



*You Choose, We Do It*  
**St. JOSEPH'S COLLEGE OF ENGINEERING**  
 (An Autonomous Institution)  
**St. Joseph's Group of Institutions**  
 OMR, CHENNAI - 119



**JULY 2025**

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**

S.No.	Title of the Events and Photographs	Details of the Event
1.	<p style="text-align: center;"><b>COLLABARATIVE QUALITY INITIATIVES WITH OTHER INSTITUTIONS</b></p> <p style="text-align: center;"> <b>Mr.Prabu.S Director</b>  <b>Mr.Anantharaj.M Director</b>          Approtech R&amp;D Solutions Pvt Ltd.  <b>K.VINODH KUMAR - Asst.Professor -</b>          St.Joseph's College of Engineering       </p> <p style="text-align: center;"><b>EVENT OUTCOMES</b></p>	<p style="text-align: center;"><i>The Department of Artificial Intelligence and Data Science organized an Industry-Institute Interaction in collaboration with Approtech R&amp;D Solutions Pvt. Ltd., Chennai. As part of this initiative, Mr. K.</i></p>

Mr. Vinodh Kumar, K Assistant Professor ADS have visited APPROTECH R&D SOLUTIONS Pvt Ltd and interacted with Mr.Prabhu.S Director and Mr.Anantharaj.M Director as the part of INDUSTRY INSTITUTE INTERACTION.

• Potential outcomes gained by staff members at Approtech R&D Solutions Private Limited:

1. Professional Growth: Opportunities for career advancement, skill development, and networking.
2. Industry Recognition: Chance to work with innovative projects, collaborate with students,

		<p><i>Vinodh Kumar, Assistant Professor, visited the company and interacted with Directors Mr. Prabu S and Mr. Anantharaj.M.</i></p>
--	--	--


## INDUSTRIAL VISIT



2.



*Final year students of the Department of Artificial Intelligence and Data Science embarked on a three-day industrial visit to 8 Queens Software Technologies Pvt. Ltd. from 21st to 23rd July 2025. The visit featured expert-led sessions on AI, Full Stack Development, Cloud Integration, Mobile App Development, and Data Analytics.*

3.	<p><b>GUEST LECTURE</b></p> 	<p><i>The Department of Artificial Intelligence and Data Science organized a guest lecture on 30th July 2025 at Hazel Hall, titled “Dream in Pixels: Redefining VFX with Artificial Intelligence”.</i></p>



*You Choose, We Do It*  
**St. JOSEPH'S COLLEGE OF ENGINEERING**  
 (An Autonomous Institution)  
 St. Joseph's Group of Institutions  
 OMR, CHENNAI - 119



**DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE**

Organizes  
**GUEST LECTURE**  
 ON

**"BLOCKCHAIN TECHNOLOGIES: EMPOWERING THE FUTURE"**



**Mr. V.S. RAJAN**

CTO & Co-Founder  
 Aadhityaa Infomedia Technologies



**29 / 07 / 25**  
**8:30 AM - 10:00 AM**



**MBA CONFERENCE HALL**

**EXCLUSIVELY FOR 3RD YEAR ADS STUDENTS**



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



*The Choice of*  
**Disciplined Toppers**

*The Department of Artificial Intelligence and Data Science of St. Joseph's College of Engineering organized a guest lecture titled "Blockchain Technologies: Empowering the Future" on 29th July 2025. The session was*

		<p><i>delivered by Mr. V. S. Rajan, CTO &amp; Co-Founder of Aadhityaa Infomedia Technologies, who shared valuable insights on blockchain innovations and their future impact.</i></p>
<p><b>4.</b></p>	<p><b>ADS CLUB ACTIVITY</b></p>	<p><i>The Department of Artificial Intelligence and Data Science, in collaboration with the FDCI Club, hosted an insightful session titled "The Innovation Pipeline: From Idea</i></p>

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

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE  
 IN COLLABORATION WITH  
**FDCI**  
 PRESENTS

"The Innovation Pipeline: From Idea to Patent"

**SPEAKERS:**

Mohammed Naazil.A.A  
 IV - ADS

Kiruthik kumar J.  
 IV - ADS

16<sup>TH</sup> July 2025 | EXCLUSIVELY FOR 2<sup>ND</sup> YEAR ADS STUDENT | Basil MEMBERS

**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 ARTIFICIAL INTELLIGENCE AND DATA SCIENCE  
 IN ASSOCIATION WITH  
**FDCI**  
 Presents

**"GLITCH - HUNT"**

**ROUND 1: THE BUG RUSH (30 MINS)**

- DEBUG 25-30 MICRO HTML/CSS/JS SNIPPETS.
- TACKLE 1 FULL BUGGED WEB PAGE.

**ROUND 2: THE DESIGN FORGE (90 MINS)**

- USE FIGMA OR CANVA TO CREATE A UI.
- ON SPOT CHALLENGE.

**TEAM SIZE: 2 MEMBERS**

24<sup>TH</sup> JULY 2025  
 OLD CSE LAB  
 9:30AM - 1.00 PM

**REGISTER NOW**


EXCLUSIVELY FOR 2<sup>ND</sup> YEAR STUDENTS

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

**The Choice of Disciplined Toppers**

to Patent" on 16th July 2025. Tailored for 2nd-year ADS students, the event featured speakers Mohammed Naazil A.A and Kiruthik Kumar J from IV- ADS, who guided attendees through the journey of transforming innovative concepts into patentable solutions. The session sparked curiosity, encouraging students to think beyond theory and explore the potential of applied creativity.

The Department of Artificial Intelligence and Data Science, in association with the FDCI Club, conducted an engaging technical event titled "Glitch – Hunt" on 24th July 2025 at the Old CSE Lab, exclusively for second-year students. The event comprised two rounds—The Bug Rush, where participants debugged multiple HTML/CSS/JS snippets and a fully bugged web page, and The Design Forge, an on-the-spot UI design challenge using tools like Figma or Canva.

5.	<p><b>FDP/WORKSHOP/CONFERENCE/HACKATHON (ATTENDED /ORGANIZED)</b></p> 	<p><i>The Department of Artificial Intelligence and Data Science successfully organized Hacknova'25, a 24-hour online national-level hackathon held from 26th to 27th July 2025. With 62 enthusiastic teams and active collaboration from industry partner Encycdata, the event provided a vibrant platform for students to build real-world solutions.</i></p>

**STUDENT ACHIEVEMENTS/COMPETITION ATTENDED BY STUDENTS**

6.



*Oracle Certified Professional – MySQL 8.0 Database Developer*

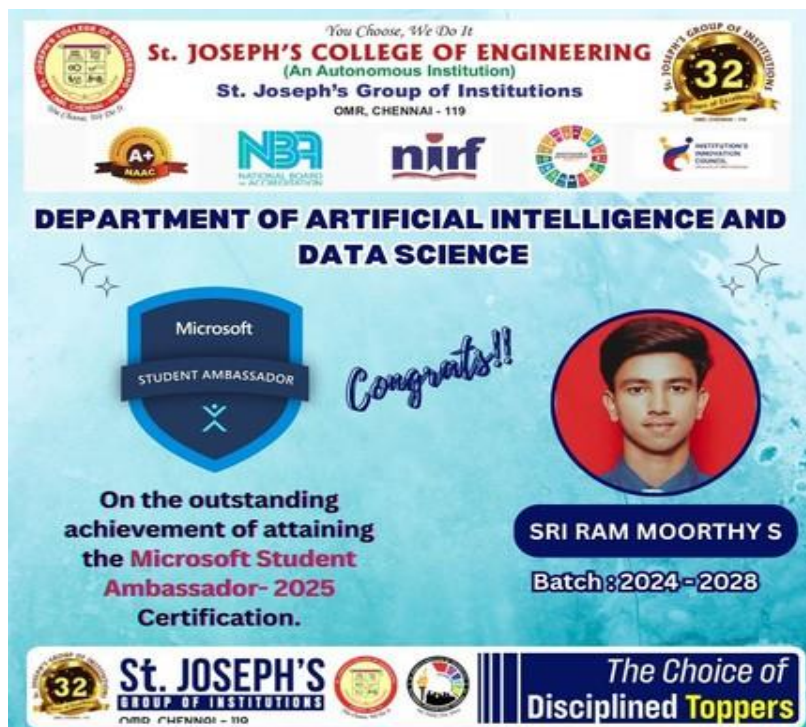
*Batch: 2023 – 2027*

*Harininivatha S has earned the Oracle Certified Professional credential in MySQL 8.0 Database Development, a globally recognized certification that validates deep technical proficiency in database design, optimization, and query development using MySQL*



*Microsoft Learn Student Ambassador – 2025  
Batch: 2023 – 2027*

*Meenachi Sundaresan J has earned a Microsoft Learn Student Ambassador, a prestigious global program that recognizes student leaders with strong technical acumen. The Beta badge earned*



*as part of this program signifies an early stage of involvement, where ambassadors begin collaborating with peers worldwide, and driving digital transformation.*

*Microsoft Student Ambassador – 2025 Batch: 2024 – 2028*

*Sri Ram Moorthy S has also earned a Microsoft Learn Student Ambassador – 2025, recognizing his strong technical foundation and commitment to peer-to- peer learning. His participation in the program reflects proficiency in areas such as cloud computing, artificial intelligence, and software development.*



*Best Paper Award – 2025*

*Batch: 2022– 2026*

*Kevin J C and J Mahatishri have been honored with the Best Paper Award for their research presentation titled “Advanced Sports Analytics Using Deep Learning” at the IC-CAMSTIA 2025 international conference, conducted by the Department of Mathematics on 25th & 26th July 2025.*

*Patent Published– 2025*


*Batch: 2022 2026*

*Sujan P, Satish G, Someshwar V, and Arul Prasanth S from the Department of Artificial Intelligence and Data Science have successfully*



*You Choose, We Do It*  
**St. JOSEPH'S COLLEGE OF ENGINEERING**  
 (An Autonomous Institution)  
 St. Joseph's Group of Institutions  
 OMR, CHENNAI - 119

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE**  
**Patent Filed & Published**




**MAHATISHRI J**  
IV Year

**Patent No:**  
202541060553

**Published on :**  
June 11, 2025

**Title :**  
Advanced Sports Analytics  
using Deep Learning for  
Player and Ball Tracking  
with stride rate analysis

*Congrats!!!*



**KEVIN J C**  
IV Year

Batch : 2022 – 2026

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

**The Choice of**  
**Disciplined Toppers**

*Patent Published – 2025*

*Batch: 2022 – 2026*

*Santhosh M, Surendhan A, Sukin Raj M, and Sibi P from the Department of Artificial Intelligence and Data Science have successfully published a patent titled “A Deep Learning based approach for early detection and classification of diabetic retinopathy” on July 4, 2025. Their work demonstrates strong research insight in medical imaging and AI, providing an impactful solution for early diagnosis of diabetic eye disease.*

*Patent Published – 2025*

*Batch: 2022 – 2026*

*Kiruthik Kumar J and Mohammed Naazil A A from the Department of Artificial Intelligence and Data Science have published a patent titled “An advanced multi- faceted AI powered framework designed for real-time attention and distraction*

*You Choose, We Do It*  
**St. JOSEPH'S COLLEGE OF ENGINEERING**  
 (An Autonomous Institution)  
 St. Joseph's Group of Institutions  
 OMR, CHENNAI - 119

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE**

**Patent Filed & Published**  
*Congrats!!!*

  
**SANTHOSH M**  
IV Year

**Patent No:**  
202541057385

**Published on :**  
July 4, 2025

**Title :**  
A Deep Learning based approach for early detection and classification of diabetic retinopathy.

**Batch : 2022 – 2026**

  
**SURENDHAN A**  
IV Year

  
**SUKIN RAJ M**  
IV Year

  
**SIBI P**  
IV Year

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

*The Choice of Disciplined Toppers*


*monitoring”. Their work highlights an innovative application of artificial intelligence to address cognitive monitoring challenges, reflecting their forward-thinking mindset and strong*

*Oracle Certified Professional–2025  
 Batch: 2023 – 2027*

*Syed Aeja Ahmed A from the Department of Artificial Intelligence and Data Science has earned the title of Oracle APEX Developer – Oracle Certified Professional. This global recognition highlights his strong technical expertise in low-code development and database applications. His achievement through the PEP Datascience & Analytics platform reflects his dedication to mastering enterprise-level software solutions and commitment to excellence in the tech industry.*

*You Choose, We Do It*  
**St. JOSEPH'S COLLEGE OF ENGINEERING**  
 (An Autonomous Institution)  
**St. Joseph's Group of Institutions**  
 OMR, CHENNAI - 119

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE**  
**Patent Filed & Published**



**KIRUTHIK KUMAR J**  
IV Year



**MOHAMMED NAAZIL A A**  
IV Year


Batch : 2022 - 2026

**Patent No:**  
202541050274

**Published on :**  
June 20, 2025

**Title :**  
An advanced multi-faceted  
AI powered framework  
designed for real-time  
attention and distraction  
monitoring.

*Congrats!!!*

  
INTELLECTUAL PROPERTY INDIA

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

*The Choice of  
Disciplined Toppers*

*Oracle Certified Professional – 2025  
 Batch: 2022 – 2026  
 Amalroja F has successfully earned the Oracle  
 Certified Professional – MySQL 8.0 Database  
 Developer*

*Oracle Certified Professional –  
 2025 Batch: 2022 – 2026  
 Harininivatha S has been recognized as an  
 Oracle Certified Professional – MySQL .*

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

*Congrats!*

**ORACLE**  
**APEX**

Syed Aejez Ahmed A  
 ADS  
 St. Joseph's College of Engineering

**PEP Datascience & Analytics**  
 Oracle APEX Developer  
 Oracle Certified Professional

St. Joseph's College of Engineering  
 YOU CHOOSE, WE DO IT  
 St. Joseph's Institute of Technology  
 WE MAKE YOU SHINE

*The Choice of*  
**Disciplined Toppers**

*Oracle Certified Professional – 2025*

*Batch: 2022 – 2026*

*Nowrin Begum R has earned the prestigious title of Oracle Certified Professional – Oracle APEX Developer, underscoring her competence in building modern web applications using Oracle's low-code platform. Her certification demonstrates her skill in database-driven application development, user interface design, and cloud-based deployment, aligning with the growing demand for rapid application development in business environments.*

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

32  
ANNIVERSARY GROUP OF INSTITUTIONS

DISCIPLINED

*Congrats!*



**ORACLE**  
Certified  
**Professional**  
MySQL 8.0  
Database Developer

Amalroja F  
ADS  
St. Joseph's College of Engineering

**PEP Datascience & Analytics**  
**MySQL 8.0 Database Developer**  
**Oracle Certified Professional**



St. Joseph's College of Engineering  
**YOU CHOOSE, WE DO IT**

St. Joseph's Institute of Technology  
**WE MAKE YOU SHINE**

*The Choice of*  
**Disciplined Toppers**

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

*Congrats!*




**HARINIVATHA S  
ADS**  
St. Joseph's College of Engineering

**PEP Datascience & Analytics**  
MySQL 8.0 Database Developer  
Oracle Certified Professional

**St. Joseph's College of Engineering**  
**YOU CHOOSE, WE DO IT**

**St. Joseph's Institute of Technology**  
**WE MAKE YOU SHINE**

*The Choice of*  
**Disciplined Toppers**

		
<p>7. STAFF NPTELCERTIFICATION</p>		<p>-</p>
<p>8. INDUSTRIAL PROJECTS DONE BY STUDENTS</p>		<p><i>Project Work at KAL-M Robotics &amp; Innovations – 2025 Batch: 2024 – 2028</i>  <i>Ananda Kumar B E has been selected to undertake an exclusive project work at KAL-M</i></p>

*You Choose, We Do It*

**St. JOSEPH'S COLLEGE OF ENGINEERING**  
 (An Autonomous Institution)

**St. Joseph's Group of Institutions**  
 OMR, Chennai - 119

**31**  
 Year of Excellence  
 Since 1994

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE  
 &  
 DATA SCIENCE**

*Congratulations*  
 to our student who has been  
 selected to undertake  
 project work @



**For the Indian Armed Forces  
 North Eastern Command**



*Best Wishes*

**Ananda Kumar B E**  
 Batch: 2024-28

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

*The Choice of  
 Disciplined Toppers*

*Robotics & Innovations, contributing to solutions for the Indian Armed Forces – North Eastern Command. This opportunity recognizes his technical capability, innovation mindset, and commitment to national-impact projects in the field of robotics and defense technology.*

9.	<b>FUNDED PROJECTS</b>	-
10.		-
11.	<b>STAFF CONFERENCE PRESENTATION /  PUBLICATIONS(ONLY PUBLISHED) DETAILS  PATENT PUBLISHED</b>	<p><i>We are proud to announce that Ms. Dr. R.Ramya, Department of Artificial Intelligence and Data Science, represented</i></p>



*St. Joseph's College of Engineering - presented their innovative research work at the 4th IEEE International Conference on Sensors and Related Networks (SENNET-2025), held from July 24–27, 2025, at Vellore Institute of Technology (VIT), India, in collaboration with Hochschule Karlsruhe – University of Applied Sciences, Germany.*

*We are proud to announce that Ms. S. Anslam Sibi and Dr. L. Sherly Pushpa Annabel, faculty members of the Department of Artificial Intelligence and Data Science, have published their impactful research work in the internationally reputed journal Scientific Reports, under the Nature Portfolio. Their paper presents an innovative approach that combines energy-efficient bat and moth flame optimization*

## Network lifetime improvement in wireless sensor networks using energy-efficient bat-moth flame optimization technique

S. Anslam Sibi  & L. Sherly Puspha Annabel

*Scientific Reports* **15**, Article number: 18065 (2025) | [Cite this article](#)

1809 Accesses | 2 Citations | [Metrics](#)

### Abstract

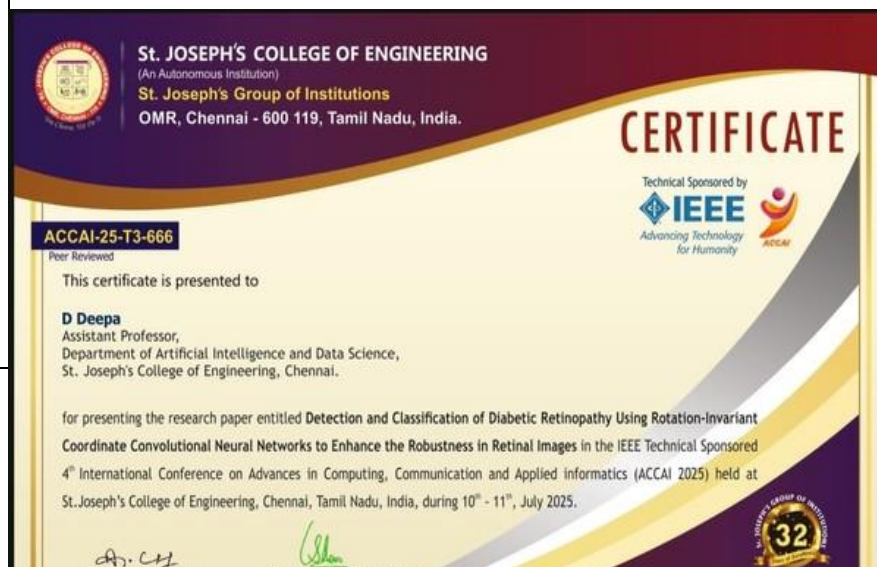
Wireless sensor networks (WSNs) face challenges in maintaining network lifetime due to energy limitations. To optimize energy usage, techniques such as node clustering and data transmission through the shortest path are employed. However, the selected Cluster Head (CH) node eventually becomes inactive as its energy is depleted during continuous transmission to the sink. To overcome this issue, we propose the utilization of Energy-Efficient Bat-Moth Flame Optimization (EEBMFO) in WSNs, aiming to enhance network lifetime. Our strategy makes use of the echolocation signal pattern that bats use to identify prey within a certain range. In a similar manner, nodes fall into clusters within the range of the CH, and the CH is chosen by looking at the highest residual energy. In addition, we use spiral path data transmission and Moth Flame optimization to route data from the source node to the CH. By

*algorithms to significantly enhance the performance and lifetime of wireless sensor networks.*

*We are proud to spotlight the exceptional research contributions of Dr. M.P. Rajakumar, whose work at the intersection of Artificial Intelligence and healthcare has gained wide recognition through high-impact publications and international conference presentations in 2025. His efforts, in collaboration with multidisciplinary teams, are pushing the boundaries of what AI can achieve in clinical settings.*

Document title	Authors	Source	Year
Personalized precision integrating AI for tailored treatment planning in nuclear medicine <a href="#">X Remove from profile</a>	Rajakumar, M.P., Balamurugan, R., Kavitha, R., ...Jason, J., Joel, M.R.	AI Insights on Nuclear Medicine pp. 181-201	2025
Multi-Phase Parkinson's Disease Detection: An Adaptive Deep Learning Approach Combining Brain MRI Analysis, Gait Dynamics, and Automated Reporting <a href="#">X Remove from profile</a>	Rajakumar, M.P, Sri Sathvig, K., Priyanka Bharathi, L.N., ...Santhosh, M.	2025 International Conference on Data Science and Business Systems Icdsbs 2025	2025

*We are proud to announce that Ms. D. Deepa, Assistant Professor, Department of Artificial Intelligence and Data Science, represented St. Joseph's College of Engineering at the 4th International Conference on Advances in Computing, Communication, and Applied Informatics (ACCAI 2025), held on 10th–11th July 2025 at our own campus in Chennai.*



*We are proud to announce that Mr . D.Senthil Kumar presented his innovative research paper at the 2025 International Conference on Computing Technologies & Data Communication (ICCTDC), held on July 4–5, 2025, and organized by Malnad*



*College of Engineering, Hassan, under the  
IEEE Bangalore Section.*

*We are proud of Mr. D. Senthil Kumar for  
presenting his research on “Genetic  
Algorithm-Optimized Machine Learning  
Models for Soil Health Assessment in  
Dryland Wheat Cultivation” at ICCMC  
2025, held at Surya Engineering College,  
Erode. His work highlights the use of AI to  
improve soil analysis and support  
sustainable farming, reflecting our  
institution’s dedication to impactful  
research.*



**SURYA**  
ENGINEERING COLLEGE  
PROGRESS THROUGH KNOWLEDGE



## Certificate of Presentation

This is to certify that

**Senthil Kumar D**

has successfully presented a paper entitled

**Genetic Algorithm-Optimized Machine Learning Models for Soil Health Assessment in Dryland  
Wheat Cultivation**

at the


**8th International Conference on Computing Methodologies and Communication  
(ICCMC 2025) organised by Surya Engineering College,  
Erode, India on 23-25th July 2025.**

Session Chair

L. Kalaiselvi  
Program Chair

Dr. S. Manoharan  
Principal

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**

<b>Sl. No.</b>	<b>Photographs Captured During Event</b>	<b>Corresponding remarks in regarding the status of activity execution</b>
<b>1.</b>	<p><b>Dr. Adlin Sheeba</b> <b>Published Patent</b></p> 	<p><b>Title of Innovation – Blockchain-Based Trusted Communication Architecture for Smart Urban Environments.</b></p>


**Certificates received by the Faculty**





**Workshop Attended by the faculty**


S.No	Name of the FDP	Name of the Staff	Conducted by	Duration
1.	OBE, Research Empowerment through Technology	Dr. Adlin Sheeba	KCG College of Technology	01.07.2025 to 05.07.2025
2.	Recent Advancements in Artificial Intelligence (AI) & ML	Ms. Quba Jaslin C	St. Joseph's College of Engineering	30.06.2025 to 04.07.2025
3.	Integrating Swarm Intelligence with Artificial Intelligence (AI) & ML	Ms. Nivi V	Panimalar Engineering College	14.07.2025 to 19.07.2025

2.


<p>3.</p>	<p><b>Mr. Nirmalkumar V</b></p> <p>Published Patent</p> 	<p><b>Title of Innovation – Intelligent Edge-Based Upskilling Framework for Remote Workforce Enablement and Learning Equity.</b></p>
-----------	---	--

**DEPARTMENT OF CHEMICAL ENGINEERING**

S.No.	Title of the Events and Photographs	Details of the Event
1.	<b>GUEST LECTURE</b>	<p>Association with <b>The Institution of Engineers (India)</b>, organized an insightful Guest Lecture on the topic “<b>Electrospun Nanofibers for Healthcare Application (Enviro &amp; Medical)</b>” on Monday, July 28, 2025, from 1:00 PM to 3:00 PM at the Placement Block. The resource person for the session was <b>Dr. Balu Ranganathan, Co-Founder of CANBRS Therapeutics Pvt. Ltd.</b>, located at the prestigious IIT Madras Research Park. A renowned expert in the field of nanotechnology and biomedical innovations, Dr. Balu shared his expertise on the synthesis, properties, and wide-ranging applications of electrospun nanofibers in both environmental protection and medical diagnostics and treatment.</p> <div style="display: flex; justify-content: space-around;">   </div>

<p>2.</p>	<p><b>IEI CHAPTER (INAGURATION)</b></p>	<p>The inaugural function commenced with a warm welcome to the Guests of Honour, <b>Dr. S. Ramesh, FIE, Chairman, IEI Kancheepuram Local Centre and Principal, Jerusalem Engineering College, and Dr. S. Karthikeyan, FIE, Honorary Secretary, IEI Kancheepuram Local Centre and Professor, Sathyabama University.</b> Their presence added prestige to the occasion as they emphasized the importance of institutional participation in professional societies like IEI.</p> 
<p>3.</p>	<p><b>INDUSTRIAL VISIT</b></p>	<p>The final year students of the Department of Chemical Engineering undertook an industrial visit to <b>Kothari Petrochemicals Ltd., Chennai,</b> on 21st July 2025. The visit aimed to bridge the gap between academic learning and industrial practices, offering students first and exposure to real-world chemical process operations.</p>

			
<p>4. <b>NGO VISIT</b></p>		<p>On 10th July 2025, the final year students undertook a meaningful <b>NGO visit to Paradise Home, Muttukadu</b> – a special school dedicated to the care and education of children with special needs. The visit was part of the department’s initiative to encourage social responsibility and community engagement among students. During the visit, the students interacted warmly with the children, participated in various activities, and gained valuable insights into the challenges and joys of working with differently-abled individuals.</p> <div style="display: flex; justify-content: space-around;">   </div> <p>on 17th July 2025, the <b>III year students</b> of the Department of Chemical Engineering visited <b>Anbu Nilayam, an oldage home</b>, as part of their NGO outreach activity.</p>	

		
<p><b>5. STUDENT ACHIEVEMENT</b></p>		<p><b>K. Dakshin Kiran, a Second Year B. Tech student</b>, who served as the official anchor for the prestigious “<b>Kani Tamil Sorpozhipu</b>” event, organized by the Tamil Peravai under the guidance of the Government of Tamil Nadu. The event, themed “கணித்தமிழ் சொற்பொழிவு”, emphasized the integration of the Tamil language with computational sciences, focusing on its applications in Artificial Intelligence (AI), Natural Language Processing (NLP), and other emerging technologies. It served as a platform to celebrate the timeless beauty and adaptability of Tamil in the digital era.</p> <p>🏆 <b>Student Contribution</b></p> <p>As the <b>event anchor</b>, <b>Dakshin Kiran</b> skillfully conducted the entire program — welcoming esteemed guests, introducing scholarly sessions, coordinating cultural performances, and ensuring smooth transitions throughout. His articulate Tamil speaking skills, stage presence, and professionalism were widely praised by faculty members and attendees.</p>



**Mr. K. Dakshin Kiran, a second-year B. Tech student,** was invited to **Prasan Vidya Mandir on 05.07.2025** as part of the **school's Career Guidance Cell initiative**. The event, titled "Alumni Sessions for Grade XI& XII," aimed to connect accomplished alumni with current school students through knowledge-sharing and motivation.



**Santhosh KJ,** a dedicated student from the 2022–2026 batch, for his exceptional achievements in the field of online learning through NPTEL. Santhosh has been conferred with two prestigious awards for the Jan–Apr

2025 semester:

**NPTEL Discipline Star**



**NPTEL Motivated Learner**


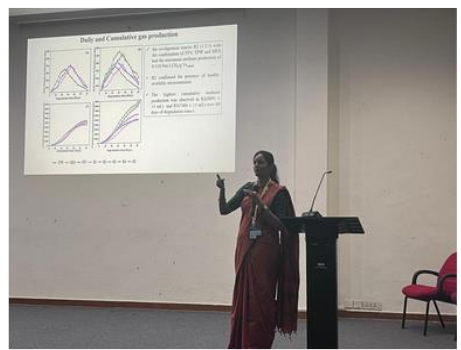
These accolades reflect his commitment to academic excellence and continuous learning. In recognition of his outstanding performance, Santhosh was also invited to participate in the Technical Workshop for NPTEL Stars, held on 6th July 2025 at the SAC Auditorium, IIT Madras. The workshop featured advanced technical sessions and interactions with domain experts from premier institutions.



Syed Ajmal Basha A, a student of the 2022–2026 batch, on being selected as a Campus Ambassador for the prestigious Entrepreneurship Cell of IIT Bombay. This coveted role stands as a testament to Syed Ajmal Basha’s leadership qualities, enthusiasm for entrepreneurship, and commitment to promoting innovation and startup culture among his peers. As a Campus Ambassador, he will serve as a bridge between IIT Bombay’s E-Cell and our institution, working to spread awareness, organize entrepreneurship-related events, and inspire fellow students to embrace entrepreneurial thinking.

		
<p>6.</p>	<p><b>COMPETITION ATTENDED BY THE STUDENTS</b></p>	<p>six of its final year students—<b>Santhosh KJ, Devika, Dynisha, Thanushri, Vivesh, and Sandeep</b>—have actively participated in the prestigious "Graduate Symposium 2025" conducted by the Centre for Outreach and Digital Education, IIT Madras.</p> <p>The symposium, held on 24th July 2025, was organized by the Department of Chemical Engineering, IIT Madras, and served as an excellent platform for young minds to engage with research scholars, academic leaders, and industry experts. Our students gained valuable insights, presented their ideas, and networked with peers from various premier institutions.</p>

		
7.	<b>PUBLICATIONS(ONLY PUBLISHED) DETAILS</b>	<p><b>Dr. S. Sujatha, Assistant Professor</b>, has made a significant contribution to the field of nanotechnology by co-authoring a research paper titled "Graphene-based materials for photocatalytic and environmental sensing applications". The paper is published in the reputed international journal Results in Engineering (Elsevier).</p> 
8.	<b>FDP/ CONFERENCE/ WORKSHOP (ATTENDED BY STAFF)</b>	<p><b>Dr. R. Sivaranjane</b> and <b>Dr. S. Sujatha, Assistant Professor</b> successfully participated in the AICTE Training and Learning (ATAL) Faculty Development Program on Environmental Impact Assessment for Attaining Sustainable Development Goals. The FDP was organized by <b>Drs. KAKUNTHALA ENGINEERING COLLEGE</b> in collaboration with</p>

		<p><b>VEL TECH HIGH TECH Dr. RANGARAJAN Dr. SAKUNTHALAENGINEERING COLLEGE</b> and conducted from July 1st to July 5th, 2025.</p> <p><b>Dr. T. Amudha, Assistant Professor</b> proudly represented our department as a <b>Session Chairperson</b> at the <b>8th International Conference on Recent Innovations in Modern Science and Technology (ICRIMST-2025)</b>.The conference was hosted by <b>SSN College of Engineering from 9 th to 11th July 2025</b>.Her role as a session chair highlights her academic contributions and leadership in facilitating knowledge exchange and fostering discussions on cutting-edge developments in science and technology. This recognition reflects the growing impact of our faculty at the international level.</p> <div style="display: flex; justify-content: space-around;">   </div>
<p><b>9.</b></p>	<p><b>SCHOOL PROGRAM</b></p>	<p>As part of the ongoing School Outreach Program, St. Joseph's College of Engineering warmly welcomed a total of <b>610 students</b> from various schools across the region. The initiative aims to introduce school students to the campus environment, laboratories, and academic culture of the institution, inspiring them towards higher education and future career paths in science and engineering.</p>

**250 students** from **Arupadai Veedu Matriculation Higher Secondary School, Thiruporur**

**220 students** from **Revoor Padmanabha Chetty's Matriculation Higher Secondary School, Kaladipet, Chennai**

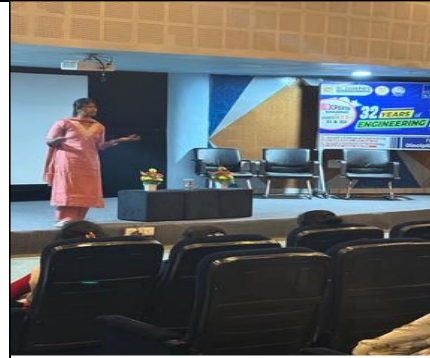


In the recent district-level events:

**Mr. P. Anand Kumar, Assistant Professor**, represented the Rasipuram team.

**Ms. R. Lavanya, Assistant Professor**, played a key role in organizing the program in Cuddalore. Both faculty members from the Department of Chemical Engineering contributed significantly to the success of the event in their respective regions, ensuring smooth coordination and impactful engagement with school students. Techno Talentum 2025 continues to

		<p>reach new milestones across Tamil Nadu, empowering the next generation of thinkers, creators, and leaders.</p> 
<p><b>10.</b></p>	<p><b>ALUMNI INTERACTION</b></p>	<p>alumni interaction session on 4th July 2025 at the Library AV Hall, exclusively for Chemical Engineering students. The session, titled "From Campus to Global Impact: Navigating Tech, Growth and Global Opportunities," featured <b>Ms. Trisha</b>, a proud alumna of the department and currently a <b>Technical Support Engineer at ZOHO</b>.</p> <p><b>Ms. Trisha</b> shared her inspiring journey from being a student on campus to achieving a global career in the tech industry. She highlighted the evolving landscape of technology, the importance of continuous learning, and how students can leverage their skills and education to unlock international opportunities. The session encouraged students to dream big, adapt to changes, and remain committed to their growth.</p>



**Mr. Mohammed Basith**, an elite alumnus and former sports achiever of the college, currently working as a **Junior Scientist at the European Institute for Energy Research**. The session, titled **“Sustainable Futures: Contributions to Green Engineering,”** was held at the MBA Conference Hall and attended exclusively by Chemical Engineering students. Mr. Basith delivered an inspiring talk on the role of green engineering in building a sustainable future and highlighted how his academic foundation and sports discipline at St. Joseph’s shaped his professional journey.



**11. ALUMNI VISIT**

The Department of Chemical Engineering at St. Joseph's College of Engineering hosted a heart-warming Alumni Meet titled "**ADUNATIO 2025**" to celebrate the 25th anniversary reunion of the **1996–2000** batch on Saturday, 26th July 2025, at 12 noon in the Placement Block

"ADUNATIO 2025" was more than a reunion — it was a celebration of friendships forged in youth, a tribute to the transformative years spent together, and a reaffirmation that no matter where life takes them, St. Joseph's will always be home.




12.	<b>BOARD OF STUDY</b>	<p>Board of Studies (BOS) meeting on 2nd July 2025, to review and approve the newly revised curriculum and syllabi under Regulation 2025 for B. Tech Chemical Engineering (I &amp; II Semesters). The meeting began with a warm welcome to the expert members and academic panel.</p> <p>The session was honored by the presence of esteemed BOS experts:</p> <p><b>Dr. Seenivasan, Associate Professor, National Institute of Technology (NIT), Andhra Pradesh</b></p> <p><b>Dr. Gomathipriya, Professor, Anna University, Chennai</b></p> <p>Key highlights of the meeting:</p> <ul style="list-style-type: none"><li>Approval of syllabi for Semester I and II</li><li>Finalization of Professional Elective Courses</li><li>Introduction of Honors and Minor Degree Programs</li><li>Addition of Emerging Technology and Skill Development Courses</li><li>Overview of the credit structure</li><li>Compilation of Open Elective Courses (OEC)</li></ul>
-----	-----------------------	--

## DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Photographs Captured During Events (Briefs About the Photographs)	Corresponding remarks (Minimum 300 words) in regarding the status of activity execution stating
1.	Publications (only published) details	<ul style="list-style-type: none"><li>• <b>Mrs.R.Ruthra</b> has Published the Journal in IEEE xplore titled “IoT-Driven Smart Waste Management System for Smart Cities using SVM and KNN Models” during July,2025.</li><li>• <b>Mrs.R.Ruthra</b> has Published the Journal in IEEE xplore titled “Enhancing Early Warning Systems in Disaster Risk Management using Hybrid Deep Autoencoders” during July,2025.</li><li>• <b>Mrs.S.Banupriya</b> has Published the Journal in IEEE xplore titled “Enhancing Landslide Risk Prediction with Dynamic Fusion Neural Networks for Economic Impact Assessment” during July,2025..</li><li>• <b>Dr.K.Vijai</b> has Published the Journal in IEEE xplore titled “CNN-LSTM Hybrid Model for Predicting Strength and Durability of Steel-Concrete Composite Structures” during July,2025.</li></ul>

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Sl. No.	Event with Photo	Description
1	<p><b>Tech Talk – Mr.Vijay Bala</b></p> 	<p><b>Date</b> : 11.07.2025  <b>Venue</b> : <b>Conference Hall – 12<sup>th</sup> block</b>  <b>Nature of Event</b> : Tech Talk  <b>Participants</b> : III &amp; IV Year students</p> <p><b>Objective :</b></p> <ul style="list-style-type: none"> <li>• To present and explain technical concepts, tools, or innovations to enhance understanding.</li> <li>• To help participants gain practical insights and improve technical competencies.</li> <li>• To encourage discussions, idea exchange, and motivation for further exploration or implementation.</li> </ul> <p><b>Outcome :</b></p> <ul style="list-style-type: none"> <li>• Participants gain deeper knowledge of the discussed technology or concept.</li> <li>• Attendees learn real-world applications, best practices, and problem-solving approaches.</li> <li>• Facilitates connections and idea exchange among peers for future projects or innovations.</li> </ul>

<b>2</b>	<b>Guest Lecture - Agentic AI: The Rise of Intelligent Autonomy</b>	<b>Description</b>
----------	---	--------------------



**Date** : 11.07.2025  
**Venue** : Conference Hall, 12<sup>th</sup> block  
**Nature of Event** : Guest Lecture  
**Participants** : III & IV Year students

**Objective :**

- To provide students with insights from industry or academic experts beyond the regular curriculum.
- To link theoretical learning with practical, real-world applications and experiences.
- To broaden knowledge, inspire critical thinking, and motivate career-oriented growth.

**Outcome :**

- Participants gain updated and specialized information from experts.
- Improved understanding of industry trends, challenges, and real-world practices.
- Enhanced inspiration and clarity about career paths, skills, and future opportunities.

3

## CSI Workshop

COMPUTER SOCIETY OF INDIA  
KANCHEEPURAM STUDENT CHAPTER

**Dr. VIDHYASAGAR B S**  
Associate Professor

10/07/2025  
9 A.M. - 11 A.M.  
CONFERENCE HALL  
BLOCK XII

Faculty Co-ordinator  
Ms. Jenitha T

**CHIEF PATRONS**  
DR. M. SENTHIL KUMAR  
CHAIRMAN KPM CHAPTER  
DR. J. DAFNI ROSE  
VICE-CHAIRMAN KPM CHAPTER  
DR. B. SREEDEVI  
SECRETARY KPM CHAPTER

**Date** : 10.07.2025  
**Venue** : Conference Hall, 12th block  
**Nature of Event** : CSI Workshop  
**Participants** : III & IV Year students

### Objective :

- To deliver focused, hands-on learning in a specific subject or technology.
- To develop and strengthen participants' technical or practical skills.
- To encourage active participation through interactive sessions and exercises.
- To promote problem-solving and application of knowledge in real-world contexts.

### Outcome :

- Participants acquire hands-on experience in the targeted area.
- Improved ability to apply learned concepts effectively.
- Greater self-assurance in using tools, techniques, or methods.
- Exchange of ideas and teamwork among participants for better understanding

4	<p><b>Pre Placement Talk - "Rootquotient"</b></p>	
		<p><b>Date</b> : 27.07.2025  <b>Venue</b> : Online  <b>Nature of Event</b> : Pre Placement Talk  <b>Participants</b> : IV Year students</p> <p><b>Objective :</b></p> <ul style="list-style-type: none"> <li>• To provide students with a comprehensive overview of a company, its culture, and its recruitment process, allowing them to make informed decisions about potential career paths.</li> <li>• It also helps companies introduce themselves to a pool of potential candidates and build a positive image.</li> </ul> <p><b>Outcome :</b></p> <ul style="list-style-type: none"> <li>• Pre placement talks create opportunities for attendees to connect with alumni who may serve as valuable mentors, advisors, or contacts in their desired field.</li> <li>• Building relationships with alumni can lead to internships, job opportunities, and professional connections that can benefit attendees throughout their careers.</li> </ul>

5 **Pre Placement Talk - "OptiSol"**

**Date** : 20.07.2025  
**Venue** : Online  
**Nature of Event** : Pre Placement Talk  
**Participants** : IV Year students

**Objective :**

- To provide students with a comprehensive overview of a company, its culture, and its recruitment process, allowing them to make informed decisions about potential career paths.
- It also helps companies introduce themselves to a pool of potential candidates and build a positive image.

**Outcome :**

- Pre placement talks create opportunities for attendees to connect with alumni who may serve as valuable mentors, advisors, or contacts in their desired field.
- Building relationships with alumni can lead to internships, job opportunities, and professional connections that can benefit attendees throughout their careers.

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**DECODE OPTISOL : YOUR GATEWAY TO SUCCESS**

**OptiSol**  
Solutions | Services

**PRE-PLACEMENT TALK BY ALUMNI**

**ADLIN FELICIA D**  
AI ENGINEER  
BATCH 2021-2025

**SREERAM A M**  
AI ENGINEER  
BATCH 2021-2025

[@https://meet.google.com/sck-mwjs-vxi](https://meet.google.com/sck-mwjs-vxi)

**ON 20<sup>th</sup> JULY 2025 FROM 6.30 PM TO 7.30 PM**

6 Pre Placement Talk - "JMAN"

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**JMAN**  
GROUP

PRE-PLACEMENT  
**TALK**

By Alumni

Srimathi  
Batch :2021-2025  
Software Engineer

Karthikhaa Shree K T  
Batch :2021-2025  
Software Engineer

@<https://meet.google.com/usc-xush-rzd>

ON 06 JULY 2025 FROM 4.00 PM TO 5.00 PM

**Date** : 06.07.2025

**Venue** : Online

**Nature of Event** : Pre Placement Talk

**Participants** : IV Year students

**Objective :**

- To provide students with a comprehensive overview of a company, its culture, and its recruitment process, allowing them to make informed decisions about potential career paths.
- It also helps companies introduce themselves to a pool of potential candidates and build a positive image.

**Outcome :**

- Pre placement talks create opportunities for attendees to connect with alumni who may serve as valuable mentors, advisors, or contacts in their desired field.
- Building relationships with alumni can lead to internships, job opportunities, and professional connections that can benefit attendees throughout their careers.

7 **Alumni Talk**



**Date:** 23-7-25

**Venue:** Conference Hall, 12th block

**Nature of Event:** Alumni talk

**Participant:** II-year Students

**Organized by:** Department of CSE

**Objective:**

- Alumni talks can facilitate networking opportunities between current students and alumni.
- Alumni talks often aim to provide current students with valuable insights into various career paths, industries, and professional experiences.
- Alumni may share their career journeys, lessons learned and advice for navigating the job market.

**Outcome:**

- Alumni talks create opportunities for attendees to connect with alumni who may serve as valuable mentors, advisors, or contacts in their desired field.
- Building relationships with alumni can lead to internships, job opportunities, and professional connections that can benefit attendees throughout their careers.

8

## Guest Lecture - I



**Date** : 10.07.2025

**Venue** : Conference Hall, 12th block

**Nature of Event** : Guest lecture

**Participants** : II, III & IV year Students

**Organized by** : Department of CSE

### **Objective:**

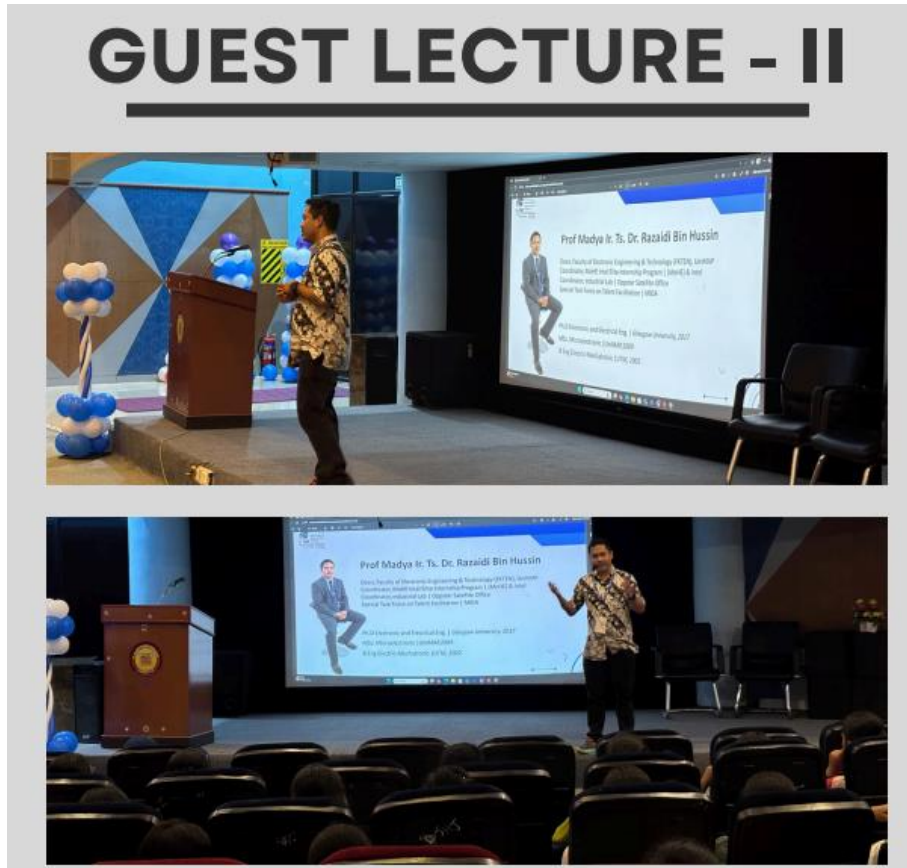
- To impart specialized knowledge, expertise, or insights on a particular topic to the audience.
- Guest speakers often bring unique perspectives, research findings, or industry experience that can complement the existing curriculum and enhance students' understanding of the subject matter.

### **Outcomes:**

- It gains new insights, information, and perspectives on the topic presented by the guest speaker.
- This enriches their understanding of the subject matter and expands their knowledge beyond what is covered in traditional coursework.

9

## Guest Lecture - II



**Date** : 10.07.2025

**Venue** : Conference Hall, 12th block

**Nature of Event** : Guest lecture

**Participants** : II, III & IV year Students

**Organized by** : Department of CSE

### Objective:

- To impart specialized knowledge, expertise, or insights on a particular topic to the audience.
- Guest speakers often bring unique perspectives, research findings, or industry experience that can complement the existing curriculum and enhance students' understanding of the subject matter.

### Outcomes:

- It gains new insights, information, and perspectives on the topic presented by the guest speaker.
- This enriches their understanding of the subject matter and expands their knowledge beyond what is covered in traditional coursework.

10 Guest Lecture - III



**Date** : 11.07.2025

**Venue** : Conference Hall, 12th block

**Nature of Event** : Guest lecture

**Participants** : II, III & IV year Students

**Organized by** : Department of CSE

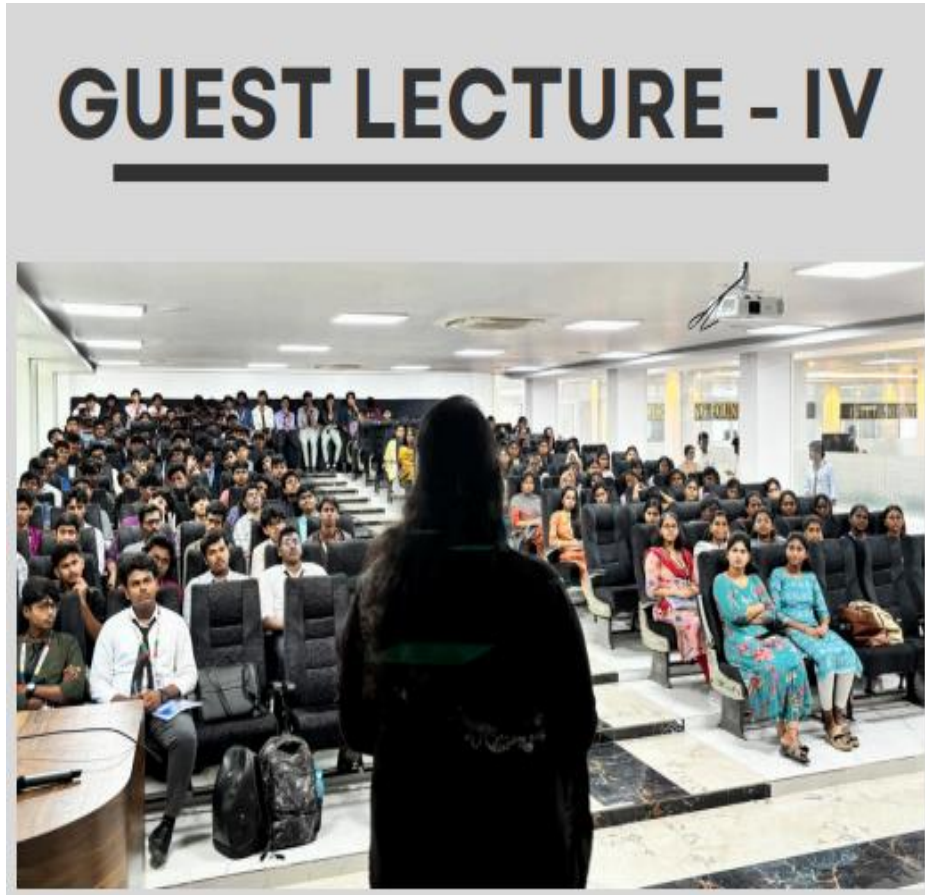
**Objective:**

- To impart specialized knowledge, expertise, or insights on a particular topic to the audience.
- Guest speakers often bring unique perspectives, research findings, or industry experience that can complement the existing curriculum and enhance students' understanding of the subject matter.

**Outcomes:**

- It gains new insights, information, and perspectives on the topic presented by the guest speaker.
- This enriches their understanding of the subject matter and expands their knowledge beyond what is covered in traditional coursework.

**11 Guest Lecture - IV**



**Date** : 31.07.2025

**Venue** : Conference Hall, 12th block

**Nature of Event** : Guest lecture

**Participants** : II, III & IV year Students

**Organized by** : Department of CSE

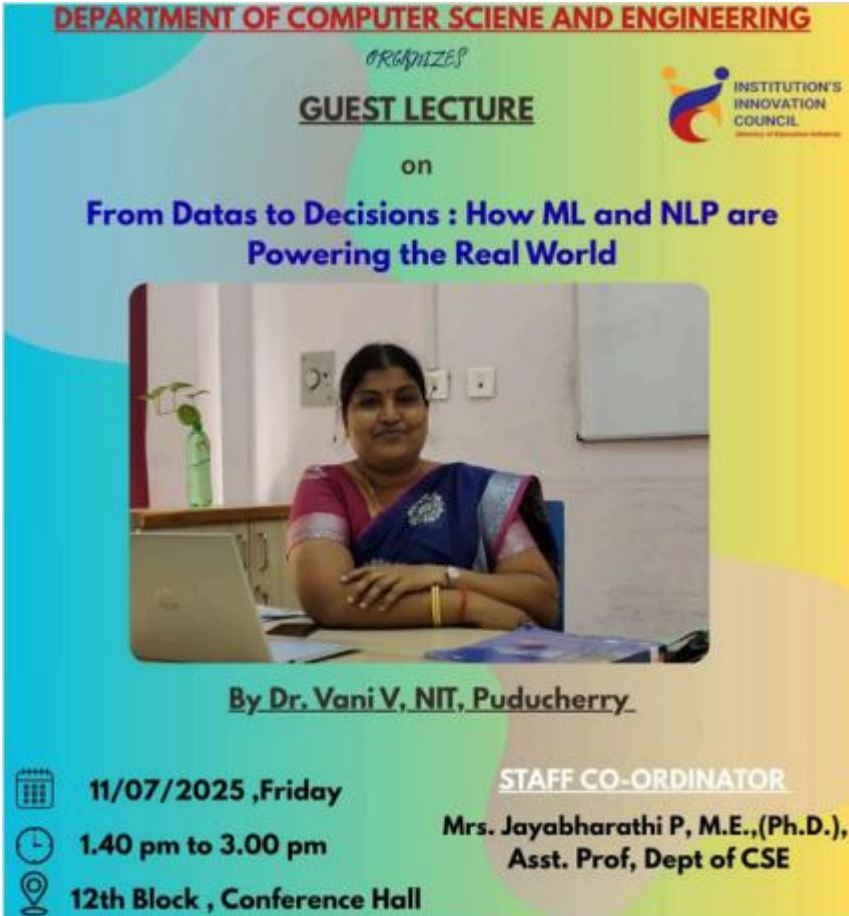
**Objective:**

- To impart specialized knowledge, expertise, or insights on a particular topic to the audience.
- Guest speakers often bring unique perspectives, research findings, or industry experience that can complement the existing curriculum and enhance students' understanding of the subject matter.

**Outcomes:**

- It gains new insights, information, and perspectives on the topic presented by the guest speaker.
- This enriches their understanding of the subject matter and expands their knowledge beyond what is covered in traditional coursework.

## 12 Guest Lecture - V



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
ORGANIZES  
**GUEST LECTURE**  
on  
**From Datas to Decisions : How ML and NLP are Powering the Real World**

**By Dr. Vani V, NIT, Puducherry.**

11/07/2025 ,Friday  
1.40 pm to 3.00 pm  
12th Block , Conference Hall

STAFF CO-ORDINATOR  
Mrs. Jayabharathi P, M.E.,(Ph.D.),  
Asst. Prof, Dept of CSE

INSTITUTION'S INNOVATION COUNCIL  
Ministry of Education, Government of India

**Date** : 11.07.2025

**Venue** : Conference Hall, 12th block

**Nature of Event** : Guest lecture

**Participants** : II, III & IV year Students

**Organized by** : Department of CSE

**Objective:**

- To impart specialized knowledge, expertise, or insights on a particular topic to the audience.
- Guest speakers often bring unique perspectives, research findings, or industry experience that can complement the existing curriculum and enhance students' understanding of the subject matter.

**Outcomes:**

- It gains new insights, information, and perspectives on the topic presented by the guest speaker.
- This enriches their understanding of the subject matter and expands their knowledge beyond what is covered in traditional coursework.

13

## Guest Lecture - VI



**Date** : 11.07.2025

**Venue** : Conference Hall, 12th block

**Nature of Event** : Guest lecture

**Participants** : II, III & IV year Students

**Organized by** : Department of CSE

### **Objective:**

- To impart specialized knowledge, expertise, or insights on a particular topic to the audience.
- Guest speakers often bring unique perspectives, research findings, or industry experience that can complement the existing curriculum and enhance students' understanding of the subject matter.

### **Outcomes:**

- It gains new insights, information, and perspectives on the topic presented by the guest speaker.
- This enriches their understanding of the subject matter and expands their knowledge beyond what is covered in traditional coursework.

Prepared By,

*Department Coordinator*

*Dr.E.Ahila Devi*

*Dr.V.Muthulakshmi*

**Head of the Department**

*To  
The  
Principal*

*Date:*

## DEPARTMENT OF MECHANICAL ENGINEERING

Sl No	Name of the Activity	Remarks
1	Faculty Acheivements	<ul style="list-style-type: none"><li data-bbox="1245 357 2045 687">➤ Mr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering Published an article titled "Comprehensive Experimental Analysis of the Mechanical Properties and Enhancements of Natural Fiber Composites" in "Journal of Polymer &amp; Composite", a Web of Science (ESCI) Indexed Journal with an Impressive Impact Factor of 6.005 on 2nd July 2025</li><li data-bbox="1245 711 2045 946">➤ Dr.M.Ganesh and Dr.M.Arun, Assistant Professors from Mechanical Engineering published an article titled, "Experimental Investigation of Milling on Inconel718 using cryogenic treated inserts", in Materials and Manufacturing Processes,(Q1 Journal).</li><li data-bbox="1245 970 2045 1300">➤ Mr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering Published an article titled "Enhancing Mechanical and Thermal Properties of Glass Fiber-Reinforced Epoxy Composites with Silicon Carbide Additives" in "Journal of Polymer &amp; Composite", a Web of Science (ESCI) Indexed Journal with an Impressive Impact Factor of 6.005 on 10th July 2025.</li><li data-bbox="1245 1324 2045 1353">➤ Mr. G. Ashwin Prabhu, Assistant Professor &amp; Dr. R. Selvam</li></ul>

		<p>and Dr. K. M. Kumar, Associate Professor from the Department of Mechanical Engineering Published an article titled "Evaluating hybrid basalt and stainless-steel wire mesh laminated composites under low impact velocity tests for naval applications" in "Journal of Materials Research", a SCIE Indexed &amp; Anna University Annexure 1, Q2 Journal with an impact factor of 2.9 on 16th July 2025.</p>
2	<b>Faculty Training</b>	<ul style="list-style-type: none"> <li>➤ Dr. Sathish R, a Professor, and Mr. Pravinkumar K, an Assistant professor from the Department of Mechanical Engineering at St. Joseph's College of Engineering, attended a one-week Faculty Development Program (FDP) from 14 July to 18 July on "Advanced Materials and Technologies in 3D Printing" conducted by the Mechanical Department of Saveetha Engineering College. Chennai.</li> <li>➤ Mr. MUNINATHAN K, Assistant Professor of St. Joseph's College of Engineering has successfully participated &amp; completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Accreditation, Ranking, and NEP: Strategies for Academic Excellence at JERUSALEM COLLEGE OF ENGINEERING from 14/07/2025 to 19/07/2025</li> </ul>
3	<b>Guest Lecture</b>	<ul style="list-style-type: none"> <li>➤ Engineering Your Future: The Strategic Role of Final Year</li> </ul>



Projects" On July 17, 2025, the Department of Mechanical Engineering, St. Joseph's College of Engineering hosted a thought-provoking guest lecture by Dr. N. Rino Nelson, Assistant Professor at IITDM Kancheepuram. The lecture, attended by Final year students and faculty, explored emerging areas in mechanical engineering and their impact on innovation. Key Highlights: - Dr. Nelson discussed cutting-edge topics such as 4D printing, Industry 5.0, AI and ML in mechanical engineering, robotics, electromechanical systems, and electric vehicles. - He emphasized how these trends are driving innovation in design, manufacturing, and overall system efficiency. - The lecture included engaging case studies and suggestions for potential project topics, providing valuable insights for students

5

**Alumni Talk**



25/07/2025



Sowmiya V

The Department of Mechanical Engineering hosted a session on **Designing the Future: AI and Machine Learning in Mechanical Systems**, delivered by Sowmiya V, GET in Renault Nissan technology. The session offered valuable insights into how AI and Machine Learning can be integrated into Mechanical systems.

➤ The Department of Mechanical Engineering was proud to host an inspiring alumni talk featuring Ms. Sowmiya V, a distinguished graduate from the 2021–2025 batch, currently serving as a Graduate Engineer Trainee (GET) at Renault Nissan Technology and Business Center India on 25 July 2025. Held at Laurel Hall, the session titled “Designing the Future: AI and Machine Learning in Mechanical Systems” drew enthusiastic participation from students and faculty alike. Ms. Sowmiya shared her insights on the transformative role of




		<p>artificial intelligence and machine learning in modern mechanical engineering applications, ranging from predictive maintenance and intelligent design optimization to autonomous systems and smart manufacturing.</p>
--	--	---

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### Events conducted:

The following events have been conducted during July 2025 at College Level

1. Alumni Activities	Report
a)	<p>The Department of Electronics and Communication Engineering organized an alumni talk on July 21, 2025. Mr. Lourdes Dinesh, Senior Software Engineer at EKA Care, Bangalore, and alumnus (Batch: 2015–2019), addressed the III-year students. He shared valuable insights into current industry expectations and emphasized the importance of continuous upskilling to stay competitive in the job market. The session provided students with a clear understanding of the skills required by employers and encouraged proactive learning. This initiative reinforced the department's ongoing efforts to bridge the gap between academic knowledge and industry demands.</p>

<p>DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING PRESENTS</p> <p><b>ALUMNI TALK</b></p> <p>BRIDGING INDUSTRY NEEDS AND ENGINEERING GRADUATES SKILLS THROUGH UPSKILLING</p>  <p>MR. LOURDES DINESH BATCH : 2015 – 2019 SENIOR SOFTWARE ENGINEER EKA CARE BANGALORE</p> <p>10:00 AM TO 11:40 AM    21.07.2025    III YEAR STUDENTS    HAZEL HALL, PLACEMENT BLOCK</p>	 
<p><b>2. WORKSHOP ORGANIZED</b></p>	<p><b>Report</b></p>
<p><b>a) EMPOWERING FUTURE ENGINEERS THROUGH DRONE TECHNOLOGY</b></p>	

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



ONE DAY HANDS-ON WORKSHOP



# DRONE DYNAMICS: INSIGHTS INTO THE FUTURE OF AERIAL TECH



**MR. SOLAIYAPPAN GANESAN**  
FOUNDER  
GMS DRONE ENTERPRISE



**MR. SANTHAKUMAR . U**  
CO - FOUNDER  
GMS DRONE ENTERPRISE




**II YEAR STUDENTS**

CSC LAB FLOOR II  
09.00 AM - 03:00 PM  
28 JULY, 2025

The Department of Electronics and Communication Engineering, in collaboration with GMS Drone Enterprise, organized a one-day hands-on workshop titled "Drone Dynamics: Insights into the Future of Aerial Tech" on 28th July 2025 for second-year students, this workshop provided practical exposure to drone assembly, calibration, and flight control. Led by Mr. Solaiyappan Ganesan and Mr. Santhakumar U, the session covered drone applications in agriculture, surveillance, and logistics. Students gained valuable technical skills, explored real-world case studies, and were encouraged to think innovatively, aligning with the institution's vision of fostering future-ready engineering professionals.



	
<p><b>3. SEMINAR ORGANIZED</b></p>	<p><b>Report</b></p>
<p><b>F a) SOFT SKILLS SEMINAR: “UNLOCKING OPPORTUNITIES – A COMPLETE GUIDE TO JOB READINESS</b></p>	

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



Presents

### UNLOCKING OPPORTUNITIES: A COMPLETE GUIDE TO JOB READINESS



**Mr Omkhumaar**  
Center Head  
Action DnA



**Mrs. Vidhya**  
Director  
Action DnA



**Mr. Khaleel Rehman**  
Founder & CEO  
Action DnA



#### Softskills Seminar

#### Exclusive Session on

- Resume Building
- Interview Skills
- Body Language

### III & IV YEARS

Venue - Hazel Hall



Wednesday July 23



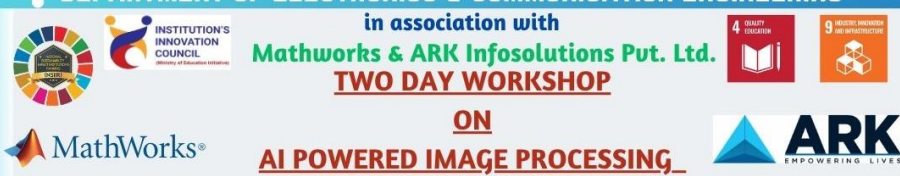
9:00 am - 3:00 pm

The Department of Electronics and Communication Engineering organized a Soft Skills Seminar, "Unlocking Opportunities – A Complete Guide to Job Readiness," on Wednesday, July 23 in collaboration with Action DnA. The seminar featured expert speakers, including Mr. Omkhumaar (Center Head), Mrs. Vidhya (Director), and Mr. Khaleel Rehman (Founder & CEO) from Action DnA. The session covered key topics such as resume building, interview techniques, and body language. Aimed at third- and final-year students, the seminar focused on enhancing employability and job readiness. Participants engaged in discussions and practical exercises, significantly improving their communication and presentation skills.



**b)MATLAB ESSENTIALS FOR AI IMAGE PROCESSING**

**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
in association with  
**Mathworks & ARK Infosolutions Pvt. Ltd.**  
**TWO DAY WORKSHOP**  
**ON**  
**AI POWERED IMAGE PROCESSING**  
**WITH MATLAB ESSENTIALS**



**Mr. Karthikeyan**  
Senior Application Engineer  
ARK Infosolutions Pvt. Ltd.,  
Chennai



**Awareness On**

- MATLAB Campus-wide License suite
- 120+ MATLAB Toolboxes
- Premium self-paced courses with MATLAB Academy
- MATLAB AI Chat Playground

**Target Audience:** II Year ECE Students  
**Duration:** 16/07/2025 - 17/07/2025  
**Venue:** Third Floor, ECE Lab

The Department of Electronics and Communication Engineering at St. Joseph's College of Engineering organized a two-day workshop titled "AI-Powered Image Processing with MATLAB Essentials" on 16th and 17th July 2025, in association with MathWorks and ARK Infosolutions Pvt. Ltd., Chennai. Designed for second-year ECE students, the workshop was conducted by Mr. Karthikeyan, Senior Application Engineer, ARK Infosolutions. The sessions offered a comprehensive introduction to AI-driven image processing using MATLAB, with hands-on training on key features such as the MATLAB Campus-wide License, over 120 specialized toolboxes, and interactive learning via MATLAB Academy and the AI Chat Playground. Students explored real-time applications including image enhancement, object detection, and classification, gaining valuable skills in applying AI techniques to practical problems.



4. Professional Society Activities	Report
i) IEEE STUDENT CHAPTER	
a) IEEE SCHOOL VISIT & PROJECT EXPO 2025	
<p>DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING</p>   <p><b>SCHOOL VISIT</b> for <b>2<sup>nd</sup> &amp; 3<sup>rd</sup> YEAR STUDENTS</b></p> <p><b>PROJECT EXPO-2025</b></p> <p>THE HINDU SENIOR SECONDARY SCHOOL, ADYAR</p>	<p>The Department of Electronics and Communication Engineering, in collaboration with the IEEE Student Chapter, organized a School Visit and Project Expo 2025 on 18th July 2025 at The Hindu Senior Secondary School, Adyar. As part of the outreach initiative, II- and III-year ECE students presented real-time hardware and software projects aimed at promoting scientific curiosity and STEM awareness among school students. The event featured interactive sessions, project demonstrations, and discussions on engineering applications in IoT and communication systems. It provided an excellent platform for students to enhance their technical communication and public engagement skills. The program reinforced the department's commitment to community engagement and knowledge sharing.</p>



**b) CSIR-INDUSTRIAL VISIT**

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

nirf INSTITUTIONS' EDUCATION COUNCIL IEEE AP-S IEEE IEEE ComSoc

IEEE STUDENT BRANCH CHAPTER PRESENTS

ONE DAY TECHNICAL BOOT CAMP



CSIR MADRAS COMPLEX  
TARAMANI, CHENNAI

9 AM TO 3 PM

29 July, 2025


A one Day Technical Boot Camp is organized by the IEEE Students Chapter under the Department of Electronics and Communication Engineering. Held on 29 July 2025 at CSIR Madras Complex, Taramani, the event aimed to bridge academic learning with industrial applications. Participants explored real-time applications of embedded systems, robotics, and calibration processes. The boot camp included expert interactions, live demonstrations, and insights into CSIR's research opportunities. It emphasized the relevance of Electronics and Communication Engineering concepts in sensors, communication systems, and automation, and promoted pathways for internships and academic projects, enhancing student engagement with industry and research.



ii) IETE STUDENT FORUM

**ADVANCED DRIVER ASSISTANCE SYSTEMS: INSIGHTS INTO VALIDATION TECHNIQUES**


DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING





**ISF - IETE Student Forum**

Presents  
An Invited Technical Talk

**QUANTIFYING ADAS: VALIDATING PERFORMANCE WITH KPIS, GROUND TRUTH AND SCENE CATALOGUES**



**Nisanth Sujayakumaran**  
*Technical Lead | Valeo India pvt. Ltd*

 **JULY 24<sup>th</sup> 2025** |  **1:00 pm - 3:00 pm**

Venue- AV Hall, Central Library

The Department of Electronics and Communication Engineering, through the ISF - IETE Student Forum, hosted a technical talk titled “Quantifying ADAS: Validating Performance with KPIS, Ground Truth and Scene Catalogues” on July 24, 2025. The session was delivered by Mr. Nisanth Sujayakumaran, Technical Lead at Valeo India Pvt. Ltd. Attended by 110 III and IV-year students, the talk provided valuable insights into advanced driver assistance systems (ADAS), focusing on industry-standard validation techniques using KPIS, ground truth data, and scene catalogues. The session enhanced student understanding of AI integration, system testing, and career prospects in automotive technology.





**iii)OPTICA STUDENT CHAPTER**

**SCHOOL VISIT**

DEPARTMENT OF ELECTRONICS AND COMMUNICATION AND ENGINEERING



OPTICA  
Advancing Optics and Photonics Worldwide

Formerly  
OSA



# SCHOOL WORKSHOP'25

CONDUCTED BY 3<sup>RD</sup> YEAR OPTICA MEMBERS



THE CHILDREN'S GARDEN SCHOOL

TINKERCAD AND ARDUINO  
WORKSHOP



TIME: 8:30AM to 2:30PM

DATE: 22.07.2025



VENUE: THE CHILDREN'S  
GARDEN SCHOOL, Mylapore,  
Chennai - 600 004.

3rd-year Optica members, the session covered Arduino components, circuit simulation, and programming basics. Activities included hands-on training, guided exercises, and a mini competition. Participants gained practical skills in electronics and programming, with top performers receiving achievement certificates. The workshop successfully inspired students to explore STEM fields.



<b>b) GENERATIVE AI UNVEILED: EXPERT TALK FOR OPTICA MEMBERS</b>	

DEPARTMENT OF ECE

OPTICA | Formerly OSA

Presents

## NEXT-GEN INTELLIGENCE: GUIDE TO GENERATIVE AI

TECHNICAL TALK

Presented by

**Mr. Eneeyan N**

CEO- IQMATH TECHNOLOGIES



**July 18, 2025**



**1.00 PM to 3.00 PM**



Mr. Eneeyan N, CEO of IQMATH Technologies. He provided insightful coverage of Generative AI, including demonstrations of tools like ChatGPT and DALL-E, along with discussions on ethical concerns and real-world applications. Students gained exposure to cutting edge AI tools and were encouraged to pursue AI-based innovations.



<b>iv)ED CELL</b>	
<b>ED CELL ORGANIZES STARTUP SPARK 2025</b>	

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



organizes

**Startup Spark Session**  
**From Ideas to Impact: Ignite the Entrepreneur in You!**



**Mr. J ROHIT**  
Director of Strategic Partnerships  
Nano Mech Labs



Library AV Hall

25-7-2025  
Friday

12:30PM - 1:40PM

Exclusively for II Year ECE students!!

The Entrepreneurship Development (ED) Cell of the ECE Department conducted a Startup Spark session on July 25, 2025, for II-year students, featuring Mr. J Rohit, Director of Strategic Partnerships at Nano Mech Lab. Mr. Rohit emphasized the significance of idea validation, strategic networking, and utilizing institutional support to establish successful startups. He encouraged students to address real-world challenges with innovative, sustainable solutions. The interactive session fostered entrepreneurial thinking and provided valuable insights into startup dynamics, effectively promoting innovation and entrepreneurial awareness among the students.





**5. Industrial Visit**

**Report**

**a) INDUSTRIAL VISIT TO PUMO TECHNOVATION**

The Department of Electronics and Communication Engineering organized an industrial visit to Pumo Technovation, a leading firm in embedded systems, IoT solutions, and electronic product development, for final year ECE students on 17th and 18th July 2025. The objective was to bridge academic learning with real-time industry practices and expose students to practical applications of their coursework. During the visit, students were introduced to IoT-based system integration, embedded programming using Raspberry Pi, ESP32, and ARM Cortex boards, and modern PCB design workflows. A live demonstration on real-time data acquisition systems in smart healthcare and industrial automation added depth to their learning experience.



**b) DISCOVERING TECH AT NIOT & BIS**



**C) DISCOVERING TECH AT BIS**

National Institute of Ocean Technology (NIOT). At NIOT, students gained insights into marine electronics and underwater communication systems, observed ocean observation sensors and data logging units, and interacted with scientists and engineers working on embedded system applications in marine environments.



The second group visited the Bureau of Indian Standards (BIS) Laboratories. Here, students explored quality testing and standardization processes for electronic components and consumer devices, covering safety and compliance protocols, electromagnetic compatibility (EMC) testing, and national standards in electronics manufacturing. The visit provided exposure to electronic component testing, certification processes, and the importance of standardization and quality assurance in the electronics industry, along with demonstrations of MCQ testing and calibration equipment.

**6) SCHOOL VISIT**

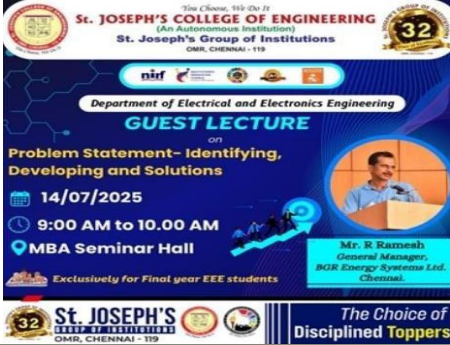



The Department of Electronics and Communication Engineering organized an “Expertise Sharing” session on 25th July 2025 for Class XI and XII students from All Angels Matriculation Higher Secondary School, K.K. Nagar, Chennai. A total of 92 students participated in the workshop held at the ECE 3rd Floor Lab. The session featured interactive quizzes and live demonstrations of innovative student projects in the Embedded Systems domain. Guided by esteemed faculty members, the event provided valuable insights and practical exposure. The program received enthusiastic responses and successfully ignited students’ interest in technology and interdisciplinary learning.

## 7) PUBLICATIONS

- 1) B. Victoria Jancee, Associate Professor, Department of ECE, has published the article entitled “Medlightnet: A Lightweight Multi-Colourspace Cnn For Childhood Medulloblastoma Diagnosis From Histopathological Images”, Int. J.Adv.Sig.Img.Sci., Vol. 11, No. 1, July 2025.
- 2) Martin Leo Manickam J, Professor, Department of ECE, has published the article entitled “User pairing and location planning in multi-UAV assisted downlink NOMA for emergency communications”, Wireless Networks, July 2025.
- 3) Mr. G.D Vignesh, Assistant professor, Department of ECE, has published a patent title “ IOT and ML enabled energy efficient advanced 6G communication network system”.

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Photographs Captured During Events	Corresponding remarks (Minimum 300 words)
1.	<div style="text-align: center;">     </div> <p style="text-align: center;"><i>PIC: EVENT POSTER &amp; PHOTO</i></p>	<p>Our department organized guest lecture for final year students on 14/07/25 with the topic <b>“Problem Statement – Identifying, Developing and Solutions”</b> by <b>Mr. R. Ramesh, General Manager, BGR Energy Systems Ltd. Chennai</b>. He gave insightful talk about Developing structured problem statements for research or projects. Also elaborated the techniques used to Identify real-time problems from multiple domains such as industry, community, environment, and academia through structured analysis methods.</p>

2.

### Guest lecture



PIC: EVENT POSTER & PHOTO

Our department organized guest lecture for third year students on 29/07/25 with topic **“Medical Devices: Point of Care testing and Portable Electronics”** by **Mr. Ishant Kumar Bajpai, Scientist D, NIELIT**, Kotturpuram, Chennai. He gave insightful talk with Overview of Point of Care Testing (POCT) & role of portable electronics in diagnostic and therapeutic devices.

4

3.

### Industrial Visit



PIC: EVENT PHOTO

Our final year EEE Students have undergone industrial visit on **15th, 16th, 17th July 2025** to **SAKTHI TRANSFORMERS** located **Thirumudivakkam SIPCOT industrial estate**. They have got practical exposure about various parts of Transformer like conservator, breather, bucholz relay, oil temperature indicator, winding temperature indicator, overload relay, lamination sheet assembling, stampings assembling, cooling fins etc.

4

4.

**Industrial Visit**



*PIC: EVENT PHOTO*

Prefinal year EEE students from A, B, and C sections visited the **Southern Railway EMU Shed, Annanur on 22nd, 23rd, and 24th July 2025** as part of their industrial visit. The students observed the functioning and maintenance of Electric Motor Units (EMU) and related electrical systems. This hands-on exposure enhanced their understanding of practical railway engineering and electrification techniques.

4

5.

**Industrial Visit**



*PIC: EVENT PHOTO*

Second year EEE students of A and B sections visited **North Chennai Thermal Power Station on 29th and 30th July 2025** as part of their **industrial visit**. The students observed thermal power generation processes, control systems, and plant operations. The visit provided valuable practical exposure to large-scale power production and energy management.

4

6.

**NGO visit**



PIC: EVENT PHOTO

St. Joseph's College of Engineering organized a community service initiative for IV Year Electrical and Electronics Engineering students on 10th July 2025. 'A' Section students visited St. Vincent House orphanage, Oragadam, Manamathi, providing electrical maintenance support, basic health assistance, and interactive sessions for residents. 'B' Section students engaged with underprivileged individuals at Amma Appa old age home, Kundrathur, conducting skill development workshops, computer literacy sessions, and infrastructure improvements. 'C' Section students visited Maria's home for aged, Seven Wells, Chennai, leading health awareness programs, renewable energy demonstrations, and recreational activities. Similarly visit was arranged for III year EEE students on 17 July 2025, 'A' section students visited Bethesda old age home, Thoraipakkam, Chennai, 'B' Section students visited Kakkum Karangal, Palavakkam, 'C' Section students visited Sami oldage home, Rajakilpakkam, Chennai

visit was arranged for II year EEE students on 31 July 2025, 'A' section visited Annai Fathima child welfare centre, OMR, Karapakkam and 'B' section visited Kakkum Karangal, Palavakkam.

4

7.

**Mentor Meeting**

**MENTOR MEETING**



for II, III, IV Year EEE Students

🕒 02:20 PM TO 03:00 PM

📅 08/07/2025

**OUTCOME**

- Students learnt how to excel in their academic performance
- Increased focus on Placement Opportunities
- Improved the participation in various events

PIC: EVENT PHOTO

On July 8<sup>th</sup> 2025, Department of Electrical and Electronics Engineering at St. Joseph's College of Engineering, conducted Mentor meeting for the II, III and IV year students. Students attended the meeting with their respective mentors. Students were motivated to improve their academic performance.

4

8.

**Workshop**



**PIC: EVENT POSTER & PHOTO**

Department of EEE, St. Joseph's college of engineering organized 2 day workshop on 3<sup>rd</sup> and 4<sup>th</sup> of July 2025.

2<sup>nd</sup> year students were provided with the topics

- Fundamentals of UI/UX,
- IoT based automation system
- Autocad for Electrical engineers.

3<sup>rd</sup> year students were provided with the topics

- Autocad for electrical engineers: Circuit design & Analysis,
- Modelling solar PV systems,
- IoT and Opencv based automation & control,
- getting started with powerBI.

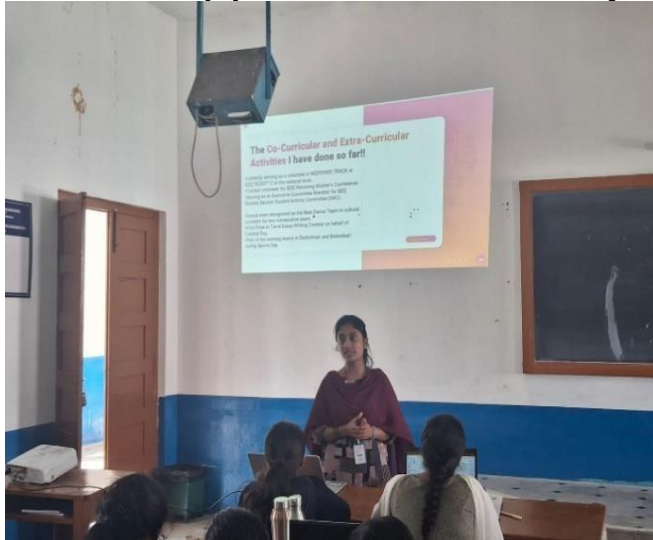
4<sup>th</sup> year students were provided with the topics

- Making of E-scooter from scratch
- Machine learning: data collection to deployment
- Sustainable lighting design in modern industry
- From breadboard to PCB: prototyping your circuit

4

9.

**Summer internship presentation and Market yourself**



**PIC: EVENT PHOTO**

St. Joseph's College of Engineering department of Electrical and electronics engineering organized **presentation of internship** undergone during summer on 12/07/2025. Along with the internship presentation students were given opportunity to present their **self-analysis** to make them enable for the current need.

4

10.

IEEE activities



PIC: EVENT POSTER

IEEE St. JOSEPH'S COLLEGE OF ENGINEERING STUDENT BRANCH CHAPTER (SBC60101), in association with the **National Institute of Technical Teachers Training and Research (NITTR), Chennai, the Centre for International Relations – Anna University, and the IEEE Madras Section**, proudly hosted the "**UniteAI: Global Innovation Forum**" on **18/07/2025** a dynamic platform fostering global collaboration in technology and innovation.

The event brought together **30 international participants from over 29 countries**, representing a diverse community of young innovators, researchers, and educators. The forum served as a confluence of global minds committed to exploring transformative ideas in Artificial Intelligence and its applications for societal betterment.

4

11.

IEEE activities



PIC: EVENT POSTER

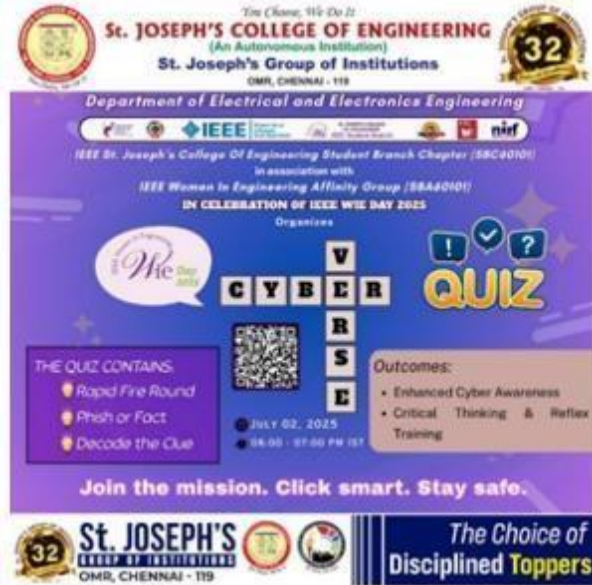
The IEEE St. Joseph's College of Engineering Student Branch (SBC60101), in association with the Industry Academia Young Professionals Committee (IAYPC), IEEE India Council, and the India Internet Foundation (IIFON), successfully hosted the **AIORI-2 Regional Faculty Workshop on July 26, 2025**, at the college campus in OMR, Chennai. This workshop was part of a nationwide initiative under the Internet Standards, Measurement, and Research Engagement Platform

, which aims to empower educators and strengthen academia's role in the development of internet standards and measurement frameworks. **This 'Train the Trainer' style workshop focused on building faculty capacity and preparing academic institutions to participate in innovation-driven internet research, measurement hackathons, and policy-oriented collaborations.**

4

12.

IEEE activities



PIC: EVENT POSTER

The IEEE Student Branch (SBC60101) of St. Joseph’s College of Engineering, in collaboration with the IEEE Women in Engineering Affinity Group (SBA60101), successfully conducted an engaging online event titled **Cyber Verse Quiz on 2.7.2025** as part of the IEEE WIE Day 2025 celebrations. Held from 6:00 PM to 7:00 PM IST via Google Forms, the **quiz aimed to boost cybersecurity awareness, critical thinking, and quick decision-making skills among students.** With over 15+ enthusiastic participants from various departments, the event featured three dynamic rounds—Rapid Fire, Phish or Fact, and Decode the Clue—challenging students to identify cyber threats, respond quickly, and think analytically. The quiz fostered awareness on cyber hygiene, phishing identification, and safe digital practices, aligning with the theme “Click Smart. Stay Safe.” This initiative effectively promoted responsible digital behavior and empowered participants with essential cybersecurity knowledge.

4

13.

IEEE activities



PIC: EVENT POSTER

The Department of Electrical and Electronics Engineering at St. Joseph’s College of Engineering, in association with the IEEE SJCE Student Branch Chapter (SBC60101) and IEEE Women in Engineering Affinity Group (SBA60101), successfully conducted an insightful session titled **"Beyond Hacks: Leading Smart"** on **4.7.2025** from 6:00 PM to 7:00 PM IST via Google Meet as part of IEEE WIE Day 2025 celebrations. Centered around the theme **“Leadership Challenges in the Cyber Era,”** the session featured **Lt. Gen. Anil Malik – Strategic Leadership Specialist, Indian Army Veteran, and TEDx Speaker** – who shared invaluable perspectives on battlefield intelligence, digital resilience, and strategic leadership in a cyber-first world. The session empowered participants to understand leadership dynamics in digital environments, showcased real-life parallels between military strategy and cyber defense, and inspired young technologists to embrace leadership roles. E-certificates were awarded to all attendees in recognition of their participation.

4

14.

IEEE activities



PIC: EVENT POSTER

The IEEE St. Joseph's College of Engineering Student Branch (SBC60101), in collaboration with the IEEE Women in Engineering (WiE) Affinity Group (SBA60101), successfully organized a virtual session titled "**ElevateU – Stand Out. Step Ahead.**" on 6.7.2025 as part of IEEE WiE Day 2025 celebrations. The session featured **Ms. Jamuna Umasankar – LinkedIn Strategist, Former RJ at ChennaiLive 104.8 FM, and IEEE India Council Awardee – who delivered an impactful talk on “LinkedIn Hacks Every College Student Should Know in 2025.”** She shared actionable insights on crafting compelling LinkedIn profiles, personal branding, and strategic networking to unlock career opportunities. Students engaged enthusiastically, gaining clarity on building a professional online presence. The session inspired participants to boost their digital visibility and leverage LinkedIn for internships, jobs, and meaningful connections. E-certificates were issued to all attendees, and heartfelt gratitude was extended to the speaker for her invaluable contribution.

4

15.

IEEE activities



PIC: EVENT POSTER

The IEEE St. Joseph's College of Engineering Student Branch (SBC60101), in collaboration with the IEEE Women in Engineering (WiE) Affinity Group (SBA60101), successfully conducted an inspiring session titled **WIE Chronicle: 20 Lessons I Learnt in My 20s – College Edition** on 6.7.2025 as part of the IEEE WiE Day 2025 celebrations. **The session featured Ms. Harini N, Immediate Past Chairperson of IEEE SJCE SB'24 and RMC 25' Administrative Coordinator, who shared 20 impactful lessons drawn from her own journey** through college and leadership roles. Through relatable stories and reflections, she addressed topics such as confidence-building, time management, learning from failures, and prioritizing mental well-being. The session deeply resonated with the student audience, encouraging them to reflect on their own paths, make mindful decisions, and embrace balanced personal and academic growth.

4

16.

IEEE activities



PIC: EVENT PHOTO & POSTER

The IEEE St. Joseph's College of Engineering Student Branch (SBC60101) successfully conducted an informative and interactive session titled Eureka Connect on 7.7.2025, aimed at equipping junior students with insights into the prestigious Eureka competition. **Senior students who had previously participated in Eureka shared their real-time experiences, outlining the event's structure, eligibility criteria, registration process, and essential strategies for crafting a compelling pitch and presentation.** The session covered key competencies such as problem identification, idea validation, and effective communication, while also addressing common challenges and practical solutions. Active participation from juniors through discussions and Q&A made the session highly engaging, leaving attendees motivated, informed, and confident to take part in innovation and entrepreneurship opportunities through the Eureka platform.

4

17.

IEEE activities



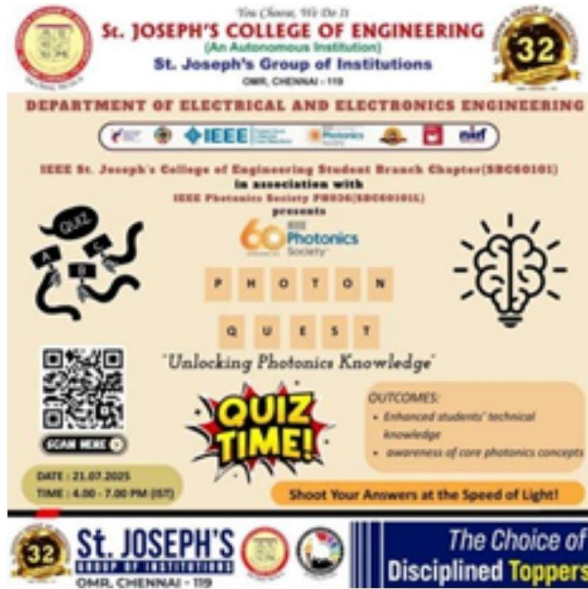
PIC: EVENT POSTER

The Department of Electrical and Electronics Engineering, IEEE St. Joseph's College of Engineering Student Branch Chapter (SBC60101), in association with the IEEE Photonics Society PH036 (SBC60101L), organized a thought-provoking technical debate titled "Clashtronics" on 8.7.2025 from 6:00 PM to 7:30 PM, as part of the 60th anniversary celebrations of the IEEE Photonics Society. **Centered on the theme "Is Photonics the Future of Computing?", the event featured spirited discussions by participants Suchitra, Sindhu, Hari Prasath, and Irfana Nazmeen of II EEE, who delved into the advancements, challenges, and prospects of photonics compared to conventional electronics.** With arguments backed by technical insights and real- world applications, the debate emphasized photonics' potential to overcome electronic limitations in speed, energy efficiency, and scalability.

4

18.

IEEE activities



PIC: EVENT POSTER

The IEEE Student Branch of St. Joseph's College of Engineering, in association with the IEEE Photonics Society PH036 (SBC60101L) under the Department of Electrical and Electronics Engineering, successfully conducted a technical quiz event titled **"Photon Quest – Unlocking Photonics Knowledge"**\* on 16.7.2025. Held online from 4:00 PM to 7:00 PM IST, **the event aimed to evaluate and enrich students' knowledge of photonics and its applications in today's technological landscape.** With enthusiastic participation from over 20 students across various disciplines, **the quiz covered both fundamental and advanced concepts in photonics, fostering academic curiosity and healthy competition.** E-certificates were awarded to all participants in recognition of their efforts. The event proved to be both educational and engaging, significantly boosting awareness of photonics and its real-world relevance while cultivating an interactive platform for technical growth.

4

19.

IEEE activities



PIC: EVENT POSTER

The Department of Electrical and Electronics Engineering at St. Joseph's College of Engineering, in collaboration with the IEEE Student Branch Chapter (SBC60101), IEEE Special Interest Group on Humanitarian Technology AG (SBA601015), and IEEE MAS SIGHT AG, successfully organized an expert session titled "Remote Sensing for Resilience: Tackling Climate Change with Satellite Data" on 10.7.2025, from 6:00 PM to 7:00 PM via Google Meet. The session was delivered by **Mr. Lokesh Parthipan, a Climate Educator and Remote Sensing Expert from Tamil Nadu. He highlighted the pivotal role of satellite data and remote sensing in combating climate change and enhancing environmental sustainability.** The talk emphasized applications such as monitoring environmental changes, supporting agriculture, and improving disaster preparedness. Attendees gained practical insights into how real-time satellite data can drive informed decisions in climate adaptation and resource management.

4

20.

IEEE activities



PIC: EVENT POSTER

The IEEE Student Branch Chapter (SBC60101) of St. Joseph's College of Engineering, in association with the Department of Electrical and Electronics Engineering, organized an insightful webinar titled "Space Exploration 5.0 – Beyond Everything" on 18.7.2025 via Google Meet. The session was delivered by **Mr. Uchit Modi, Associate Software Engineer at Catalyx Space**, who presented an engaging talk on **"Global Ground Station Networks for CubeSats Communication."** Attended by over 40 students, **the session explored the design, applications, and global impact of CubeSats in modern space missions, with a strong focus on real-time communication via global ground station networks.** Mr. Uchit's presentation not only deepened students' technical understanding of satellite communication systems but also inspired participants to explore careers in space science, robotics, and STEM-related fields. The event successfully bridged theoretical learning with real-world applications, igniting interest in research, innovation, and IEEE engagement in the space technology domain.

4

21.

CLUB activities



PIC: EVENT POSTER & PHOTO

The SOCIAL AWARENESS CLUB, in collaboration with the IEEE SPECIAL INTEREST GROUP ON HUMANITARIAN TECHNOLOGY, at St. Joseph's College of Engineering, specializing in Electrical & Electronics Engineering, hosted a technical event "ENVIRONMENTAL PROTECTION GREEN PULSE" on JULY 11, 2025. Around 21 students participated in this event. **This event is designed to align with global initiatives addressing pressing energy challenges, empowering participants to contribute to a more sustainable world.** By engaging in these immersive experiences, we aim to nurture a new generation of engineers and innovators who are equipped with the knowledge, creativity, and determination to drive meaningful change and build a sustainable future

4

22.

**CLUB Activities**



PIC: EVENT POSTER & PHOTO

The ENSAVE CLUB, in collaboration with the IEEE VTS, at St. Joseph's College of Engineering, specializing in Electrical & Electronics Engineering, hosted a technical event “ECONEXT” on JULY 21, 2025. Around 21 students participated in the event .

The event consist of 2 rounds :POP QUIZ round and Debate Outcome for the Environmental Protection "ECONEXT" Event

1. Idea Drop Box :Students anonymously submitted "One Green Idea" that the club could implement in the future.
2. Innovation Pitch: Teams presented creative sustainability solutions to reduce energy or plastic use.

4

23.

**CLUB activities**



PIC: EVENT POSTER

St. Joseph's College of Engineering, (Electrical & Electronics Engineering) ROBOTICS CLUB in association with IEEE ROBOTICS AND AUTOMATION SOCIETY organized a technical event " ROBO SOCCER" on 24/07/2025. ROBO SOCCER is a event that combines knowledge, quick thinking, and problem-solving. The event included two rounds. In the first round, participants first worked on Technical rounds related to Robotics. In the second round, they demonstrated their idea through presentation skills . The event continued with the enthusiasm of our students. The program ended with a photo session.

4

24.

**CLUB activities**



*PIC: EVENT PHOTO*

Lingual club of department of EEE organized placement preparatory training session for IV year students on 26/07/2025. Training for core subjects were given.

4

25.

**Mock Interview**



*PIC: EVENT PHOTO*

Our department conducted mock interview for II, III and IV year students conducted by faculty mentors on 30/07/2025. Student preparedness was analysed and feedback to correct was provided.

4

26.

### Entrepreneurship development activity

● **10.07.25** II yr & III yr students  
A seminar on  
● **11.00AM** "TECHNOPRENEURSHIP - OPPORTUNITIES FOR ENGINEERS"  
● **AV Hall Library**

**Resource Person**  
**Dr. Shankar. K**  
ASSISTANT PROFESSOR  
DEPT OF EIE  
NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR  
ASSAM, INDIA



PIC: EVENT PHOTO

Our department ED cell organised a seminar on **“Technopreneurship -Opportunities for Engineers”** for II & III Year students on **10 July 2025** from 11am to 12.20pm. The resource person **Dr.Shankar.K**, Assistant professor, Department of EIE, **National Institute of Technology, Silchar**, Assam, India, encouraged the students for finding solutions from little things. Session was interactive and useful to the students.

4

27.

### ALUMNI INTERACTION



PIC: EVENT PHOTO

Our department organized a **grand alumni reunion REVENIR 25 for the 1996-2000 batch on July 12, 2025**. Over 35 alumni from across the globe, including professionals from Australia, UK, USA, Canada, Saudi Arabia, Kuwait and India gathered to reconnect and relive their college memories. The event was filled with warmth, nostalgic moments and enthusiastic sharing of career journeys.

4

28.

### ALUMNI INTERACTION



PIC: EVENT PHOTO

Our Alumni **Mr.Krithik Narain Baskaran, Associate Consultant ,TCS and Mr.Meril Ernest Joseph , Senior IT Engineer, ABN AMRO Netherland (Batch: 2005 - 2009)** interacted with III year and final year students on 18th July 2025 ,10.00am to 12:00am. **Emerging opportunities for engineering graduates in banking-IT sectors were discussed in detail during the interaction.** Students gained valuable exposure to real-world applications of IT in the financial sector.

4

29.


### ALUMNI INTERACTION



PIC: EVENT PHOTO

Our Alumni **Mr.Chacko Thomas ,Sustainability Manager, ANZ Sydney,Australia (Batch 1996-2000)** interacted with II year and final year students on 21st July 2025 ,11.00am to 12:00am. He emphasized how foundational EEE skills enabled him to adapt to evolving energy and environmental roles. He also shared key lessons on interdisciplinary learning, resilience, and continuous upskilling. **He also highlighted global opportunities in green energy and sustainable infrastructure worldwide.**

4

<p>30.</p>	<p style="text-align: center;"><b>ALUMNI INTERACTION</b></p>  <p style="text-align: center;"><i>PIC: EVENT PHOTO</i></p>	<p>Our Alumni Mr.Jensen Fernando (<b>PG Batch 2013-2015</b>) <b>Senior Electrical Engineer, Baxar, Bangalore</b> interacted with III year students on 21st July 2025 ,11.00am to 12:00am. <b>He shared valuable insights on core electrical engineering roles, project execution, and industry expectations. The session inspired students to align academic learning with real-world engineering challenges.</b></p>	<p style="text-align: center;">4</p>
<p>31.</p>	<p style="text-align: center;"><b>Faculty recognition</b></p>	<ul style="list-style-type: none"> <li>• Dr M Venmathi, Associate Professor, has acted as <b>reviewer</b> for the journal “Engineering Research Express” by IOP Science Publishers. Also acted as <b>faculty evaluator</b> for <b>tech star summit 2025</b> organised by SIMATS engineering.</li> <li>• Dr M Ramesh Babu, Professor, has acted as BOS Member for Meenakshi Sundararajan Engineering College, Chennai.</li> <li>• Dr.V.Krishnakumar, associate professor attended industrial training provided by MAVIC aviations.</li> <li>• Dr N Chidambararaj, Associate Professor, and Mr K Aravindhnan, Assistant Professor, has participated in the workshop “Applications of AI to Power Quality” organized by SSN College of engineering, Chennai from 30th June 2025 to 8th July 2025</li> <li>• Ms R G Nirmala, Assistant Professor, Dept of EEE, has participated in the workshop “Emerging Applications in Electrical Enginnering and Industry 4.0” organized by Rajalakshmi Engineering College, Chennai from 21st Jul 2025 to 25th July 2025</li> </ul>	<p style="text-align: center;">5</p>

32.	<b>Faculty Publication</b>	<ul style="list-style-type: none"> <li>•Ms.S.Gomathi published a book chapter titled “Two stage high gain Dc/DC converter with model predictive controlled system for renewable applications” in Springer Nature</li> <li>•Dr. M. Venmathi has published a paper titled “Analyze, Design and implementation of MPWM in-terleaved Dc-DC converter with voltage doubler for EV applications.</li> <li>•Mr N Jeyaprakash has published a paper titled “State Space controller of SLCC and Design analysis with MPPT” in The International Journal of Informatics and Communication Technology and another paper “Stability Assessment of DC-DC Interlinking Con-verters in Solar Energy Systems Using SISO and MIMO Impedance- Based Techniques” in The In-ternational Journal of Informatics and Communication Technology.</li> <li>•Mr H Prasad and Dr T D Sudhakar has published a paper titled “Electric load forecasting using ARIMA model for time series data” in International Journal of Informatics and Communication Technology</li> </ul>	<b>5</b>
-----	----------------------------	--	----------

33.	PLACEMENT DETAILS FOR THE MONTH OF JULY 2025	<p><b>2022-2026 Batch</b></p> <table border="1" data-bbox="1193 805 2074 981"> <thead> <tr style="background-color: #c8e6c9;"> <th>SL. NO</th> <th>REGISTER NUMBER</th> <th>NAME OF THE STUDENTS</th> <th>COMPANY PLACED</th> <th>TOTAL NUMBER OF OFFERS</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>312322105054</td> <td>HARIPRASATH S</td> <td>BLUE STAR</td> <td>1</td> </tr> <tr> <td>2.</td> <td>312322105034</td> <td>DHARANI M</td> <td>EDGEVERVE</td> <td>1</td> </tr> <tr> <td>3.</td> <td>312322105008</td> <td>AFREED MOHAMMED S</td> <td>EDGEVERVE</td> <td>1</td> </tr> <tr> <td>4.</td> <td>312322105092</td> <td>MOUSEENA BANU M</td> <td>KISSFLOW</td> <td>1</td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>TOTAL OFFERS</b></td> <td style="text-align: center;"><b>4</b></td> </tr> </tbody> </table> <p><b>2021-2025 Batch</b></p> <p>Total No of students placed = 103 Students  Total No of Offers = 129 Offers  Total No of Students (UG) = 194  Total No of Eligible Students (UG) = 165 (All Clear)  % of students Placed (UG) = 103/194 = 53.1 %  No of students having single offers = 77  No of students having Double offers = 22  No of students having Triple offers = 4</p>	SL. NO	REGISTER NUMBER	NAME OF THE STUDENTS	COMPANY PLACED	TOTAL NUMBER OF OFFERS	1.	312322105054	HARIPRASATH S	BLUE STAR	1	2.	312322105034	DHARANI M	EDGEVERVE	1	3.	312322105008	AFREED MOHAMMED S	EDGEVERVE	1	4.	312322105092	MOUSEENA BANU M	KISSFLOW	1	<b>TOTAL OFFERS</b>				<b>4</b>	<b>4</b>
SL. NO	REGISTER NUMBER	NAME OF THE STUDENTS	COMPANY PLACED	TOTAL NUMBER OF OFFERS																													
1.	312322105054	HARIPRASATH S	BLUE STAR	1																													
2.	312322105034	DHARANI M	EDGEVERVE	1																													
3.	312322105008	AFREED MOHAMMED S	EDGEVERVE	1																													
4.	312322105092	MOUSEENA BANU M	KISSFLOW	1																													
<b>TOTAL OFFERS</b>				<b>4</b>																													

## DEPARTMENT OF MBA

### Alumni Talk:



Mr. S. Sri balaji, our distinguished alumnus and Deputy Manager at Naukri.com, for an insightful alumni talk on "Strategic Steps to Crack Placements" held on 04th July 2025.

## Guest Lectures:



Guest lecture on “Challenges and Opportunities for MBA Students in the Corporate World” on 10th July 2025 at 10:00 AM in the Conference Hall, MBA Block. The session was graced by Ms. Sagaya Malar Vizhi, Counseling Psychologist, Soft Skills Trainer, and POSH Enabler, who brought her vast experience and dynamic approach to address the evolving landscape of the corporate world for budding management professionals.

Guest lecture on “Opportunities for MBA Students in Financial Services” on 18<sup>th</sup> July 2025, from 1:00 PM to 3:00 PM at the MBA Block Conference Hall. The session featured Mrs. Meenu Balika R., B.E., MBA, Operations Specialist at Citi Bank, with expertise in AML and KYC compliance. She provided students with an in-depth understanding of the financial services industry, emphasizing current trends, key skills required, and the vast scope for MBA graduates in domains like banking operations, risk management, regulatory compliance, and fintech innovations.

Guest lecture on 29th July 2025 titled “Banking in Action: Practical Insights for Aspiring Professionals.” The session was delivered by Mrs. Anusha Lanka, Credit Officer, Repco Bank, and was attended by all Integrated MBA students.

## NGO VISITS:



V Year Integrated MBA students of the Department of Management Studies, St. Joseph's College of Engineering, visited Maria's Home for the Aged on 03rd July 2025. The visit was a heartfelt experience aimed at fostering compassion, empathy, and a sense of community among the students.

IV Year Integrated MBA students of the Department of Management Studies, St. Joseph's College of Engineering, visited St. Joseph Children Home, Koothavakkam, as part of their social outreach initiative. The visit aimed to sensitize students towards social responsibility and community engagement.

III Year Integrated MBA students of St. Joseph's College of Engineering, Chennai, undertook a meaningful and heartwarming NGO visit to St. John's Debritto Home for Women, located in Kovalam on 24/07/2025, as part of their community outreach and social responsibility initiative.

Second Year Integrated MBA students visited Amma Appa Old Aged Home, Chennai on 31st July 2025. The visit was organized to instill a sense of social responsibility and empathy among the students.

## INTERNATIONAL VISITING LECTURE



- Dr.M. Shunmuga Sundaram Delivered An International Visiting Lecture On “Monetizing Content In The Creator Economy: From Micro Influencers To Multi Million Dollar Brands ” On 24.07.2025
- Dr.R. Arun Delivered An International Visiting Lecture On “Gen Z As Consumers: What Business Need O Know In 2025” On 22.07.2025

## INDUSTRIAL VISITS:



IVth year MBA Integrated 37 students, accompanied by Dr. Poovizhi and Dr. Arogyaraj, embarked on an enriching industrial visit to TAFE – Tractors and Farm Equipment Limited, located in Pudupakkam, Chennai.

On 30th July 2025, a group of 29 Second Year Integrated MBA and 41 Third Year Integrated MBA students undertook an enriching industrial visit to UE Press Tools Pvt Ltd, located in Thirumullaivoyal, Chennai.

**Faculty as Resource Person/Reviewer:**



Dr. R. Arun, Assistant Professor, Department of Management Studies, St. Joseph's College of Engineering, served as a Program Committee Member and Reviewer at the 6th International Conference on Data Science and Applications (ICDSA 2025) held at Malaviya National Institute of Technology (MNIT), Jaipur, India, from July 16 to 18, 2025.

**FDP / CONFERENCE / WORKSHOP/SEMINAR  
ATTENDED BY FACULTY:**



Dr. R. Satish, participated in a 5-day Professional Development Programme (Online) on “Data-Driven Decision Making for Rural Entrepreneurs” from 07th to 11th July 2025. The programme was organized by the National Institute of Technical Teachers Training and Research (NITTTR), Chennai.

Dr. S. Gangadharan, Associate Professor, successfully participated in a 5-day National Faculty Development Programme (Online) on “Fintech for Financial Inclusion Using Artificial Intelligence” from 07th to 11<sup>th</sup> July 2025. The FDP was organized by Avinash College of Commerce, Secunderabad, Telangana, and A.C.T Academy, Kerala.



Dr. R. Nadenasabai, Associate Professor, and Dr. K.A. Arokiaraj, Assistant Professor have participated in a Seven-Day Online International Professional Development Programme titled “Excellence in Research: Global Trends, Tools & Ethics” organized by Patrician College of Arts and Science, Chennai, from 21st to 28th July 2025.



Dr. G. Nirmala and Dr. Angelin S. Kiruba actively participated in a 3-day Faculty Development Program on “Celonis Process Mining using the Celonis Process Intelligence Platform”, organized by ICT Academy in association with Celonis. The FDP was conducted from 28th July to 30th July 2025 at St. Joseph’s College of Engineering.



Mr. S. Aravinth, Assistant Professor, Department of MBA, St. Joseph's College of Engineering, successfully presented a research paper titled "Energy-Efficient VLSI Architectures for On-Device Deep Learning in Real-Time Vision Applications" at the 6th International Conference on Data Intelligence and Cognitive Systems (ICDICI 2025), held at SCAD College of Engineering & Technology, Tirunelveli, from 9<sup>th</sup> to 11th July 2025.

### WORKSHOP ORGANISED:

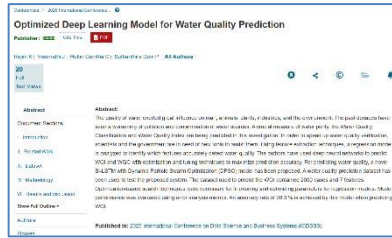


A one-day workshop on "Mock Interview Skills" exclusively for the Final Year Integrated MBA students on 22nd July 2025. The session aimed to equip students with essential interview techniques and boost their confidence for upcoming placement opportunities. Ms. Lakshimi Krithika S., a seasoned Talent Acquisition Specialist from Straive, served as the resource person for the workshop.

# DEPARTMENT OF INFORMATION TECHNOLOGY

	<b>Photographs Captured During Event/Screenshot</b>	<b>Corresponding remarks in regarding the status of activity execution</b>
<b>1.</b>	 <p style="text-align: center; margin-top: 20px;"> <b>Co-Author Dr. S. Duraimurugan,</b> published a paper indexed in Scopus         </p>	<p style="text-align: center; margin-bottom: 10px;"> <b><u>Staff Publication</u></b> </p> <p>             David P Surenthran, G. Ramasundaram, P.M. Durai Raj Vincent, <b>S. Duraimurugan</b>, Asokan Vasudevan, Mohammad Faleh Ahmmad Hunitie, Suleiman Ibrahim Mohammad "Impact of cross-border e-commerce development on China's foreign trade", International Journal of Data and Network Science, ISSN 2561-8156 (Online) - ISSN 2561-8148 (Print), Volume 9 Issue 2 pp. 323-334, 2025, DOI: 10.5267/j.ijdns.2024.7.015. <b>(Indexed in Scopus)</b> </p> <p> <b>Abstract:</b>              This study investigates the impact of cross-Border E-commerce development on China's foreign trade. The software SPSS is used to calculate the value of each independent variable CBEC transaction volume, business infrastructure, professional talents, and development potential, and the software STATA version 18 is used to perform all the regression analyses. The findings reveal that efficient CBEC business infrastructure, including electronic payments, logistics, and digital support systems advancements, significantly enhances trade facilitation. The analysis indicates steady growth in CBEC transactions and infrastructure, alongside an increasing internet penetration rate, supporting the sector's expansion. The study concludes with recommendations for policymakers and businesses, emphasizing the need to enhance infrastructure, cultivate professional talents, and strengthen market potential to ensure sustainable CBEC development and boost foreign trade. These insights provide a comprehensive understanding of the mechanisms CBEC influences foreign trade, offering a valuable reference for future research and policy formulation.         </p>

2.



**Co-Author**  
**Dr. Heltin Genitha C,**  
 Published a paper in Scopus  
 indexed Conference

**Staff Conference Publication**

"Rejini K; Visumathi J; **Heltin Genitha C,** Suthanthira Devi P, "Optimized Deep Learning Model for Water Quality Prediction," 2025 International Conference on Data Science and Business Systems (ICDSBS), Chennai, India, 2025, pp. 1-11, doi: 10.1109/ICDSBS63635.2025.11031661. (**Indexed In Scopus**)

**Abstract:**

The quality of water exerted great influence on man, animals, plants, industries, and the environment. The past decades have seen a worsening of pollution and contamination of water sources. In order to speed up water quality verification, scientists and the government are in need of new tools to assist them. Using feature extraction techniques, a regression model is analyzed to identify which features accurately detect water quality. The authors have used deep neural networks to predict WQI and WQC with optimization and tuning techniques to maximize prediction accuracy. The dataset used to predict the WQI contained 2000 cases and 7 features. Optimization-based search techniques were necessary for fine-tuning and optimizing parameters for regression models. Model performance was evaluated using error analysis metrics. An accuracy rate of 99.3 % is achieved by this model when predicting WQI.

3.



**Co-Author**  
**Ms. Annie T A**  
 Published a paper in Scopus  
 indexed Conference

Dhivakar P; Arigela Sri Harsha; Sudheer Kumar Battula; V. Choudri; **Annie T A;** S. Gayathri Priya, "Collision-Aware Autonomous Vehicle Motion Planning using Spiking Convolutional Neural Networks and Parrot Optimization Algorithm," 2025 International Conference on Intelligent Computing and Control Systems (ICICCS), Erode, India, 2025, pp. 1584-1591, doi: 10.1109/ICICCS65191.2025.10985079. (**Indexed in Scopus**)

**Abstract:**

The primary input for motion planning, which permits safe autonomous driving on public roads, is an accurate trajectory prediction of nearby road users. Advanced urban traffic conditions which are constantly evolving provide tremendous difficulties for autonomous vehicles specifically in the task of predicting the motion of surrounding vehicles and safely moving through it. This research seeks to address these challenges by presenting a new framework that combines a lightweight spiking convolutional neural network (LS-CNN) for real-time prediction of trajectories with an efficient collision avoidance technique based on the generated trajectory. The findings of the study emphasize that the integrated system improves both the trajectory prediction efficiency and the level of navigating safety. The model obtained above 95% of the trajectory prediction accuracy and also offered the path with the collision risk less than 0.005%. This work helps to provide an optimal performance for autonomous driving cars by implementing a highly adaptive traffic scenario prediction method to enhance the future enhancement of the autonomous vehicle navigation systems.

4.



**Authors**  
**Sivadharshini V; Sarnitha M; Mrs. Lathaselvi G**  
 Published a paper in Scopus indexed Conference

**Staff - Student Conference Publication**

**Sivadharshini V; Sarnitha M; Lathaselvi G "AI-Driven Comic Narration System for Visually Impaired Users," 2025 International Conference on Data Science and Business Systems (ICDSBS), Chennai, India, 2025, pp. 1-8, doi: 10.1109/ICDSBS63635.2025.11031942. (Indexed In Scopus)**

**Abstract:**

Comics, with their complex combination of visual storytelling and text-based dialogue, pose substantial accessibility issues for those with visual impairments. Current screen readers and accessibility solutions cannot handle the nonlinear and image-dependent nature of comic book content. The aim of this project is to design an automated system that provides individuals with visual impairments the opportunity to enjoy comic books through auditory storytelling. The system leverages a blend of computer vision, optical character recognition (OCR), and natural language processing (NLP) technologies to capture important details from comic book illustrations. This includes interpreting scene descriptions and text within speech bubbles. This information is compiled into a coherent narrative and transformed into speech using text-to-speech (TTS) technology. YOLOv11 is used for panel segmentation, ensuring the correct order of content is captured. This groundbreaking system offers a novel approach to making visual media, like comics, accessible for individuals with visual impairments by converting visual elements into an auditory format.

5.



**Authors**  
**J. Gnanasoundharam, Sarithra S M; Thirisha B,**  
 Published a paper in Scopus indexed Conference

**J. Gnanasoundharam, Sarithra S M; Thirisha B, "Harnessing Machine Learning for Next-Level Airline Satisfaction Prediction," 2025 International Conference on Data Science and Business Systems (ICDSBS), Chennai, India, 2025, pp. 1-7, doi: 10.1109/ICDSBS63635.2025.11031709. (Indexed in Scopus)**

**Abstract:**

The aviation industry always looks for better customer satisfaction, This promotes revenue and client loyalty. By utilizing machine learning, airlines can better predict the level of satisfaction among passengers and align accordingly. This is based on big data, including experience during flight, quality of service, on-time performance, and comments from customers. With such techniques, airline firms apply sophisticated algorithms and predictive models to trace passenger satisfaction patterns or trends. Findings from such analysis lead airlines into proactive improvements in services to better personalize customer experience and operational efficiency. A deeper understanding of passenger needs through machine learning in predictive satisfaction also helps to create data-driven decision making and maintain competitive superiority in the dynamic nature of the aviation sector.

6.



**Authors**  
**Mrs. D. Jeya Priya; Sarish R V; Sujeeth S,** published a paper in Scopus indexed Conference

**D. Jeya Priya; Sarish R V; Sujeeth S,** "Enhanced E-Waste Classification Through Masked Generative Transformers," 2025 International Conference on Innovative Trends in Information Technology (ICITIIT), Kottayam, India, 2025, pp. 1-5, doi: 10.1109/ICITIIT64777.2025.11040702. **(Indexed in Scopus)**

**Abstract:**

The rapid growth of electronic devices has resulted in a substantial rise in electronic waste (e-waste). Proper classification of e-waste components plays a vital role in sustainable recycling efforts. However, conventional deep learning approaches often struggle to accurately identify complex components, especially when processing images that contain noise or visual obstructions. This paper proposes a novel approach, Masked Generative Transformers (MGTs), for e-waste classification. MGTs combine generative and discriminative learning paradigms, enabling them to reconstruct missing parts of an image and gain a deeper understanding of visual structures. Unlike conventional vision transformers, MGTs can effectively distinguish between similar components and are robust to noise and occlusion. Our experimental findings highlight the advantages of MGTs over traditional approaches in e-waste classification. This study supports the advancement of more effective recycling techniques and fosters sustainable waste management efforts.

7.



**Authors**  
**J. A. Carol Jeffri and A. Tamizhselvi,**  
Published a paper in Scopus indexed Conference

**J. A. Carol Jeffri and A. Tamizhselvi, "Inclusive Educational Platform: Interactive Quizzes with Integrated Text-to-Speech for Blind and Sighted Children," 2025 International Conference on Knowledge Engineering and Communication Systems (ICKECS), Chickballapur, India, 2025, pp. 1-7, doi: 10.1109/ICKECS65700.2025.11034781. (Indexed in Scopus)**

**Abstract:**

This paper introduces a unified web-based quiz platform designed to support both blind and sighted children through three interactive quiz types: Jumble Words, Simple Quiz, and Guess the Item. The platform integrates text-to-speech (TTS) and voice navigation to bridge accessibility gaps in online educational tools, enabling visually impaired children to participate independently without external assistance. Unlike traditional quiz platforms, which often lack assistive technology and segregate users with visual impairments, this solution ensures inclusive learning by providing an intuitive, accessible, and interactive experience for all users. The frontend is developed using React.js, while the backend is powered by Node.js with MongoDB. The Web Speech API is incorporated to facilitate text-to-speech and voice input functionalities, ensuring seamless interaction. To evaluate the platform's effectiveness, usability tests were conducted with both blind and sighted children. The results demonstrated positive engagement and accessibility, validating the impact of features such as voice navigation and auditory feedback. Additionally, sighted users found the platform's interactive elements engaging, further reinforcing its inclusive design.

8.






**Sample FDP Certificate**

**Seminar/ FDP Attended by Faculty**

S.No	Title of the topic	Name of the Staff	Conducted By	Date
1.	Next-Gen Deep Learning: From Foundational Concepts to Applied Intelligence	Mrs. Domilin Shyni	Department of Computer Science and Engineering, Mar Ephraem College of Engineering and Technology	14-7-2025 to 18-7-2025 (5 days)

## DEPARTMENT OF MATHEMATICS AND ENGLISH

Events	Remarks
<b>FDP/Workshop/Conference</b>	
	
	-
	<p>The Department of Mathematics, St. Joseph's College of Engineering, organized the International Conference on Contemporary Applied Mathematics and Statistics: Trends, Innovations and Applications – 2025 (IC-CAMSTIA) on the 25th and 26th of July 2025. This prestigious event brought together academicians, researchers, and students to explore recent advancements and innovations in the fields of mathematics and statistics. The conference was partially sponsored by the Tamil Nadu State Council for Science &amp; Technology (TNSCST) under the Partial Assistance to Conference Scheme and Academia for Advanced Research in Mathematics, which further added value and recognition to the event. The two-day conference featured seven invited talk sessions (online -1 and offline - 6) and 16 technical sessions (online -12 and offline - 4). Sessions included keynote speeches by eminent professors, paper presentations by researchers, and discussions on contemporary topics. Each session encouraged vibrant discussions and active engagement among participants, enriching the academic and professional experiences of all attendees. Out of 285 participants 222 persons presented their research ideas.</p>
<b>Symposium</b>	-
<b>Awards/Prize won by staff</b>	

<b>Awards/Prize won by students</b>	
<b>Industrial Projects done by students</b>	
<b>Publications(only published) details</b>	1. John Jayaraj J. , <b>N. Jose Parvin Praveena</b> , I. Paulraj Jayasimman * , Broumi said , A Nonagonal Single-Valued Neutrosophic Soft Set Analysis of Issues Faced by Female Employees across Industries, <i>International Journal of Neutrosophic Science</i> , vol. , no. , 2025, pp. 229-241. DOI: <a href="https://doi.org/10.54216/IJNS.260316">https://doi.org/10.54216/IJNS.260316</a>
<b>Funded Projects</b>	-
<b>Other activities</b>	.

## DEPARTMENT OF SCIENCE

Sl. No.	Events	Remarks
1	Collabarative Quality initiatives with other institutions	<b><i>Board of Study Member</i></b> Dr. S. Suresh has acted as Board of Study Member for Regulations 2025, for Anand Institute of Higher Technology, Chennai, on 10.07.2025.
2	Industrial Visits, Inplant Training, Internships	<b><i>AICTE – INAE – IIT - Centre of Engineering Education Excellence (CEEE) Program</i></b> <ol style="list-style-type: none"> <li>1. Dr. S. Kiruba, Dr. N.R. Rajagopalan, Dr. S. Manikandan, Dr. K. Jayamoorthy, Dr. B. Subash, Dr. S. Rama, Dr. G. Sasikumar had attended the CEEE program in the domain of “Civil and Environmental Engineering” conducted by IIT Madras, from 23-06-25 to 04-07-25.</li> <li>2. Dr. P. Krishnan, Dr. K. Dhanaraj, Dr. A. Dhivya had attended the CEEE program in the domain of “Materials, Chemical and Biomedical Engineering” conducted by IIT Delhi, from 23-06-25 to 04-07-25.</li> <li>3. Dr. P. Saravanan, Ms. S. Savitha had attended the CEEE program in the domain of “Materials, Chemical and Biomedical Engineering” conducted by IIT Kharagpur, from 30-06-25 to 11-07-25.</li> <li>4. Dr. S. Suresh, Dr. V. Swarnalatha, Dr. A. Arulmozhi, Dr. A. Mahalakshmi, Dr. A. Uma Devi, Dr. J. Sharmila, Dr. N. Punitha, Dr. S.M. Prakash, Dr. K. Sathesh Kumar, Dr. C. Chandrasatheesh had attended the CEEE program in the domain of “Civil and Environmental Engineering” conducted by IIT Kanpur, from 23-06-25 to 04-07-25.</li> </ol>
3	Guest Lecture	-
4	FDP/Workshop/Conference	<b><i>Acted as Chairperson:</i></b> <ol style="list-style-type: none"> <li>1. Dr. K. Jayamoorthy had chaired a session at “8th International Conference on Recent</li> </ol>

		<p>Innovations in Modern Science and Technology” organized by SSN College of Engineering, Chennai, held between 09-07-25 and 11-07-25.</p> <ol style="list-style-type: none"><li>2. Dr. P. Saravanan had chaired a session at “Second International Conference on Management, Science and Technology” organized by RBVRR Women’s College, Hyderabad, held between 26-07-25 and 27-07-25.</li></ol> <p><b>Invited Talk:</b></p> <ol style="list-style-type: none"><li>1. Dr. K. Jayamoorthy had delivered an invited talk on “Advanced Functional Materials” in the 8th International Conference on Recent Innovations in Modern Science and Technology” organized by SSN College of Engineering, Chennai, held between 09-07-25 and 11-07-25.</li><li>2. Dr. K. Dhanaraj had delivered an invited talk on “Nano materials applications in Health sector” in the International Conference on Green Chemistry and Nanotechnology: Health, Environment &amp; Beyond – GreenNano2025” organized by R.B.V.R.R Women’s College, Hyderabad, held between 24-07-25 and 25-07-25.</li></ol> <p><b>Presented Paper:</b></p> <ol style="list-style-type: none"><li>1. Dr. S. Suresh and Mr. S. Kaleel Mohamed Ibrahim had presented a paper titled “FTIR and 2D COS analysis of Protein, Carbohydrate and Silver oxide nano priming” in the 8th International Conference on Recent Innovations in Modern Science and Technology” organized by SSN College of Engineering, Chennai, held between 09-07-25 and 11-07-25.</li><li>2. Dr. S.M. Prakash had presented a paper titled “Microwave assisted synthesis, spectral characterization, antifungal and antibacterial activities of some novel substituted piperidones” in the 8th International Conference on Recent Innovations in Modern Science and Technology” organized by SSN College of Engineering, Chennai, held between 09-07-25 and 11-07-25.</li></ol>
--	--	---

		<p><b>Participated:</b> <b>ATAL FDP</b></p> <ol style="list-style-type: none"> <li>1. Dr. V. Swarnalatha, Dr. A. Uma Devi, Dr. J. Sharmila and Ms. S. Savitha had attended an ATAL (Physical mode) Faculty Development Programme titled "Recent Trends in Sustainable Practices of Water Management and Soil Conservation", held from 23-06-25 to 28-06-25, organized by Meenakshi College of Engineering, Chennai. (Certificate received in the month of July)</li> <li>2. Dr. G. Senthil Murugan had attended an ATAL (Physical mode) Faculty Development Programme titled " Multidisciplinary Applications of Artificial Intelligence, IoT, and Robotics Integration with Industry 5.0", held from 07-07-25 to 12-07-25, organized by PERI Institute of Technology, Chennai.</li> <li>3. Dr. N.R. Rajagopalan, Dr. S. Rama, Dr. G. Sasikumar had attended an ATAL (Physical mode) Faculty Development Programme titled " Accreditation, Ranking and NEP: Strategies for Academic Excellence" held from 14-07-25 to 19-07-25, organized by Jerusalem College of Engineering, Chennai.</li> </ol> <p><b>Other Conferences:</b></p> <ol style="list-style-type: none"> <li>1. Dr. P. Krishnan and Dr. K. Dhanaraj had attended a Two-Day National Conference on "Road Map to Viksit Bharat – A Multi-Disciplinary Approach" held from 26-07-25 to 27-07-25, conducted by VIT Chennai.</li> </ol>
11	<b>Publications(only published) details</b>	<p><b>Journal Publications:</b></p> <ol style="list-style-type: none"> <li>1. Dr. P. Saravanan has published a research review article titled "Hydrogen in transport: a review of opportunities, challenges, and sustainability concerns" in the "RSC Advances Journal", 2025 (29). Doi: <a href="https://doi.org/10.1039/D5RA02918J">https://doi.org/10.1039/D5RA02918J</a></li> <li>2. Dr. S. Suresh has published a research article titled "An Efficient Biphasic MoO<sub>3</sub>/ZrO<sub>2</sub> Catalyst for Visible Light-Driven Photocatalytic Degradation of Methylene Blue: Reusability and Detoxicity Assessment" in the "Physica Status Solidi A Journal", 2025 . Doi: <a href="https://doi.org/10.1002/pssa.202500169">https://doi.org/10.1002/pssa.202500169</a></li> </ol>

		<ol style="list-style-type: none"><li>3. Dr. K. Jayamoorthy has published a research review article titled “A comprehensive overview of titanium dioxide for sensor and medicinal applications” in the “Microchemical Journal” 2025 (216). Doi: <a href="https://doi.org/10.1016/j.microc.2025.114518">https://doi.org/10.1016/j.microc.2025.114518</a></li><li>4. Dr. K. Jayamoorthy has published a research article titled “Integrated experimental and in silico studies on thiophene carboxamide derivatives: synthesis, characterization, and biological evaluation” in the “Journal of the Iranian Chemical Society” 2025. Doi: <a href="https://doi.org/10.1007/s13738-025-03248-2">https://doi.org/10.1007/s13738-025-03248-2</a></li><li>5. Dr. K. Jayamoorthy has published a research article titled “Synthesis, molecular structure characterization, and in vitro and in silico investigations of heterocyclic N-butylamide-substituted carboxamides” in the “Chemical Papers” 2025. Doi: <a href="https://doi.org/10.1007/s11696-025-04239-6">https://doi.org/10.1007/s11696-025-04239-6</a></li><li>6. Dr. B. Subash has published a research article titled “Modern Screen-Printed Carbon Electrodes Modified with Multilayered Double Transition Metals Carbides (MXenes) for Ascorbic Acid Detection in Urine and Sweat Samples” in the “Journal of Molecular Structure” 2025 (1342) 142738. Doi: <a href="https://doi.org/10.1016/j.molstruc.2025.142738">https://doi.org/10.1016/j.molstruc.2025.142738</a></li><li>7. Dr. A. Dhivya has published a research article titled “Structural, Spectral, and Biological Investigations of Photosynthesized Selenium-Doped CaO Nanoparticles: Experimental and Theoretical Studies” in the “Journal of Molecular Structure” 2025 (10) e05776. Doi: <a href="https://doi.org/10.1002/slct.202405776">https://doi.org/10.1002/slct.202405776</a></li><li>8. Dr. K. Dhanaraj has published a research article titled “Ti-doped hydroxyapatite nanorods from the Crassostrea angulata waste shell: cell-viability and antibacterial activity” in the journal “Transition Metal Chemistry” 2025.</li></ol>
--	--	--

		<p>Doi: <a href="https://doi.org/10.1007/s11243-025-00676-0">https://doi.org/10.1007/s11243-025-00676-0</a></p> <p><b>Patents</b></p> <ol style="list-style-type: none"> <li>1. Dr. J. Sharmila has published a patent titled “Colorimetric Sensor System and Method for Rapid Detection of Heavy Metal Ions in Aqueous Environments” in the “Official Journal of the Patent Office – Journal issue 23/2025” – dated 06-06-2025.</li> <li>2. Dr. C. Chandrasatheesh has published a patent titled “A System And Method For Catalytic Conversion Of Biomass To Liquid Hydrocarbons Using Zeolitebased Catalysts ” in the “Official Journal of the Patent Office – Journal issue no. 28/2025” – dated 11-07-2025.</li> </ol> <p><b>Reviewers:</b></p> <ol style="list-style-type: none"> <li>1 Dr. S. Suresh – Current Organic Chemistry</li> <li>2 Dr. N.R. Rajagopalan – Physics and Chemistry of the Earth</li> <li>3. Dr. K. Jayamoorthy – Journal of Molecular Structure, Separation and Purification Technology, Journal of Photochemistry and Photobiology, Materials Science in semiconductor processing</li> <li>4 Dr. B. Subash - Discover Materials, Journal of Nanoparticle Research</li> <li>5. Dr. A. Dhivya - BMC Plant Biology</li> </ol> <p><b>Research Scholars: (June 2025 Session)</b></p> <ol style="list-style-type: none"> <li>1. Dr. P. Saravanan – 1 Scholar (Part time)</li> <li>2. Dr. P. Krishnan – 2 Scholars (Full time)</li> <li>3. Dr. B. Subash – 1 Scholar (Full time)</li> </ol>
12	<b>Funded Projects</b>	--

13	Other activities(if any)	<p>As a part of Engineering Excellence – School Event,</p> <ol style="list-style-type: none"> <li>1. Dr. A. Uma Devi had coordinated events for 147 students from St. Thomas Matriculation Higher Secondary School, Chennai on 03-07-25.</li> <li>2. Dr. A. Uma Devi had coordinated events for 125 students from St. Thomas Matriculation Higher Secondary School, Chennai on 04-07-25.</li> <li>3. Dr. P. Krishnan had coordinated events for 118 students from Ramakrishna Mission Matriculation Higher Secondary School, Chennai on 23-07-25.</li> </ol> <p>As a part of Engineering Excellence – School Event – Expert Talk Session,</p> <ol style="list-style-type: none"> <li>1. Mr. Arun Kumar, Chief Operating Officer, Logwiz Institute, Chennai, had delivered a lecture on 25-07-25.</li> <li>2. Mr. S. Nithyanandhan, CSR Lead – Tamilnadu &amp; FS India, Capegemini had delivered a lecture on 31-07-25.</li> </ol>
----	--------------------------	--