



FRANCIS XAVIER ENGINEERING COLLEGE
Department of Electronics & Communication Engineering
Newsletter (2023-2024 Odd Semester)

Volume: 22 issue: 1

JUL 2023 - DEC 2023



DEPARTMENT VISION

To develop Electronics and Communication Engineers by permeating with proficient morals, to be recognized as an adroit engineer worldwide and to strive endlessly for excellence to meet the confronts of our modern society by equipping them with changing technologies, professionalism, creativity research, employability, analytical, practical skills and to excel as a successful entrepreneur.

DEPARTMENT MISSION

1. To provide excellence through effective and qualitative teaching- learning process that equips the students with adequate knowledge and to transform the students' lives by nurturing the human values to serve as a precious resource for Electronics and Communication Engineering and nation.
2. To enhance the problem solving and lifelong learning skills that will enable by edifying the students to pursue higher studies and career in research.
3. To create students with effective communication skills, the abilities to lead a ethical values in order to fulfil the social needs.

STATEMENT OF PSOs

PSO1: Design, Implement and Test Embedded and VLSI systems using state of the art components and software tools.

PSO2: Design and develop the signal processing and communication systems for the real time application.

STATEMENT OF PEOs

PEO1: Acquiring Quality Education:

To develop in the students the ability to acquire adequate knowledge on all aspects of Engineering and continue to develop professionally through lifelong learning which would spark an interest for higher studies and cutting-edge research.

PEO2: Developing Multi-skills & professionalism:

To provide ability in dynamic leadership skills, powerful Discerning & Decision making and communication skills with amicable team spirit and ethical responsibility.

PEO3: Contemporary learning:

To get equipped with skills in trending technologies in industries, which delivers excellent job prospects and kindles the spirit of entrepreneurship

EDITOR: Mrs. J. Friska AP/ECE

CO EDITOR: Mrs. E. Francy Irudaya Rani AP/ECE

Student Editor : Fejisha Dev & Abinaya

STUDENT ORIENTATION PROGRAMME

College is a brief period in the life of graduates, yet it is a crucial one. College gives a fantastic academic & social experience that plays a vital influence in determining the kind of person they formulate into. Every year of college is memorable in its own way, with something new to offer. In many aspects the pre final year of college is considered the most important one as it is a time to take in as much of the college experience as possible & prepare for life outside the college. Being a final-year student might be terrifying, but it will be easier if they already know what to do & how to face the unprecedented challenges. With a view to make the pre final year students get an overview of the academic & industrial expectations, a two day Student Orientation Programme was organised for the B.E & B.Tech Programme students of Francis Xavier Engineering College on 11.7.2023 (Tuesday) and 12.07.2023 (Wednesday). The sessions were planned to Orient the students towards various portfolios like Mentor, Student Activity Score (SAS), Academics & IT operations, Examinations & OBE, Skill Training, Applied Lab, Entrepreneurial Development Cell (EDC) & Placements. The sessions exposed the students to the nuances adopted into the portfolios for the betterment of the students.

MENTOR :

The team of mentor representatives under the headship of Mrs. Angelin Ranjitha Mani, Mentor/SAP Coordinator shared the importance of mentoring, the role of mentors and mentees, the significance of SAP (Student Action Plan) for academic, skill and knowledge enhancement and the uniqueness of one-on-one mentoring.



Further, they motivated the students to participate actively in academics, cultural/non cultural events, special initiatives, and sports so that their SAP can be attained by the end of the academic year thereby supporting them in gaining good internals. The team conveyed the content with clarity that the students appreciated the initiatives taken up for enhancing the student activities inside the campus.

ACADEMICS & IT OPERATIONS :

The importance of academics and IT operation enhancements were elaborated by the team headed by Dr.L.R.Priya, Prof. Academics. The importance of maintaining good grades in the pre final year which will act as a categorizing aspect for interviews in their final year was very well delivered to the students through well knitted ppt's. Also, the need for maintaining 85% of attendance in alliance with biometric attendance was also conveyed to the students. The academic flexibilities in grounds of credit-transfer, Minor Degree Course and completing authorised NPTEL/MOOC online courses for the advancement of course during the 7th & 8th Semester were well received by the students. Dr. Caroline Viola Stella Mary, Head ERP addressed the students on enhancing student accessibility to Grafana & Discourse Portal and the importance of biometric attendance, the follow up actions for attendance block and the late privileges. She further shed light on the opportunity opened up for designing logos in their upcoming My Career & Support desk APPS. The students found the session lively and enthusiastic.

TRANSFORMING EDUCATION IN LINE WITH CURRENT TECHNOLOGY DEVELOPMENT



fostering innovation and scalability. The speaker said to the students that Education systems nowadays prioritize and invest in comprehensive teacher training programs that equip educators to integrate technology into their teaching practices. The speaker emphasized the importance of Digital Learning Platforms, like Online platforms, learning management systems, and virtual classrooms which are becoming a powerful tool for collaborative learning. The speaker concluded the session and requested the students to watch more Technical Videos. The interaction between the students and the resource person was highly motivating to all the Participants. The session ended with the feedback of Students. This event was coordinated by Dr. R Prem Ananth, IIC Convener, IIC Innovation Ambassador for "Design thinking & Innovations", AP/ECE with the guidance of Dr. Lourdes Poobala Rayen, IIC President.

In Commemoration of National Education Day, a session on "Transforming Education in line with current Technology Development" was organized by the Entrepreneurship Development Cell & IIC in association with the Electronics & Communication Engineering Department on 24th November 2023. The session was handled by Dr. G. Rajakumar, Controller of Examinations, IIC Vice President, Prof./ECE, FXEC. A total of 49 students & 2 faculties participated. Dr R Prem Ananth delivered the welcome address and introduced the resource person.

He explained the history of National Education day which was announced by the Ministry of Human Resource Development (HRD) in the year 2008 to commemorate the birthday of the great Maulana Abul Kalam Azad. The Resource person started his speech by insisting that the integration of technology into education is becoming increasingly crucial, providing new opportunities and challenges for educators, students, and policymakers. He said that Governments and Educational Institutions had invested in robust digital infrastructure, including high-speed internet access and updated hardware, to ensure widespread access to technology. The speaker said the education policy makers also developed clear and flexible policies that support the integration of technology in education, ensuring a balance between innovation and ethical considerations and further added that Public and Private Institutions facilitate the development and implementation of cutting-edge educational technologies,



RESOURCE PERSON

DR. G. RAJAKUMAR

COE HEAD PROF./ECE

“You cannot change your future, but you can change your habits, and surely your habits will change your future.”

A.P.J. Abdul Kalam

STUDENT ACTIVITY SCORE (SAS) :

In alliance with SAP discussed by the Mentoring team, the SAS team spoke on the importance of fixing the target dates and maintaining a follow up on completing the plans framed for the particular year. The band of faculty under the headship of Mrs. J.Friska, SAS Coordinator gave an elaborate idea on how students will be rewarded through SAS on the basis of the Technical, Non-technical and SSIG tasks which they complete. They also highlight the need to participate in national and international level Technical events and Conferences so as to obtain a galore of experience.

APPLIED LAB :

The team of faculty under the guidance of Dr. Lakshmi Narayanan, Prof. Applied Lab addressed the students on the importance of inculcating company specific and domain specific skills through applied Labs. The need for participating in national, international level competitions, filing patents, publishing papers and student projects were elaborated by the team. The achievements of students of the Applied lab shared won applause among the students. The ideas shared with regard to designing products or projects made the students spell bound and encouraged their eagerness to enhance their skill sets.

EXAMINATIONS AND OBE:

Dr.RajaKumar, the controller of examination addressed the students on the importance of scoring the internal marks that can support the students in boosting their grades. The awareness on malpractice issues and its aftermath were clearly elaborated. The need for clearing arrears before they reach their final year that can support them in attending interviews were also highlighted. The revised norms on maintaining 75 % of attendance to make themselves eligible to appear for the internal exams were also elaborated with clarity. The students found the session highly informative.

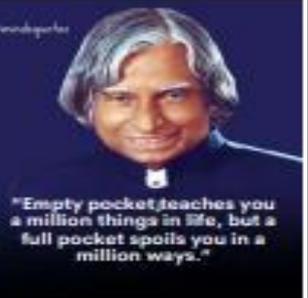
SKILL TRAINING :

The team of faculty under the guidance of Dr.S.Balaji, Prof. Skill and Training spoke on the importance of enhancing their Engineering skills that serves as the spotlight to lure the attention of employees who are in search of skilled engineers. The importance of upgrading the students Technical and Professional Skills, Soft Skills and People skills were also projected by the team. The students were given a clear idea on the skills sets that he/she must develop before sitting for an interview which was found to be productive.



ENTREPRENEURIAL DEVELOPMENT CELL (EDC) :

The team of faculty under the leadership of Dr.Lourdes Poobala Rayen, the director of EDC addressed the students on the importance of self-employment and the merits of being an employer. The ideas on means to start a company and the funding schemes provided by the central and state government for young entrepreneurs were elaborated by the team. The budding entrepreneurs of the Institutions and their business ventures shared their professional fears among the students.



PLACEMENTS

Placements are considered the crown target of any student entering into the portals of an Institution. A team of dedicated faculty under the leadership of Dr. Mohammed Sathick and Dr. A. Gnana Saravanan addressed the students on the placement opportunities open for the B.E/B.Tech students in both public and private sectors. An outlook on the importance of preparing for GATE, who aspire to work in government sectors was also deliberated meticulously that won the attention of the students. A clear insight on interview rounds, aptitude exams, technical skill sets, importance of enhancing people skills were also elaborated by the team.

SYSTEM VERILOG USING UVM (PHASE 1)

MANDATORY SKILL TRAINING



A Skill training program on System Verilog using UVM (phase 1) was organized by the Department of ECE under the guidance of Dr. S. Balaji, Professor/ Training & Skill, Mrs. J. Friska, HOD/ECE & Dr. S. Allwin Devaraj, AP/ECE, Skill Coordinator. Mrs. M. Chitra Evangelin Christina, AP/ECE, Mrs. Bhuvana, AP/ECE, Mrs. Lenin Marksia, AP/ECE Mrs. Valli Suseela, AP/ECE were the trainers. The primary goal of this one-week skill training program was to equip participants with essential skills and knowledge in System Verilog. The program was designed to include a mix of theoretical concepts, practical exercises and hands-on activities to ensure an engaging and interactive learning experience.

The training content was thoughtfully curated to cover various important aspects of System Verilog. The feedback from students was overwhelmingly positive. Throughout the training program, students were evaluated based on their engagement, participation, and performance in various tasks and activities. The students demonstrated a strong commitment to learning and actively participated in all the sessions. The skills that the students have acquired during this training will surely be beneficial in their professional endeavors.



FX – ENGLISH PROFICIENCY CLUB

CROSSWORD PUZZLE

Crossword puzzles boost analytical skills as well as speed up one's ability to sift through possible scenarios and answers and challenge memory, logic, and analytical thinking, and also enhance cognitive abilities, particularly in areas related to language and problem-solving. Engaging in such a competition challenges the brain and keeps the mind sharp. With regard to this, a Crossword Puzzle competition was conducted for all the students of B.E and B.Tech programmes on 25.07.2023 (Tuesday) on the first floor at the Main Library Block from 3.00 pm to 4.00 pm under the activity code ACT/23-24/001625. A total of 20 students participated in the contest and the winners are: I prize - Ms. THRISHA S (IV CSE), II prize - Mr. SRI RAM V(IV CSE) and III prize Mr. Sri Vallinayagam V S (I CSE). The event was coordinated and conducted by Mrs. Shala F John, AP/English, and Ms. Thamizh Paavai P, AP/English.

IMAGE PROCESSING USING OPENCV PYTHON

A skill training program on 'Image Processing using OPENCV Python' was conducted from August 14th August, 2023 to August 24th, 2023 for the II year students of ECE and EEE Department. A Total of 32 students attended this program. Students were trained in Image Processing and Assessment tests were conducted to the students. Individual projects for the real time applications have been given to the students and they have been trained to complete the projects. All students were instructed to submit the project report in research article format to present it in reputed conferences. The skill training program was well coordinated by Dr.V.R.S. Mani Prof/ECE. At the end of the training, students expressed their interest to get placed in software and Electronics based core companies. Most of the students have trained to use Google colab and they are using it in their own computers.



WINNERS OF PROJECT EXPO

FXEC Embedded & IOT Applied lab students Mr. G. Selvagopal III ECE B, Mr. K. Vignesh Kumar III ECE B and Mr. C. Kalaiselvan III ECE A participated in the National Level Project EXPO 2K23 held at Kalasalingam Academy of Research and Education on 28.07.2023 and won third Prize with cash award of Rs. 2000. They presented the project titled on BLIND STICK USING RASPBERRY PI PICO. The main aim of this project is to assist blind persons without human need & students integrated Raspberry pi pico, PIR sensor, IR sensor, Buzzer module, Rain drop sensor, Ultrasonic sensor into the project. The team was motivated by Mrs. M. Radha, AP/ECE, Embedded & IOT Applied Lab In-charge, and guided by Mrs. J. Friska, HOD/ECE and Dr. K. Lakshmi Narayanan, Vertical Head/Applied Labs.

FXEC EMBEDDED AND IOT APPLIED LAB



Mrs. M. Radha



G. Selva Gopal



Vignesh Kumar



C. Kalaiselvan

EDC - WORKSHOP

TRADEMARKS AND PATENTS AS INDICATORS OF SOCIAL AND ENVIRONMENTAL INNOVATION



On 27.07.2023 a "Workshop on Trademarks and Patents as indicators of Social and Environmental Innovation" was organized by the Entrepreneurship Development Cell in association with the IIC to share knowledge about the innovation and its legal recognition. The resource person for the session was Mr. P. Krishna Kumar, AP/Civil, FXEC from 10.30 AM – 4.00 PM. A total of 35 students and 2 faculties attended the programme. The programme was coordinated by Mrs. P. Raja Priya, AP/Civil, FXEC.

The resource person started his session by describing the objectives of the programme as to identify protectable innovations, to suggest steps for transforming innovations into proprietary assets, to use IP information, particularly relating to patents and designs, for further research and development in developing new product and process and finally utilize the IP information in their business development. The speaker explained the various types of Intellectual Property Rights such as patents, copyrights, trademarks, Geographical indications, designs etc. and also enumerated the registration process of patents. He explained that patents play a crucial role in promoting and protecting environmental innovations in some of the thrust areas like renewable energy technologies, waste management and recycling innovations, sustainable materials and manufacturing processes, and smart and sustainable cities. The students actively participated in the workshop and the resource person clarified the doubts of the students. The program came to an end with the feedback of the students.

INDUSTRIAL INTERACTION ON STATIC TIMING ANALYSIS (STA)



A riveting Industry Institute Interaction session on Static Timing Analysis (STA) was hosted, under the elite guidance of Mr. P. Radhakrishnan Pasirajan, Senior Director at Qualcomm. Attended by 20 esteemed faculties and an eager group of 20 students, the event delved into the critical role of STA in modern chip design. The session not only highlighted the significance of STA but also offered illuminating insights into setup time, hold time, and how STA intricately calculates timing analysis for a single cycle. Mr. Pasirajan captivated the audience with his extensive knowledge and engaging delivery style. He emphasized on the pivotal role STA plays in ensuring the functionality and performance of integrated circuits, shedding light on the complexities of setup time and hold time duration. His elucidation on how STA meticulously calculates

timing analysis for a single cycle left the attendees with a deeper understanding of the intricate processes underlying chip design. The event was not just a monologue; it proved to be a dynamic and interactive exchange of ideas. Students actively participated, quizzing Mr. Pasirajan on various aspects of STA and its practical implementation in sequential circuits. A notable highlight of the session was the subsequent discussion with Dr. K. Jeyakumar, GMD; Mr. S. Krishna Kumar, GMA; and Dr. V. Velmurugan, Principal, among other distinguished members of the M-Team. Mr. Pasirajan expounded on the qualities that industry values in students: a hunger for knowledge, a positive attitude, an in-depth understanding of cutting-edge technologies, and the ability to thrive in the ever-evolving landscape of their chosen industry.

The session left an indelible impact on both faculties and students alike. It not only equipped them with profound insights into STA but also instilled a broader perspective on how to excel in the industry. The key takeaway resonated with the audience - a combination of knowledge, attitude, and adaptability is the key to a successful and enduring career. Heartfelt gratitude was extended to Dr. Caroline Viola Stella Mary M, ERP Head and Dr. G. Rajakumar, CoE/FXEC for being a source of this program. The coordinators, Prof. J. Friska, HOD/ECE, Prof. C. Amarsign Feroz, ASP/ECE and Dr. A. Andrew Roobert, ASP/ECE have taken meticulous efforts in organizing and orchestrating the event seamlessly. Their dedication ensured that the interaction was not just informative but also an enriching experience for all participants. In conclusion, the STA Industry Institute Interaction provided a platform for students and faculties to interact with an industry stalwart, gaining invaluable insights that extend beyond textbooks. The event underscored the importance of bridging the gap between academia and industry, ensuring that students are well-equipped to contribute meaningfully to their chosen field.



SESSION ON PATHWAYS TO PROSPERITY :

ENTREPRENEURSHIP SUCCESS

With regard to National Entrepreneurship Day, a Session was organized on the title "Pathways to Prosperity: Entrepreneurship Success" by the Entrepreneurship Development Cell and IIC in association with the Electronics and Communication Engineering department on 29th November 2023.

The session was handled by Anto Joel Valan Mutharasu, CEO & Founding Partner Zenanvibe and Inseatfood Pvt Ltd. A total of 59 students and 1 faculty participated. This event was organized and coordinated by Dr. R Prem Ananth, IIC Convener, IIC Innovation Ambassador for "Design thinking and Innovations",



Assistant Professor/ECE, FXEC with the guidance of Dr. Lourdes Poobala Rayen, IIC President Professor/MBA. The program started with the welcome address and chief guest introduction by Dr. R Prem Ananth, IIC Convener, IIC Innovation Ambassador for "Design thinking & Innovations", Assistant Professor/ECE, FXEC. He said that the resource person is providing a paid internship to our college students for developing Website, ERP System and Google optimization. The guest speaker started the session with an ice breaking session and Students actively participated. The speaker said all the students have the thought of going to work but there is a great opportunity to become an entrepreneur and prosper in life. The speaker further added that to become a successful entrepreneur, Innovation and Creativity are the key. He said investigating social problems with Innovative disruptive ideas and unique solutions can drive you towards a good business. The speaker shared his own real life experiences as an entrepreneur and further requested the students to create a Linked account and start to build a network. He concluded the session with a quote "Pathways to Prosperity is to earn while u learn". The interaction between the students and the resource person was highly motivating to all the Participants. The Session ended with the feedback of Students.



*"I AM NOT HANDSOME BUT I
CAN GIVE MY HAND TO
SOMEONE WHO NEED HELP
BECAUSE BEAUTY IS REQUIRED
IN HEART NOT IN FACE"*
- APJ Abdul Kalam

IDENTIFYING INNOVATIVE STARTUP AVENUE IN ELECTRONICS

On 18.10.2023 a talk on "Identifying Innovative Startup Avenue in Electronics" was organized by the Entrepreneurship Development Cell & IIC in association with the Electronics & Communication Engineering department. The session was handled by Dr. G. Rajakumar, Controller of Examinations, IIC Vice President, Professor/ECE, FXEC. Totally 41 students & 1 faculty member participated. Mrs J Friska, HoD/ECE delivered the welcome address & introduced the chief guest & explained the activities of IIC & motivated the students to actively participate in IIC activity and ended with the quote "Don't be a Job seeker, Be a Job Provider".



The resource person started his session by explaining the importance of the electronics sector which is expanding globally due to quick technological advancements & a manufacturing company that specializes in electronic items is ideal for business entrepreneurs with technical expertise. The speaker suggested Sales, Servicing & Repair, PCB Manufacturing, Developing Embedded Products, Electronic Test Equipment Rental Services, Industrial Automation, Electrical Panel Manufacturing & E-Waste Recycling were the Electronic business ideas that can be opted for & are expected to yield a good return on investment. The speaker said major global smartphone market players Apple, Samsung, Huawei, OPPO, Vivo, Xiaomi, Sony, ZTE, Lenovo, LG Electronics, were started with little money & also sighted a few Startup Avenue in Electronics such as Gaming Computer Assembly, Low-Cost Chip Manufacture, Security Camera Manufacturing, Provider of Solar Panel Systems, Manufacturing, Robotic Vacuum Cleaners, Manufacturing of Inverters Pneumatic Tools Production. The resource person concluded his speech by insisting the students being an entrepreneur can have the flexibility, independence, the ability to work at their own place and with their own rules. He also clarified the doubts raised by the students. The interaction between the students and the resource person was highly motivating to all the Participants and the session ended with the feedback of Students. The Program was organized by Dr. R Prem Ananth, IIC Convener, IIC Innovation Ambassador for "Design thinking & Innovations", AP/ECE, FXEC with the guidance of Dr. Lourdes Poobala Rayen, IIC President.

TRAINING ON "C PROGRAMMING" FOR GETTING SUPER DREAM AND MARQUE PLACEMENT OFFERS

Training and Skills Development organized and conducted Higher Package Training on "Core C Programming" for Super Dream and Marque Placements for the benefit of 1 year students from 27/11/2023 to 08/12/2023 in the Training Hall, Ground Floor, MBA Block. Mr. Bharath, Senior Trainer, BYTS Services India Private Limited, Hyderabad was the trainer. The Topics covered in the training session are Introduction to programming & uses of it, Data type, Work of printf, Modulus operator, Relational Operator, If - Else conditional construct continuation, Conditional operator, Dummy Statements, Loops Logical operator & its types, While Loop, Short Circuit Operators, Number Systems - types & its conversions, Data types, Memory Allocation - Float & Double, Char data type, Functions, Return type, Types of errors, Scope & life of a variable, Difference b/w Auto & static variables & problems and Purpose of storage classes. This training will help the students to get placement offers in highest package companies. Total of 155 students from AI&DS - 36, Civil-01, CSBS-07, CSE-18, ECE-03, EEE-25, IT-13, MCA-03 and Mechanical-49 registered and attended the training program. The training program was convened by Dr. S.Balaji, Director/ Training and Skills Development, Coordinated by Dr. Y. Harold Robinson, Prof./CSE and Dr. S. Allwin Devaraj, AP/ECE and Mr.N.V.Selvam, AP/EEE.



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FRIDAY, December 15, 2023



STUDENT ORIENTATION PROGRAM ON PERSONALITY DEVELOPMENT

With a great motive to equip the students on life skills and to hone their interpersonal abilities, a Student Orientation Programme on "Personality Development" was organized for the 1 year Batch 1 CSE, IT, ECE, CSBS and Civil students from December 4, 2023 to December 8, 2023. The primary objective of the orientation is to enhance the self-confidence of all participants. Mr. Suresh Punjabi, Corporate Trainer at Academy for Individual Development and corporate Excellence was the trainer and led the session incorporating engaging activities and insightful discussions. The program commenced with a heartfelt expression of gratitude, acknowledging the role of a higher power. Participants were guided to reframe their insecurities in a positive light, culminating in a symbolic 'funeral' for 'I. Mr. Suresh underscored the importance of working smart over working hard, supported by a speed test exercise. Self-exploration sessions were thoughtfully balanced with relaxation, where participants learned dance routines inspired by sports like volleyball, basketball, and hockey. All participants received ribbon bows and chocolates,



MR. SURESH PUNJABI



symbolizing the collective success of the orientation program. The student orientation program proved to be an eye-opening experience, instilling valuable life lessons and encouraging self-discovery. The diverse activities, insightful discussions, and emphasis on positivity contributed to a holistic and memorable initiation into the academic community.

GUEST LECTURE

INTRODUCTION TO EMBEDDED SYSTEM



RESOURCE PERSON
Mr. T. Devakumar
AP/ECE, NEC

On 23.11.2023 a guest lecture on "Introduction to Embedded system" was organized by the Department of Electronics and Communication Engineering in association with the Institute of Electrical and Electronics Engineers. The guest lecture was handled by Mr. Devakumar T, Assis. Professor (Sr. Gr), Department of ECE, National Engineering College, Kovilpatt from 03.00 PM - 04.00 PM. Totally 41 students and 2 faculties participated. This event was coordinated by Dr Mani, Professor /ECE and Dr. R. Prem Ananth, AP/ECE. The program started with the chief guest introduction by Dr V. R. S. Mani, Professor/ECE.

The guest speaker started his session by listing out the career opportunities in embedded systems. The guest speaker said an embedded system is a chip where we can program the chip and get a suitable real time application & further added that chip is a combination of logic blocks and further added that cadence is a software where we can design the logic. After designing the logic, the chip will be built in Taiwan. He said Embedded systems are specialized computing systems designed to perform dedicated functions within larger systems or products which are designed for a wide range of tasks. These systems are integrated into everyday devices & play a crucial role in various industries, from consumer electronics to automotive, healthcare

& industrial automation. The speaker said Input and Output Interfaces, Micro controllers / Micro processors, Power Supply & Peripherals were the components of an embedded system. He concluded the session by sharing the application of embedded system in various sectors like Consumer Electronics such as Smartphones, smart TVs, and home appliances, in-car infotainment, Medical Devices, Industrial Automation (PLCs), robotics and Aerospace.

THE HUMAN FOOT IS A MASTERPIECE OF ENGINEERING AND A WORK OF ART.

-LEONARDO DA VINCI

WORKSHOP ON DESIGN THINKING, CRITICAL THINKING & INNOVATION DESIGN

DESIGN THINKING



RESOURCE PERSON

DR. R. PREM ANANTH
AP/ECE, FXEC

A Workshop on "Design Thinking, Critical thinking and Innovation Design " was organized by the Entrepreneurship Development Cell and IIC in association with the Department of Electronics and Communication Engineering on 14.12.2023 to 15.12.2023. The workshop was handled by Dr. R Prem Ananth, IIC Convener, IIC Innovation Ambassador for "Design thinking & Innovations", Assistant Professor, Francis Xavier Engineering College. A total of 49 students and 2 faculties participated. This event was coordinated by Mr Pradeep T Rajan, AP/ECE, FXEC. This event was conducted with the guidance of Dr. Lourdes Poobala Rayen, IIC President.

On Day 1, the speaker started his session by defining the word Entrepreneur as a person who starts a new business. He quoted the example of Deepinder Goyal, the founder of Zomato as the real-world example of a successful innovative entrepreneur and further added that Adhoc innovation, Systematic (structured) innovation, Incremental innovation, Breakthrough innovation and Frugal Innovation were the classification of innovation and explained each classification with real world examples. The speaker also shared a few industrial types of innovation, like product innovation, process innovation, customer experience innovation and business model innovation. He compared Post office and Professional courier as an example for customer experience innovation and also explained all the types of industrial innovation to the students and cleared their doubts in question and answer sessions. On the second day of the workshop, the speaker said that exploring potential solutions generates as many possible options as one and can use techniques like brainstorming, mind mapping, or research to come up with good ideas. The speaker said design thinking is one of the best approaches for problem solving which is a type of creative problem solving that focuses on the needs and perspectives of the users. It is a way of thinking and making that keeps the user at the center of everything and can help one to solve complex and ill-defined problems in a human-centric way. The interaction between the students and the resource person was highly motivating to all the Participants. Workshop came to an end with the feedback of Students. The Program was organized by Mr Pradeep T Rajan, AP/ECE, FXEC with the guidance of Dr. Lourdes Poobala Rayen, IIC President.

19TH GRADUATION CEREMONY



Francis Xavier Engineering College conducted its 19th Graduation Ceremony on 17 Dec, 2023. The prestigious event saw the gathering of eminent personalities, faculty, & proud families, creating an atmosphere of prestige and accomplishment.



Dr. V. Velmurugan, Principal, delivered the welcome address and presented the highlights of the institution, showcasing the academic excellence and milestones achieved by the institution and the students during their educational journey. The atmosphere resonated with pride and optimism as the graduates prepared to embark on new chapters of their lives. Adding a touch of

academic wisdom, Dr. Jeyakumar, GM (D), and Mr. Krishnakumar, GM (A), along with Directors, Vertical Heads, and Heads, adorned the ceremony with their distinguished presence. Their encouragement and support were invaluable to the graduates, symbolizing the seamless blend of academia and industry. Dr. L R Priya, Professor Academics, proposed the vote of thanks acknowledging the collective efforts that culminated in the success of the event. The ceremony served not only as a recognition of academic accomplishments but also as a manifestation of the collaborative spirit that defines the institution. As the graduates step into the world beyond academia, equipped with knowledge, skills, and a spirit of innovation, the 19th Graduation Ceremony of Francis Xavier Engineering College will be remembered as a milestone in their journey of becoming responsible contributors to society.

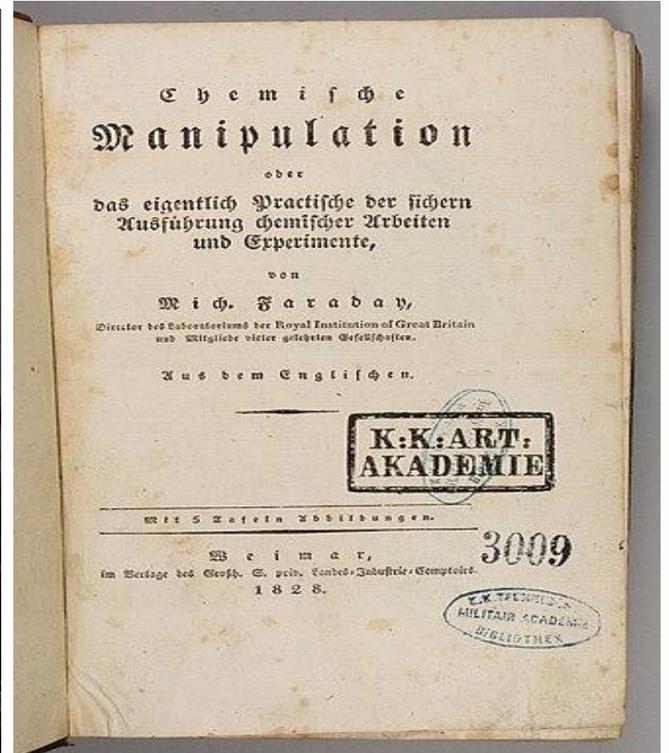
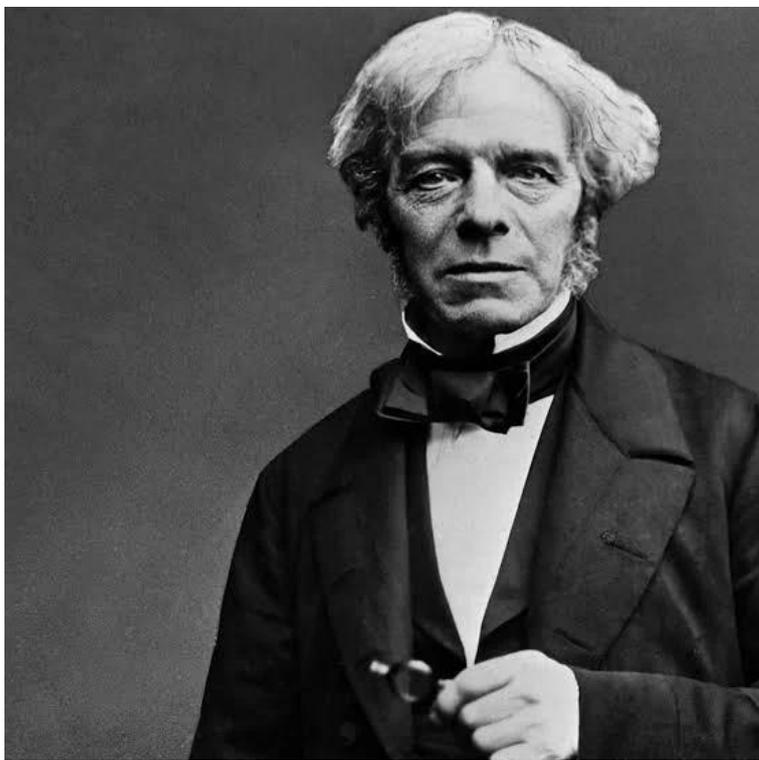


Dr. R. Velraj, the distinguished Vice Chancellor of Anna University was the chief guest. Dr. Velraj, in his thought-provoking address, emphasized the pivotal role of engineers as nation builders, setting the tone for the significance of the moment. He bestowed degrees upon the diligent Under graduate batch of 2018-2022 and the accomplished Post graduate batch of 2020-2022. The ceremony was presided over by Mrs. Augusti Marys Priyadarshini, the esteemed Correspondent of SCAD Group, adding an air of grace & distinction to the event. Dr. R. Perumalsamy, Prochancellor of Noorul Islam Centre for Higher Education, graced the occasion with his presence and offered his felicitation.



Department of ECE Placement Details

University Serial No	Student Name	On/Off Campus Placement	Name of the Employer
95072014001	AAKASH R	On Campus	Sutherland Global
95072014002	ABINAYA M	On Campus	Oasis Automation
95072014015	DEEPHYKA K	Off Campus	TCS
95072014020	GAYATHIRY S K	On Campus	Sutherland Global
95072014025	HARINATH SIVA M	On Campus	Oasis Automation
95072014032	JEEVASHREE S	On Campus	Oasis Automation
95072014033	JENOLIN N	On Campus	Oasis Automation
95072014044	KEERTHANA I	On Campus	Sutherland Global
95072014045	KIRTHICA C	Off Campus	TCS
95072014311	MARI GOMATHY A	On Campus	Sutherland Global
95072014312	MERLINE YABESH P	On Campus	Sutherland Global
95072014057	MOHAMED RISVAN M	On Campus	Sutherland Global
95072014058	MUTHU KAUSALYA R	On Campus	Sutherland Global
95072014068	RAGAVI A	On Campus	Sutherland Global
95072014069	RAM MUTHUKUMAR M	Off Campus	TCS
95072014073	REJONI J	On Campus	Sutherland Global
95072014074	ROGAN ANTONY S	Off Campus	TCS
95072014077	SAKTHI G	Off Campus	TCS
95072014086	SHAHINA JALEELA S	On Campus	Sutherland Global
95072014092	SIVAGAMI R	On Campus	Sutherland Global
95072014099	SURESH S	Off Campus	TCS
95072014315	MOHAMMEDSAIFULLAH P A	On Campus	Sutherland Global
95072014322	TAJDEEN	On Campus	Oasis Automation



Michael Faraday was an English chemist and physicist who contributed to the study of electrochemistry and electromagnetism. His main discoveries include the principles underlying electromagnetic induction, diamagnetism, and electrolysis. Faraday was an experimentalist who conveyed his ideas in clear and simple language. His mathematical abilities did not extend as far as trigonometry and were limited to the simplest algebra. Physicist and mathematician James Clerk Maxwell took the work of Faraday and others and summarised it in a set of equations which is accepted as the basis of all modern theories of electromagnetic phenomena. On Faraday's uses of lines of force, Maxwell wrote that they show Faraday "to have been in reality a mathematician of a very high order – one from whom the mathematicians of the future may derive valuable and fertile methods

Born: 22 September 1791, Newington Butts, London, United Kingdom

Died: 25 August 1867 (age 75 years), Hampton Court Palace, Molesey, United Kingdom

Title: Fullerian Professor of Chemistry (1833–1867)

Awards: Copley Medal, Royal Medal, Rumford Medal, Albert Medal, Royal Society Bakerian Medal

Spouse: Sarah Barnard (m. 1821–1867)

Parents: James Faraday, Margaret Hastwell