

Mar Ephraem College of Engineering and Technology

ANNUAL REPORT 2024

Admirable Chairman of our college and the Bishop of Marthandam Diocese Your Grace Most Rev. Dr Vincent Mar Paulos, Venerable Chief guest of today's function Dr.V.Narayanan, Distinguished Scientist (APEX Scale), Director Liquid Propulsion systems center,ISRO- Department of space, Govt.of India, Respected Vicar General of Marthandam Diocese, Rt. Rev. Monsignor Jose Bright, Respected Correspondent and Secretary of our college Very Rev. Fr. Satheesh Kumar, Respected Mother Provincial Rev. Mother Rose Francis, Respected Bursar of our college Rev. Fr. Hebin, Respected Chancellor of the Diocese Very Rev. Fr. Franklin Jose, Respected Procurator of the Diocese Very Rev. Fr. Devadhas, Respected College Board Members, Respected Academic Director Prof. Dr N. Austin, Respected college day coordinator Prof.J.M.Aravind, Student coordinators Mr S.Sarankumar, of final year ECE and Ms Lavanya P Alfred of final year Civil, Respected Heads of various departments, Rev. Fathers, Rev. Sisters, the Press, Staff, Parents and my dear students, a warm good morning to all.

ABOUT MAR EPHRAEM

MAR EPHRAEM COLLEGE OF ENGINEERING AND TECHNOLOGY at Malankara Hills, Elavuvilai, Marthandam was blessed and inaugurated by His Beatitude Moran Mor Baselios Cardinal Cleemis Catholicos, The Major Archbishop of Malankara Catholic Church, on September 14, 2009. Mar Ephraem has grown well beyond an ever-continuing explorative experience, in quality education, with six U.G Programs, four P.G Programs and two doctoral program.

ACCOLADES

- Mar Ephraem College of Engineering and Technology is a NAAC Accredited institution with various other tributes.
- Mar Ephraem is added another feather on its cap by attaining the NBA Accreditation for Mechanical Engineering, Civil Engineering and Computer Science & Engineering.
- Mar Ephraem is the only FIST supported college in Southern Tamil Nadu, recognized by DST, Govt. of India with a fund of INR 73 Lakhs.
- Mar Ephraem is the sole institution in our district to have received funding for 13 projects, from various government funding agencies such as DST (Department of Science and Technology), DRDO (Defence Research and Development

Organization), ISRO and others. Out of these projects, 10 have been successfully completed, while 3 are ongoing.

- ACIC Mar Ephraem Incubation Forum is the only incubation forum in southern region of Tamilnadu supported by the NITI Aayog, Government of India.
- Mar Ephraem has been approved by MSME, Govt. of India to set up an incubation platform named Mar Ephraem MSME Incubation Centre.
- Mar Ephraem received two University ranks in the Anna University Results. R. Daniya, M.E in Applied Electronics, secured an 5th rank, and Gitty Mary George from the Department of Civil Engineering achieved 20th rank.

HIGHLIGHTS OF STUDENT ACHIEVEMENT

Libin R C, George Binu, Ardra Rachel Jacob, Anto Remin 2nd year students of computer science department won Runner Up (cash prize 50000/-) Kumari Hackathon Organized by Start Up Tamil Nadu & Kanyakumari District Administration.

Reshma Rose, an MBA student, was honored with a cash award and trophy by the Honorable Governor of Tamil Nadu for her remarkable achievement in securing the 2nd place in a prestigious state-level drawing competition.

P.Bibin from III ECE and V.Claris Stenila from I CSE were selected to represent the Anna University Kho-Kho team. Additionally, J.L Pratheeban from III ECE won a Bronze Medal in javelin throw at the Anna University level competition.

Jerisha.J, III CSE, achieved third place in a regional-level Elocution competition. And received an award presented by the honorable minister of Tamil Nadu, Thiru R.S. RajaKannappan organized in connection with kalaigarn Centenary Celebration.

Three student projects have been honored with selection in "Niral Thiruvizha 2024," Tamil Nadu's prestigious skilling innovation challenge.

"AI-Based Nutrition Analyzer for Fitness Enthusiasts," led by Anto Jerin J A, Aswin R R, Jebish Abraham T R, Saran Kumar S, under the mentorship of Prof. G. Brenda, Assistant Professor-ECE,

"Solar powered smart Dhobi cart", led by Jacob Samas, Aaron Carter Rajesh Singh, Abishek Joel G M, Raghul R S, under the mentorship of Dr.Anish John Paul M- HoD-EEE

"Multi Purpose agriculture machine" " led by Aatharsh C S, Abin S, Akash S and Akash V S, under the mentorship of Dr.Beschi Selvan S.L, Assistant Professor-Mechanical

INFRASTRUCTURE

Mar Ephraem is situated on a sprawling 12.3-acre expanse, with a built-up area spanning 2,32,545.47 square feet, dedicated to cutting-edge infrastructure. In addition to the existing facilities, we have a fully furnished maker space, computing space with high end computing machines, sector specific laboratory, and discussion room with video conference facility. We also have a DST- FIST supported fully furnished PCB fab lab with state-of-the-art equipment and facilities for designing, prototyping, and manufacturing printed circuit boards (PCBs).

ACADEMICS

- This academic year we secured 72.79 percentage results in the Anna University examinations.
- 247 graduates and 18 postgraduates have completed their degrees and received their degree certificates from the Shri.M.Hevin Leo, Founder, Infa Worx data Management Services Pvt.Ltd who was the chief guest on our ninth graduation day on 20 October 2023.

Staff Achievements:

- Prof. Dr A Lenin Fred is the Chairman of IET Kanyakumari local network. He is designated as Chartered Engineer by (IEI) India and the mentor of change by Gov. of India for ATAL Tinkering Labs, and has also been serving as the National Jury for India-International Science Festival, for the past five years
- Prof. Dr. A. Lenin Fred, Principal, Dr. Anish John Paul, Dr. Leo Bright Singh, and Dr. Lalin L Laudis are certified Chief Innovation Officers by Distinguished Rochester, New York.
- Prof. Dr. N. Austin, Academic Director, is the working president of Kumari Maha Sabha for the past five years.
- Prof.Dr.V.Suresh and Dr. Lalin L Laudis is appointed as Mentor for Community Innovator Fellowship program in ACIC Mar Ephraem Incubation Forum.
- Dr. D. Dhanya, HoD, Artificial Intelligence and Data Science has received the Best Researcher Award from Novel Research Academy, Pudducherry

- Prof. Dr. A. Lenin Fred, Dr. Jerusalin Carol, Dr. D. Dhanya, Dr. D. Rajeev, and Dr. Lalin L. Laudis contribute their expertise as esteemed reviewers for reputed international journals.
- Prof. Dr A Lenin Fred, Dr. Jerusalin Carol, Dr. Anish John Paul, Dr. Leo Bright Singh Dr.Melba kani, Dr. D. Dhanya, Dr.M.Jebapriya, Mr.Asbin, Dr. Lalin L Laudis are serving as Innovation Ambassador for Institute Innovation Council by Ministry of Education.
- Mr. Sam J. Palson, Physical Director, is the qualified Referee of the All India Kabaddi Federation.

Dr. Moly M Rose Assistant Professor (S&H) have been awarded the doctoral degree this academic Year.

- A total of 13 scholars have completed doctoral degrees under the supervision of Prof. Dr A. Lenin Fred, and 4 scholars under the supervision of Dr. Jerusalin Carol

STAFF AS RESOURCE PERSONS:

Dr. A Lenin Fred, Dr.N.Austin, Dr. M. Anish John Paul, Prof.. Sivapriya S, Prof.. K. Shiny, Dr. V. Suresh, Dr. R. Benschwartz, Dr. Lalin L Laudis, Dr. Leo Bright Singh R, Dr. John Iruthaya Raj M, Dr.D Rajeev, Dr.D.Dhanya and Dr. J. Jerusalin Carol have contributed their expertise as chief guests, resource persons, juries and session chairs at numerous esteemed organizations.

Exhibition Highlights

Mar Ephraem Students exhibited their innovations at science and technology exhibition organized by Malankara Catholic College , Little flower Matric Hr.Sec.School, and Bethany Navajeevan Institutions .

Student Achievements

The students of Mar Ephraem have received numerous awards and accolades across a spectrum of events, showcasing their exceptional talent and dedication

Department of Mechanical Engineering

Akash V S, Aatharsh C S , Abin S, Akash S, final year students won First prize & Cash award of INR Rs. 10,000 for project Exhibition conducted by Bethany Navajeevan Senior Sec. School, vencode and various institutions

Shine S, Mohamed Fazil M, Jibin J S, Ceyalin Behal G final year students won First and second prizes for Water Rocket, Photography, Paper presentation and film making in inter college national level technical events.

Sandeep J , Solomon, Akilesh C S, Alsin Nikki Y J, Jojo S S, Adersh Vinod V P, Ashin A Second year students won First prize for Lathe Master Project Expo and film making in inter college national level technical events.

Aravinth M U, Dijolin Ashick Mano G final year & Jinisha P L Third year won second and third prizes Paper presentation in inter college national level technical events.

Jinisha P L, Blessy T, Nishinth D J Alexander, Abishek M, Akilesh C S, Adersh Vinod V P won prizes for Paper presentation & CAD Modelling organized by National Institute of Technology Tiruchirappalli.

Department of Computer Science and Engineering

Brijisha B S , Akshaya S S , III year Sam Nijin final year and L. Mershiba Fred, I ME, CSE won prizes for Paper presentation and poster presentation at IPRC Mahendragiri and several other inter college national level technical events.

Department of Civil Engineering

Aswini T, Blesslin C, Ancy G, Pranav Santhosh won first and second prizes for Paper presentation, poster presentation, code cracking in inter college national level technical events.

Brightlin Jeba Benisha won third prize in state level Tamil Essay Writing organized at Anna University, Chennai

Pranav Santhosh won first prize and Cash award of rupees 6000 for project expo under ACIC Mar Ephraem Incubation Forum at St. XAVIERS College of Engineering and Technology

Department of Electrical and Electronics Engineering

Angelin and Selina received first prize in technical quiz in an inter college national level technical event.

Abishek Joel G M, Sadhananda Prabhu final year received Budding Young Entrepreneur Award organized by Scinicorn Labs pvt.ltd

Department of Electronics and Communication Engineering

F.V.Tony Francis, Aadhavan Shejay V S, Ashish Ebinze E S, Nijand S.V ,Roshan K.S,P.Bibin won prizes for Paper presentation, poster presentation at various inter college national level technical events

Department of Artificial intelligence and Data Science

R.J. Nishmah, Karoliya, Agin Doli, R.G,Jeffisha, Jemi.J,Helmi, Eliza Reji, won first prizes for Paper presentation, poster presentation at various inter college national level technical events

Department of Business Administration

Ashwin Binth.R, won First prize and cash award of Rs. 25000/- for Best Manager organized by Rajadhani Business School, Trivandrum

Anusree Durga Das, Riya S Reji, Gautham, Lincy Abin Raj, Vincy, Poojitha, Kanimozhi, Saranya, Jefflin, Abinashika, Aswin Raj, Gautham, Adlin won first and second prizes for Corporate Show Business Quiz, Ad-zap, Paper presentation, Business Quiz, Corporate Show, Role Play at several inter college national management fest and events

The Department of Business Administration received the overall champion in the management fest organized by St. Xavier's Catholic College of Engineering

SKILL ENHANCEMENT INITIATIVES

Each department diligently organized workshops, hands-on training sessions, value-added courses, capacity and skill development programs and career guidance seminars. Additionally, they conducted sessions on intellectual property rights (IPR), entrepreneurship, and environmental sustainability, all aimed at enriching the student experience and fostering holistic growth. These initiatives provided students with practical knowledge, enhanced skills, and invaluable insights into various facets of their disciplines, empowering them to excel academically and professionally while instilling a sense of social and environmental responsibility.

INDUSTRIAL VISITS/INTERNSHIPS

- Each department of Mar Ephraem facilitated industrial visits to prominent industries such as the HAL Heitage Centre and Aerospace Museum, Construction Companies, Thermal Power Plant Thoothukudi , ISRO Mahendragiri, Atomic Power Plant

Koodankulam, Parle-G Madurai, Shiva Batteries &RR Industries Bangalore, Tamilnadu State Transport Corporation Ltd, Shipyard Ltd Goa for their students, to gain industrial experience and practical training.

- The Third-year students belonging to the Department of Civil Engineering were taken for a 10-day Survey Camp to Courtallam by a team of eminent faculty.
- All Our students were sent for internships in more than 50 reputed industries to improve their employability skills.

PROFESSIONAL DEVELOPMENT OF FACULTY:

- 85% of faculty members across various departments actively participated in Faculty Development Programs (FDP) conducted through offline, online, and hybrid modes. Financial support was extended to faculty members to participate FDP under the Naan Mudhalvan Scheme.
- 19 faculty members from various departments have completed NPTEL/SWAYAM online certification course.

PUBLICATION OF JOURNAL, BOOKS & BOOK CHAPTERS:

- A total of 45 articles in peer-reviewed journals and 6 book chapters, 32 papers in conference proceedings were published in reputed publishers by the faculty of various departments.

FUNDED RESEARCH

Mar Ephraem Received Rs.46,44,000/- for the project entitled” An IOT Administered UAV with Deep Learning Models for Spotting and Spraying Pesticides to avoid But – rot in Palm Varieties” from the ministry of Science and Technology, Government of India, in which Prof. Dr. A.Lenin Fred is the Principal Investigator, Dr. Leo Bright Singh, Dr. Anish John Paul, Dr. Lalin Laudis and Dr. Jerusalin Carol are the Co-Principal Investigators.

ENTREPRENEURSHIP

ACIC Mar Ephraem Incubation Forum

Mar Ephraem has established an “ACIC Mar Ephraem Incubation Forum” supported by the NITI Aayog, Government of India in the southern region of Tamilnadu. Dr. Anish John Paul is the CEO, Ms. Paulin Jini, Incubation Manager, Dr. Melba Kani, serving as the Project Coordinator, Mr. Asbin T S, Outreach Manager, Ms. Annie G.S Shaeba overseeing Finance, and Ms. Tehilim Job as Digital media Manager. ACIC Mar Ephraem Incubation Forum is designated as a District Advanced Skill Development Centre by District Collector. Currently, our incubation center is nurturing 48 physical and virtual startups, with the invaluable guidance of 36 mentors

Prepared by Internal Quality Assurance Cell

who have graciously volunteered their expertise to support our incubatees. ACIC Mar Ephraem has collaborations with StartupTN and established partnerships with 25 academic institutions and industries.

New Gen IEDC

In order to turn the innovative ideas of students into Business start-ups, The National Science & Technology Entrepreneurship Development Board (NSTEDB) /Department of Science and Technology (DST); the Government of India granted 2.87 crores for setting up NewGen IEDC in Mar Ephraem Campus. A total of 85 innovative projects were selected for the grant up to Rs. 2.5 lakhs per project.

CAMPUS COMPANY:

- Mar Ephraem has a campus company named “Mar Ephraem Digital Solution” to develop and implement software for Nithi limited and hospitals. The Company is also maintaining the website and MIS of Mar Ephraem.

CONSULTANCY:

- Department of Civil Engineering and has carried out Research consultancy for Southern railway, Ideal construction and PWD, Government of Tamil Nadu.
- Department of Mechanical Engineering has carried out Research consultancy with various industries and institutions for Testing and Fabrication.

COLLABORATION/MOU

This academic year, Mar Ephraem College has forged strategic partnerships by signing Memorandums of Understanding (MoUs) with an array of esteemed companies and organizations. These collaborations encompass a broad spectrum of industries and include names such as Lofty Opticals, Cad point, Baytech Innovations, Shree Tech, CADD center, Vintech Systems, Silicon India Pvt. Ltd, Scinicorn Labs, Open Weaver India Pvt. Ltd, Daebu Automotive Seat India Pvt. Ltd, Gelbero IT Solutions, and Moorthy's Training Academy. These MoUs signify the college's commitment to fostering meaningful engagements with industry leaders, enhancing learning opportunities, and facilitating avenues for students' professional growth and development.

CELLS AND CLUBS

In Mar Ephraem, 29 different cells, committees, and clubs fostering a sense of responsibility, leadership, and strong sense of attitude, provide avenues for personal growth, social engagement, and self-responsibility. The professional bodies, notably

ISSE, IET, IEEE, SAE, and ISTE, have remained dynamic, organizing various events. NCC, NSS, Fine Arts Club, Youth Red Cross, Eco Club, Sports Club, Placement and Training Cell, Career Guidance Cell, Alumni Association, Counselling Cell, Green Energy Cell, Grievance Redressal Cell, OBC Cell, SC/ST Cell, Literary Club, Institute Induction Cell, Institutional Value Cell, IPR Cell, Entrepreneurship and Development Cell, Language Development Cell, and Jesus Youth are estimably active in the campus aiming at the all-round development of each student.

Training and placement cell

Mar Ephraem has a Training and Placement Cell (TPC) with a dedication, offering personalized career counseling, hands-on training, and pertinent resources, under the leadership of Prof. I. Jackson Thanga Roy as the Training and Placement Officer. The TPC remains steadfast in its mission to empower students with the skills and support needed to thrive in their chosen careers.

As a harvest to the effectiveness of our training programs we have successfully placed 189 students in the past academic year alone. Overall, we take pride in having placement record of 95 students, with ongoing placements in esteemed international organizations and various reputed companies like Essel Propack Poland, Abu Zakariya Constructions Oman, People Link Hyderabad, Iplon Chennai, TVS Sundram fasteners Chennai, Conserve Solutions Chennai, Seventh Sense talent solutions Bangalore and Infraworx.

NCC

The NCC unit at our campus, operating under the 11 Tamil Nadu Battalion NCC Nagercoil (11 TN BN NCC Nagercoil), has been functioning effectively since November 25, 2021. The unit comprises a total intake of 80 cadets, all dedicated to upholding the motto of Unity and Discipline. Lt. Manoj M, Associate NCC Officer is leading the Mar Ephraem NCC unit. Mar Ephraem NCC has organized special programmes like International Yoga Day, Quit India Movement Seminar, Gandhi Jayanti (SHS), Drug Abuse Seminar, NCC Day, Republic Day, Women's Day, Drug Abuse Rally, Old Age Home Visit.

Alumni Association:

The Mar Ephraem Alumni Association, known as AMEOS, is officially registered and led by Prof. G.L. Abishek as the coordinator. An alumni gathering took place on October 20, 2023, where former students came together to share their

professional experiences with current students and reminisce about their time at the institution, creating a space for both mentorship and nostalgic reflection.

Sports:

Mar Ephraem Sports Club is headed by Mr. Sam J Paulson organized various activities for the students to enhance the potentials in sports. Mar Ephraem excelled in various sports organized by Anna University Zonal level, claiming the Athletic (Men) Overall 2nd position, Football and Hockey 2nd positions, and securing 1st place in Kho Kho. In the domain of Athletic (Women), they secured an overall 3rd position.

Mar Ephraem Manna

Ephraem Manna's motto is "For the students, By the students". Ephraem Manna has contributed a sum of Rupees Three Lakhs Seventy-One Thousand and Fifty (Rs.3,71,050/-) to assist economically backward students.

Efforts towards Inclusive Environment

Efforts towards fostering an inclusive environment at Mar Ephraem include celebrating a diverse range of cultural and traditional festivals such as Onam, Pongal, Christmas, as well as observing occasions like Teachers' Day and National Days

AWARDS AND RECOGNITIONS FOR STUDENTS

Mar Ephraem provides various awards and recognitions for students to acknowledge their achievements and contributions. Best Outgoing Student Award, Best Ambassador Award, Good Samaritan Award, Artistic Excellence Award, Icon of Sports 2024 Award, Best Library User Award, Best Student Researcher Award. These awards are awarded to honor excellence across different domains and to motivate students to excel in various aspects of their academic and personal development.

MAR EPHRAEM INSTITUTIONAL SOCIAL RESPONSIBILITY:

Mar Ephraem organized career guidance programs by Public Relation Department of our college, headed by Dr. Leo Bright Singh, Department of Mechanical Engineering, in the nearby schools and have also hosted training programs for the school teachers of Kanyakumari district.

Mar Ephraem hosted Robotics training camp for the nearby rural school students. The training was carried out by the Mar Ephraem Robotics cell headed by Prof.Dr.V.Suresh, HoD ECE.

From the inception of the Institution, Mar Ephraem College of Engineering and Technology has taken a lot of initiatives to uphold its goals for providing value-based education, general, specific and soft skills, initiating research activities, participating in community activities, establishing linkages and MoUs.

Successful and fruitful completion of each academic year is the result of the dedicated work of everyone on the campus. The management, teaching & non-teaching staff and the students have contributed their might unfailingly. All these have been made possible by the grace of the Almighty God who always leads our way Towards Light (ERGA LUMEN)

Let me conclude my report by thanking one and all for your co-operation and efforts.

Thank You