

IN ALTUM... The MBCET Mens Letter



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Mar Baselios College of Engineering and Technology (Autonomous)
Mar Ivanios Vidyanagar, Nalanchira, Thiruvananthapuram — 695 015.

All B Tech Programmes Accredited by NBA since 2016

College code : MBT



Exchanging MoU with Nissan Digital India LLP



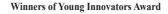
Ms. S. Asha won ISTE Kerala Section Special Appreciation Award



Ms. Ammu Maria Ashok Winner of Poetry Award



Team Mar Baselios College of Engineering and Technology (Dept. of Civil Engineering), guided by Mrs. Radhika P., has secured First place at the All Kerala Project Expo 2024 conducted by K.T.U. for the project: "Valorization of Plastic Wastes using Thermo-Catalytic Plastic Pyrolysis". The Project also bagged the "Young Innovators Award" at the Young Innovators Technical Summit 2024, held at Govt. Polytechnic College, Kalamassery.





Dr. Nidhi M.B. Assoc. Prof. in ME receives the Best Teacher National Award



MBCET Team in MSME Conclave

Message from the Bursar



The term Engineering has been derived from the Latin "ingenium" meaning cleverness and "ingeniare" meaning to "contrive and devise". It has existed since ancient times, probably about 2550 BC, when Imhotep, the first Engineer built the Pyramid at Saqqara,

Egypt. Since then it has been developing and transforming the world beyond imagination. The hegemony of the Youth as dynamic professionals control the Present and shape the Future, transcending the environments and taking Technology to the heights of development.

MBCET, committed to professionalism is trying to make the Engineering Studies future-centric. Thus our Engineering graduates are well aware of the need for constant updation and systematic, research-oriented studies, with due importance to human values. This is vitally important since effort is needed to uphold human dignity, where humans fall into a routine of artificiality and conditioning, where they are treated as mere commodities.

I wish and pray that all MBCETians may succeed in their academic and personal lives transforming themselves as the agents of change and growth for the welfare of the Nation and humanity.

- Fr. John Varghese

Principal's Desk



Twentytwo years of steadfast growth of MBCET has entered into the new realm of autonomy. The second curve of growth of the College has just begun and we aim at spearheading development that can foster professional development, inculcate good research and entrepreneurial tenets and nurture socially

inclined values. Priority has been to create awareness about the changing landscape of the skills essential for the new industrial scenario of 21st century and the readiness to learn/ unlearn. Our College has opened up avenues for industrial internships, IT skills update, introduction to state of the art tools and practices to use the technology. The long term internships in industries are sandwiched between the academic schedule so that the students are not deprived of opportunities, despite the fact that our Faculty have to tow a lot to support these students on the go. Campus placements and the associated training had enabled many students to secure jobs and plan for their career. The collaborations with industry and research organizations have started expanding to forge stronger relationship to fortify our dreams. We understand that excellence is a journey that we continue to tread, even in the days of uncertainty due to the new technologies like AI/ML, robotics and so on, pushing humans out from many of the job roles. We are deeply indebted to our collaborators, and stakeholders for the support and look forward to getting the same in the coming days too.

- Dr. Abraham T Mathew

Editor's Note.....



Power breeds ego and greed making one tyrannical as demonstrated in different countries across the world. It wreaks havoc whereas issues could and should have been settled on a table. Technological advancement, instead of making humans more dignified and refined, transforms them into instruments of terror! When Einstein died on 18 April 1955, he left a piece of writing. These were his last words: 'In essence the conflict that exists today is no more than an old-style struggle of power.' Man seems to have lost his ability for introspection, and for using intuition, insight, and farsightedness. Mark Antony's (Julius Caesar – Shakespeare) outcry still echoes: ...men have lost their reason...!' Man acts like a machine, computer chips being implanted in the brain. After AI, we think of Organoid Intelligence. Metros grow.

Meanwhile, water sources dry up. As El Niño reveals itself, the parched earth cries out.

Yet another batch of students move out of campus, strengthening the alumni and the human resource of the Nation. But unemployment is a reality which can be confronted only by becoming employable, by being flexible, reliable, adaptable, and committed and in short a dignified human being with a sense of value.

- 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.

SME Conclave

CII Kerala organised MSME Conclave "Future ready MSMEs for India @ 100" at Tvm. Mr. Vipinkumar K. C. (COO-CR), Dr. Premchand V.P. (MED) and Ms. Merlin George (CSED), along with Jyothish Ram J. N. S8 EC1, Aswin P. N. S8 EC1, Akshay Prasad S8 EC1, Karthikeyan N. S8E C1, Silpa C. from MBCET Start Up zyra.in represented MBCET in the conclave. The objective of the conclave was to promote and support the growth of MSME sector by creating a platform for networking, collaboration and knowledge sharing, among entrepreneurs, academicians, Industry Experts, and Government officials.

MoU with Nissan Digital India LLP

MBCET has signed an MoU with Nissan Digital India LLP under their Campus Connect Program, on 8th February 2024. As a part of this initiative, NDI is introducing an industry elective on Applied Data Science for the S6 students of the Department of Computer Science and Engineering. **Shri. Ramesh Miraje**, Divisional General Manager, NDI, signed the MoU with MBCET.

MoU renewal with UiTM Mara

MOU with UITM MARA Malaysia and MBCET were formally signed on 3 October 2023, to support student and faculty exchange programmes.



Online knowledge exchange is initially intended. **Dr. Nidhi M.B.** MED organised the MOA exchange.

MoU Signed

MoU between MBCET (Autonomous) and BSNL was signed on 7th Nov 2023, opening up avenues for our students to explore in the field of telecommunication networks.

PATENTS AWARDED

• **Dr. Dishore S. V.**, Assistant Professor, EED published a utility patent on "Dynamic Power Allocation for Fast and Safe Charging of Electric Vehicles using Deep Learning" bearing the Application No: 202341029506. Date of Filing: 24.04.2023. Publication Date: 12.05.2023.



• A patent by GoI has been granted on 12 Feb 2024 to the patentee [1. Dr. Nidhi M. B. (Faculty) 2. Salman Mohammad 3. Vimal George 4. Viswanath S (Students)], members from the Mechanical Department, for an invention entitled A U T O M A T E D BRAKING SYSTEM AND METHOD for the term of 20 years from the

5th day of March 2020 in accordance with the provisions of the Patents Act, 1970.

Faculty Bags Best Teacher National Award

Dr. Nidhi M. B., Professor, MED won the MIET Mehaboobi Mohamed Yunus Memorial National Award for the Best Women Engineer-ing College Teacher for the year 2022, at the 52th ISTE National Annual Convention at Kalaburagi (Karnataka State) on February 12, 2024. Award includes citation and cash prize. (Photo: See Cover)

Distinguished Poet Award 2023

Ms. Ammu Maria Ashok received prize in International Poetry Competition conducted for 12th Rabindranath Tagore Award 2023, and was honoured with the title 'Distinguished Poet Award 2023".

PROFESSIONAL BODY ACTIVITIES

IET

IET KKLN Installation Ceremony

The IET KKLN Installation Ceremony took place on Monday, 29 January 2024, at Senatus Hall. The



event commenced with a Welcome and Presidential Address delivered by **Dr. A. Lenin Fred**, Chairman of IET KKLN, followed by the address by **Dr. Abraham T. Mathew**, Principal, **Dr. Lalin L. Laudis**, Treasurer, IET KKLN, extended felicitations, and **Dr. S. Sreeja**, Joint Secretary, IET KKLN, proposed the Vote of Thanks.

Dr. Soumya A. V., Secretary, IET KKLN, presented the plan for 2024, while **Er. Geoffer Jaish**, Chairman, IET KKLN YP, curated the Young Professionals' events for the same period: A technical talk on the theme "Powering Tomorrow: Navigating



the Horizon of Nuclear Energy" was delivered by **Bobin Saji George**, Assistant Professor, MED, MBCET.

- IET MBCET organised a talk on "Power of Engineering Simulations: A Cinematic Perspective" on 8 December 2023. The resource person was Mr. Bobin Saji George, Asst. Prof., MED, MBCET. No. of Participants:80 ,Co-ordinator: Ann Santhosh S7 ECE
- **Dr. A V Soumya**, Asst. Prof, EED, MBCET, has been newly elected to the position of Honorary Secretary of IET Kanyakumari Local Network.

POSTER DESIGNING COMPETITION

The Children's Day Poster Design Competition, organized by IET MBCET, showcased incredible talent. **Shwetha Krishnan Suresh** S3 CS1, MBCET and **Sneha S. S.** (First-year student at Amrita School of Arts and Science, Kochi Campus) were the winners. Co-ordinated by **Abhishek. S** S5 CS2 and **Shreya Shelji** S3 CS1.

PATLN 2023

The PATLN 2023 event, organized by the IET, took place on 11 November 2023, at Forte Manor Hotel, Trivandrum. **Abhilash George** (S5 CS2) emerged as the first



runner-up and **Anand Pillai** (S3 CS2) earned the title of audience favourite.

IET India Award Nights



The IET President's Address by **Dr. Gopichand Katragadda** and the IET India Award Nights were held on 6 November 2023, in Bangalore. **Dr. Katragadda** emphasized the transformative potential of AI for India's resilient future. The IET India Award Nights honoured the achievements of indi-viduals in the field of engineering and technology. Six students from MBCET volunteered for both events.

INSIET



INSIET, an online event, was organised by IET MBCET On Campus on 30 October 2023. The session was handled by two distinguished guest speakers Ms. Likhitha Chandrasekara, a former PATW winner, and Mr. Geoffrey Jaish R. L., Chairman of IET KKLN YP.

PATW 2023

The PATW 2023 College Heats, organized by the IET MBCET On Campus on October 27, 2023, had **Dr. Shobha Theresa**



George, Mr. Jijo Jose, Dr. Lani Rachel Mathew, and

Mr. Jobby Johnson as judges. Over 12 students participated, and Anand Pillai S3 CS2 and Abhilash George S5 EC2 emerged as the winners.



IGNIET 2023

IGNIET 2023, the flagship event of IET On-Campus Chapter was con-ducted on 14 October 2023 at Olympia. The distinguished former Chairpersons of IET graced the event.

HEEE

The Annual General Meeting of IEEE SB MBCET

The annual General Meeting of IEEE SB MBCET, was held at the Senatus Hall on 21 February 2024. **Dr. Abraham T. Mathew,** Principal inaugurated the meeting. The members took the oath of the IEEE Code of Conduct, led by **Adlu Rahman,** Vice-Chair. The new Execom members for the year 2024-25 were introduced by

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Dr. Lani Rachel Mathew, Senior IEEE Member and Branch Counsellor of the College. **Savya Unnikrishnan**, Chair addressed the gathering. The annual plan for the year 2024-25 was presented by **Blessy Smitha Das**, Secretary. **Abhishek S. S.**, Former RAS Chair, proposed the vote of thanks.

IEEE SB ACTIVITIES

- PAS DE CODE-9/10/23-14/10/23: Pas de Code, a
 6-day internship program on Machine Learning and
 Deep Learning, was hosted by IEEE SPS MBCET.
 The Pas de Code program, focused on simulation in
 machine learning and deep learning using tools like
 MATLAB and Orange. Ms. Manju S., Vice Principal
 at NISH and Assistant Professor in the Department
 of Audiology and Speech-Language Pathology graced
 the final day as the guest of honour.
- BYTE BLITZ Conducted under the aegis of IEEE Robotics and Automation Society MBCET in collaboration with IEEE Computer Society MBCET, the Byte Blitz workshop was held on the 22 November 2023. No. of participants, 129. **Mr. Shravan D.A.**, a distinguished Web Development Enthusiast, was the Resource Person.
- ShrIEEEk is the flagship event organized for first-year students. The event was conducted on 15th December 2023. They are introduced to IEEE and its working through this event. The branch counsellor of MBCET SB, Dr. Lani Rachel Mathew gave the students an idea about IEEE and the different opportunities associated with it. Mr. Sanju Mathew, was the Resource Person about his experience in IEEE.
- "CRACKING CAT, An Online Session for MBA Aspirants," held on 27 October 2023. Shri. Allen Thomas Kannattu was the Resource Person.

IEI PROFESSIONAL SOCIETY

An awareness session on the largest multi-disciplinary professional body of engineers, The Institution of Engineers

(India) [IEI] was given to EEE students of S1, S3 and S5 on 16 November 2023. The resource person was Er. P. Balakrishnan Nair, Chairman, Institution of Engineers. The



session was coordinated by **Dr. Shalu George K.**, (Kerala Section) Assoc. Prof., EED.

ENERGY CONSERVATION DAY COMPETITION



As part of the Energy Conservation Day on 14 December, IEI MBCET and NSS Units 230 and 706 of MBCET collaboratively organized a poster-making competition

centered around the theme of 'Save Energy'. The event drew participation from over 15 enthusiastic volunteers. **Feba M. Paul** of S1 CE1 secured the first position, while **A. Samyuktha Syam** of S7 EE1 claimed the second position in the competition.

ISTE

ISTE Kerala Section Special Appreciation Award

Ms. Asha S., (Associate Professor, Dept. of Computer Science and Engineering) was awarded the ISTE Kerala Section Special Appreciation Award for her valuable contributions (photo on cover).

TALK 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. Co-ordinators: Ms. Amritha B.J., Assistant Professor, Department of ECE, and Ms. Poorna B.R., Assistant Professor, Department of CSE.



DEPARTMENT OF CIVIL ENGINEERING

DEPARTMENT ACTIVITIES

CONSULTANCY WORKS

Soil investigation

Soil investigation as part of the consultancy work "DPR preparation of Vazhimukku to Kaliyikkavila: Investigation for minor bridges and culvert" is ongoing since 24 January 2024



NPTEL COURSE COMPLETION

The Faculties of CED Mr. Divyaprasad S. P., Ms. Indhu Luke, Ms. Diana Alice Sugunan (Elite + Silver certification) and Dr. Alice Thomas (Elite certification), Dr. Elizabeth C. Kuruvilla, Dr. Jaya S. Pillai and Dr. Neethu Roy have completed NPTEL/SWAYAM Courses on different topics.

FDP ORGANIZED

Five Day Faculty Development Programme on LiDAR Applications in Advanced Surveying

The Department of Civil Engineering has conducted a five-day Faculty Development Programme (FDP) on LiDAR Applications in Advanced Surveying, from 8 to 12 January 2024. The FDP was formally inaugurated by



Chief Guest, **Sri. Nizamudeen A. IAS**, Director, Kerala State Remote Sensing and Environment Centre and Guest of Honour, **Sri. Narayanan Namboodiri T.V.**, Chief Engineer, Kerala Water Authority. **Dr. Abraham T.**

Mathew, Principal, Rev. Fr. John Varghese, Bursar and Dr. S. Viswanatha Rao, Vice Principal, spoke on the occasion. The FDP had a total of 30 participants



from various government and non-government organisations. The event was coordinated by **Mr. Nitin S.** and **Ms. Akhila A. M.** (Asst. Prof. Dept. of Civil Eng., MBCET).

FDPs ATTENDED

Ms. Jean Molly Simon, Ms. Smrithi Cheriyath, Dr. Anupama Krishna D., Dr. Archana J. Satheesh, Mr. Nitin S., Mr. Sreeju Nair S. B., Dr Alice Thomas, Dr. Jaya S Pillai, Ms. Rintu Johnson, Ms. Jisa Jose, Dr. Neethu Roy, Dr. Amal Raj, Ms. Diana Alice Sugunan, Ms. Radhika P., Ms. Jomy James, Dr. Jisha S.V., Ms. Anupama Krishnan, Dr. Jayasree S., Ms. Ansu Mathew, Ms. Bindhu Biju, Ms. Rakhi J. H., Ms. Sangeetha Sajeev, Mr. Nitin S. and Ms. Lekshmi Chandran attended FDP/STTP organized by DTE, AICTE, NIT etc.

FACULTY AS RESOURCE PERSON

 Dr. Alice Thomas Civil Department was an evaluator of the young innovation program projects in the water conservation category, conducted by KDISC and Kerala Startup Mission on 14 October 2023.



• **Dr. Jisha S. V.** delivered a Plenary Lecture at the National Conference on Soils and Foundations - SAF 2024. The conference was held from 15 to 17 February 2024, and was organized by the Department of Civil Engineering,



LBS Institute of Technology for Women, in association with the Deep Foundations Institute (DFI) and the Technical Committee TC 212 (Deep Foundations) of the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE).

PhD GUIDESHIP

APJAKTU has sanctioned PhD guideship for **Dr. Jaya S. Pillai** and **Dr. Alice Thomas.**

PAPER PUBLICATION

The Faculty, Ms. Lekshmi Chandran M., Dr. Jisha S.V., Mr. Sreeju Nair S. B., Dr. Anupama Krishna D., Dr. Alice Thomas presented papers at IIT and NIT on different dates.

ACTIVITIES OF PROFESSIONAL BODIES INDIAN GEOTECHNICAL SOCIETY (IGS) ACTIVITIES

Inauguration of IGS Student Chapter and One Day National Seminar On Modern Geotechnical Engineering Practices

The Indian Geotechnical Society Student Chapter was inaugurated on 29 November



2023. The Resource persons were **Dr. Anil Joseph**, IGS President, Dr. R. Shivawshankar, Professor (Rtd.), NITK Surathkal: Er. T. K. Alexandar Vaidian, CEO Relcon Foundations; Dr. Unnikrishnan N., Professor CET Thiruvananthapuram and Dr. Jayamohan Jayaraj, Hon. Secretary of the Thiruvananthapuram Chapter. Dr. Abraham T. Mathew, Principal MBCET, presided over the meeting. Dr. Unnikrishnan N. briefed about the IGS and **Dr. Anil Joseph** delivered the inaugural address. followed by felicitations from other guests of honor. The office bearers are: Ms. Diana Alice Sugunan, IGS Mentor introduced the executive members Adithya Devan (President), Grishma Nair (Vice President), Nidha Fathima Z. S. (Secretary), Lekshmi Gayathri A. (Joint Secretary), Adarsh S. L (Treasurer), Shaheen Noushad, Ahamad Sahil N. S., Allen Sam Biju, Rickey R. B. Niranjan Raj, Namitha Kurup P. S. (Year Representatives), Rahul Rajan, Adhityan A. S. (Media handler). One-day National Seminar on Modern Geotechnical Engineering was held on the same day. The Seminar included Technical sessions by the Resource Persons: Dr. Anil Joseph, Er. T. K. Alexander Vaidian, Prof. R. Shiva-shankar, Dr. Unnikrishnan N. and Dr. Jayamohan Jayaraj

INDIAN PLUMBING ASSOCIATION (IPA) ACTIVITIES

Indian Plumbing Association has set up a Plumbing Lab in Civil Engineering department.



CIVIL ENGINEERING STUDENTS ASSOCIATION (CESA) ACTIVITIES

Online Alumni Interaction

CESA conducted an online alumni talk with Lt. Vishnupriya Nair, Alumna (2019-2023) of Civil Engineering Department on 25 September 2023. S7 students attended the session.



Expert Talk

CESA organized an expert talk on "Soil Investigation Practices" on 27 September 2023, targeting fifth-semester students as part of the course work of Geotechnical Engineering subject. **Dr. Jaya V.**, Professor College of Engineering, Trivandrum, was the speaker. The event was coordinated by **Ms. Lekshmi Chandran M**. and **Ms. Diana Alice Sugunan.**





AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) ACTIVITIES

One-day training programme on Road Safety

KSCSTE-NATPAC organised a one-day training programme on "Road Safety and Youth Leadership" for the students and a one day training on "Road Safety" for the educational institution bus drivers in association with MBCET on 8th February and 14 February 2024 respectively. The programmes were coordinated by the MBCET student Chapter of ASCE.



Global Science Festival Talk Session

On 22 January 2024, the MBCET student chapter of ASCE conducted a talk session titled, "Nuts and Bolts: How a Nail Built the World or Why We Should Reinvent the Wheel" The event was associated with the Global Science Festival Kerala. The session featured Ms. Roma Agrawal, an esteemed Indian-British Chartered Structural Engineer renowned for her contributions, including the notable project "The Shard." Ms. Agrawal's transition from Engineering to a full-time writer and speaker was eloquently shared, inspiring S8 students from the Department of Civil Engineering. Ms. Agrawal was accompanied by Mr. Vishu Sharma, Senior Project Manager, British Council. The event proved to be both informative and engaging, with Ms. Agrawal's insights leaving a lasting impact.

Know Your Alumni Session

MBCET Student chapter of ASCE organised a Know your Alumni session with **Aravind Uthaman** (2016 alumnus) currently working in Canada, on "**Chasing Dreams Abroad**". 50 students from S5 and S7 attended the online session.

Food Drive

MBCET Student Chapter of ASCE conducted a food drive on 2nd October 2023 at Vanross ground. Students of S3, S5 and S7 were involved in distribution of food packages. Lunch packets were



distributed to nearly 100 people.

THANAL ACTIVITY

THANAL the social service wing of Department of Civil Engineering made a visit to CH Mohammed Koya



Memorial State Institute for the Mentally Challenged on 20 October 2023 and handed over 25 Bedsheets to the inmates.18 students of S7 and 4 faculties of the Department took part in the activity.

INDUSTRIAL VISITS

Industrial visit to Adani Vizhinjam Port Private Limited

Department of Civil Engineering in association with CESA and IGS MBCET Student Chapter conducted an industrial visit to Adani Vizhinjam Port Private Limited. Faculty Coordinators were: Mr. Sreeju Nair S. B. and Ms. Diana Alice Sugunan.



Site Visit to Travancore Cements Limited

Students of S5 CE1 were taken to Kerala's first cement factory 'The Travancore Cements Limited (A Govt. of Kerala undertaking) Nattakom, Kottayam



on 15 December 2023 as part of the course 'Construction Technology and Management'. The visit was coordinated by Ms. Indhu Luke, Ms. Jomy James and Mr. Johnson George.

Visit to the Prefabricated Multilevel Car Parking Construction Site



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Students of S5 Civil Engineering were taken to the site of prefabricated multilevel car parking construction at Palayam, a Smart City Trivandrum Ltd. project. The visit was coordinated by Ms. Jomy James and Ms. Smriti Cheriyath.

Visit to Construction Sites





Students of S5 CE1 were taken to the Aranganasheri Bridge construction site, Amboori-Kuravimala connection bridge site and Kallikadu Convention center construction site on 1 December 2023. The event was coordinated by Ms. Lekshmi Chandran. Faculties of the Dept. Mr. Sreeju Nair and Ms. Jomy James accompanied the students

Visit to India Cement Manufacturing Plant, Tirunelveli, Tamil Nadu

Students of S5 CE2 were taken to India Cement Manufacturing plant, Tirunelveli, Tamil Nadu on 2nd December 2023 as a part of the course Design of Concrete Structures. The event was organized by Mr. U. P Govind and accompanied by faculty Ms. Jisa Jose.

Visit to Kallada Dam

Students of S5 Civil Engineering visited Kallada Dam and associated hydraulic structures- Ottakkal Weir and Pallamvetty Saddle Dam situated in the Thenmala region



of Kollam District. Faculties of the Dept. Ms. Akhila A. M., Dr. Minu Ann Peter and Mr. Sreeju Nair S. B. accompanied the students along with Ms. Rintu Johnson and Ms. Sangeetha Sajeev who has coordinated the visit.

EXPERT TALKS

Interactive Sessions by COMMAND tech CAD and IT Pvt. Ltd.

An interactive session was conducted by experts from COMMANDtech for the 2024 batch of Civil Engineering students on 01 November 2023. This programme was coordinated



by **Dr. Jisha S. V.**, HoD/CED along with the department placement team. **Dr. Neethu Roy**, **Dr. Jaya S. Pillai**, **Ms. Jean Molly Simon**, **Mr. Sijo M. Saji**, **Ms. Sangeetha Sajeev** and **Mr. Nitin S.**

Expert talk on "Introduction to Project Management Tools"



An expert talk on "Introduction to Project Management Tools" by Ms. Devisha from Inspiro Edutech, ATC of Kerala State Rutronix.

was conducted on 10 November 2023 Friday, at Laurie Baker Hall for S5 Civil Engineering students. The talk was Coordinated by **Ms. Jomy James** and **Ms. Smrithi Cheriyath.**

EXHIBITION ON Trash to Art'

Nature Club and Waste Management Cell of MBCET organised an exhibition for first year students on the theme "Trash to Art", as part of the awareness drive and initiative for a Clean and Green Campus. The event was coordinated by **Dr. Jaya S. Pillai**, **Dr. Soumya A. V.** and co-coordinated by first year faculties handling Environmental Science course. Student coordinators were **Alan Gabriel**, **Jobin S. R.**, **Gopi Krishnan** (S5



EE1) and Alan A. Vincent (S7CE1). Winners of the expo are Sreedev Jayan&Bijoy B. S. (S1 CE2) first prize, Akshitha Mohan (S1EE) second prize and Aneeta Sibi (S1 EL) third prize.

Upcoming International Conference ICID 2024

ICID 2024 Second International Conference on Infrastructure Development, by the Department of Civil

Engineering MBCET, will be from September 25 to 27 2024. Theme: Resilience, Sustainability Transformation Adaptation in Infrastructure It will be held at Mar Baselios College of Engineering and Technology (MBCET). ICID 2024 aims to address the challenges and opportunities in infrastructure develop-



ment, considering its crucial role in societal progress and in achieving the sustainable development goals (SDGs). For more details, visit the website: https://www.icid24.in/

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ORIENTATION SESSION FOR NEWLY JOINED FACULTY MEMBERS

An orientation session was organized by the Department of Computer Science and Engineering in association with TLC,



for the newly joined faculty members on 20 September 2023.

SMART INDIA HACKATHON 2023 PRELIMS



On 27 September 2023, the MBCET hosted the SIH Prelims Internal Hackathon. Under the guidance of faculty coordinators Mr. Arun J. S., Ms. Vishagini V., and Ms. Dhanya L. K., alongside the unwavering commitment of student coordinators Neha Elizabeth Syam (Final Year Student) and Ferwin Lopez (Pre-Final Year Student). Five distinguished mentors, Mr. Rinse and Mr. Alen, both alumni of our college currently working at TCS, Dr. Tessy Mathew (Professor, Dept. of CSE), Dr. Jesna Mohan and Ms. Jisha Jose (Asst. Professor, Dept. of CSE), guided participating students throughout the hackathon. 4 accomplished alumni Mr. Savio Menifer, Mr Gautham, Mr. Akshay and Mr Vishnu P Kumar served as judges. Out of the 31 participating teams, 15 were selected to represent our college in SIH'23 and one attended the final at Hyderabad.

INVITED TALK ON 'HOW TO CRACK GATE AND OTHER COMPETITIVE EXAMS"

An invited talk on 'How to crack GATE and other competitive exams" was conducted on 3rd October, 2023 by the Dept. of CSE. The resource person was **Mr. Jayaram V.**, HR Head & Advisor to CGP Career Avenues, Trivandrum.

EXPERT TALK ON "VALUE OF IEEE EXPLORE & EBSCO eBOOKS IN RESEARCH, PLACEMENT & CAREER DEVELOPMENT"

The Department organized an expert talk on "Value of IEEE Explore & EBSCO e Books in Research, Placement & Career Development", on 5 October 2023 for the S8 students. The talk was delivered by



Mr. Nanda Lal. T. S., Senior Training Manger, South India EBSCO Information Services, New Delhi. Faculty coordinator: **Ms. Deepthi K. Moorthy**.

HANDS-ON WORKSHOP on PYTHON PROGRAMMING by UST

The Department in association with UST, organized a five days hands-on workshop on Python progra-



mming from 9 to 13 October 2023. 50 students of S3 from the Departments of CS, AI, EL and ME participated.



RECHARGE YOUR BOUNCE-BACK PERSONA

The "Recharge your Bounce-back Persona" session organized by TLC MBCET, which took place on October 20, 2023. This faculty orientation session was addressed by **Ms. Dainu Kuruvilla**, HR Manager at Tata Elxsi.



PLACEMENT ORIENTATION SESSION BY CARESTACK



A "Placement Orientation Session" was conducted on 27 October 2023 by CareStack, at MBCET, targeting third-year Computer Science students, The session

was led by Ms. Nadia Baba, HR Manager at CareStack.

STUDENT WELFARE-AWARENESS PROGRAMME

Student Welfare-Awareness Programme "Aduthariyam Lahariyude Niyamam" by Kerala State Excise Department is hosted by on 04 November 2023. Around 250 students from various colleges in Trivandrum district participated in the programme. Inauguration was done by Shri. D Balachandran, Deputy Excise Commissioner Thiruvananthapuram. Session was handled by Shri. Binu P. M., Assistant Professor Kerala Law Academy, followed by quiz competition and debate. Mr. Ajay K. R. Assistant Excise Commissioner and Vimukthi Manager, Mr. Shiju Kumar S.S. Excise Circle Inspector Thiruvananthapuram, Mr. Vignesh Vishwanath Vimukthi Mission Coordinator Thiruvananthapuram, Mr. Ramjith R. P. Assistant professor MBCET addressed the gathering.

ATTENDO APP LAUNCHED

As part of Awareness against drug usage and laws conducted by Kerala State Excise Department in association with MBCET on 4 November



2023, a Mobile application "Attendo" developed by students of the Dept. of CSE was launched by Shri. D. Balachandran, Deputy Excise Commissioner Thiruvananthapuram. This application is in use at Govt. HSS Anavoor. The App can help to monitor the students and keep them away from the menace of drug abuse. Through this application students can register the complaints if anyone is approaching them with malicious intentions. These complaints will be visible to the Kerala Excise Department through email, automatically.

CAREER ENHANCEMENT SESSION BY CAPABL

The Dept. of CSE organised a Career enhancement session in association with Capabl, Bangalore. During the session,



the CEO of the company, Mr. Mayank Arora addressed the gathering and conducted AISAT (All India Skill Assessment Test) where 30 students from S7 CSE and

30 students from S3 CSE were selected for their Naukri Saksham Programme. 120 students from S7 CSE and 120 students from S3 CSE attended the session. Faculty coordinators: Ms. Sreeja S. R. and Ms. Krishna L.

SESSION ON CYBER SECURITY

A session on "Cyber Security" was conducted by-Red Team Hacker Academy, TVM at Pascal Hall for S5 CSE students on 14 November 2023. Faculty coordinators: Ms. Deepthi K. Moorthy, Mr. Anand Haridas, Ms. Krishna L.





HANDS-ON WORKSHOP ON "OBJECT ORIENTED DESIGN (JAVA)"

The Dept. of CSE in association with CSI MBCET, conducted a hands-on workshop on Object Oriented Design (Java) for S3 B-Tech CSE students (count-112) on 25 November



23. **Ms. Anjali C.**, Senior Software Engineer at Ospyn Technologies gave students an insight on Java concepts of Lambda expressions and Collections.

Faculty Coordinators: Ms. Lino Zachariah, Ms. Gauri Shree V. K. Student Coordinator: Nandini Krishna S3 CS2.

FDP ON GENERATIVE AI WITH HANDS ON TRAINING USING PYTHON

The Dept. of CSE in association with CSI-SB & Data Analytics Research Group, organized 6 days Online Faculty Development Programme on "Generative AI with Hands on Training Using Python" from 29 January –03 February 2024. **Dr. Jisha John**, HOD CSE delivered the welcome address. The Programme included sessions on Recent Trends in Deep Learning, Transformers, Fine tuning and Prompting of transformers, Detailed study about GAN, Recent trends in Generative AI for both image and Text and so on. There were 102 online registrations. Faculty coordinators: **Ms. Vishagini V.** and **Ms. Lino Zachariah**, AP, CSE

FACULTY ENABLEMENT SESSION BY NISSAN DIGITAL

The Department of Computer Science and Engineering in association with Nissan Digital conducted a Faculty Enablement Session on 14 December 2023. Resource



persons were **Mr. Selva Prabhakaran** (Principal Data Scientist, Nissan Digital), **Mr. Anant Agarwal** (Data Science Manager, Nissan Digital), **Mr. Rajesh Vaddi** (Data Science Manager, Nissan Digital) and **Mr. Sebastian Ukken** (DGM Business Excellence, Nissan Digital).

MICROSOFT AZURE DATA FUNDAMENTALS SESSION BY EY GDS



The Dept. of CSE, in association with the Training and Placement Unit, hosted a session on Microsoft Azure Data Fundamentals on 27 February 2024 at Shannon Hall.

The session was led by Data Engineers, Mr. Vishnu Govind, and Mr. Anish Menon from Ernst & Young Global Delivery Services, to empower 3rd-year CSE on Cloud Technologies. Student Coordinators: Ferwin Lopez, Sreeparthip V., Diya Sundeep, Riyanna Maria Abison, Faculty Coordinators: Dr. Anne Dickson, Ms. Merlin George.

INDUSTRY INSTITUTE COLLABORATION

INDUSTRIAL VISIT TO COGNIZANT

An industrial visit to **Cognizant Technologies**, a service-based IT company, was organized for S3 and S5 CSE students on 15 and 16 November 2023. The students from S5 CS1 were accompanied by the faculty members: **Dr. Tessy Mathew**, **Dr. Jesna Mohan** and **Mr. Praveen J. S.** and S5 CS2 by faculty members: **Ms. Asha S.**, **Ms. Jisha John** and **Mr. Shibu V. S.**



INDUSTRIAL VISIT TO CARESTACK

The industrial visit to **CARESTACK**, a product-based IT company, was organized for the third-year students of the Department on 10 January 2024. The internship was concluded with a session handled by **Mr. Arun**, Product Manager, Carestack on 'Importance of Lifelong Learning Insights, Networking'.



VISIT FROM BOWIE STATE UNIVERSITY

As part of the collaboration with BOWIE STATE UNIVERSITY **Prof. Darshana Josyula** (Professor, Department of Computer Science, Bowie State University) visited the Dept. on 19 January 2024, and had a discussion on the collaboration activities and student exchange programmes.



ASSOCIATION OF COMPUTER ENGINEERS ACTIVITIES

ACE UNVEIL

The Association for Computer Engineers (ACE) represents the Professional association of Department of Computer Science and Engineering. The inaugural ceremony titled

"ACE UNVEIL," held on November 24 and was inaugurated by **Dr. Brijesh Madhavan**, CEO of Curvelogics Advanced Technology Solutions Pvt. Ltd., and **Mr. Alex Varghese**, an alumnus of MBCET and Senior Cybersecurity Architect at Oracle India. A session named ACE LAUNCHPAD,



with a primary focus on first-year students, was conducted. Faculty coordinator: Mr Praveen G. L., Ms. Deepthi K. Moorthy Student coordinator: Elizabeth Syam, Abraham Aniyan Varghese

COMPUTER SOCIETY OF INDIA (CSI ACTIVITIES

FDP ON "DIGITAL FORENSICS"

The Dept. of CSE in association with CSI SB, organized five days faculty development programme on "Digital Forensics" in hybrid mode from 19-23rd February, 2024. The resource persons were Ms. Achu Marium John (Analyst-Information Security, UST, Thiruvananthapuram), Ms. Dija S. (Scientist-F, CDAC, Thiruvananthapuram), Dr. Dittin Andrews (Scientist-E, CDAC, Thiruvananthapuram), Dr. Ranju S. Kartha (Associate Professor, Dept of IT, Rajagiri School of Engineering And Technology), Mr. Jayaram P. (Scientist-E, CDAC, Thiruvananthapuram), Mr. Hiron Bose (Scientist-E, CDAC, Thiruvananthapuram), Dr. Sibi Chakkaravarthy S. (Associate Professor, School





of CSE, VIT Andra Pradesh), **Mr. Adonis Thokalath Sunny** (Senior Associate, Ey, Thiruvananthapuram), **Mr. Shijin C.** (Project Engineer, Cdac, Thiruvananthapuram), **Mr. Midhun Mohan M. G.** (Supervising Associate, Ey, Thiruvananthapuram), **Mr. Binny Jacob Kuriakose** (Assistant Director, Ey, Thiruvananthapuram). **Dr. Abraham T. Mathew**, Principal, MBCET delivered the valedictory address. There were 56 registrations for the event. **Ms. Prathibha S. Nair** and **Ms. Vijitha Robinson**, Assistant Professors, Dept. of CSE were the Faculty Coordinators.

HANDS ON SESSION ON "INTRODUCTION TO FastAPI AND GRAPHQL"

The Dept. of CSE in association with CSI Trivandrum Chapter and Trivandrum Python Community organized an online session on "Introduction to FastAPI and GraphQL" from 17 to 19 January 2024. Third semester CT students and members of CSI and Trivandrum Python Community participated in these sessions. The resource person was **Mr. Jothir Adithyan**, Product Engineer, UST. Faculty coordinator:- **Dr. Neena Raj N. R.** Student coordinators:- **Mr. Aadithya S. L**, **Mr. Ashvin P. Kumar** (S3 CT).

HANDS-ON SESSION ON "GETTING STARTED WITH MONGODB"

Dept. of CSE in collaboration with ISTE MBCET and CSI MBCET organized an online hands-on session on "Getting started with MongoDB" on 14 January, 2024 for S5 CSE students. The resource person was **Mr. Kevin Jacob,** Product

Engineer at UST, who covered basic concepts of MongoDB and different job opportunities it provides. Faculty coordinators: Ms. Poorna B. R. and Mr. Ramjith R.P. Student coordinators: Krishnapriya Deepak and Riyanna Maria Abison.

ALUMNI GROUP ACTIVITIES



ALUMNI ACHIEVEMENT

Mr. Samuel Punnoose John (CSE Alumnus 2013-2017) joined Apple Inc. as System Design Engineer at San Diego, California.

PAPER PRESENTATION

Mr. Praveen G. L., Ms. Jisha Jose, Mr. Melvin Joseph K., Ms. Lino Zachariah, Assistant Professors, Dept. of CSE, presented papers in Conferences held at different Institutions.

FACULTY ACHIEVEMENTS

APPRECIATION AWARD

Ms. Dhanya L. K., Assistant. Professor, CSED, received the Exam Preparation Series Appreciation Award for her noteworthy contributions at the Permute event held at Park Center, Technopark, on February 23, 2024 organized by MuLearn.

BOOK CHAPTER PUBLISHED

Ms. Devipriya V. S. (Asst. Professor, Dept. of CSE) co-authored a book chapter in 'Digital Twins' (ISBN: 979-8-89113-057-9), published in September 2023.

PATENT PUBLISHED

Dr. Sibi Chakkaravarthy Sethuraman (VIT-AP) and **Ms. Devipriya V. S.** (Assistant Professor, Dept of CSE, MBCET) published a patent.

CHAIRED THE SESSION

Ms. Sreeja S. R., Assistant Professor, Dept. of CSE, chaired the session on "Mixed Reality in Surgery Planning" conducted as part of the Pulse Talks, organized by IEEE EMBS, on 14th December 2023.

PARTICIPATION IN CONFERENCES/ SYMPOSIA/ WORKSHOPS/ SEMINARS

BOOTCAMP ATTENDED

 Dr. Tessy Mathew, Professor, Dept. of CSE, participated in the "Machine Learning with TensorFlow Bootcamp" organized by the ICT Academy of Kerala in association with Google for Developers India Edu Program on 18 November 2023. Dr. Anne Dickson, Assistant Professor, Dept. of CSE, participated in the "Machine Learning with TensorFlow Bootcamp" organized by the ICT Academy of Kerala in association with Google for Developers India Edu Program on 18 November 2023.

ATTENDED CONFERENCE

 Ms. Prathibha S Nair, Ms. Lino Zachariah, Assistant Professors, Dept. of CSE attended the Springer icSoft Comp 2023 (5th International Conference on Soft Computing and its Engineering Applications) organized by Charotar University of Science and Technology, Changa, India from 07-09 December 2023 in virtual mode.

FDP ATTENDED

Mr. Shon J. Das,Ms. Poorna B. R., Ms Prathibha S Nair, Ms Vijitha Robinson, Mr. Ramjith R P, Dr Tessy Mathew, Dr. Jisha John, Mr. Anand Haridas, Dr. Neena Raj N. R., Ms. Krishna L., Ms. Merlin George, Dr. Priya Mariam Raju, Ms. Krishna L., Ms. Merlin George, Ms. Anjali S., Ms. Deepthi K. Moorthy, Ms. Lino Zachariah and Ms. Jisha Jose attended FDP's organized by different Institutions.

ATTENDED THE INTERNATIONAL CONCLAVE ON SKILLS, ENGINEERING, AND TECHNOLOGY

Mr. Anand Haridas, Assistant Professor, CSED, Adlu Rahman, Abhishek Raman, Diya Sundeep, Gayathri K.S., Nanadana T. S., Melvin Joseph, Aravind J.L., Nikitha Anna, R. Sidharth, Abhishek S. and Rilin George (students from S5 CSE) attended The International Conclave on Skills,



Engineering, and Technology, ICSET 2023, organized by the ICT Academy of Kerala on 19 September 2023 held at Adlux Convention center, Angamally. Mar Baselios College of Engineering & Technology has been selected as a Premium Member of ICT Academy of Kerala for the Academic Year 2023 -24. The premium member certificate was also received on the same occasion.

ATTENDED IEEE EVENT

Dr. Jisha John (HoD, Dept. of CSE), **Dr. Tessy Mathew** (Professor, Dept. of CSE), **Dr. Veena Nair** (Asst. Professor, Dept. of S&H), **Mr. Binu K. John** (Librarian) attended the "Empowering Engineering Education: The Role of IEEE Content" event at Hotel Vivanta, Thiruvananthapuram on 14 September 2023 organized by IEEE EBSCO.



PARTICIPATED IN THE MuLearn EVENT

Mr Arun J S (Asst. Professor, Dept. of ECE) and Ms. Vishagini.V (Asst. Professor Dept. of CSE) participated in the 2-day event on "Education 4.0 - Investing in the Future of Jobs & Skills" from 7-6 October 2023, organized by MuLearn.

WORKSHOP ATTENDED

Mr. Shibu V.S. Asst. Professor, Dept of CSE has attended the Seven-day FDP SERB Karyashala High- End Workshop organized by the Department of CSE, NIT Calicut, from 8 to 14January 2024.

COURSE COMPLETED

Dr. Anne Dickson, **Ms. Vishagini V., Ms. Vijitha Robinson**, Asst. Professors attended courses / Training organized by IHRD, AICTE etc.

FACULTY INTERACTION WITH OUTSIDE WORLD

FACULTY AS RESOURCE PERSON

• Ms. Dhanya L. K., Assistant Professor, was the resource person for the 2-day workshop on Machine Learning Using Python, for the S3 and S1 BCA Students at Christ



College, Vizhinjam, on 18 and 19 October 2023.

- Dr. Neena Raj N R, Assistant Professor, was a resource person for the workshop on "Let's Learn LaTex" organized by Department of Computer Applications, Christ College Vizhinjam on 25 October 2023.
- Mr. Shibu V. S. Asst. Professor, Department of Computer Science and Engineering served as resource person on "Advanced C Programming" for the Placement Training Programme for the S6 Computer Science students held at FISAT Engineering College, Angamaly.

JOURNAL REVIEWER

Ms. Sreeja S. R., Asst. Professor, in CSE served as reviewer for the Journal "Journal of Advances in Medicine and Medical Research". The journal is indexed in US National Library of Medicine (NLM) Catalog (NLM ID: 101711724), Index Copernicus (ICV: 100.00), CNKI (China), Polish Ministry of Science and Higher Education etc.

PUBLICATIONS

PAPER PUBLICATION

Ms. Sreelekshmi S. A, Dr Jisha John (Prof and HoD, Dept of Cse), Ms. Jisha Jose, Dr. Neena Raj N. R., Ms. Devi Priya V. S., Ms. Sreeja S. R., Ms. Anjali. S, Ms. Vinny Pious Asst. Professors in CSE published papers in different Journals.

ACCOLADES WON BY STUDENTS

TOP 100 CODERS COMPETITION

The students of the Department got selected in the **Top 100 coders competition** organized by **G Tech Mulearn** in association with **Kerala Startup Mission**. During the hackathon, they developed their software products and showcased them in the Huddle Global, India's Largest Beach Startup Festival from 16 November 2023 to 18 November 2023. They have placed themselves within the top 20k rank globally in the HackerRank platform for competitive coding. The members are 1. **Aditya S.**, S5EC2, 2. **Amrithesh S.**, S5EC2, 3. **Prajwal Pramod**, S5CS2, 4. **Abel Louis Fernandez**, S1 CT.

BEST START-UP AWARD

The Start-Up team by Mr. Abhilash George (S5 CS2) and Ms. Ann Santhosh (S5 EC2) won the "Best Startup

Award" in 'NOVA 2k23' conducted by Don Bosco College on 9 November 2023. The Team has won funding from the Young Innovators Program organised by KDISC.



CODECRYPT

Rhon S George, Vinu B Kurup, Ritin George D S5CS2 and Adithya Krishnan S5CS1 won the award for Best UI/UX in CodeCrypt, organized by ACES CUSAT on 24-25 November 2023. They were the runner-up of the hackathon conducted as part of the event and received a cash award of Rs 15,000.

Web3 for India 2030

Rhon S George, Vinu B Kurup, Ritin George D S5CS2, Mr. Adithya Krishnan S5CS1 and Ms. Krishnapriya Deepak won web3 for India 2030 Organized by Kerala Blockchain Academy on 30th November 2023. They won a cash prize of Rs 1,00,000.

Amrita Blockcamp

Rhon S George, Vinu B Kurup, Ritin George D and Adithya Krishnan (S5CS1) were the 3rd Runner-up in the Amrita Blockcamp Organized by Amrita Vishwa Vidyapeedam during 4-5th May 2023. They won a cash prize of Rs 5,000.

SPARSHAM OUTREACH ACTIVITY

The Department of Computer Science and Engineering, as part of the 'SPARSHAM' outreach initiative, arranged a charity drive for book donations. This drive aims to benefit the students of Govt. Regional Fisheries High School and Higher Secondary School near Valiyathura. Faculty Coordinators: **Ms. Poorna B. R., Ms. Gauri Shree V. K.** (Asst. Professors, CSED)



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CONFERENCES/SYMPOSIA/WORKSHOPS/SEMINARS/WEBINARS/TRAINING/INTERNSHIPORGANIZED

Talk Sessions

The IEEE EMBS SBC in association with eNiX and Biomedical Research Group of ECED organized a seminar session on the topic "Sleep & Technology: Understanding the connection" on 10th November 2023. The resource person for the



session was **Dr. Kamalesh Gulia**, Scientist G (Professor) and In-charge, Division of Sleep Research, BMT Wing, Sree Chitra Tirunal Institute for Medical Sciences & Technology. 56 students attended the session. Coordinators: **Dr. Lani Rachel Mathew** and **Dr. Emy Mariam George**, Asst. Professors, ECED.

The Department of ECE organized an expert talk session on the topic "Value of IEEE Xplore & EBSCO ebooks in Research, Placement & Career Development" for the final year students on 5 October 2023. The resource person for the session was **Mr. Nanda Lal T. S.**, Senior Training Manager-South India, EBSCO Information Services, New Delhi. Staff coordinator: **Mr. Binu K. John**, Librarian, **Dr. Swapna P. S.**, Assoc. Professor, ECED and **Ms. Ann Mary Alex**, Asst. Professor, ECED.

Career Guidance Talks:

 The Department of ECE organized a career guidance session for S7 ECE students on 23rd November 2023 by Mr.



Renju John, Research Associate, A-Star Singapore. **Mr. Niyas. K. Haneefa**, Assistant Professor, ECED, coordinated the session.

 A career guidance session on 'Career Guidance for Higher Studies' for S7 ECE students on 11 October 2023 by Mr. Salim Peter, Manager, Presidency University, Bangalore. Mr. Niyas. K. Haneefa, Assistant Professor, ECED, coordinated the session.

Intel India Education Conclave

An Education Conclave organized by Intel India took place at the Intel Campus in Bangalore on November 3 and 4, 2023. **Mr. Jinu Baby**, Assistant Professor in



ECED, **Mr. Shiras S. N.**, Assistant Professor in ECED, and **Mr. Jijo Jose**, Assistant Professor in ECED participated in tracks focused on SoC& FPGA Design, 5G/6G in Industry, and Generative AI & Industrial IOT, respectively.

Blessing Ceremony



The Blessing Ceremony of the newly upgraded 'Modelling and Simulation lab' of ECE Department with 65 new

desktop pcs was held on 20th November 2023. **Rev. Fr. John Varghese Palanilkunnathil**, Bursar and **Fr. Thomas Mukalumpurathu**, Assistant Bursar officiated the Prayer Ceremony.

INDUSTRY - INSTITUTE COLLABORATION INITIATIVES

Visit to SCTIMST



A visit to SCTIMST was arranged for the 3rd semester B. Tech students doing minor in B.Tech Electronics and Communication E n g i n e e r i n g

(Biomedical Engineering basket) on 6th Dec 2023. Faculty incharge: **Dr. Jayakumari J.**, Prof.& Head, Dept. of ECE

Visit to Maker Village and FabLab



Students of S5 EC1 and S5EC2 visited the Maker Village and Fablab, Kalamassery, Cochin for a one-day Industrial Visit on 6and 13 December 2023. The students were accompanied by **Dr. Swapna P. S.,** Asso. Professor, **Mr.Jinu Baby, Mr. Shiras S. N.** and **Mrs. Salga Ann Jacob**, Asst. Professors, ECE

VISIT TO VSSC

The students of S8 ECE visited VSSC Space Museum on 20 March 2024. The team of 21 students were accompanied by Ms. Merin Philip and Mr. H. Aravind Sarma, Asst. Professors, ECE



Visit to ICFOSS

The students of S3 EC1 and S3 EC2 visited the International Centre for Free and Open Source Software (ICFOSS) for a one-day Industrial Visit on 11 and 14 December 2023. ICFOSS is an autonomous organization set up by the Government of Kerala. The students were accompanied by **Dr. Luxy Mathews**, Asso. Professor, **Dr. Ancy S. Anselam**, Asso. Professor, **Mrs. Anu Susan**, **Mr. Sreekumar M. G.**, **Mr. Sherry Varghese George** and **Ms. Gouri Nandhana**, Asst. Professors, ECE.





MuLearn Recognition in 2023: Celebrating Excellence

• Top Campus Award 2023:

Mar Baselios College of Engineering and Technology has proudly clinched the title of Top Campus 2023 in The Mulearn Annual Awards. This prestigious accolade is a testament to their exceptional performance, securing an impressive 8 lakh Karma Points throughout the year. Faculty Coordinator: **Mr. Arun J. S.**, Assistant Professor, EC Student Coordinator: **Aditya S.**, S5 EC2

In another remarkable achievement, Team Codeify has emerged as the Top Learning Circle in the state.

Mr. Arun J. S., Assistant Professor, EC and Lead Enabler Mulearn MBCET. Team members Aditya S., Amrithesh S., Ameer Ansary S5 EC2, and Prajwal P. P. S5 CS2, they won 25800 Karma points.

The Annual General Meeting of IEDC 2022-2023

The Annual General Meeting 2023 of Catalyst IEDC was conducted on 5 January at Senatus Hall. The meeting started with



the welcome address of the Catalyst IEDC Nodal Officer Mr. Arun J. S. The Annual Report for the year 2023 was presented by C. Rachana former CMO Catalyst IEDC. Dr Abraham T. Mathew, Principal unveiled the Catalyst IEDC website and addressed the students.

The Executive Committee of Catalyst IEDC for the year 2024 was announced by Mr. Arun J. S., C. Rachana, is the new CEO and Krishnapriya Deepak the COO.

PROGRAMMES CONDUCTED BY THE DEPARTMENT

Faculty Development Programme organized

The Biomedical Research Group, Department of ECE, in association with the IEEE EMBS Kerala

Chapter, organized a five-day FDP on "Recent Trends in Healthcare and Assistive Technologies – RTHAT'24" from 29 January to 02 February

2024, to foster





disability inclusion in society. The FDP was formally inaugurated on 29 January 2024, by Mr. Jithin Krishnan,

Vice Chair, IEEE EMBS Kerala Chapter, in the presence of Rev. Fr. John Varghese, Bursar, Dr. Abraham T. Mathew, Principal, Dr. S. Viswanatha Rao, Vice Principal, and Dr. J. Jayakumari, HoD, ECE. The FDP was coordinated by Dr. M.J. Jayashree, and Ms. Amritha B. J., Department of ECE.

Internship Programme

IEEE Signal Processing Society (SPS) SBC MBCET in association with Signal Processing Research group, Dept. of ECE organized "Pas de Code version 2 - a 6-day Internship Programme on Simulation of Machine Learning and Deep Learning models using MATLAB and Orange" from 9 to 14 October 2023. It was a 30 hours programme organized for second and third year B.Tech students of MBCET. Ms. Manju S., Vice Principal, NISH, Dr. Lani Rachel Mathew and Ms. Deepa P. L., Asst. Professors, Dept. of ECE, MBCET were the resource persons. Mr. Sreekumar M. G. and Ms. Deepa P. L. coordinated the programme. Akhil Paulton Adem S7 EC2, Chair, IEEE SPS, MBCET was the student coordinator. 40 Students completed the internship programme.











Intel Unnati Tool Kit Training

A 5 day Intel Unnati Tool Kit Training [Part-1] was conducted from 17 to 21 October, 2023 at the Intel Unnati Data-Centric Lab.



The sessions were handled and coordinated by **Dr. Swapna P. S.**, Associate Professor, Dept. of ECE and **Mr. Jijo Jose**, Assistant Professor, Dept of ECE. There were 18 participants from M1, S3 and S5 of various departments.

eNiX - Department Association Activities

Introductory event (For 1st years)-On 22/09/23, e-NIX, the Departmental Association of Electronics and Communication conducted an introduction session about the Association. The talk session was handled by Abhiram Krishna, member of e-NIX association.

COMMUNITY OUTREACH PROGRAMMES SPANDANAM ACTIVITIES

• As part of the Spandanam (Social Service wing of Dept. of ECE), activity, monetary support was given to a needy patient who



undergoes dialysis twice a week in Powdikonam, Thiruvananthapuram on 11 October 2023.



• As part of the Spandanam activity donated 107 food kits at RCC, Trivandrum in collaboration with NSS on 1st March 2024.

FACULTY ACHIEVEMENTS

Certificate of Appreciation

- Ms. Deepa P. L., Assistant Professor, Dept. of ECE, was awarded the certificate of appreciation for the Malayalam Translation of the course "Engineering Mechanics" offered by IIT Madras on 31 October 2023.
- Ms. Salga Ann Jacob, Assistant Professor, Dept. of ECE, was awarded the Certificate of Appreciation for the proactive work and volunteering in the Team for preparing the data for sustainable institutions of India Green Ranking 2023 conducted by the R. World Institutional ranking.

Proficiency Certificate

- Ms. Lekshmy S, Asst. Professor, Dept. of ECE completed the Skill Development Training Program on 'Internet of Things-PHASE III' and scored above 75% in the final assessment under the joint venture of ISTE & BNY Mellon.
- Mr. Shiras S N, Asst. Professor, Ms. Anu Susan Philip, Ms. Merin Philip and Mr. Sherry Varghese George, Asst. Professor, Dept. of ECE, completed 12 week NPTEL course on "Introduction to Wireless and Cellular Communications" from July to October 2023 and obtained Elite certification.

RESOURCE PERSONS FOR WORKSHOPS/ CONFERENCES/EXPERT LECTURES

RESOURCE PERSON (EXTERNAL)

Dr. M.J. Jayashree
 S, Professor, Dept.
 of ECE, and IQAC
 Coordinator, delivered an Orientation



- talk on 'NAAC Criteria and the Accreditation Process' on 19-01-2024 to the Faculty members of Marian Engineering College.
- **Dr. M.J. Jayashree** coordinated the Annual event named "Ignium 2023" for the student members of IEEE EMBS Kerala Chapter in online mode on 30th December 2023.
- Dr Jayakumari J, HOD, Dept. of ECE, delivered an invited talk on Intelligent Reflecting Surface aided wireless communication systems- applications and challenges today (online) during the 2023 5th International Conference on Circuits and Systems sponsored by University of Electronic Science and Technology, China and IEEE Chengdu CEDA hosted by Yangtze Delta Region Institute, China. Conference is being held in Huzhou, China. She chaired a Technical session "Electronic Device Design" on 30 October 2023 in the same conference.

RESOURCE PERSON (INTERNAL)

• **Dr. Lani Rachel Mathew** took a session on 'Speech analyzer with Raspberry pi, Praat and Python' as part of the internship 'Pas de code' conducted by the Signal processing group on October 2023.

- She handled a hands-on session also on STM32 Microcontroller as part of the Faculty Development Program on 'Recent Trends in Healthcare and Assistive Technology' on 31 January 2024
- Mr. Sherry Varghese George handled a hands-on session on STM32 Microcontroller as part of the FDP on 'Recent Trends in Healthcare and Assistive Technology' on January 31, 2024

PUBLICATIONS

- **Prathap P**, **Jayakumari J**, "An improved neural network-based saliency detection scheme for light field images," Multimed Tools Appl (2023). doi:10.1007/s11042-023-17683-x
- J. L. Lakshmi, J. Jayakumari, "A Novel Resource Sharing Channel Interleaver for 5G NR," Advances in Electrical and Computer Engineering, vol.23, no.4, pp.61-68, 2023, doi:10.4316/AECE.2023.04007
- Deepa P L, Narain Ponraj D. and Sreena V. G., "Performance analysis of deep transfer learning approaches in detecting and classifying brain tumor from magnetic resonance images", Intelligent Data Analysis, vol. 27, no. 6, pp. 1759-1780, 2023 (https://content.iospress.com/articles/intelligent-data-analysis/ida227321)
- Femina Jalin, Jayakumari J, "LASSO Based Acoustic modelling for Tamil text to Speech Synthesis", KongzhiyuJuece/Control and Decision, pp. 1933-1945.
- Ann Mary Alex, Jobymol Jacob, "Hot Carrier Effects on High Frequency Characteristics of SiGe HBTs", International Journal of Electronics Letters, pp. 1-11.
- Mr. Jijo Jose and Mr. H. Aravind Sarma, Asst. Professors, presented a paper titled "Real-time Fall Detection Model with Action Recognition based on Deep Learning" in the IEEE-sponsored 2023 Global Conference on Information Technologies and Communication (GCITC) organized by the Reva University, Bengaluru, India from 1-3, December 2023.

PARTICIPATION IN CONFERENCES WORKSHOPS/FDPs/SEMINARS/WEBINARS

FDPs/STTPs/WORKSHOPS/CONFERENCE

• **Dr. S. Viswanatha Rao**, Professor, Vice Principal and Dean (Academic Affairs), **Dr. M. J. Jayashree**,

Dr Luxy Mathews, Ms Deepa P. L., Mr. Arvind P., Dr. J. Jayakumari, Professor & Head of ECE, Dr. P. Sreedevi, Mr. Niyas K. Haneefa, Ms. Anu Susan Philip, Mr. Shiras S.N, Mr. Sherry Varghese George, Ms. Amritha B.J., Mr. Arun J.S., Ms. Salga Ann Jacob, Dr.Vineetha Mathai, Ms. Merin Philip and Mr. H. Aravind Sarma attended FDP/Conferences on different dates in various Institutions.

STUDENT ACHIEVEMENTS

A Team consisting of **Abhilash** George S5 CS, Johann Joshua Knox S5 CS2 and Ann Santhosh S5 EC2 won second place at Dekathon 2.0, held at St Thomas



College, Chengannur. They received 25,000/- cash prize as well as a fully sponsored one-week internship at FabLab KSUM, Kochi.

Best Startup Award:



The startup by Abhilash George S5 CS2 and Ann Santhosh S5 EC2 won Best Startup Award in NOVA 2k23 conducted by Don Bosco

College on 9 November 2023. The team has already won funding from the Young Innovators Program organized by KDISC.

• IEDC Makerstudio Interns Showcase Project at **Exhibition**

A group of students completed internship at the IEDC Maker Studio and exhibited their internship project, a smart home/office automation device at the Navajeevan



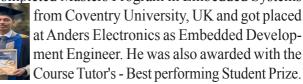
Bethany Vidyalaya on 30 November 2023. The student team, composed of Gouri Sankar S3 EC1, Kurien P. Issac S3 EC1, Alwin John S3 EC, and Vishnu B. S. S3 EL, designed a cutting-edge device capable of seamless integration with existing wiring infrastructure. Under the guidance of Mr. Jijo Jose, Assistant Professor, ECED and with the invaluable support of Mr. Chandramohan, Lab Instructor, IEDC Maker Studio, the students demonstrated their technical prowess and dedication.

ALUMNI ACHIEVEMENTS

Mr. Kevin (2015-2019 ECE) completed masters in Data Science and AI from the University of Liverpool and graduated as valedictorian.



Mr. Renjith Gopan (2017 - 2021 ECE) has successfully completed Masters Program in Embedded Systems



Ph.D Awarded

Ms. Revathy Sivanandan, Ph.D. scholar of APJ Abdul Kalam Technical University under the guidance of Dr. Jayakumari J, Professor & HOD, Dept. of ECE defended her Ph.D. thesis titled "Development of novel CNN for efficient tumour diagnosis from breast ultrasound images", on 07 November 2023. She is the first scholar who received Ph.D degree from MBCET Research Centre under APJ Abdul Kalam Technical University.

Newly Joined Faculty

Ms. Lakshmi J. L., Ms. Nithya Mohanan, Ms. Bincy Ponnan and Ms. Radhika S. Ms. Lakshmi J L Ms. Nithya Mohans







joined as Assistant Professors in the department of ECE.

Technical Staff achievement

Ms. Manju Suresh, Sr. Grade Instructor, Dept. of ECE, completed a 8 week NPTEL course on "Embedded System Design with ARM" from Jan to March 2024 and obtained Elite certification.

Faculty as Resource Person

Mr. Arun J. S. Assistant Professor, Dept. of ECE delivered a session on Idea generation using business model canvas at "Ideathon 2024" held at Sree Anjaneya Institute of Dental Sciences, Kozhikode on 22 March 2024

Paper Presented

Dr. Jayakumari J., Professor and Head, Department of ECE presented a research paper during the Second International Conference on Advances in Smart

- Sensor, Signal Processing & Communication Technology organized by Goa University on 23 March 24.
- Ms. Teena Rajan, Assistant Professor, Dept. of ECE presented a paper at Second International Conference on Advances in Smart Sensor, Signal Processing and Communication Technology (ICASSCT 2024), held at School of Physical and Applied Sciences, Goa University, Goa, India 23 March 2024.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

DEPARTMENT ACTIVITIES

NEW HEAD OF THE DEPARTMENT

Dr. Elizabeth Varghese, Associate Professor assumed charge as the Head of the Department of Electrical and Electronics Engineering on 1 November 2023.



NEW FACULTY JOINED



Mr. Midhun G. joined as Assistant Professor in the Department of Electrical and Electronics Engineering on 26 February 2024.

CONTROL SYSTEM RESEARCH GROUP ACTIVITIES

The Control Systems Research group, Department of Electrical and Electronics Engineering organized an invited talk on the Control Aspects of Soft landing of Chandrayaan - 3 for the final year students on 08 December 2023. The resource persons were: Ms. Revathi H., Group Director, LPSC, ISRO and Mr. Benoy Joseph K., Divisional Head, LPSC, ISRO.

ONLINE CERTIFICATION COURSE

- The Department of Electrical and Electronics Engineering in association with Energy Management Centre, Kerala organized an EMC Online Certification Programme on "Recent Trends in Sustainable Energy Management Practices" during September-October 2023. The programme was coordinated by Ms. Vandana P. and Mr. Aswin R B, Assistant Professors, EED.
- The Department of Electrical and Electronics Engineering in association with CDAC organized "Circuitrix", a 30 hrs Online certification programme

on Simulation of Power Electronic Circuits from Basics to Applications in MATLAB/Simulink. The programme was coordinated by Ms. C. Sojy Rajan and Ms. Vrinda Prasad, Assistant Professors, EED.

GATE 2024

• An online orientation session targeting GATE 2024 for S7 students inside and outside campus, was organised by EEE department on 07 September 2023. The session was handled by Mr. Unni R., Freelance educator at Unacademy and Entri apps. More than 30 students participated in the event. The event coordinators were Ms. Revathy K P and Ms. Amala Justin, Assistant Professors, EED.

INTERACTION WITH OUTSIDE WORLD

- Dr. Soumya AV, Asst. Professor, Dept. of EEE and Ms. Sandra S. R., S6 EEE, Chair, IEEE EMBS attended OPEN DAY at Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum on 23 February 2024.
- **Dr. Nisha G K,** Professor, EED attended 40th Anniversary celebrations of IEEE Kerala Session on 10 December 2023 at Mascot Hotel, Trivandrum. The event was inaugurated by Prof. Saifur Rahman, IEEE Life Fellow, Director of Virginia Tech Advanced Research Institute, USA, and the current IEEE President. Prof. Rahman, a trailblazer in technology and innovation, shared his insights on IEEE's role in Climate Change Mitigation & Resilience.
- **Dr. Nisha G K**, Professor, EED attended the Kerala Leadership Summit, organised by IEEE WiE Kerala Section as part of WiECON-ECE'23 on 26 November 2023 at Hotel Apollo Dimora, Trivandrum.

• Kerala Energy Fest

A team of EE and ME faculty attended Kerala Energy Fest and the launch event of Centre for Energy studies, an initiative by Energy Management Centre Kerala. The team consisted of Mr. Aswin R B, Ms. Neetha Chandran of EED and Mr. Ayswer A S, Mr. Ajeesh M V of MED.

Industrial Visit to KEL

43 students from S5 EE along with **Dr. Soumya A.V.** and **Mr. Aswin R.B.** visited Kerala Electricals



and Allied Engineering Co Ltd (KEL) Mamala on 08 December 2023.

• Industrial Visit to Milma



As part of the National Milk Day celebrations on November 26 and 27, commemorating the 102nd birth anniversary of Verghese Kurien, the Father of the

White Revolution in India, The second-year students of EEE visited the production unit of Milma, Ambalathara on 27 November 2023, accompanied by Faculty Advisors.

Visit to KSEB

A group of students along with Mr. Ayush Vijayan and Ms. Neetha Chandran, Assistant Professors, visited KSEB on 16 October 2023 as part of the final year project



to discuss the load arrangement in Thiruvananthapuram district. They visited the SCADA Control unit also and had interaction with the officials of KSEB.

• **Dr. Nisha G. K.** attended the first Brain Storming Session on the formation of Women Cell in Energy on 27 September 2023, in EMC Office. She was nominated by EMC.

ILLUMINA ACTIVITIES

- Illumina, the Professional Association of Department of EEE in collaboration with IEEE PES SBC MBCET conducted an expert talk on the topic, "Renewable Energy Integration to Electric Grid with Battery Energy Storage" on 13 December 2023 for the final year EEE students. The resource person was Dr. Sukumar Kamalasadan, Professor and Distinguished Scholar, Department of Electrical and Computer Engineering, The University of North Carolina, Charlotte.
- Illumina, along with NSS Units 230 and 706, Phoenix Trivandrum NGO organization and Enix, the department association of ECE, conducted blood donation camp on 30 November 2023. Sri. Brahmanaykam Mahadevan inaugurated the session. 68 volunteers registered for the camp and 39 students donated the blood in the camp.

FACULTY ACHIEVEMENTS

PhD AWARDED

- Dr. Soumya A. V., Assistant Professor, Department of Electrical and Electronics Engineering was awarded the "Doctorate Degree" by the Vellore Institute of Technology for her thesis entitled "Artificial Intelligence based Signal Processing Approach for Islanding Detection in Microgrid" on 18 December 2023.
- Dr. Elizabeth Varghese, Associate Professor and Head of the Department of EEE was awarded the Doctorate of Degree by the University of Kerala for her thesis entitled "Design of Fractional Order Controllers for Launch Vehicles" on 28 November 2023.

FACULTY CONTRIBUTIONS

VISITING FACULTY

In connection with the visiting faculty programme in the Dept. of Electrical Engineering, College of Engineering Trivandrum, **Dr. Elizabeth Varghese**, Associate Professor and HoD, EED delivered lectures on 'Modelling and Control of Fractional Order Systems' on 13, 18 and 19 December 2023.

FACULTY AS RESOURCE PERSON

• **Dr. Dishore S. V.,** Assistant Professor, EED, handled an online session for the first session of the 30 hrs Online certification programme on Simulation of Power Electronic Circuits from Basics to Applications in MATLAB/Simulink, Circuitrix, on 16 October 2023, organized by the Dept. of ECE in association with CDAC.

SESSION CHAIR

• Mr. Ayush Vijayan, Assistant Professor, EED served as the Session Chair for paper presentation conducted as part of the event named "Symposium", organized by the Dept. of ECE, Heera College of Engineering and Technology, TVM on 10 November 2023.

EXPERT TALK ON UHV

 Dr. S Ushakumari Professor, EED and Dean, Corporate Relations was one of the resource persons for a workshop on 'Universal Human Values' conducted on 02 and 03 February 24 at Pascal Hall. Mr. Vipin

- **Kumar KC**, Corporate Relations and **Dr. Veena Nair**, Assistant Professor, S&H coordinated the Programme.
- Dr. S. Ushakumari was a resource person to deliver expert lecture in 'Need for Value Education' and 'Holistic Transformation of Human being', on 8 and 9 January 2024, as part of the Short Term Training Programme organized by Centre of Sustainable Development in collaboration with Depts. of ME and CE, College of Engineering Trivandrum.
- **Dr. S. Ushakumari** was the Resource person for the Student Induction program on Universal Human Values for Mechanical Engineering on 19, 21 and 31 October 2023 and for Electrical Engineering on 14 and 21 October 2023 at College of Engineering Trivandrum.
- **Dr. S. Ushakumari** was the resource person for the FDP on "Universal Human Values" organized in KMEA Engineering College in collaboration with AICTE for the faculty of Engineering colleges from 5 to 7 October 2023 and on 20 September 2023 at Visvesvaraya Bhavan, Institute of Engineers (India), Thiruvananthapuram.

FDPs/STTPs ATTENDED

 Dr. Shalu George K., Ms. Surasmi N.L., Ms. Revathy K. P., Dr. Nisha G. K., Ms. Sandhya P., Ms. Manju Sreekumar, Ms. C. Sojy Rajan, Dr. Elizabeth Varghese attended FDP at different Institutions.

COURSES COMPLETED

- **Dr. Dishore S. V.**, Assistant Professor, EED completed a course in 'Simulation of a Single-Phase Half Bridge and Full Bridge Inverter using MATLAB' and got certified by Infosys Springboard.
- He completed also a 30 hrs Course on "Compendium of Electric Vehicle Engineering" organised by the Department of EEE & Centre for Continuing Education, Sri Ramakrishna Engineering College, Coimbatore, Tamilnadu.

WORKSHOPS ATTENDED

 The following faculty members and students from the Dept. of EEE attended the seminar on "Artificial intelligence in Power Distribution", jointly organised

- by Energy Management Centre (EMC) and Centre for Energy Studies (CES) on 14 February 2024: **Dr. Soumya A. V., Ms. C. Sojy Rajan, Ms. Vandana P., Mr. Aswin R. B., Ms. Shilpa Susan Peter**, Assistant Professors, EED, **Ram Abhishek** and **Sanjay S. S.** (S8 EE), **Abhijith Anand**, **Arunesh J. B., Blessy Smitha Das**, and **Sophy Maria Joy** (S6 EE). The seminar was inaugurated by **Shri. K. Krishnankutty**, Hon'ble Minister for Electricity, Kerala and the presentation was done by Shri. Rajesh Shenoy, Centre for Study of Science, Technology and Policy (CSTEP), Bangalore.
- Dr. S. Ushakumari, Dean, Corporate Relations, Dr. Dishore S. V., Ms. Sandhya P and Mr. Aswin R B attended workshops at different Institutions.

MOOC COURSES

- Ms. Shilpa Susan Peter, Assistant Professor, EED completed two MOOC courses namely Design of Electric Motors (IISc Bangalore) and Control Engineering (IIT Madras) with Elite certificate during July-Dec 2023.
- **Dr. Dishore S V**, Assistant Professor, EED, completed the 4-week NPTEL course on 'Fundamentals of Electronic Device Fabrication' with Elite certificate, conducted by IIT Madras during July-Aug 2023.

AWARENESS SESSIONS ATTENDED

• Ms. Revathy K. P., Ms. Neetha Chandran and seven students from EED attended an Energy Conservation Awareness session organized by EMC on



7 October 2023. The event focused on capacity improvement of women technocrats, possibilities of energy conservation and its practical implementation in the State.

CONFERENCE

• **Dr. Sheryl Arulini**, Assistant Professor, EED attended the IEEE sponsored 3rd International Conference on New Energy and Power Engineering as an Academic Committee Member held at Huzhou, China from 24 to 26 November 2023.

RESEARCH PAPERS/PUBLICATIONS

 Mr. Praveen Raj R S, Dr. Dishore S. V. and Mr. Anil J, Assistant Professors, EED published papers in different Journals.

TECHNICAL STAFF CONTRIBUTIONS

Mr. Anand B. H. mentored the team of students from S3 EL for the Grand finale of Smart India Hackathon 2023 from 19 to 20 December 2023.

STUDENT CONTRIBUTIONS

STUDENT ACHIEVEMENTS

- Vishnu B S, Anand S. Ganesh and Rehan Philip of S4 EL attended 2024 edition of 'ICTAK Top Ten: Bringing Together Brilliant Minds' conducted by The ICT Academy of Kerala on 20 February 2024 at Tagore Theatre, Vazhuthacaud, Thiruvananthapuram.
- Yash Chhalotre (S3 EL) participated and won award for UNODC conducted as a part of MACE MUN 2023 held at Mar Athanasius College of Engineering held from 30 November to 04 December 2023.
- MBCET Yoga Men's team bagged the second position in the APJ AKTU Inter Zone Intercollegiate Yogasana Competition held at Rajagiri School of Engineering and Technology, Ernakulam on 23 November 2023.
 Advaith Renjith and Manuraj M. S. of S1 EL were members of the team.

KSEB POWER OUIZ

40 students participated in the College level Power Quiz organized by KSEB Officers Association on 21 November 2023. The College Level



Winners are **Deepak G. Thomas,** S5 EC2 (1st prize) and **Vinayak R. K.,** S7 CS (2nd prize).

SMART INDIA HACKATHON 2023

A team consisting of Aathish R. Viswam (S3 EL), Yash Chhalotre (S3 EL), Varsha Rachel George (S3EL), Vishnu B. S. (S3 EL), Amal S. (S3 EL), Nandana Krishna (S3 EL) got selected for the Grand finale of

Smart India Hackathon 2023 which was held from December 19 to 20, 2023. They are one among the 5 teams shortlisted from Kerala.



PROJECT EXHIBITION



A group of students from EED 2023 pass out batch, displayed their project work "Multi-Purpose RFID Tag (M-TAG)" in Navajeevan Bethany Vidyala, Nalanchira on 30 December 2023. The Group

Members are Arya A., Greeshma D. G., Jeenu L. Jose, Rohith U. Nair and Laby Mathew Ninan.

ALUMNI NEWS

- Mr. Joseph John Panicker, Alumnus 2016-20 EEE Batch joined IU, International University of Applied Science, Berlin, Germany for MBA in Innovation and Entrepreneurship, during January 2024.
- One of the projects of EEE 2023 pass-out batch, exhibited their project entitled "Multi Purpose RFID Tag (M-TAG)" on 2 November 2023 at the KTU exhibition stall for Keraleeyam, organized by the Government of Kerala. The group members were Ms. Arya A., Ms. Greeshma D. G., Ms. Jeenu L. Jose, Mr. Rohith U. Nair and Mr. Laby Mathew Ninan. The project was guided by Dr. Sheryl Arulini A. and Ms. Neetha Chandran, Assistant Professors, EED.

TECHINICAL SOCIETIES

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

• IEEE PES SBC MBCET in collaboration with Illumina, the Association of Department of EEE conducted an expert talk on the topic, "Renewable Energy Integration to Electric Grid with Battery



- Energy Storage" on 13 December 2023 for the final year EEE students. The resource person was **Dr. Sukumar Kamalasadan**, Professor and Distinguished Scholar, Department of Electrical and Computer Engineering, The University of North Carolina, Charlotte.
- IEEE PES MBCET conducted an online session for MBA aspirants, Cracking CAT, an insight and motivation to delve into the world of CAT (Common Admission Test) and how to master it on 27 October 2023. The resource person was Mr. Allen Thomas,

Aptitude trainer/GD & PI Trainer/Mentor and Counselor.

Mr. V. Sridhar (S1 EL) and Mr. Aadhikesh S (S1 EE) represented MBCET and participated in IEEE day PES Quiz Phase-2, organised as part of IEEE Day Celebrations, at Cochin University of Science and Technology, Kochi on 4 November 2023.

UPCOMING EVENT

ICEMPS 2024, 18-20 April 2024

The Department of Electrical and Electronics Engineering, organized the 2024 International Conference on E-Mobility, Power Control and Smart Systems, (ICEMPS), from 18 to 20 April 2024. This was a premier conference organized as a follow up of the preceding mega events of IEEE ICAGE 2014, IEEE



PEDES 2016 and IEEE SPICES 2022, hosted by MBCET. For more details, visit the website: https://www.icemps2024.com

Co-ordinators: Dr. Shalu George K., Ms. Manju Sreekumar, Mr. Aswin R. B.

DEPARTMENT OF MECHANICAL ENGINEERING

Talk on ANSYS Fluent software

ASME MBCET Students
Section in association with
AUTOMATA MBCET conducted a two-day Hands-On
Workshop on ANSYS Fluent,
on 17 November and 24



November for S7 ME students. Resource person: **Mr. Bobin Saji George**. Student Section Advisor, ASME MBCET.

OFF ROADS LOGO RELEASE

The logo release of the "Off Roads" to be held in March 2024 was held along with the Senate



X'mas celebrations. A super-bike show, displaying 20 super bikes was held at the OAT on 22 December 2023 as part of the logo release.

Aardram - Food Distribution Drive



The members of Aardram (a social service wing from ME Department) along with faculty coordinator **Mr. Akhil chandran B.S.**, conducted a Food Donation

drive on 16 November 2023. From students and teachers across all departments, 465 food packages were distributed to the people at the premises of Trivandrum Medical College Hospital and General Hospital.

EMC workshop for Women technocrats

Dr. Nidhi M. B., Ms. Ruby Maria Syriac and **Ms. Aislin C.** from Dept of Mechanical Engineering, MBCET had attended the 'Energy Awareness Workshop – Women Oriented' Awareness Session, organised by Energy Management Centre (EMC), Dept of Power, Govt. of Kerala on 07 October 2023.

DAB meeting

The Department Advisory Board (DAB) meeting of the ME department was held at 11.30 am on Saturday - 2 Dec 2023. **Dr. Nidhi M. B.**, Associate Professor the DAB coordinator arranged the meeting. Members from the teaching faculty, selected parents, experts and alumni participated in the meeting. The meeting was conducted in online mode, suggestions put forwarded by DAB members were taken note of.

Outreach Program

A group of students from St. Johns School Nalanchira visited the IEDC lab and various Departmental labs on 22 January 2024 to know about the scope of various disciplines of Engineering.



PUBLICATION

 B. Deepak, Bipin Sankar published papers in different Journals.

Faculty news

Dr. Arvind P. Assistant Professor in ME Department, was awarded Ph.D. by the Kerala Uty. Guide **Prof. Dr. Asok Kumar N.**, CET.



Best Faculty Award

Dr Nidhi M.B. Associate Prof MED, MBCET (Secretary IIIE and N C Member ISTE) received the Shri P K Das Memorial Best Faculty award in Senior category in



Mechanical Engg on 15th Dec, 2023. She was selected among final 20 shortlisted faculty across India from 1548 applicants (cleared all 3 rounds interview and

scrutiny). She is the only faculty from Kerala to receive the Award for this year by Nehru group of institutions. She inaugurated the Tech Sphere Exhibition on AI Technology and Robotics at Navajeevan Bethany Vidyalaya, Trivandrum on 3 February 2024.

Expert Talk

Ms. Nidhi M. B., Associate Professor, ME Dept delivered expert Talks on different topics at Govt Polytechnic College Chelakkara and at School of Mechanical Engineering, VIT Vellore.

Faculty as Mentor

Dr. Nidhi M. B., Associate Professor MED has been inducted as CII Mentor for Women Leadership Program from October 2023 onwards.

Mr. Bobin Saji George, AP MED, served as Program Committee member and Reviewer for 5th International Conference on Communication and Intelligent Systems (ICCIS 2023)



organised by Malaviya National Institute of Technology, Jaipur (NIT Jaipur - An Institute of National Importance) and Soft Computing Research Society during 16 to 17 December 2023.



Ms Ruby Maria Syriac, AP MED, delivered the first knowledge sharing session on the topic 'Assembly Modelling – A Hands on Experience' under the MoU with UITM Mara Malaysia on 20 December 2023.



Dr. Nidhi M. B., Professor, MED served as panelist at the CII (Confederation on Indian Industry) IWN Conclave on Women Leadership at Kochi on 23 February 2024,

along with **Dr Saji Gopinath**, Vice Chancellor, Digital University Kerala; **Ms Radhika Ramachandran**, Scientist (Retd), ISRO; **Ms Sarada Jayakrishnan**, General

Manager (Quality), Terumo Penpol Pvt Ltd; and Ms Roopa George, Executive Director, OEN India Ltd.

Dr. Nidhi M. B. was felicitated by Indian Institution of Industrial Engineering (IIIE) Trivandrum Chapter for her achievements and contributions during 2023 on the

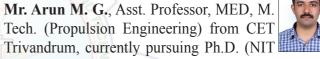


Foundation Day celebration at IIIE TVM chapter on 27 January 2024. She served as visiting faculty at Entrepreneurship Development Institute of India (EDII) Ahmedabad as Expert in Supply Chain Management Vertical during 09 to 12 January 2024.

Faculty Promotions

Dr. Rajesh T. N. and **Dr. Nidhi M. B.** have been promoted as Professor; **Dr Premchand V. P.** has been promoted as Associate Professor; **Ms. Ruby Maria Syriac** as Assistant Professor (Senior Grade).

New Faculty Inclusions





Calicut) under the guidance of **Dr. T. J. Sarvoththama Jothi**. Doctoral research area - Experimental Aeroacoustics of Flow past Cylinders.



Ms. Arya A. S., Asst. Professor, MED. M. Tech. (Robotics) from GEC Palakkad. M.Tech thesis title - Agribot for herbicidal purpose using ROS.

Faculty attended FDP

Teaching faculty members from the ME Department, Dr. K. Muraleedharan Nair, Dr. Remil George Thomas, Mr. Ayswer A. S., Mr. Roshan George Koshy, Mr. Ajeesh M. V., Ms. Ruby Maria Syriac, Mr. Vaisakh S. Nair and Mr. Alen K. Johnsonand Dr. Nidhi M. B., Professor, MED attended FDP at different Institutions.

STUDENT ACHEIVEMENTS

The following papers from ME Department were presented at 15th International Symposium on Experimental and Computational Aerothermodynamics of Internal Flows (ISAIF 2023), 24 to27 October 2023 held at IIT Madras. "Numerical Study On Flow Oscillation Suppression Mechanism When Supersonic Flow Passes Open Cavities", Mahadev A. K., Milan A, Abhijith T, Anjith S, K. Muraleedharan Nair

- "Computational Study on The Effect of Slot Span on Wing Performance of a NACA4412 Airfoil".
 Arghya P.S, Ananthan A., K. Muraleedharan Nair
- "Effect of Shockwaves on Supersonic Film Cooling with Rectangular and Triangular Slotted Wall", Anjan R Nair, Melvin Jacob, Arghya P.S., Ananthan A.
- "Numerical Investigation on Novel Scramjet Design for Optimizing Flow Characteristics", Shalom B. Varghese, Bobin Saji George, Mohamed Safan, Anston Nixon, Alen Sunny.

Ms. Sandhra Rose Chackochan, final year student from ME Department got placed in Robert Bosch Limited.



Ashwin Abraham Anil, Abel Sam Shibu and Gowri R. G. S2 ME presented a Poster and model presentation on project titled 'Tesla Coil' and 'Home automation' in the

THE NANO NEXUS, inaugural edition of MBCET Science Fest on 1 March 2024.

ALUMNI NEWS

Mr. Bharath K. R., alumnus of 2017-21 batch of MED, received the Kalabhavan Mani Memorial Award 2022 for the Best Newcomer Actor for his Film **'Haya'**



OBITUARY

Adieu...



HARI VENKIT (46)
Assistant Professor
Dept of Mechanical Engineering

Mar Baselios College of Engineering and Technology

DEPARTMENT OF SCIENCE & HUMANITIES

Dr. Preethi P. C., Assistant Professor, Chemistry, Department of Science and Humanities won Ph.D. from Kerala Uty.

Dr. Veena Nair delivered a session in IEEE-EBSCO Knowledge Feast at Taj Vivanta on 22 September 2023.

Paper publications

• Ms. Lakshmi J.S. published 3 Papers in different Journals.

FDP

 Dr. Renjini M. Nair and Ms. Anaswara Johny and Dr. Veena Nair participated in FDP organized by different Institutions.

Conferences

- Ms. Lakshmi J.S presented 3 papers and Dr. Archana
 P. Das presented 2 Papers in Conferences and Seminars. Dr. Archana P. Das won Best Paper Award.
- Ms. Sruthi Janardhanan and Ms. Syama S Mohan, Dr. Veena Nair and Ms. Ammu Maria Ashokattended workshop organized by different Institutions.
- **Dr. Preethi P.C** published 3 papers in different Journals.

CENTRAL LIBRARY

The Library conducted a Seminar on "Value of IEEExplore in Research, Placement and Career Development" for S7 EC & CS BTech Students on 05 October 2023. The Resource Person was Mr. Nandalal TS, Sr. Training Manager, EBSCO.

Library conducted another Seminar "Effective Utilization of the Library and E-Resources of MBCET" for S7 CE & ME BTech students on 6th& 11th October 2023. Resource Person was Mr. Binu K John, Librarian.

Expert Visit: Dr. (Fr.) John Neelankavil CMI, Librarian & Faculty, DVK Pontifical Athenaeum, Dharmaram, Bengaluru (Library Planning Expert) visited MBCET Library on 21 October 2023. He interacted with Principal Dr. Abraham T Mathew, Vice-Principal Dr. Viswanatha Rao, Asst. Bursar Fr. Thomas Mukalumpurathu, Dr. Muraleedharan Nair and Librarian, Mr. Binu K John regarding modernization and space management.

Library

The Library conducted a **Colloquium** on "**Designing Components of a Modern Library**" on 1st December

2023 at Senatus Hall. The Speaker was Fr. Dr. John Neelankavil CMI, Librarian & Faculty, DVK Dharmaram College, Bangalore. Asst. Bursar, Vice-Principal, Deans, HoDs, Senior Professors, Library Advisory Committee Chairman and Members, (LAC) were present. Mr. Binu K John, Librarian welcomed the guests and Mr. Sijo M Saji, Assistant Professor (CED & LAC Member) proposed the vote of thanks.

Library started a new Portal for MBCET Autonomous Previous Years Question Bank. The URL for accessing the same is https://mbcetautonomous.wordpress.com/

Library renewed access to IEEE (ASPP), ASME, ASCE, Elsevier's Science Direct, E-Journals packages, EBSCO Engineering E-Books, DELNET database, Knimbus Remote Access & KOHA ILMS on cloud.

Library conducted Seminar "Empower Your Knowledge Journey with Knimbus Offline Training" for M. Tech Students on 14 February 2024 at Senatus Hall. The Resource Person was Mr. Arjun Nair, Asst. Manager - Product Trainer, GIST, New Delhi. Binu K John, Librarian delivered Welcome Speech and Fr. Meljo **Sebastian Thomas** (M2, CE-SE) proposed vote of thanks.

DEPARTMENT OF PHYSICAL EDUCATION

Yogasana

Mr. Kiran Biju, S3 CS1 participated in the Senior District Yogasana Championship and bagged the First position conducted by Yogasana Association,



Thiruvananthapuram held at Navajeevan Bethany Vidyalaya.He also represented Trivandrum District in the State Competition on 14-15 October 2023 in Kozhikode.

Yogasana Team



MBCET Yoga Men's team bagged the second position in the APJ AKTU Inter Zone Intercollegiate Yogasana Competition held at Rajagiri Engineering College, Ernakulam on 23 November 2023.

Selected to University Team

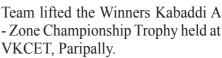
Sreenandan A, S1 ME selected to the KTU University YOGA team



Kabaddi

MBCET Kabaddi Men Team secured the third position.





Men's Basketball team lifted the A Zone Basketball Championship held at Mohandas Engineering College, Anad.



Basketball (Women) Champions



MBCET Women Basketball Team became the Champions of the APJ AKTU A-Zone Inter Collegiate Tournament held on 19th November 2023 at Mohandas College of Engineering and Technology, Anad.

Basketball Women's Team Secured Runner Up position in the APJ AKTU Kerala Inter-Collegiate Tournament held at ICCS College of Engineering and



Management on 24th & 25th November 2023.(NSS, Palakkad Vs MBCET Score 30-27)

Diya Vijayan V. D. S3 EC 2 and Dona Ivan of S1 CE1 got selected in the KTU Team to participate in the South Zone Inter-University Basketball Tournament to be held at Jain University Bangalore.



Dona Ivan S1 CE1 was awarded the Best Player of the APJ AKTU All- Kerala Inter-Collegiate Tournament held on 24th & 25th November 2023



Ashish T. of S3 CE has participated in the Senior Basketball Men's team in the State Championship held from 7 to 12 Nov 2023.

Rohan P. C. and Ashish E. of S1 ME and S1 CT have been selected to the Kozhikode Basketball Team for the State Championship held at



Malappuram. They attended the camp at Kozhikode from 18 December 2023 onwards.



MBCET Basketball Team lifted the All Kerala Vishwajyothi Inter Engineering Basketball Runner Up trophy Organised by Vishwajyothi Engineering College, Vazhakulam, Muvatupuza on 21 February 2024.

Lawn Tennis



Lawn Tennis Women Team of MBCET Secured Second Runner Up position (Sona S-S5 EC1 & Anna Merry Cherian - S7

CS 2) in the Inter Zone Inter - Collegiate Championship held at TKM College of Engg. & Technology, Kollam.

Sona S. (S5 EC1) participated in the KTU Inter-University Lawn Tennis Championship held at Jain University, Bangalore from 10 to 12 November 2023.



MBCET Men's team lifted the Inter-Collegiate, Inter-Zone (All Kerala) Lawn Tennis Championship held at TKM Engi-neering College on 25 Nov 2023. The team members are Aravind Ajay (S3 ME) Faiz Muhammad. S (S3

CE) Sijo S. (S1 CT).

Table Tennis-Inter Collegiate Winners

MBCET Table tennis Men and Women teams secured First and Third positions respectively in the APJ AKTU A - Zone Inter-Collegiate Tournament held at CET.



Inter-zone Table Tennis Team



Juhi Elizabeth John - S3 CT, Pranav P. Nair S5 ECE-1 got selected to KTU University Table Tennis team. MBCET

Men Team secured third position and Women Team secured fourth position in the Inter Zone Inter Collegiate Table Tennis Championship held at GEC, Kannur

Chess Championship Team

MBCET Chess Men team lifted the KTU (A - Zone) Inter-Collegiate Chess Championship Trophy and the Women's Team got Fourth position in the



competition organized by the Department of Physical Education, MBCET.



Vineeth Rohan, S7 CE1 got selected to the KTU University Volleyball Team for the third time and he is also been selected as the Captain of the University Volleyball team.

Shone C. Achankunju (S3 EC 2) and got selected in the KTU University Athletic Team to participate for the South Zone Inter-University Athletic Championship held at Tamil Nadu



Physical Education and Sports University, Chennai from 29th December 2023 to 1st January 2024.

Shone represented KTU in 200 Mtr, Long Jump and 4x 100 mtr relay.



Sijo S. will represent in 800 Mtr.

This is the second time KTU is sending Athletes in an Athletic meet. In the 5 member KTU Team, two are MBCTian.

Keerthana D. S., S1CE1 participated in the Junior District League Championship held at GVHSS ,Vattiyurkavu on 13 and 14 January 2024. She also participated in the State



Championship from 11th to 14th April held at Malapuram.



MBCET Women NETBALL Team secured third position in the All Kerala Inter Zone Netball Championship held on 23 February 2024.

Bhadra S. S., S6 ME, Diya Vijayan V. D. of S4EC and Aromal R. Chandran of S2EL got selected to the University Netball team.





The Shuttle Badminton Men team of MBCET became the Second runner-up in the A Zone Shuttle Badminton Championship held at Toss Academy, Manacadu

MBCET Volleyball Men Team secured Third position in the A Zone Inter Collegiate Volleyball Championship held at VKCET, Paripally on 24 November 2023.



KTU Athletics Meet

MBCET Athletic Team won third position in Men Category and fifth position in overall Championship in the KTU Athletics Meet 2023-24. Shone C Achenkunju became the fastest man in KTU.



NSS

BLOOD DONATION CAMP

NSS Units 230 and 706 along with Phoenix Trivandrum NGO organization, Enix the Department Association of ECE, and Illumina, the Association of Dept. of EEE conducted a blood donation camp on 30 November 2023. Sri Brahmanaykam Mahadevan inaugurated the session. 39 students donated blood in the camp.



STREET PLAY

As part of International day for elimination of violence against women, NSS units 230 and 706 as well as ISTE SHE MBCET conducted a street play on Elimination of Violence against Women at Kanakakunnu, Trivandrum on 25 November. The event was inaugurated by **Ms. Sunanda Nalini**, Former Child Welfare Committee Chairperson and member, Kerala Child Welfare



Commission. Faculties **Ms. Revathy K. P.**, Assistant Professor EED, **Ms. Soumya A. V.**, Assistant Professor EED, **Mr. Praveen J. S.**, Assistant Professor CSED, **Mr. Praveen J. L.**, Assistant Professor CSED accompanied the Team along with volunteers of NSS and ISTE.

NATIONAL UNITY DAY



As part of National Unity Day NSS units 230 and 706 of MBCET celebrated National Unity Day, on 31 October 2023. Principal **Dr. Abhram T. Mathew**, hoisted the National flag and delivered the speech on Unity Day to the students. Coordinators: **Revathy K. P.** Assistant Professor, EEE and **Mr.Praveen J.S.** Assistant Professor CSE. 25 volunteers participated.

TALK CONDUCTED



As an initiative towards proper waste management the Environmental Cell of MBCET along with Waste Management Cell conducted a talk on "Awareness on Solid Waste Management"

on 20 December 2023 for the House Keeping Staff and Faculty and Students of Sustainability Cell. The speaker of the session was **Mr. Pratheesh M. V.**, Project Coordinator, Green Worms Pvt Ltd. The talk was coordinated by **Dr. Nidhi M. B.**, Coordinator Environmental Cell and **Dr. Soumya A. V.**, Coordinator, Waste Management Cell.

TRAINING AND PLACEMENT UNIT

The Training and Placement Unit had a remarkable achievement by getting 250 job offers from 50+ recruiters such as Experion Technologies, UST, Qburst, H & R Block, Signify, TATA- ELXSI, Speridian Technologies, Nissan Digital India, Gulf Asia Engineering and Projects, SPACELABS, BIMLABS Engineering Services Pvt. Ltd., Mitsogo Technology, Bosch Limited, Aham Builders, South Indian Bank, Quantiphi Analytics, Tangentia, Federal Bank, Polus Solutions, Vinvish Technologies, Bond Interiors, Socius Innovative, etc. Paid internship for more than 50 students with highest stipend of around 32k per month has been arranged.



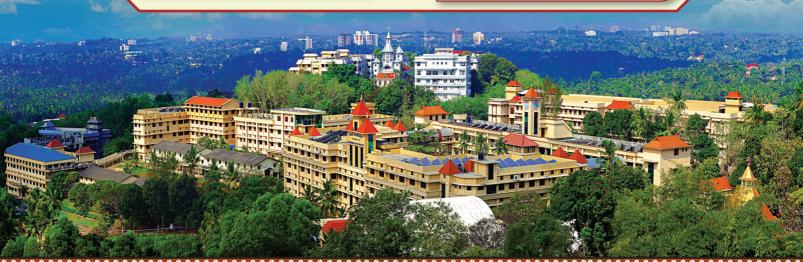
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COURSES OFFERED

College code: MBT

B. Tech		
Courses	Number	
	of seats	
Computer Science and Engineering	120	
Electronics and Communication Engineering	120	
Civil Engineering	120	
Electrical and Electronics Engineering	60	
Mechanical Engineering	90	
Computer Science and Engineering (AI)	60	
Electrical and Computer Engineering	60	

M. Tech		
Courses	Number of seats	
Structural Engineering	18	
Computer Science and Engineering	18	
Power Control and Drive	09	
Telecommunication Engineering	18	
Machine Design	18	
Transportation Engineering	18	
IOT and Sensor Systems	18	
Environmental Science and Engineering	18	



The founder conceived it. We build it. Posterity sustains it.

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For Private Circulation only | Designing & Printing: St. Joseph's Press, Thiruvananthapuram - 695 014