prof. in the Dept. of CSE, participated in the faculty enablement program on Artificial Intelligence Foundation conducted by Infosys Springboard from 24 to 28 June 2024.
- **Dr. Priya Mariam Raju**, Asst. Prof., Dept. of CSE, participated in the Faculty Enablement Program on “**Artificial Intelligence**” conducted by Infosys Springboard from 24 to 28 June 2024.
- **Dr. Tessy Mathew**, Professor, Dept. of CSE successfully completed 415 hrs of Faculty Development Program in Business Analytics got certified by IIT Palakkad and ASAP Kerala with NCVET recognition. The Faculty Development Programme was provided through ASAP Kerala.
- **Dr. Anne Dickson**, Assoc. Prof., CSED, participated in the Faculty Development Program on Network Security Tools and implementations organized by Department of Computer Science and Engineering (Cyber security) at Vimal Jyothi Engineering College, Kannur from 15 to 16 July 2024.
- **Ms. Jisha Jose**, Asst. Professor, Dept. of Computer Science & Engineering completed a 6-day FDP on “**Recent Advancements in machine learning and Deep learning**”, held from 24 to 29 June 2024 organized by Pencil bitz in association with the ministry of MSME, Government of India.
- **Ms. Lino Zachariah & Ms. Deepthi K. Moorthy** (Assistant Professors, Dept. of CSE) attended the one week online Faculty Development Programme on “**Generative AI Models for Engineering Applications**” organized by Dept of CSE, Thiagarajar College of Engineering, Madurai from 1 to 6 July 2024.
- **Ms. Asha S.**, Assoc. Prof., Dept. of CSE, participated in a 40- hours Faculty Development Program on “**Deep learning and its Applications**” sponsored by Ministry of Electronics and Information Technology (MeitY), GoI organized by E ^ ICT Academy, NIT Warangal and Anil Neerukondu Institute of Technology and Sciences (A), Sangivalasa, Vishakhapatnam during 21 to 30 March 2024.
- **Ms. Anjali S.**, Asst. Prof., Dept of CSE attended the Six days FDP on “**Recent Advancements in Machine learning and Deep learning**” organized by Pencilbitz Academy, Ministry of MSME, Government Of India from 24 to 29 June.
- **Ms. Poorna B. R. & Ms. Vijitha Robinson** (Assistant Professors, Dept. of CSE) participated in one week National level Faculty Development Programme on “**Impact of Emerging Technologies in AI/ML and Data Science**” organized by the Department of Computer Science and Engineering, Madanapalle Institute of Technology and Science in association with Computer Society of India, from 26 February to 2 March 2024.
- **Ms. Gayathri K. S.** (Asst. Prof., Dept. of CSE) participated in the One Week National level Online Faculty Development Program on “**Outcome Based Education and Application of Generative AI in Teaching and Research**”, organized by the Internal Quality Assurance Cell (IQAC) of Government College Kottayam, in association with The Kerala State Higher Education Council (KSHEC) from 6 to 13 March 2024 and completed all the tasks, assignments and assessments and secured an A grade.
- **Ms. Asha S.**, Asst. Prof., Dept. of CSE, Mar Baselios College of Engineering and Technology participated in the One Week National level Online Faculty Development Program on “**Outcome Based Education and Application of Generative AI in Teaching and Research**”, organized by the DST-CURIE-AI center of Sri Padmavati Mahila Visvavidyalayam (SPMVV University), Tirupati, in association with IPSR Solutions limited from 18 to 23 March 2024 and successfully completed all the tasks, assignments and assessments and secured an A grade.
- **Ms. Gayathri K. S. and Ms. Jisha Jose**, Assistant Professors, Department of CSE has participated in the Five day online Faculty Development Program on “**Unleashing AI: A Roadway to Intelligent Future**”, organized by the Department of CSE, College of Engineering, Perumon from 1 to 5 April 2024.
- **Ms. Prathibha S. Nair**, Asst. Prof., Department of CSE participated in the One Week National Level Online Faculty Development Program on “**Generative AI Models and Applications of Machine Learning**” from 21 to 25 May 2024 organized by the Department of Computer Science & Engineering at Shri Vishnu Engineering College for Women(A).
- **Ms. Deepthi K. Moorthy**, Assistant Professor CSE Department participated in one week National level online faculty development program on “**Outcome Based Education and Application of Generative AI in Teaching and Research**” organized by DST-CURIE-AI centre of Sri Padmavati Mahila Vishwavidyalayam (SPMVV University), Tirupati in association with IPSR solutions limited from 18 to 23 March 2024.

COMPLETED UHV COURSE

- **Ms. Krishna L. and Ms. Gauri Shree V. K.** Assistant Professors, Department of Computer Science and Engineering, participated and successfully completed the 5- day Online FDP on the theme “Inculcating Universal Human Values in Technical Education” organized by AICTE from 5 to 9 August, 2024.
- **Dr. Anne Dickson**, Assoc. Prof., Dept of CSE successfully completed the 5-day Online FDP on the theme “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education (AICTE) from 11 to 15 March 2024.
- **Ms. Merlin George**, Asst. Prof., Dept of CSE successfully completed the 5-day Online FDP on the theme “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education (AICTE) from 11 March to 15 March 2024.

FACULTY INTERACTION WITH OUTSIDE WORLD VISIT TO CDAC

Dr. Tessy Mathew, Dr. Anne Dickson, Dr. Jisha John and Prof. Raju K. Gopal along with students of Computer Science and Engineering visited CDAC on 6 May 2024 for a discussion on the collaborative project work being done with MBCET.

SERVED AS SESSION CHAIR

- **Dr. Neena Raj N. R.**, Assistant professor, Dept. of CSE served as session chair for Second National Conference on Emerging Technologies in Smart Systems-NCETSS'24 which was organized by Marian Engineering College, Kazhakkootom on 2 May 2024.
- **Dr. Jesna Mohan**, Associate Professor, Department of CSE served as the session chair at the International Conference on FOSS Approaches towards Computational Intelligence and Language Technology (FOSS-CIL T24), organized by International Centre for Free and Open Source Solutions (ICFOSS) held on 21st and 22 March 2024.



REVIEWER AT THE INTERNATIONAL CONFERENCE

Ms. Dhanya L. K. (Assistant Professor, Dept of CSE) was a Reviewer at the International Conference on FOSS Approaches towards Computational Intelligence and Language Technology (FOSS-CIL T24), organized by International Centre for Free and Open Source Solutions (ICFOSS) held on 21 and 22 March 2024.

SERVED AS EXTERNAL EXAMINER

Dr. Tessy Mathew, Professor, Department of CSE was the external examiner for PhD public Viva-Voce at Mahindra institution, Anna University, Chennai on 22 March, 2024.

FACULTY AS RESOURCE PERSON

- **Ms. Jisha Jose**, Asst. Prof., Dept. of CSE has been a resource person for "Familiarisation and Demonstration of 8086 Microprocessor" to semester 4 MSc Physics students on 18.03.2024 in the Dept. of Physics, Mar Ivanios College (Autonomous), Thiruvananthapuram.
- **Dr. Jesna Mohan**, Associate Professor, Department of CSE served as resource person for the Faculty Development Program (FDP) on Deep Learning models and its application organized by Noorul Islam Centre for Higher Education on 21 May 2024.



PAPER PRESENTATION

- **Mr. Madhav Santhosh, Mr. Noel John Robert, Mr. Reuben Vinod Varghese, Mr. Rohaan Renu John** (2020-2024 batch) and **Dr. Tessy Mathew** (Professor, Dept. of CSE), presented the paper titled “Dhwani: Leveraging CNN in an Augmentative and Alternative Communication Solution” in the 2024 Third International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2024), 24 - 26, JULY 2024, Trichy, Tamil Nadu, India.
- **Mr. Adinath Ajith Naik, Mr. Adarsh Joseph Kalief, Ms. Gouripriya S. A., Mr. Raef Abdul Nazir and Ms. Jisha Jose** (Asst. Prof., Dept. of CSE), presented a paper titled “Smart Vehicle Parking Management System Using Machine Learning and IOT” in the 1st International Conference on Applied Artificial intelligence and Machine Learning organized by the Department of CSE, IT, CSE (AI&ML), CSE (DS) and AI & DS at Vignan Institute of Technology and Science, Hyderabad, Telangana, India., held on 30 & 31 August 2024.

PAPER PUBLICATIONS

- **Dr. Tessy Mathew, Dr. Jesna Mohan, Dr. Jisha John, Ms. P. L. Deepa, Dr. Sanjeev V. Thomas** published a book chapter titled **"Malformation Risk Prediction with Machine Learning Modelling for Pregnant Women with Epilepsy"** in Computational Intelligence for Oncology and Neurological Disorders by Taylor and Francis Group.
- **Mr. G. L. Praveen**, Assistant Professor, CSED and **Dr. K. S. Sunil** have presented a paper titled **"On the Complexity Aspects of Various Sub-Classes of Linear Languages"** in the 2024 IEEE 9th International Conference for Convergence in Technology(I2CT), Pune, India (April 5-7, 2024) and published the work in IEEE Xplore.

ACCOLADES WON BY STUDENTS

μLearn MBCET: THE SKILLING BACKBONE OF CATALYST MAR BASELIOS IEDC

MBCET is at the forefront of μLearn, becoming the first to hit 1 lakh Karma Points! Last year, we dominated the leaderboard, earning the prestigious Mu Button Award for reaching 1 million Karma Points. Our alumni continuing to contribute to the μLearn community. Monthly Leaderboard, ranking MBCETians based on the total number of Karma Points earned in a single month, has ranked **Jyothsna P. Nair (S5 CT)** on the top spot, earning 8000+ Karma Points.

ATTENDED CAMPUS IMMERSION PROGRAM AT IIT GUWAHATI

Ms. Elza Sabu, Ms. Sara Robin Baby, Ms. Diya Mathews and Ms. Christy John Tharakan, from S2 CSE attended the IEEE India Council IIT Guwahati Campus Immersion Program 2024 from 26 June to 3 July 2024



POSTER PRESENTATION

Ms. Angel T. John, Ms. Anna Biju Abraham, Ms. Anna G. Samuel, Ms. Vismaya C. P. (S6 CS2) & Dr. Jisha John, (Professor), Department of CSE, presented the poster titled **"Enhancing Stroke Recovery: Rehabilitation with MRI & Predictive Modelling"** at the International Conclave on AI and Robotics for Enabling Healthcare Singularity held on 21 April 2024 at Thiruvananthapuram.



GATE RESULTS

Many final year and passout students of MBCET qualified this year's GATE Exam. **Mr. Amal Joe** (2019-2023 Batch CSE) got AIR 161.



UST (SEMICON VERTICAL) INTERN

Mr. Sijo Ajay, S8 CS2 got selected as UST (SEMICON Vertical) Intern, after clearing the selection process.

INTERNSHIP AT IIT PALAKKAD

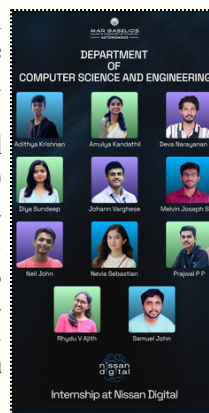
Adlu Rahman (S6 CS1), Abhishek Raman (S6CS1), Samuel John (S6CS2) and Rithin George (S6CS2) got selected as Interns with stipend for the ERP project in IIT, Palakkad.

MERPS INTERNSHIP

Ms. Angel T. John, Ms. Anna Biju Abraham, Mr. Aravind J. L., Ms. Feba Mariam Jacob and Mr. Sam Sudheer, final year students of the Department of Computer Science and Engineering got selection for four months internship at MERP Systems from August to November, 2024.

INTERNSHIP AT NISSAN DIGITAL

The following students of Sixth semester BTech Computer Science and Engineering have been selected for internship at Nissan Digital. **Prajwal P. P., Rhydu V. Ajith, Neil John, Deva Narayanan P. K. (CS2) Adithya Krishnan, Amulya Kandathil, Deva Narayanan P. K., Diya Sundeep, Johann Varghese, Melvin Joseph, Neil John, Nevina Sebastian, Prajwal P. P., Rhydu V. Ajith Samuel John Melvin Joseph (CS1) and Maushmi Rajesh (CS2).**



GTECH MULEARN INTERNS

Seven of our talented students have successfully secured internships in the intern hunt organized by **GTech Mulearn** for the second quarter of the year. Pioneering the movement associated with MuLearn, **Ms. Sona Ponnachen (S6 EC1)** has successfully landed the role of MuLearn District



Lead, Trivandrum. the additional internship roles obtained by our students are **Ms. Maria Sara Raju (S6 EC1) - Operations Intern, Ms. Jyothsna P. Nair (S4 CT) - Operations Intern, Mr. Agnivesh P. S. (S2 CS1) - Graphic & UI Design Intern, Ms. Lekha R. (S6 EC1) - Content Writer Intern, Mr. Niranj R. (S2 CS2) - Graphic Design Intern and Mr. Chris Thomas (S2 CS2) - Graphic Design Intern.**

CSI INAPP INTERNATIONAL STUDENT PROJECT AWARD

The student team from CSE department - **Bryan Bishi, Abraham A. V. and Jins Varghese** bagged the First prize for “**CSI Inapp International Student Project Award**” for their project entitled Smart Waste Bin. **Mr. Praveen G. L.**, Assistant Professor, Department of Computer Science and Engineering guided the team. This was a 6 month long process that involved selecting the best projects from the 200+ projects.

INTERNSHIP

About 191 students have done internships in various companies like UST Global, Gtech Mulearn, Acsia Technologies, Verzeo, Tata Elxsi, Nissan Digital India, Quantiphi, Signify Innovations India Limited etc from March – September 2024. The final year students were also given internship opportunities in the Companies/Organizations like Nissan Digital India, HAL, UST Global, MERP Systems Pvt Ltd, CareStack and IIT Palakkad. As part of the department initiated internship programme, 40 students from the final year batch are currently undergoing internships in TEMT.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

DEPARTMENT ACTIVITIES

INFOSYS SPRINGBOARD CERTIFICATION

Dr. Swapna P. S., Associate Professor, **Mr. Anoop K. Johnson**, **Ms. Deepa P. L.** and **Mr. Jinu Baby**, Assistant Professors, Department of ECE, completed the Artificial Intelligence Foundation Certification and the Artificial Intelligence Primer Certification by Infosys Springboard.

ACCOLADES WON BY STAFF AND STUDENTS

- **Dr. M. J. Jayashree**, Professor, received a Certificate of Appreciation in recognition of her selfless attitude towards all the activities and initiatives taken up for student members' development during AGM 2024 of IEEE EMBS Kerala Chapter on 27 April 2024.
- **Ms. Amritha B. J.**, Assistant Professor and **Mr. Chandramohan B.**, Lab Assistant, were awarded with a design patent for device for detecting sodium benzoate.
- **Ann Mary Biju** (S6 ECE 2) has been selected for the IEEE WIE Scholarship 2023-24 Funded by Quest Global.

- Hackathon 'EDEN 3.0.: The team from MBCET, comprising **Aditya S.** (S6 EC2), **Ferwin Lopez** (S6 CS1), **Gowri S.** (S6 EC2), and **V. Vany Suria** (S6 EC2), secured first place in the hackathon 'EDEN 3.0.' This 24-hour event, hosted by Marian Engineering College, presented multiple problem statements for participants to tackle. Our team chose to develop an employee management system and emerged as the winners, securing first place.

ALUMNI ACHIEVEMENTS

- **Ms Sheethal** 2015-19 EC1 completed graduation from Indian Institute of Management, Udaipur
- **Mr. Udayachandran K.** 2012-2016 EC2 batch got admission at IIT Roorkee for pursuing MBA.

DEPARTMENT ASSOCIATION (E-NIX) ACTIVITIES

- Mini Project Exhibition: eNIX, the electronics association organized the MiniProject Exhibition, on 24 May 2024, in the Dept. of ECE. The exhibition showcased the ingenious mini projects developed by the sixth semester students of Dept. of ECE. The exhibited projects were evaluated by the Chief Guest, **Dr. Naveen S.**, Assistant Professor at LBS Institute of Technology for Women; Currently on deputation at LBS centre as Assistant Director LBS; and Director in Charge, Centre for Excellence for Disability Studies. Faculty Coordinators: **Dr. Swapna P. S.**, **Mr. Anoop K. Johnson** (S6 Mini Project coordinators, ECE), **Mr. Shiras S. N.** (eNIX coordinator).
- e-NIX released E-wave, the Technical magazine of the ECE department on 30 May 2024 by **Dr. Abraham T. Mathew**, Principal. Recent developments in the tech-world, achievements and activities undertaken by the department, literary skills of students and staff have been reflected in the 10th edition of E-Wave.
- ProX-Final Year Project Expo- eNIX, the Electronics Association of MBCET, organized ProX - the final year project expo, on 24 April 2024, in the Department of ECE. The exhibited projects were evaluated by Chief Guest, **Dr. Joseph Zacharias**, HoD, Department of ECE, College of Engineering, Trivandrum. Faculty Coordinators: **Dr. Luxy Mathews**, **Dr.. Ancy S. Anselam** (S8 project coordinators, ECE).

MBCETAA BEST PROJECT AWARDS (2020-24 BATCH)

- Smart Traffic Management System with Density Control, Emergency Override and Pedestrian Crossing. **Akhil Paulton Adem, Diya Narayan, Gauthan G. B., Nandana V. L., Neha A. Thomas**
Guide: **Mr. Jinu Baby**
- LoRaWAN for Smart Campus, **Chris Mathew, Abhishek S. S., Rohan Geo Chacko, Abhiram A. M.**
Guide: **Dr. S. Viswanatha Rao.**

INTEL UNNATI TOOL KIT TRAINING

A five-day Intel Unnati Tool Kit Training (O level certification) was conducted from 8 to 12 July 2024 at the Intel Unnati Data Centric Lab. The training went beyond the basics, exploring Machine Learning on Linux with the Intel® one API ecosystem for accelerated performance. The participants gained server access skills, solidified their Linux foundation, and demystified machine learning algorithms. It was then integrated with hands-on Python exercises using popular libraries and explored using GitHub for project management. This comprehensive program equipped the participants to tackle Machine Learning on Linux with confidence. The session was handled and coordinated by **Dr. Swapna P. S.**, Associate Professor, ECE and **Mr. Jijo Jose**, Assistant Professor, ECE.

IEEE SB ACTIVITIES

MBCET bagged the Best Student Branch Chapter award 2023 during the Annual General Meet held on 27 April 2024 by the IEEE EMBS Kerala Chapter.

FACULTY ACHIEVEMENTS

A certificate of appreciation was presented to **Dr. M. J. Jayashree**, Professor, Dept. of ECE and IQAC Coordinator, Student Activities Chair in recognition of her remarkable contributions to the IEEE EMBS Kerala Chapter Student Activities.



She is continuing as Student Activities Chair and Chair of IEEE EMBS Women in Biomedical Engineering.

FACULTY ACHIEVEMENTS

Dr. Lani Rachel Mathew, Assistant Professor, Department of ECE, was awarded with Best Student-Branch Chapter Faculty Advisor Award 2023.



KSCSTE - IPRICK - SANCTION ORDER FOR WORKSHOP ON IPR

KSCSTE - IPRICK issued a Sanction Order for a grant of Rs. 10,000/- to the college for conducting a Workshop on IPR. **Dr. Lani Rachel Mathew**, Asst. Prof., ECED, will be the faculty coordinator.

PROJECTS /CONSULTANCY WORKS

Name of the Principal Investigator/ Co Investigator (if applicable)	Name of the Funding agency	Year of Award	Funds provided	Duration of the project
Dr. Jayakumari, Dr. Sreedevi P., Ms. Teena Rajan, Mr. Shiras S. N.	UNIVERSITI TEKNOLOGI MALAYSIA	2023	\$ 10000 (Rs.8.2 Lakhs)	Two years
Dr. S. Viswanatha Rao	MBCET (Student project)	2023	Rs. 68,824/-	One year
Mr. Shiras S. N	CERD KTU funding (Student project)	2024	Rs. 32500/-	One year
Dr. Vineetha Mathai	CERD KTU funding (Student project)	2024	Rs. 27,500/-	One year
Mr. Jijo Jose	MBCET	2023	Rs.1,33,000/-	Two Years
Dr. J. Jayakumari, Mr. Jijo Jose	MBCET	2023	Rs. 1,60000/-	One Year

WORKSHOPS/FDPS ORGANIZED

As part of campus wide MatLab license, Mathworks conducted three days Faculty Training on UAV from 9 to 12 July 2024. 20 Faculty Members from various Departments participated in this event. **Mr. Venkatesan Seetharaman**, Sr. Engr, Mathworks was the resource person. Co-ordinator: **Ms. Deepa P. L.**, Assistant Professor.

INVITED LECTURES ORGANIZED

- Organized a one-hour career guidance session on 'Career Guidance for Higher Studies/ opportunities for ECE' for S7 ECE students on 18 August 2024 by **Dr. Jayaram V.**, director, CGP career avenues. **Mr. Niyas K. Haneefa**, Assistant Professor, ECED, coordinated the session.
- Organized a career guidance session on 'Career Guidance for Higher Studies' for S7 ECE students on 9 August 2024 by **Mr. Ajay Nayar**, Head of Academics, TIME Institute. **Mr. Niyas K. Haneefa**, Assistant Professor, ECED, coordinated the session.
- The ISTE MBCET Faculty Chapter organized a session titled "Art to release, relax, and recharge" for the faculty members of MBCET on 01st April 2024. **Ms. Nincy Mariam Mondly**, a



Psychologist from Pallium India, was the guest speaker. The event was coordinated by **Ms. Amritha B. J.**, Asst. Prof. Dept. of ECE, and **Ms. Poorna B. R.**, Asst. Prof. Dept. of CSE.

IEEE SPS TALK



As part of Distinguished Lecture Programme (DLP) of IEEE, IEEE Signal Processing Society of MBCET SBC organized a talk on "Seizure Monitoring of Patients with Epilepsy using a Single Wearable EEG Sensor" by **Dr. John Mathews**, Prof., Electrical Engineering and Computer Science, Oregon State University, U. S. on 8th April 2024.

INVITED TALK

Mr. Arun J. S. Assistant Professor, Department of ECE delivered an invited talk on "**Design Thinking**" in the LEAP Entrepreneurship State Summit organised by the Directorate of Industrial Training, Government of Kerala on 12 June 2024.

PUBLICATIONS

JOURNALS

J. L. Lakshmi, J. Jayakumari, "A reduced complexity rate matching and channel interleaver/de-interleaver for 5G NR," Engineering Research Express, vol.6, April 2024 (Scopus Indexed)

PAPERS PRESENTED

- Ms. Deepa P. L.**, Asst. Prof., Dept. of ECE, presented a paper titled A Hybrid Vision Transformer Model Using ResNet152 for Brain Tumor Classification in 1st IEEE International Conference on "Smart Power Control and Renewable Energy" in 1st IEEE International Conference on "Smart Power Control and Renewable Energy" (ICSPCRE-2024) organized by Dept. of Electrical Engineering from 19 to 21 July 2024.
- Lakshmi J. L., Jayakumari J.** presented a paper titled A Hardware Efficient Implementation of Sub-Block Interleaver for Polar Codes in 5G NR in International Conference on Advancements in Power, Communication and Intelligent Systems (APCI) 2024, IEEE Kerala Section.
- Alin Mariam Solomon, Jayakumari J.** presented a paper titled Improving User Satisfaction for Next Generation CRN using Utility

Proportional Fairness based Resource Allocation Approach in International Conference on Advancements in Power, Communication and Intelligent Systems (APCI) 2024, IEEE Kerala Section.

BOOK CHAPTER PUBLISHED

Ms. Teena Rajan, Assistant Professor published, Department of ECE published a book chapter titled "**Multi-dimensional Characterization Methods for Conductive Fabric Materials: Enabling Ai-enhanced Healthcare Applications**" in Futuristic Trends in Artificial Intelligence e-ISBN: 978-93-6252-759-2 IIP Series, Volume 3, Book 8, Part 4, Chapter 7.

MOOC COURSES, FDP, WORKSHOP, SEMINAR ATTENDED

Sl. No	Faculty	Details of Training Programme
1	Dr.M.J.Jaya shree	attended a Two day National Level Online Workshop for IQAC Coordinators titled "Strategies to strengthen the institutional capacities for Quality, Ranking and Accreditation" on 4 and 5 April 2024 conducted by Institute for Academic Excellence (IAE).
2	Dr. Ancy S. Anselam and Dr. Swapna P.S	participated in the One Week National level Online Faculty Development Program on Outcome Based Education and Application of Generative AI in Teaching and Research, organised by the Internal Quality Assurance Cell (IQAC) of Gauhati University, Assam in association with ipsr solutions limited from 17 to 24 April 2024
3	Ms. Teena Rajan	completed the training in the Division of Medical Instrumentation, BMT wing of SCTIMST, Trivandrum from Jan to May 2024
4	Mr. Shiras S.N.	attended Five Day FDP cum Hands on Workshop on Wireless Communication Technologies for Beyond 5G Systems from 24 to 28 June 2024, organized by Dept. of ECE , Indian Institute of Information Technology Kottayam
5	Mr. Sherry Varghese George	attended Five Day FDP cum Hands on Workshop on Wireless Communication Technologies for Beyond 5G Systems from 24 to 28 June 2024, organized by Dept. of ECE ,Indian Institute of Information Technology Kottayam

Sl. No	Faculty	Details of Training Programme
6	Mr. H Aravind Sarma	attended FDP on Engineering Next-Gen materials organized by The Dept. of S&H, MBCET from 18 to 22 June 2024

IIC TECH TRANSFER REGIONAL MEET ATTENDED

Mr. Jijo Jose and Mr. Sherry Varghese George, Assistant Professors, Department of ECE attended IIC Tech Transfer Regional Meet of Indovation Center Kerala held at the St. Thomas Institute for Science and Technology on 26 June 2024.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

DEPARTMENT ACTIVITIES HYKON PRODUCT DEVELOPMENT CENTRE INAUGURATION

Hykon India Product Development Centre at MBCET was inaugurated on 11 March 2024 to bridge the gap between industry and academia. The centre was inaugurated by His Excellency Most Rev. Dr. Mathews Mar Polycarpus, Auxiliary Bishop of the Major Archdiocese of Trivandrum, Malankara Catholic Church. Fr. John Varghese, Bursar presided over the function. Dr Abraham T. Mathew, Principal, welcomed the gathering. Mr. Christo George, Founder, Chairman and Managing Director of Hykon India Ltd. gave an overview on the collaboration between Hykon India Ltd. and MBCET. Dr Elizabeth Varghese, HoD, Department of EEE proposed the vote of thanks.

BLESSING OF NEW COMPUTER LAB OF EEE DEPT.



On September 5, 2024, the EEE Department marked a significant milestone with a blessing ceremony for its new Computer Lab in C-300. This event celebrated the lab's launch, which includes 65 systems—one for faculty and 64 for students. Notably, 5 of these systems are equipped with i5 processors to handle demanding tasks, while the remaining 60 feature i3 processors.

WORKSHOP CONDUCTED

A Two days MATLAB Awareness Session was organized for the students of S5 Electrical and Electronics Engineering (EE) and S5 Electrical and



Computer Engineering (EL) by CoreEL Technologies on 14 and 15 September 2024. The session aimed to enhance students' proficiency in MATLAB, a crucial tool in Engineering fields. The event was coordinated by Dr. Sheryl Arulini and Mr. Midhun Gopakumar, Assistant Professors of the Dept. of EEE

TRAINING SESSION UNIVERSAL HUMAN VALUES



An UHV training session was organised for the faculties on 27 March 2024 at Faraday Hall. Resource person was Dr. S Ushakumari, Prof. & Dean, Corporate Relations. She is also the Resource Person of AICTE on Universal Human Values.

ATTENDED THE UHV PROGRAM

Dr. Ushakumari S., Dean Corporate Relations and Professor, EED, attended the UHV program held at SRM University, Chennai from 1 to 8 May 2024. The program was sponsored by AICTE.

INDUSTRIAL VISIT



42 Students of S6 EE and Mr. Aswin R B, Assistant Professor, EED, visited Adani Vizhinjam Port Pvt Limited, on 4/5/24 as a part of their Industrial Visit.

NEW CHARGES IN EED

The new roles of Senior level functionaries were announced in the College Executive Council meeting held on 30 May 2024. Dr. Nisha G K., Professor, EED, entrusted with the role of IQAC Coordinator, Ms. Sojy Rajan., Asst. Prof., EED was assigned as Assistant Dean Alumni Affairs and Ms. Shyju Susan Mathew, Asst. Prof., EED was selected to serve as TLC coordinator.

NEW TECHNICAL STAFF

Mr. Mohammed Thasleem A joined as Lab Assistant in the Department of Electrical and Electronics Engineering on 04 September 2024



INTERACTION WITH OUTSIDE WORLD

PROJECT PRESENTATION AT KSEB LTD.

The project "Smart Demand Response for Consumers" by **Archit S Thampi, Muhammad Faris, Nevin Thomas John, and Sravan A R** was presented to Kerala State Electricity Board (KSEB) Ltd officials, who praised its innovative approach to optimizing energy consumption. Guides: **Mr. Ayush Vijayan** and **Ms. Neetha Chandran** Assistant Professors. **Dr. Nisha G K**, Professor, EED, also attended the session.



IPR CENTRE AND STARTUP CELL INAUGURATION

Dr. Shalu George, Associate Professor in the Electrical Engineering Department (EED), and **Yash Chhalotre** from S4 EL attended the



inauguration of the IPR Centre and Startup Cell organized by APJ Abdul Kalam Technological University on 19 June 2024, at Mascot Hotel in Thiruvananthapuram. **Yash Chhalotre** served as one of the Technical Volunteers for the event. **Dr. Shalu George** was one of the 50 invited faculty members from the university's affiliated colleges.

ILLUMINA ACTIVITIES

Illumina displayed a motivational video on the life story of **Steve Jobs** as a part of promoting best practices in the Department on 15 March 2024.

BOOK DONATION CAMPAIGN

Illumina, The Association of Department of Electrical and Electronics Engineering in association with NSS MBCET celebrated National



Reading Day on 19 June 2024. As an outreach activity, around 100 books were donated to the students of St. Goretti School, Nalanchira. The students were directed to read the books and write a short review on the same. The best review will be awarded cash prize.

SPACE WEEK CELEBRATIONS

As part of space week celebrations Illumina, the Association of Electrical and Electronics Engineering department organised 5 events.

Event 1 & 4 : Knowhere (Phase 1 And 2)

Knowhere was the first event which is a quiz competition based on space and its happenings. The event was jointly organised by Illumina, the



Association of Department of Electrical and Electronics Engineering and E-Nix, the Association of Department of Electronics and Communication Engineering with Space Club, MBCET. The student coordinators of the event were **Ann Santhosh** and **Rohin Sabu** of S7 ECE and **Arif A, Abhishek A** and **Adithya S** of S5 EEE. The faculty coordinators were **Ms. Manju Sreekumar** and **Ms. C. Sojy Rajan**, EED and **Ms. Swapna P. S.** and **Ms. Shiras S. N.** ECE. 1st prize was secured by **Merlin Reji** and **Jishnu E.V.**, 2nd prize: **Elvis Mathews** and **Bhavya R. Biju** and 3rd prize: **Avin J.** and **Udith Krishna**.

Event 2: Universe In A Nutshell

The event was a lecture session handled by **Mr. Adithya S.**, student of S5 EEE, MBCET. The event was organised by Illumina, Association of



Electrical and Electronics Engineering along with the Space Club of MBCET. The co-ordinators of the event were **Adithya S.**, S5 EEE along with the faculty coordinators, **Ms. Manju Sreekumar** and **Ms. C. Sojy Rajan**, Dept. of EEE.

Event 3: Adhara

Adhara was the second and most eye-catching event of the series including space model exhibitions of all the well renowned missions



performed by space centres across the world, hosted by the students of S5 EEE. The event was inaugurated by **Rev. Fr. John Varghese**, Director, MBCET and **Dr. S Viswanatha Rao**, Principal, MBCET. The models were hand made by the students of S5 EEE with the help and support from the faculty coordinators, **Ms. Manju Sreekumar**, **Ms. C. Sojy Rajan** and **Ms. Shilpa Susan Peter**. The students selected renowned space missions and created precise replicas of them within a time span of 3 days. The models included PSLV, GSLV, Starship, Falcon Heavy, S1 Block, Lander, Saturn V,

Chandrayaan Rover, Aryabhata, etc. The Expo was open to all students and faculty at MBCET and featured two main attractions: the detailed models of various space missions and a digital showcase that included the sounds of different planets, a live trajectory view of satellites from NASA, and other informative videos about rocket science. The event also had a special book exhibition.

Team Members: **Rakesh R., Adithya S., Abhishek A., Abhinav S. B., Adil N., Adithyan Ganesh, Adithyan R. J., Amal Nazerudin, Gokul**



Krishna S. M., Prithvi M., Akarsh A., Harishankar A. S., Arif A. and Devika C. The event centred on students' opinions about various space-related books and movies. It featured discussions on space-themed movies and literary reviews of books related to space. Faculty coordinators: **Ms. Manju Sreekumar, Ms. C. Soji Rajan.**

ILLUMINA TALK ON GATE

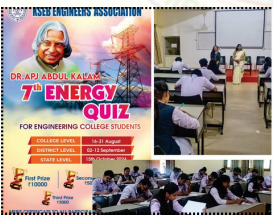
Illumina, Association of the Department of EEE, organized a **talk on GATE 2025** for S5EE students on 21 August 2024 and for S5EL students on 04 September



2024. **Mr. Jararaman V.,** HR Head and Advisor, CGP Career Avenues, TVM was the resource person.

DR. APJ ABDUL KALAM 7TH ENERGY QUIZ

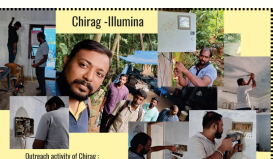
College level competition of the Dr. APJ Abdul Kalam 7th Energy Quiz was coordinated by Illumina, the Association of the Department of EEE on 6 September 2024 in Faraday



Hall. **Ms. Sreelekshmi L.,** Asst. Eng., and **Ms. Pushpalatha,** Asst. Exec. Eng., KSEB conducted the quiz. 26 students participated in the event.

OUTREACH ACTIVITY

Chirag, the outreach wing of Illumina, association of Dept of EEE successfully completed the electrification work of a house costing



Rs. 29,000/-. The work was completed on 17 July 2024. The complete work was carried out by the **Mr. Rajeev Mon, Mr. Ratheesh Kumar V. S., Mr. Midhun Gopal, Mr. Anand B. H., Mr. Arun N., Mr. Vijil Francis, and Mr. Santhosh R. S.,** Technical Staff of Dept. of EEE.

POST GRADUATE PROGRAMME (FACULTY)

Mr. Midhun G, Asst. Prof., EED, completed Post Graduate Program in association with Great Lakes Institute of learning on Topic



“Electric Vehicle Technology” with Excellent Grade.

MATLAB FOR ENGINEERS: AN EXPERIENTIAL LEARNING

A National Event organized by Department of Electrical & Electronics Engineering, Manipal Institute of Technology in association with Mathworks selected



four of our faculty members, **Ms Sheenu P, Ms Shyju Susan Mathew, Ms Revathy K P and Ms Neetha Chandran** (Asst. Prof., EED) as best participants. They are among 25 best participants selected from the 230 online participants. The course was conducted in online mode from 18 June to 20 July 2024.

FACULTY CONTRIBUTIONS

FACULTY AS RESOURCE PERSON

- Mr. Anil J,** Asst. Prof., Dept. of EEE was invited as **Chief Guest and Resource Person** for the National Level Technical Symposium on



Big Data Analytics and Artificial Intelligence (**ALACS '24**) organised by Department of Computer Science, St Alphonsa College of Arts and Science, Soosaipuram, Karinkal, Tamil Nadu on 20 March 2024

- Dr. Dishore S V,** Asst. Prof., Dept. of EEE was invited as **Keynote Speaker** for the International



Conference on Modern Trends in Engineering and Management (**ICMTEM**) organised by Department of Electrical and Electronics Engineering, Stella Mary's College of Engineering in association with AB Technologies Nagercoil on 2 April 2024.

- **Mr. Sheryl Arulini**, Asst. Prof., EED was invited as the speaker for the Webinar on “**Cyber Security Challenges in Smart Grid**” organized by the Department of Electrical and Electronics Engineering, Mangalam College of Engineering on 1 May 2024.
- **Dr. S Ushakumari**, Professor and Dean, Corporate Relations, has been the **Resource person** for the Faculty Development Programme organised by Bishop Jerome Institute on 9 July 2024.
- **Dr. Ushakumari S**, Professor and Dean- Corporate Relations, MBCET served as the **resource person** for the **3 days workshop on Basic Human Aspirations and its fulfilment** organised by HRD Cell of Government Engineering College, Thrissur.

SESSION CHAIR

Mr Anil J., Asst. Prof., EED chaired a Technical session in the International Conference on Circuit Power and Computing Technologies (**ICCPCT 2024**) organized by Baselios Mathews II College of Engineering, Sasthamcotta, Kollam. He was also one of the **Technical reviewers** for the conference.

EXPERT TALK



Dr. Dishore S. V., Asst. Prof., Dept of EEE delivered a session on “How to Write an effective Research Article” on 20 March 2024 for final year Electrical and Electronics students. He delivered also a session on “How to Write an effective Research.

WORKSHOPS ATTENDED

- **Mr. Anil J.** and **Ms. Neetha Chandran**, Assistant Professors from EEE Department attended a workshop “**Digital Defenders- Strengthening Security Awareness**” by Digital University Kerala hosted at Mar Baselios College of Engineering and Technology on 18 March 2024.,
- **Ms. Vrinda Prasad**, Asst. Prof., EEE Department attended a Two days Training Program “**PoSH – Prevenson of Sexual Harassment at workplace**” on 18 and 19 March 2024 at KTDC Grand Chaitram, organised by Tourism Department. Govt of Kerala.
- **Dr. Dishore S. V.**, Asst. Prof., EED participated in the SPARC sponsored workshop on
- “**Renewable Energy based Electric Vehicle Technology**” conducted at National Institute of Technology Tiruchirappalli during 11 to 15 March 2024. He participated in the workshop on “**Micro-grid Systems, Simulations and Implementation using MATLAB**” organized by the Department of Electrical and Electronics Engineering, Amal Jyothi College of Engineering, Kanjirappally from 22 to 26 July 2024.

PAPER PRESENTATIONS

- **Ms Revathy K P**, Asst. Prof., Dept. of EEE presented a paper titled “**Powering the Future: A Comprehensive Review on DC-DC Converters and their Vital Role in Electric Vehicle Technology**” in 4th International Conference on Artificial Intelligence and Smart Energy (ICAIS 2024) 22 to 23 March (Springer), 2024 , organized by JCT College of Engineering and Technology, Coimbatore.
- **Ms. Surasmi N L**, Asst. Prof., EED presented paper titled “**Grid Integrated Hybrid Renewable Energy System for Power Quality Improvement using Open End Winding Transformer**” in 2024 International Conference on E-Mobility, Power Control and Smart Systems (ICEMPS 2024) at MBCET.
- **Rahul R. S.** of 2019- 23 B. Tech. batch presented paper titled “**Closed Loop Speed Control of BLDC motor using Flyback Converter for Electric Vehicle Applications**” in 2024 International Conference on E-Mobility, Power Control and Smart Systems (ICEMPS 2024) at MBCET. The paper was co-authored by **Ms. Surasmi N. L.** (Asst. Prof., EED), **Anjana S.**, **Titto S. Babu** and **Vignesh S. S.**
- **Dr. Nisha G. K.**, Prof., EED, presented paper in 2024 International Conference on E-Mobility, Power Control and Smart Systems (ICEMPS 2024) held at MBCET from 18 to 20 April 2024.
 - **Mr. Chinmay Krishna S.** and **Dr. Nisha G K.**, “**Review of Autonomous Mobile Robots**”
 - **Mr. Praveen O.** and **Dr. Nisha G. K.**, “**Closed Loop Control of Three Level NPC Induction Motor Drive for Water Pumping Application**”
 - **Ms. Sandhya P.**, **Dr. Nisha G. K.** and **Ms. Aiswarya S. S.**, “**Charging Up the Future: Capacitive and Inductive Wireless Power Transfer**”
 - **Mr. Vaishnav Dev B.**, **Ms. Mayoorika Venu**, **Mr. Vivin John Thomas**, **Mr. Tomin J. S.**, **Ms. Sandhya P.** and **Dr. Nisha G. K.**, “**Industrial Automation and Implementation of Coconut Breaking System**”

- **Mr. Anil J.**, Asst. Prof., EED presented a paper titled "**Literature Survey on Face Recognition of occluded Faces**" in the International Conference on Circuit Power and Computing Technologies organized by the Baslios Mathews II College of Engineering, Kollam held on 8 and 9 August 2024

FDP/STTPS ATTENDED

- **Dr. Nisha G. K.**, Prof., EED, **Ms. C. Sojy Rajan**, **Ms. Surasmi N. L.**, **Ms. Shyju Susan Mathew**, **Ms. Sandhya P.** and **Ms. Revathy K. P.** Asst. Prof., EED attended 5 days online FDP on "**Opportunities on Power Electronics for Smart Grid, Renewable Energy and Electric Vehicles**" from 26th Feb to 1 March 2024 organized by Department of Electrical and Electronics Engineering, SCMS School of Engineering and Technology.
- **Ms. Manju Sreekumar**, Asst. Prof., EED attended a 3 day FDP on "**Automotive Autosar in Embedded Systems**" organized by SMEC Automation at Kochi from 29 Feb to 2 Mar 2024.
- **Dr. Nisha G. K.**, Prof., EED, **Ms. C. Sojy Rajan**, **Ms. Surasmi N. L.**, **Ms. Shyju Susan Mathew**, **Ms. Sandhya P.** and **Ms. Revathy K. P.** Asst. Prof., EED attended 5 days online FDP on "**Opportunities on Power Electronics for Smart Grid, Renewable Energy and Electric Vehicles**" from 26 Feb to 1 March 2024 organized by Department of Electrical and Electronics Engineering, SCMS School of Engineering and Technology.
- **Ms. Manju Sreekumar**, Asst. Prof., EED attended a 3 day FDP on "**Automotive Autosar in Embedded Systems**" organized by SMEC Automation at Kochi from 29 Feb to 2 Mar 2024.
- **Dr. Nisha G. K.**, Prof., EED, **Ms. Sandhya P** and **Mr. Aswin R. B.**, Assistant Professors EED successfully completed the 5 days **Faculty Development Program (FDP) on Electric Vehicles** organized by the Human Resource Development Centre (HRDC) of APJ Abdul Kalam Technological University from 13 to 17 May 2024.
- **Dr. Shalu George K.** (Assoc. Prof., EED), **Ms. Manju Sreekumar**, **Ms. Sandhya P.**, **Ms. C. Sojy Rajan**, **Ms. Shyju Susan Mathew**, **Ms. Surasmi N. L.**, **Ms. Revathy K. P.**, **Mr. Anil J.**, **Ms. Neetha Chandran** and **Mr. Ayush Vijayan** Assistant Professors, EED participated in the 5 days FDP on "**Engineering Next- Gen Materials**", organized by the Department of S & H, MBCET which was held from 18 to 22 June 2024.
- **Mr. Anil J.**, Asst. Prof., EED attended a 5 days Faculty Development Program on "**Publishing in High Impact Scopus, SCI and SCIE Indexed Journals**" organized by Gokul Global University, Siddhpur in collaboration with Nucleus of Learning and Development from 24 to 29 June 2024.
- **Dr. Nisha G. K.**, Prof., EED, **Ms. Surasmi N L** and **Mr. Anil J** Assistant Professors, EED attended a seminar on the topic "**Hydrogen Energy for Sustainable Future**" organized by the Department of Electrical and Electronics Engineering, MES College of Engineering, Kuttipuram from 08 to 12 July 2024
- **Ms. Shyju Susan Mathew**, **Ms. Sheenu P.**, **Ms. Revathy K. P.**, **Dr. Sheryl Arulini**, **Ms. Neetha Chandran** and **Ms. Parvathy C. J.**, Assistant Professors, EED has participated in the national level online event "**Matlab for Engineers: An Experiential Learning**" organized by Department of Electrical and Electronics Engineering, MIT-Manipal in association with Mathworks India Pvt Ltd from 18 June to 18 July 2024
- **Ms. Shyju Susan Mathew**, **Ms. Surasmi N. L.**, **Ms. Shilpa Susan Peter**, **Dr. Dishore S V**, **Ms. Vrinda Prasad**, **Ms. Neetha Chandran** and **Ms. Parvathy C. J.**, Assistant Professors, EED has participated in the **Mathworks training on Simulink and UAV Control for MBCET** organized by Mathworks Training Services from 9 to 11 July 2024.
- **Ms. Revathy K. P.**, Asst. Prof., EED participated in the Faculty Development Programme on "**AI @ Energy Efficiency**" organized by the Department of Electrical and Electronics Engineering, Vimal Jyothi Engineering College from 26 to 28 June 2024.

SEMINARS ATTENDED

- **Mr. Anil J.**, Asst. Prof., EED attended 2 days seminar on **Quantum Machine Computing Approach to Identify Natural Calamities and Environmental Issues** sponsored by Science and Engineering Research Board and organized by Baslios Mathews II College of Engineering held on 24 and 25 of April 2024.
- **Dr. Nisha G K**, Prof., EED and **Ms. Surasmi N L**, Assistant Professor, EED attended a seminar on the topic "**Climate Change and Energy Conservation**" as part of 32nd Foundation Day celebration activities of **Energy Conservation Society (ECS)** at Press Club, Trivandrum on 8 July 2024.

WEBINARS ATTENDED

- **Dr. Nisha G K**, Prof., EED participated in the webinar on **Institutional Preparedness for Accreditation & Ranking Framework**, organized by MasterSoft & IQAC, Baba Farid University of Health Sciences, Faridkot, on 24 July 2024
- **Dr. Nisha G K**, Prof., EED participated National Webinar on **The Indian Knowledge Systems (IKS)** organized by MasterSoft in association with Malwanchal University, Indore on 08 August 2024

RESEARCH PAPERS/PUBLICATIONS

- **Ms. Revathy K P**, Asst. Prof., EED published a paper entitled **"Powering the Future: A Comprehensive Review on DC-DC Converters and Their Vital Role in Electric Vehicle Technology"** in Springer Information Systems Engineering and Management as Proceedings of 4th International Conference on Artificial Intelligence and Smart Energy ICAIS 2024.
- **Dr. Dishore S. V.**, Asst. Prof., EED published a SCI journal entitled **"A modular multiport Landsman converter-driven hybrid EV charging station with adaptive power management system."** in Computers and Electrical Engineering 118 (2024): 109422. Q1 journal impact factor:4.

STUDENT ACHIEVEMENT

- **Aathish R. Viswam**, **Amal S.**, **Vishnu S.** S4 EL and **Krishna Prasad** S4 CS attended a 24-hour Software Hackathon from March 1, 2024, to 2 March 2024 held at KMCT College of Engineering, Kozhikode.
- **Sarang G. S.** S7 EE was selected as **IEEE PES DAY 2024 Brand Ambassador**. 
- **Rohan U. S.** S8 EE2 won the **Best ISTE Student Award**. 
- **Dimal George John** and **Anjith S M** from S8 EE1 qualified in **GATE 2024**.  
- **Abhav Rajit Nair** and **Elvis Mathews Olickal**, S2EL won **MUN Award** under the category **Honorable Mention**. **Yash T L Chhalotre**, S4EL won **MUN Award** under the category **Special Mention**. 
- **Abhav R. Nair**, Student, S3EL was selected as chair at **TMUN 2024** (Tomorrow Model United Nations) in the committee **ECOFIN**. 

- **Abhav R. Nair**, student, S3EL won High Commendation representing The United States of America in UNGA DISEC Committee at University College Model United Nations, Palayam.



- In observance of **Anti-Ragging Day** on 12 August, followed by Anti-Ragging Week from 12 to 18 August, the UGC and Centre for Youth (C4Y), the UGC

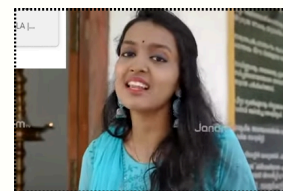


National Anti-Ragging Monitoring Agency, suggested various events at college level and organized National Contest 2024 for students: Contest 1 - Instagram Threads Digital Poster Making; Contest 2 - Instagram Reel Making; and Contest 3 - YouTube Video. **Mohammad Afroz A.** S5 EL participated in Instagram Reel Making Contest and was selected as one among 23 finalists from 3290 entries from 23 States of India.

- **Adithyan Ganesh** S5EE has been selected as **Trivandrum Regional Coordinator** of the Natural Resource Protection Force (NRPf) NSS Cell of APJ Abdul Kalam Technological University for the AY 2024-25.



- **Devapriya S.** S5EE performed on **Janam TV** in connection with Ayyankali Jayanthi on 28 August 2024.



- The recent **Ideathon on "Ethical AI,"** hosted by Kerala University of Digital Science, Innovation and Technology in collaboration with the Mozilla Foundation, highlighted exceptional talent and innovation. Of the 26 teams competing, nine hailed from MBCET, underscoring



the institution's significant role and contribution to the event. The event attracted a diverse group of competitors, including PG students and professionals from various fields. The **second prize** was awarded to **Yash Chhalotre** (S5 EL) and **Anand Pillai** (CS), while **Manuraj M S**, **Hanok Samuel Boban** and **Navin Tom Babu** (S3 EL) earned the **fourth prize**.

PAPER PRESENTATIONS (STUDENTS)

- Students from the Dept. of Electrical and Electronics Engineering actively participated in the **National Conference on Education, Environment, Economy 2030 - Focussing on the Marginalized** from 14 to 15 March 2024 jointly organised by Mar Ivanios College (Autonomous), St John's College, Anchal, Mar Theophilus Training College, Mar Baselios College of Engineering and Technology, Mar Gregorius College of Law, MCA Major Archdiocese of Trivandrum, Malankara Social Service Society in collaboration with Kerala State Higher Education Council, Govt. of Kerala.
- Aathish R. Viswam**, **Amal S** and **Vishnu B. S.**, S4 EL presented a paper on 'Focus Minder - Enhancing Productivity and Collaboration'
- Yash T. L. Chhalotre**, S4 EL presented a paper on a Dynamic Traffic light system with adaptive morphology.
- Jenifer Alosious** S8 EE1 presented a paper on Smart charging on electric vehicles.

PROJECT EXHIBITION



The Association of Electrical and Electronics Engineering, Illumina, conducted Project Expo of the final year B. Tech students on 23 April 2024. The judges of the event were **Dr. Bobby Philip**, Joint Director, Planning and Development, KTU and **Dr. Arvind P.**, Asst. Prof, Dept. of ME, MBCET. A

cash prize of Rs. 3000 was awarded to the winners. First place from S8EE1 was secured by the project titled "Satellite Tumbling Control Using Magnetorquers". Team members: **Advait P. S.**, **Malavika S.**, **Merin Anna John**, **S. Meenakshi**. From S8EE2, the first place was secured by the project titled "Real-Time Data Acquisition System for Transformers Using IoT". Team Members: **Ram Abhishek C. S.**, **Sanjay S. S.**, **Farsana Rafi**, **Devika S. Ajith**.

DEPARTMENT OF MECHANICAL ENGINEERING

DEPARTMENT ACTIVITIES

OFFROADS '24



OFFROADS'24, the prestigious Auto-show organised by Automata in association with the Dept. of ME, MBCET was held on 20 April 2024 (Saturday) at the College premises. The event was formally inaugurated by **H. H. Prince Avittom Thirunna Aditya Varma** in the presence of **Fr. John Varghese Palanilkunnathil** Bursar, **Fr. Thomas Mukalumpurathu** Asst Bursar, **Dr. Abraham T. Mathew** Principal, **Dr. S. Viswanatha Rao** Vice Principal and student convenor **Mr. Sooraj Menon**. The autoshow featured 50+ cars and bikes from various segments. It also had automobile exhibitions. Faculty coordinators of the show: **Mr. Ayswer A. S.**, **Mr. Ajeesh M. V.** Asst Professor's, MED.

FDP ON 'FRONTIERS OF MECHANICAL ENGINEERING: HARNESSING THE POWER OF AI, ML AND IOT' CONDUCTED



A Six Day Hybrid Workshop on 'Frontiers of Mechanical Engineering: Harnessing the power of AI, ML and IOT' jointly organized by Department

of Mechanical Engineering and ISTE MBCET Chapter, in association with ISTE Kerala Section and Universiti Teknologi MARA (UiTM) was conducted from 06 to 11 May 2024. Topics included AI, Mechatronics and automation, data science and modelling, ML, IoT and Python. Participants visited IBS centre in Technopark on the 3 days of the workshop as part of industrial visit. **Dr. Nidhi M. B.**, Professor and **Ms. Ruby Maria Syriac**, Assistant Professor, Department of Mechanical Engineering were the Coordinators.

TALK ON HIGHER EDUCATION OPPORTUNITIES IN UK



A Session on Higher Education Opportunities in UK was taken by **Dr. Ahmed Onsy**. He is a Professor of Mechatronics and Intelligent Systems Engineering at the University of Central Lancashire (UCLan), who contributes to research within the area of Maintenance and Intelligent Machines (Tribotronics) and is a member of the Jost Institute for Tribotechnology. The guest was welcomed to the Department by **Dr. K Muraleedharan Nair**, Professor & Dean (Administration). The talk was organised by Department Placement Cell led by **Dr. Nidhi M. B.**, Professor, MED.

YANTHRA 24 - PROJECT EXPO

An exhibition showcasing the works done by the final year ME Dept. students was conducted at the Mechanical Dept Block on 17 May 2024. The exhibition was formally inaugurated by **Fr. John Varghese Palanilkunnathil**, Director in the presence of **Dr. S. Viswanatha Rao**, Vice Principal and **Dr. Remil George Thomas**, Head of MED. 17 projects were put as exhibits, comprising of fabrication works and simulation works. Project faculty coordinators of this expo were **Dr. Vinod V.** and **Dr. Rajesh T. N.** The project titled "Monopropellant cold rocket thruster" by the group of **A. B. Gouri**, **Aiswarya Mohan D.**, **V. S. Savio** and **Vignesh K.** guided by **Dr. K Muraleedharan Nair**; "Sustainable E-bike for urban logistics" by **Sooraj Menon**, **Sreekanth M. R.**, **Dan Mathew Philip**, **Umesh M. Chandran** and **Jovan Mathew Thomas** guided by **Dr. Arvind P.**; both these projects shared the best Expo Project Award.

EXPERT TALK

ME Dept. Placement cell and Dept. association Automata organised a talk on the topic 'Opportunities in Administrative Services' for the final and pre final year students on 14 August 2024. The talk was organised by **Dr. Nidhi M. B.**, Professor, MED. Resource person: **Mr. A. U. Prasad**, Head of Top Notch IAS.



TRAINING PROGRAMME FOR STUDENTS



43 students from first year ME, CE and CS had taken part in the 5 days of Internship training programme in Automotive Engineering at Jayamatha ITI, Nalanchira in association with the Department of Mechanical Engineering, scheduled from 24 to 28 June 2024. Certificates were given to the students who successfully completed the training.

PHD AWARDED

Mr. Arun M. G., Asst. Professor, MED, successfully defended his PhD thesis at NIT Calicut, titled "Aerodynamic noise characteristics of circular, non-circular, and tandem configuration cylinders in the subcritical flow regime", under the guidance of



Dr. T. J. Sarvoththama Jothi, Associate Professor NIT-C on 22 July 2024.

NEW FACULTY RESPONSIBILITIES

- **Dr. Rajesh T. N.**, Professor, MED has been appointed as Dean (Student Affairs).
- **Dr. Nidhi M. B.**, Professor, MED has been appointed as Centre Head for CPDL.


PAPER PUBLICATION AND PAPER PRESENTATIONS

- **G. Raveesh, R. Goyal, S. K. Tyagi;** "Sugarcane bagasse derived composite sorbent for sorption based atmospheric water harvesting"; Separation and Purification Technology journal - Elsevier (Q1, Impact Factor 8.1 <https://doi.org/10.1016/j.seppur.2024.129820>)
- **G. Raveesh, R. Goyal, S. K. Tyagi;** "Atmospheric water sorption kinetics of a biomass-derived sorbent: a preliminary study"; Journal on Reaction Kinetics, Mechanisms and Catalysis- Springer. <https://doi.org/10.1007/s11144-024-02694-y>
- **Dr. Nidhi M. B.,** Siddharth S., Vaibhav Vinu S8 ME presented a paper on "Leveraging Convolutional Neural Networks of Weld Defect Detection" in the International conference ITechCET2024 organized by Musaliar College of Engineering, Pathanamthitta on 25 May 2024.

FACULTY NEWS

- **Dr. Nidhi M. B.,** Professor, MED, received the recognition as Women leader from Metro Media on the occasion of International Women's Day Celebration on 8 March 2024. She received it from MD of Vizhinjam International Seaport, **Dr Divya S. Iyer IAS.** 
- **Dr. Nidhi M. B.,** Prof., MED, is Fellow Member of Green ThinkerZ wef April 2024. Green ThinkerZ™ Society is a Registered Society vocating United Nations Sustainable Development Goals (SDGs): 2030. Green ThinkerZ® is Registered at NGO Darpan, NITI Aayog. Govt of India PB/2022/0310139.
- **Mr. Bobin Saji George,** Asst. Prof., ME Department, was Resource Person for the hands on training program conducted at Mount Zion College of Engg., Pathanamthitta on 11 March 2024 in the topic "Engineering Simulation". 
- **Ms. Nidhi M. B.,** Prof., MED delivered a talk on "Empower Embrace Excel: Women's day and the power of inclusion" on 7 March 2024 at Rajadhani Institute of Engineering and Technology, Trivandrum as part of International Women's Day celebration. 

- **Dr. Nidhi M. B.,** Professor, MED,
 - conducted a workshop on Sustainable Waste Management practices in campuses as part of DRISTI Tech Fest 2024 of College of Engineering Trivandrum on 6 April 2024 coordinated by Clean CET Mission and NSS CET
 - delivered a webinar on "Blue Ocean Strategy" organized by the Indian Institute of Industrial Engineering (IIIE), Trivandrum Chapter on 22 May 2024.
 - was the chief guest of the inaugural session at the International Conference on Research Advances in Engineering and Technology organised by Musaliar College of Engineering and Technology on May 24, 2024.

- **Dr. Nidhi M. B.,** Professor, MED delivered a talk on "Education 5.0: Leveraging power of digital information" at Mohandas College of Engineering and Technology, Trivandrum on 22 July 2024 as part of FDP organised by collegiate ISTE chapter. 

- **Dr. Nidhi M B,** Prof., MED and ISTE National Executive Council member had been the chief guest of the inaugural session 

at the Five Day Hands-on workshop on 'Applications of AI and ML' organised by St. Thomas Institute for Science and Technology Trivandrum on 05 August 2024.

- **Mr. Akhilchandran BS,** Assistant Professor, attended a Seminar on "A Roadmap to Harness the Potential of India's Demographic Dividend," organised by KILE - Kerala Institute of Labour and Employment on 9 August 2024 which was led by **Dr. S. K. Sasikumar,** a distinguished Economist.

STUDENT NEWS

POSTER PRESENTED

- **Mr. Aaron Koshy Boby** (S6 ME) presented a poster (paper titled "A Patentleft Design to Estimate the Sodium Benzoate Preservative in the Food Grade



Ice and Other Commodities") at National level research conclave 'Research Conclave on Global Transformation 2024 (ReconGT24)' organized by The National Institute of Technology Calicut on 19 to 20 April 2024. Other authors - **Dr. Krishnamohan G. P.**, Associate Professor, S&H Dept; **Ms. Amritha B. J.**, Assistant Professor, ECD; **Dr. Dishore S. V.**, Assistant Professor, EED, **Mr. Santhosh P.**, Texas A&M University Qatar and **Mr. Chandramohan B.**

PAPERS PRESENTED



Students from 2024 batch of ME Department attended and presented technical papers at the 2 International conference on Fluid, Thermal and Energy Systems (ICFTES'24) held at NIT Calicut on 6 to 8 June 2024.

CERTIFICATE OF APPRECIATION



Ananth P. Nampoothiri, Adithya Jayakumar K. T., John Sony Kurien, S6 students of ME Department received certificate of appreciation from **Ms. Anushreedha S. S.**, Project Officer, WWF-India for pitching an environment conservation idea 'Solar tree' as part of WWF-India's ECHO - Building Environment Conservation Heroes Programme 2023-24 on 26 June 2024 (Wednesday). Group Mentor: **Dr. Nidhi M. B.** Professor in MED.

DEPARTMENT OF SCIENCE & HUMANITIES

DEPARTMENT ACTIVITIES

FDP CONDUCTED

A five-day International Faculty Development Program on 'Engineering Next-Gen Materials' was conducted by the Department of Science and Humanities from 18 to 22 June 2024. The program

was inaugurated by **Dr. T. P. D. Rajan**, Senior Principal Scientist, CSIR- National Institute for Interdisciplinary Science and Technology, Trivandrum. Eminent speakers from various premium institutions were the resource persons for the FDP. There were 68 participants from different institutions. The event was coordinated by **Dr. Renjini M. Nair** and **Dr. Preethi P. C.**, Assistant Professors, Dept. of S & H.

FDP ATTENDED & PARTICIPATED

- **Dr. Archana P. Das**, Assoc. Prof. & HoD (S&H) attended a five day FDP on Counselling and Academic Mentoring organized by the Human Resource Development Centre (HRDC) of the University from 20 to 24 May 2024.
- **Dr. Preethi P. C., Ms. Lekshmi I. and Ms. Shijin Shaji** participated in a One-week National level Faculty Development Programme on 'Outcome Based Education and Application of Generative AI in Teaching and Research', organized by the Internal Quality Assurance Cell (IQAC) of Gauhati University, Assam in association with IPSR Solutions Limited from 17 to 24 April 2024, and in a five-day FDP on 'Innovative Teaching And Learning Pedagogy' organized by the Research Foundation of India from 20-24 May 2024.
- **Dr. Preethi P. C.** participated in a five-day FDP on 'Recent Trends in Teaching, Learning & Research' in India' organized by the Research Foundation of India from 27-31 May 2024.
- **Dr. Veena Nair**, Asst. Prof. (S&H) participated in a 8 day (June 26 to July 3, 2024) AICTE sponsored FDP on UHV-2 at TKMCE, Kollam.
- **Mr. Vinu V.**, Asst. Professor(S &H) participated in a workshop on "A Roadmap To Harness The Potential Of India's Demographic Dividend" organised by KILE - Kerala Institute of Labour and Employment on 9 August 2024.
- **Dr. Renjini M. Nair**, Asst. Prof. (S&H) participated in the Faculty Development Program from 27 to 31 May 2024 on "R" organized by Saintgits College of Engineering in association with Spoken Tutorial Project, IIT Bombay.
- **Ms. Shijin Shaji** participated in the 5- day online FDP "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE) from 1 to 5 April 2024.
- **Dr. Preethi. P. C. & Ms. Lekshmy O.** (S& H) attended a five day FDP on ' Innovative Teaching And Learning Pedagogy' organized by Research Foundation of India from 20 to 24 May 2024.

BEST ROTARY ANN AWARD

Ms. Lekshmi I., Assistant Professor, Dept. of Science & Humanities was awarded with the best Rotary Ann for the Rotary year 2023-24.

PUBLICATION

- **Harisankar A., Maneesha M., Preethi P. C., Geethu G., Kavya M. K., Midhun Murali, Resmi Raghunandan,** Facile room temperature synthesis of ZIF-67 for efficient photocatalytic degradation of methylene blue under sunlight irradiation, *Ionics* (2024), <https://doi.org/10.1007/s11581-024-05601-6>. (IF-2.4)
- **Ms. Lekshmy O.** Lab Tutor (Chemistry), Department of Science and Humanities published a book chapter on "**Chitosan - based coating for corrosion protection of copper**" in *Futuristic Trends in Chemical, Material Science and Nano- Technology*, vol:3, chapter:16, June 2024. She published another paper on "**Iron Removal from Drinking Water System using Eco-friendly Synthesized Metal-Organic Frameworks**" in *Oriental Journal of Chemistry*, vol: 40, issue 2, Oriental Scientific Publishing Company, April 2024.
- **Ms. Ammu Ashok** published poem titled "Impressions" in *Malayalam Literary Survey*, Kerala Sahitya Akademi Journal, March - April Issue 2024.
- **Ms. Lekshmy O.** published a paper on "Iron Removal from Drinking Water System using Eco-friendly Synthesized Metal-Organic Frameworks" in *Oriental Journal of Chemistry*, vol: 40, issue 2, Oriental Scientific Publishing Company, April 2024.

WEBINAR MOOC COURSES ATTENDED

- **Dr. Preethi P. C.**, Asst. Prof. (Dept. of S&H) passed the 15-week NPTEL course "**Chemistry of Nanomaterials**" with a credit of 4, offered by the University of Kerala, Thiruvananthapuram.
- **Dr. Archana P. Das**, Assoc. Prof., **Mr. Vinu V.**, Asst. Prof. and **Dr. Veena Nair**, Asst. Prof. (Dept. of S& H) passed the 4 weeks NPTEL course "Effective Engineering Teaching in Practice" offered by IIT, Madras. Dr. Archana P. Das is one of the toppers of the course.
- **Dr. Archana P. Das**, Associate Professor (Dept. of S& H) passed the 12 weeks NPTEL course "**Medicinal Chemistry**" offered by IISER.
- **Dr. Renjini M. Nair** participated in the webinar on "Cloud & DevOps Opportunities in the AI Era" organized by Marian College Kuttikanam (Autonomous).

- **Ms. Lekshmi I.**, Asst. Prof. (Maths), S & H Department, participated in a 'Mini-Course on Optimization Theory and Its Applications' organized by Vietnam Institute for Advanced Study in Mathematics, Hanoi, Vietnam during from 18 to 21 March 2024.

DEPARTMENT OF PHYSICAL EDUCATION

STATE KICK BOXING CHAMPIONSHIP



Ashwin Gireesh of S2 EC1 participated in 7th Kerala State Kick Boxing Championship 2024 held at Calicut and won Gold and Bronze medal in the following category. 1. Full contact-56 (senior): Bronze. 2. Musical form with weapon: Gold.

ALL INDIA NETBALL PARTICIPATION

Diya Vijayan V. D. of S4 EC2 was selected as the vice captain of the KTU Women's Netball Team in the All India Inter University Netball Championship



for women held at Naipunya Institute Koratty from 4 to 7 May.

DISTRICT TAEKWONDO CHAMPIONSHIP

Adnan Nizam S2EC2 represented Thiruvananthapuram District and secured Bronze Medal in the Junior Boys Under 59 kg weight category in the 3rd Kerala



State Open Taekwondo Championship 2023-24 held from 6 to 7 January 2024 at Jimmy George Indoor Stadium, Thiruvananthapuram.

3 ON 3 BASKETBALL CHAMPIONSHIP

Rohan P. C. (S2 ME2), **Ashish E.** (S2 CT), **Aromal R. Chandram** (S2 EL) Participated in the "HOOPS SUMMER FEST 24" 3 on 3 Basketball Tournament conducted by Trivandrum Basketball Association and secured Runner Up position held during 18 - 19 May at Chandrasekharan Nair Stadium.



ROLL BALL DISTRICT CHAMPIONSHIP

Cewin K. C. E. S5 CS2 participated for the Thiruvananthapuram District Roll Ball Championship and secured First position. He has also been selected to the State camp.



ROLL BALL STATE CHAMPIONSHIP



Aditya K. Dileep S3 CSE participated in the 20th Kerala Roll ball State Championship represented Kollam district and secured second position which was held at central Stadium on 3 August 2024.

VINEETH ROSHAN SECURES NIT ADMISSION

Vineeth Roshan Civil Department (2020-24 batch) got admission to the NIT Calicut for M Tech in offshore structures. He has been admitted for the course through sports quota. He has represented three times for the KTU Volleyball team.



YOGASANA CHAMPIONSHIP



MBCET Yogasana Team participated in the NYSF District Yogasana championship held on 25 August 2024 at Sri Vidyadhiraja Vidya Mandir High school and secured 4 gold and one silver and all are selected for State competition 1) **Fathima L. S.** of S3 EC2 secured first in traditional and rhythmic pair. 2) **Ananya Biju** of S3 EC2 Kumar secured first rhythmic pair and second traditional. 3) **Kiran Biju** of S5 CS1 secured first in traditional.

DISTRICT BASKETBALL CHAMPIONSHIP

Vishjowns Vinod S1 CE2 played for the IJYC Club in the District Championship and secured second position. He's also been selected to the Kollam

Basketball team, which will participate in the Kerala State Basketball Championship held from 1 to 6 October 2024 at Rajiv Gandhi indoor stadium, Kadavanthara, Ernakulam.

LIBRARY UPDATES

SEMINAR CONDUCTED



- MBCET Library conducted a Seminar on “Value of IEEE Xplore and EBSCO eBooks in Project Work” for S7 EC, EE & CS BTech Students on 24 July 2024. The Resource Person was **Mr. Nandalal T. S.**, Sr. Training Manager, EBSCO.
- MBCET Library conducted a Seminar on “Effective Utilization of the Library and E-Resources of MBCET” for S7 CE & ME BTech students on 25 and 26 July 2024. Resource Person was **Mr. Binu K John**, Librarian.

CAEP 2024 ATTENDED



Dr. Jayakumari J (Professor – ECD), **Dr. Jisha SV** (HoD- CED) and **Mr. Binu K John**, Librarian attended “Clarivate Awareness and Engagement Program” - CAEP 2024 at Hilton Garden Inn, Thiruvananthapuram on 9 August 2024 organized by Clarivate™ which is a leading global provider of transformative intelligence.

STUDENT INDUCTION PROGRAMME

As part of the Student Induction Programme (SIP-2024), MBCET Library conducted Seminar “Know Your Library – MBCET Library Liaison Program-cum-Orientation Session” from 03 to 12 September 2024 for all 11 batches of First year **B.Tech** students. **Mr. Binu K John**, Librarian was the Resource person and **Mr. Sambhu B. K.**, Asst. Librarian, coordinated the sessions.

NSS NEWS

MEDICAL CAMP

The NSS unit of MBCET, in collaboration with NIMS Medicity, organized a health camp on campus, providing free checkups for students, faculty, and staff. The camp included services such as blood pressure and sugar checks, eye tests, and heart checkups, including ECGs. In addition to the medical assessments, awareness sessions on heart care and overall health were conducted to encourage preventive measures. The camp concluded with a ceremony featuring speeches from **Dr. S. Viswanatha Rao**, Principal **Fr. John Varghese**, Director and **Dr. Akash Jose**, highlighting the significance of health awareness and community well-being.

THANAL ACTIVITY

Visit to Gandhi Bhavan, Pathanapuram



As a part of Thanal (social wing of Civil Engineering Department, MBCET) activity, 21 students of the Department accompanied by 4 faculty visited the Gandhi Bhavan in Pathanapuram on 23 March 2024. Gandhi Bhavan is taking care of more than 1200 destitute and abandoned inmates ranging from months old baby to a 106 years old great grandma. Out of which 300 are bedridden patients.

SPANDANAM ACTIVITIES



Spandanam, The social service wing of the ECE Dept., distributed school bags to the children of the housekeeping staff on 29 May 2024. Coordinator: **Ms. Teena Rajan**, Assistant Professor, Dept. of ECE. The Spandanam Team from the ECE Department visited the family of a bedridden patient residing near Parottukonam and donated an amount to support their medical needs

on 31 July 2024. Faculty Members: **Dr. M. J. Jayashree**, **Ms. Teena Rajan**, **Mr. Jinu Baby** and **Ms. Merin Philip** Student Members : **Aleena Maria Sam**, **Deepak G. Thomas**, **Ann Mary Biju**.

DISTRIBUTION OF ONAM KITS



As part of "Sparsham" social outreach initiative of the Department, a team of students and faculty visited the Jyothis Center in Kumarapuram, which provides care for cancer patients, as well as selected differently-abled, and distributed Onam kits on 12 September 2024. Faculty Coordinators: **Ms. Poorna B. R.**, **Ms. Vijitha Robinson** (Asst. Professors, CSED)

A VISIT TO SNEHAVEEDU



As part of "SPARSHAM" social extension activities of Department of Computer Science and Engineering, our team visited Snehavedu Charitable Society Rehabilitation Center, Nalanchira, and contributed dinner to the 130 inmates on 31 May 2024. Co-ordinators: **Ms. Poorna B. R.**, **Ms. Gaurishree V. K.** (Asst. Professors, CSED).

PLACEMENT UPDATES

The Training and Placement Unit has been quite active this year also. Over **375 job offers** were received from more than 50 recruiters, including **Futureblox**, **ECS Fin**, **Esyasoft**, **Techversant**, **G10X**, **Prochant**, **Nissan Digital India (Intern)**, **Quantiphi Analytics**, **Carestack (Intern)**, **UST (Intern)**, **Merp Systems (Intern)**, **Techvantage (Intern)**, **HAL (Intern)**, **IIT Palakkad (Intern)**, **Experion Technologies**, **Qburst**, **H&R Block**, **Signify**, **TATA ELXSI**, **Speridian Technologies**, **Spacelabs**, **Tangentia**, **Federal Bank**, **Vinvish Technologies** etc.



MAR BASELIOS

COLLEGE OF ENGINEERING AND TECHNOLOGY

AUTONOMOUS

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B.Tech Civil Engineering.	120 seats
B.Tech Computer Science and Engineering.	120 seats
B.Tech Electronics and Communication Engineering.	120 seats
B.Tech Electrical and Electronics Engineering.	60 seats
B.Tech Mechanical Engineering.	90 seats

New B.Tech Programmes started in 2022

B.Tech Computer Science and Engineering(Artificial Intelligence).
B.Tech Electrical and Computer Engineering.

M.Tech Programmes

M.Tech Computer Science and Engineering.	18 seats
M.Tech IoT and Sensor Systems.	18 seats
M.Tech Machine Design.	18 seats
M.Tech Power Control and Drives.	09 seats
M.Tech Structural Engineering.	18 seats
M.Tech Telecommunication Engineering.	18 seats
M.Tech Transportation Engineering.	18 seats

New M.Tech Programme started in 2024

M.Tech Environmental Science and Engineering.

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