



You Choose, We Do It
St. JOSEPH'S COLLEGE OF ENGINEERING
(An Autonomous Institution)

St. Joseph's Group of Institutions

OMR, Chennai - 119



We prepare for



English Qualifications™



DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING



NEWSLETTER – EIE - MAR 2024

OUR PATRONS



Dr. B. Babu Manoharan

M.A., MBA., Ph.D

Chairman



Mr. B. Shashi Sekar

M.Sc., INTL. Business

Managing Director



Mrs. S. Jessie Priya

M.Com

Executive Director



Dr. Vaddi Seshagiri Rao

M.E., M.B.A., Ph.D

Principal

VISION:


To make every student of the department irrespective of his/her social, cultural background and learning abilities gets a fair chance in mastering the various fields of Electronics and Instrumentation to become a proficient individual for the empowerment of society.

MISSION:

- To Prepare students to understand recent technologies in Electronics and Instrumentation Engineering effectively and adapt themselves in an ever-changing environment.*
- To impart excellent computing knowledge to students by providing well equipped facilities and state of the art systems.*
- To prepare students with excellent leadership skills, management capabilities and ethical understanding for successful career.*

SEERA CLASS

The 2nd year EIE (Electronics and instrumentation) students attended the SEERA CLASS on 01.03.2024 and on 21.03.2024 as a part of curriculum.




St. JOSEPH'S COLLEGE OF ENGINEERING
You Choose, We Do It
(AN AUTONOMOUS INSTITUTION)
OMR, CHENNAI - 119

Department of
Electronics and Instrumentation Engineering

INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of HRD Initiative)

SEERA
1-Mar-2024

II Year Students



St. JOSEPH'S
GROUP OF INSTITUTIONS
OMR, CHENNAI - 119

The Choice of
Disciplined Toppers

On 01.03.2024 it was conducted by 3rd year EIE students on the topic “Electric Hybrid Vehicles”. The class started with the teaching on Electric Hybrid vehicles, the 3rd year students covered various key aspects, including the fundamental working principles of hybrid engines, the integration of electric motors with traditional combustion engines, and the significance of battery technology. The discussion also touched upon the environmental advantages of hybrid vehicles, such as reduced emission and improved fuel efficiency. Additionally, the presentation highlighted innovations in hybrid vehicle design and the potential future developments in these rapidly evolving fields.

On 21.03.2024 it was conducted by Prof Dr.V.Vijayan for II YR EIE students on the topic “MATLAB Programming”.

The students were exposed about various MATLAB tools and the dedicated toolboxes for the control systems.

They were trained on various plots and they were taught to acquire insights about bode , polar plots. With the basic techniques taught the students were equipped with the knowledge about checking the stability of simple and complex processes, systems.



Department of Electronics and Instrumentation
Engineering

INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of HRD Initiative)

SEERA
Student Employability Enhancement Research Activities

21/March/2024
II EIE



MATLAB Programming

SEERA CLASS III YEAR

The 3rd year EIE (Electronics and instrumentation) students attended the SEERA CLASS on 06.03.2024, 13.03.2024 and 20.03.2024 as a part of curriculum. They indulged themselves in Intense Coding Practices sessions for all the three days.



In the intense coding practice SEERA class, students of 3RD year EIE delved into advanced algorithms, data structures, and problem-solving techniques. They tackled complex coding challenges, honing their skills in languages like Python, Java, and C++. Through hands-on projects and rigorous exercises, they mastered concepts such as dynamic programming, recursion, and efficient algorithm design. Moreover, students learned to collaborate effectively, debug efficiently, and optimize code for performance. This immersive experience equipped them with the expertise needed for real-world coding scenarios.

In this intense coding practice SEERA class, the students of 3rd year EIE gained invaluable skills and insights. From mastering complex algorithms to refining problem-solving techniques, every session has been a journey of growth. Collaboration with peers has enhanced our ability to communicate and work in teams effectively. The rigorous practice has honed our coding proficiency, empowering us to tackle challenges with confidence. Overall, the experience has been transformative, equipping us with essential tools for success in the world of programming.



GUEST LECTURE

RECENT TRENDS IN IOT AND MACHINE LEARNING APPLICATIONS

The 2nd year **EIE** (Electronics and instrumentation) students attended a Guest lecture on 15.03.2024. We had **Mr. Udhay Prakash K**, Senior Technical Programmer from **NEXTGEN Technologies**, who lead the session.

St. JOSEPH'S COLLEGE OF ENGINEERING
You Choose, We Do It
(AN AUTONOMOUS INSTITUTION)
OMR, CHENNAI - 119

DEPARTMENT OF
ELECTRONICS AND INSTRUMENTATION ENGINEERING

ORGANIZES

IEEE Control Systems Society

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

GUEST LECTURE

TITLE
Recent Trends in IoT and Machine Learning Applications

15.03.2024
FRIDAY

8.00 am - 9.30 am

BASIL, CENTRE FOR TRAINING AND PLACEMENT

Mr Udhay Prakash K
Senior Technical Programmer
NEXTGEN Technologies,
Chennai.

St. JOSEPH'S
GROUP OF INSTITUTIONS
OMR, CHENNAI - 119

The Choice of Disciplined Toppers

In the Guest Lecture on recent trends in IOT and Machine learning applications, we delved into cutting-edge technologies reshaping industries worldwide. We covered fundamental concepts of IOT, exploring its integration with machine learning algorithms for enhanced functionality. Students gained insights into IOT device connectivity, data collection, and analysis methods, alongside advanced machine learning techniques like deep learning and reinforcement learning. Emphasis was placed on real-world applications spanning healthcare, smart cities, agriculture, and more, illustrating how these technologies optimize processes and drive innovation. Through hands-on projects and case studies, students developed a comprehensive understanding of the synergy between IOT and Machine Learning, preparing them to tackle the challenges and opportunities presented by the rapidly evolving digital landscape.



Students indulged in emerging trends like edge computing, enabling devices to process data locally for faster response times and reduced latency. They explored machine learning techniques tailored for IOT environments, such as anomaly detection and predictive maintenance. . Moreover, they studied the integration of IOT data streams with machine learning algorithms to create intelligent systems capable of autonomous decision-making. This knowledge equipped them to navigate and contribute to the cutting-edge developments in these fields.



INDUSTRIAL VISIT



On March 14, 2024, the Department of Electronics and Instrumentation Engineering organized an industrial visit to the Central Scientific Instruments Organisation (CSIO) located in [Taramani, Chennai]. The visit aimed to provide students with practical insights into the application of theoretical knowledge in the field of Electronics and Instrumentation engineering. This report summarizes the activities and observations made during the visit from 8:00 AM to 3:00 PM.

CSIO is a premier national laboratory dedicated to research, design, and development of scientific and industrial instruments. It plays a pivotal role in bridging the gap between academia and industry by fostering innovation and technological advancements in instrumentation and related fields.

The visit commenced with an introductory session by CSIO representatives, providing an overview of the organization's objectives, ongoing projects, and contributions to various sectors including healthcare, agriculture, and defence. Students were briefed about the importance of instrumentation in modern industries and research. The students were divided into groups and taken on guided tours of CSIO's state-of-the-art laboratories. They had the opportunity to witness advanced equipment and instrumentation used for research and development purposes.

CSIO showcased some of its cutting-edge projects and prototypes developed in collaboration with industries and research institutions. Students were impressed by innovations such as IoT-enabled sensors, environmental monitoring systems, and smart agricultural technologies.

The industrial visit to Central Scientific Instruments Organisation provided students with valuable exposure to cutting-edge research, development, and innovation in the field of electronics and instrumentation engineering. It served as a platform for bridging the gap between theoretical learning and practical applications, inspiring students to pursue careers in research, development, and industrial automation. The Department of Electronics and Instrumentation Engineering expresses its gratitude to CSIO for facilitating this insightful and enriching experience.

SPOKEN TUTORIAL – IIT B

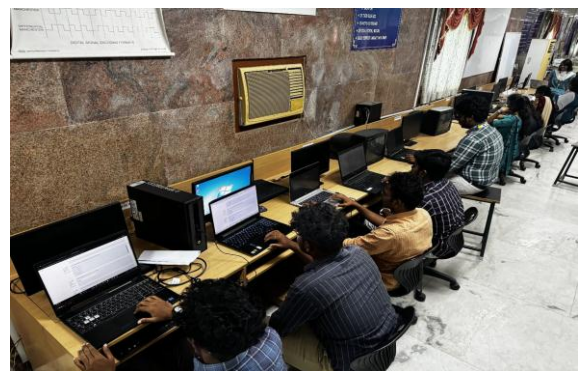


The spoken tutorial emphasized interactive learning, with opportunities for students to ask questions, seek clarification, and engage in discussions. Through online they were fostered with a collaborative learning environment, encouraging active participation from all students.

After an intense practice outside lab hours the students were tested for their proficiency in **Scilab** programming on 06.03.2024. Around 45 students have taken up the test and 40 of them cleared it. After successful completion IIT B provides them a certificate of evaluation which eventually helps them in placements.

The spoken tutorials on Python programming given by IIT B provided students with a solid foundation in Python programming fundamentals. By familiarizing students with Python's capabilities and applications in electronics and instrumentation engineering, the session aimed to enhance their academic learning and prepare them for future challenges in the field. The interactive nature of the tutorial, coupled with hands-on exercises, ensured that students gained practical experience and confidence in their programming abilities. Overall, the session was a resounding success in advancing students' proficiency in Python programming and its relevance to electronics and instrumentation engineering.

After an intense practice outside lab hours the students were tested for their proficiency in **Python programming** on 19.03.2024. Around 50 students have taken up the test and 38 of them cleared it. After successful completion IIT B provides them a certificate of evaluation which eventually helps them in placements.



ALUMNI TALK

The alumni talk delivered by Mr. Hari Hara Sudhan Govindaraj to the students of the Electronic and Instrumentation Engineering department at St. Joseph's College of Engineering was incredibly informative and enlightening. His insights into the future of our careers and the various placement opportunities invaluable.



Mr. Hari Hara Sudhan Govindaraj, an esteemed alumnus of our college from the 2014-2018 batch, currently serving as a Senior Software Support Engineer at Geotab Inc. in Oakville, Canada, provided practical advice and firsthand experiences that resonated deeply with me and my peers. He discussed career path guidance, placement opportunities, considerations for pursuing a master's degree, and strategies for professional growth. He shared his views about exploring a career in IoT based on telemetry in Canada is an excellent choice given the country's vibrant tech scene. He said that there more opportunities are available. Overall, Mr. Hari Hara Sudhan Govindaraj's alumni talk was a resounding success and left a lasting impact on me and my fellow students. We are grateful to the department for organizing such enriching events that empower us to make informed decisions about our careers.

ALUMNI TALK



The alumni talk delivered by Mr. Lokeshwaran A to the students of the Electronics and Instrumentation Engineering department at St. Joseph's College of Engineering was an enlightening and incredibly informative experience. As a Third-year student, I found his insights into the future of our careers and the plethora of placement opportunities available to be invaluable.

Mr. Lokeshwaran A, an esteemed alumnus of our college from the 2018-2022 batch, is currently immersed in research on VLSI, showcasing his dedication to advancing technology in the field. His previous role as a project engineer in the biomedical department at IIT Madras, where he contributed to various projects related to biomedical engineering, underscores his expertise and commitment to innovation. Notably, his pivotal role in the research crew satellite project further highlights his dedication and proficiency.

During his talk, Mr. Lokeshwaran A provided comprehensive guidance on career paths, placement opportunities, considerations for pursuing a master's degree, and strategies for professional growth. His encouragement to focus on skill enhancement through certifications in VLSI and learning stm32 microcontroller resonated deeply with the audience, inspiring us to strive for excellence in our chosen fields.

Overall, Mr. Lokeshwaran A's alumni talk was a resounding success, leaving a lasting impact on me and my fellow students. We are immensely grateful to the department for organizing such enriching events that empower us to make informed decisions about our careers and aspire towards greater heights of achievement.

PROJECT EXPO WINNERS

The Management, Principal, Faculty members and Students are pleased to congratulate the following students for winning the national level technical symposium organized by **Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology**, Chennai in association with **IEEE Madras Section** held on **March 20, 2024**.

S. N	Name of the Students	Year	Event Name	Prize Details	ALUMNI MENTOR
1.	Divakar S Hanathika T Dheepigha G Gayatri K	II Year EIE	Project Expo (NEXUS 2k24)	2 nd Prize Rs. 10,000/-	Mr. Hari Hara Sudhan Govindaraj



INTRAMURAL SPORTS DAY

The 3rd year **Electronics and Instrumentation Engineering (EIE)** students participated in the Intramural Sports event held on **March 2, 2024**. Basketball, Football, Kabaddi, Volleyball, Ball badminton, Badminton(doubles), Chess (Singles), Table tennis (Singles) were held for men and Basketball, Throwball, Ball badminton, Badminton(doubles), Chess (Singles), Table tennis (Singles) were held for women.

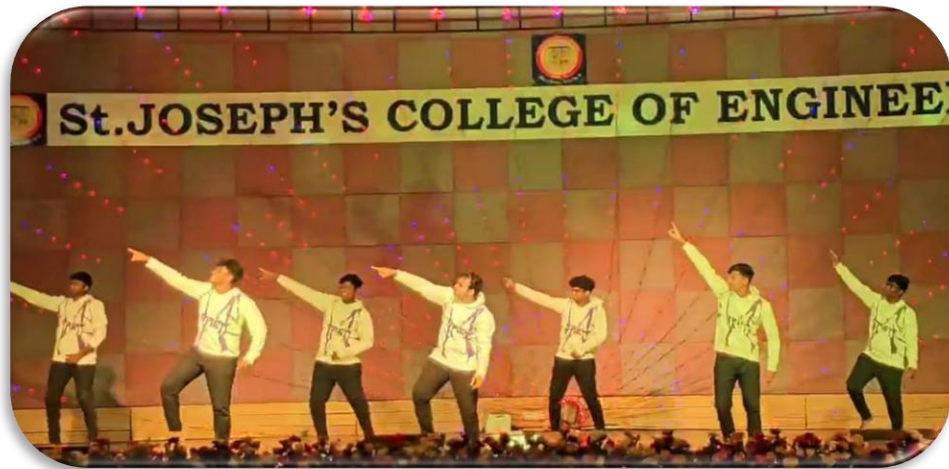
S.no.	EVENT	PLACE
1.	THROWBALL(WOMEN)	WINNERS

It is a day dedicated to promoting physical fitness, teamwork, and friendly competition among participants and a great way to encourage a healthy and active lifestyle while fostering camaraderie and sportsmanship among participants.



COLLEGE DAY

The 3rd year **Electronics and Instrumentation Engineering (EIE)** students participated in College day held on **9 March 2024**. It includes various activities such as cultural performances and prize distributions. Outstanding performance of both the team **“TIME TRAVELLERS”** and **“RHYTHM REBELS”** and the team **“TIME TRAVELLERS”** won the cash prize. It is a day for students to showcase their talents, and foster a sense of community within the campus.



ISA ACTIVITY

(PYTHON PROGRAMMING QUIZ)

The 3rd year Electronics and Instrumentation Engineering (EIE) students participated in ISA (International Students Association) activity Python programming quiz focused on Python programming held on 13 March 2024.

The quiz program began with a brief introduction to Python programming, highlighting its importance in the field of technology and its versatility in various applications. They were then divided into teams and given a series of challenging questions related to Python syntax, functions, and algorithms.



This event was not only educational but also a great opportunity to showcase their skills and learn from their peers. This activity reinforced their passion for programming and ignited a desire to further explore the world of technology and innovation.

At the end of activity they were filled with a sense of accomplishment and pride in our teamwork and dedication. This activity reminds the importance of continuous learning and pushing ourselves out of our comfort zones to reach new heights.



NGO VISIT

The 3rd year **Electronics and Instrumentation Engineering (EIE)** students had the privilege of participating in a Non-Governmental Organization visit to **Anjalamal Special Child School** on **March 16, 2024**. The experience proved to be profoundly heartening. Students were warmly greeted by the cheerful countenances of the children, each exuding a palpable sense of joy and enthusiasm.

Throughout the day, students had the opportunity to interact with the students, participate in various activities, and witness the incredible dedication of the teachers and staff. From sensory play sessions to music therapy classes, every moment was filled with love, compassion, and genuine care for the children.

Despite their challenges, they exuded a sense of positivity and determination that was truly inspiring. It was a humbling reminder of the power of perseverance and the importance of creating a supportive and inclusive environment for all.

St. JOSEPH'S COLLEGE OF ENGINEERING
You Choose, We Do It
(AN AUTONOMOUS INSTITUTION)
OMR, CHENNAI - 119

Department of Electronics and Instrumentation Engineering

NGO VISIT
16 March 2024

Anjalamal Children's Home Kalpakkam

St. JOSEPH'S GROUP OF INSTITUTIONS
OMR, CHENNAI - 119

The Choice of Disciplined Toppers

PLACEMENTS

Soliton is renowned for its commitment to excellence and innovation, offering a dynamic environment for professional growth and development. They announced that our students have met the eligibility criteria to attend placement opportunities at Soliton on **March 15, 2024**. For Soliton 40 out of 54 has attended the recruitment process.

With a rich history of innovation and excellence, HCL Technologies offers a dynamic environment for professionals seeking to excel in the field of embedded systems and they are delighted to announce that our students have met the eligibility criteria to attend placement opportunities at HCL(Embedded) on **March 15, 2024**. For HCL out of 54 students, 50 students have attended the first round of recruitment.

Juspay, a pioneering company at the forefront of digital payment solutions has offered dynamic and innovative environment for individuals seeking to make a meaningful impact in the **fintech** industry. They are delighted to announce that our students have met the eligibility criteria to attend placement opportunities at Juspay on **March 20, 2024**. Around 50 students of third year have attended the recruitment process.

INTRAMURAL SPORTS DAY

The 2nd year Electronics and Instrumentation Engineering (EIE) students participated in the **Intramural Sports event** held on **March 16, 2024**. Basketball, Football, Kabaddi, Volleyball, Ball badminton, Badminton(doubles), Chess (Singles), Table tennis (Singles) were held for **men** and Basketball, Throwball, Ball badminton, Badminton(doubles), Chess (Singles), Table tennis (Singles) were held for **women**.

S.NO	Event	Place
1	BASKETBALL(Women)	RUNNER
2	TABLETENNIS (WOMEN)	WINNER
3	FOOTBALL (MEN)	RUNNER



We teamed up with the department of **Artificial intelligence and machine learning(AIML)** and emerged **Victorious** in the **intramural sports day**.

It is a day dedicated to promoting physical fitness, teamwork, and friendly competition among participants and a great way to encourage a healthy and active lifestyle while fostering camaraderie and **sportsmanship among participants**.

PROJECT EXPO

St. JOSEPH'S COLLEGE OF ENGINEERING
You Choose, We Do It
(AN AUTONOMOUS INSTITUTION)
OMR, CHENNAI - 119

DEPARTMENT OF
ELECTRONICS AND INSTRUMENTATION ENGINEERING
in association with
IEEE Control System Society
Organizes

Project [Expo]

For all IV YEAR EIE Students

Date 20.03.2024 Time 8.00 am - 3.00 pm
Process Control Lab

St. JOSEPH'S
GROUP OF INSTITUTIONS
OMR, CHENNAI - 119

*The Choice of
Disciplined Toppers*

St. JOSEPH'S COLLEGE OF ENGINEERING
You Choose, We Do It
(AN AUTONOMOUS INSTITUTION)
OMR, CHENNAI - 119

Department of
Electronics and Instrumentation Engineering
Project Expo 20-Mar-2024

St. JOSEPH'S
GROUP OF INSTITUTIONS
OMR, CHENNAI - 119

*The Choice of
Disciplined Toppers*

The 2nd year EIE (Electronics and instrumentation) students attended the **Project Expo** on **20.03.2024** as a part of curriculum. It was conducted by 4th year EIE students.

The **Second and third year students** eagerly attended the project expo organized by their senior peers, with a blend of anticipation and curiosity. The event pulsed with **innovation and creativity**, as it showcased a myriad of projects spanning various disciplines.

The students found themselves immersed in a tapestry of ideas and technological advancements. Conversations buzzed with enthusiasm as they engaged with the **seniors** delving into the intricacies of each project.

Witnessing the culmination of the seniors' efforts served as both inspiration and motivation for the second year students. Moreover, the **Project expo** fostered a sense of **innovation and collaboration** among the students, laying the groundwork for future interdisciplinary ventures. As they departed from the event, the second year and third year students carried with them not only newfound knowledge but also a **renewed sense of purpose and determination to excel in their academic pursuits**.

COLLEGE DAY

We're thrilled to share the excitement from the recent College Day held on **March 23rd**, where our **2nd-year Electronics and Instrumentation Engineering (EIE)** students showcased their talents and enthusiasm. With 30 teams participating in **College Day**, the energy was palpable.

From our department, we proudly cheered for our two formidable teams: "**9 Shots**" represented by our **talented girls** and "**Sentinels**" by our **spirited boys**. Their dedication and skill were commendable throughout the day.

The anticipation peaked as the winners were announced, with **17 cash prizes of 3000** each up for grabs. We're delighted to announce that our girls' team, "9 Shots," emerged victorious, **claiming one of these prestigious prizes**. Their triumph is a testament to their hard work and perseverance.

Let's continue to support and celebrate the achievements of our students, inspiring them to reach greater heights in both academics and extracurricular pursuits.

