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Excelsion

St. JOSEPH'S COLLEGE OF ENGINEERING - WEEKLY NEWSLETTER



St. JOSEPH'S



COLLEGE OF ENGINEERING

(An Autonomous Institution)

St. JOSEPH'S GROUP OF INSTITUTIONS

OMR, CHENNAI - 119



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ABOUT THE COLLEGE

- O St. Joseph's College of Engineering is having 30 years of successful academic reputation offering 11 UG programs and 3 PG programs with a current intake of more than 1750 students per year.
- O Since inception, our Institution is consistently placed among the Top 10 institutions in terms of number of ranks. So far 1553 ranks including 57 Gold medals and 56 Silver medals have been secured by students. The college has been in 1st Place for 4 times in terms of fetching highest numbers of Anna University ranks.
- The College is continuously being ranked by in National Institutional Ranking Framework (NIRF) since 2017 and ranked in '101 150 band' at National Institutional Ranking Framework under Innovation category (NIRF- Innovation 2023).
- O Accredited with A+ grade by securing 3.46 on a scale of 4.00 by National Assessment and Accreditation Council (NAAC).
- O 10 departments have been recognized as 'Research Centers' by Anna University to pursue Ph.D. and also recognized as 'Scientific and Industrial Research Organization' (SIRO) since 2014 by DSIR, Government of India.
- Our institution has received 2nd Rank in Performers band of NSIIR 2023 (National Sustainability Impact Institutions Ranking) organized by NITI AAYOG & ATAL Innovation Mission for our initiatives in support United Nation's Sustainable Development Goals.
- Our research publications have resulted in fetching Scopus h-index 67 and Web of Science h-index 59 for our institution.
- Our institution is the recognized 'Linguaskill Centre' for Cambridge English Assessment in India & one among 25 South Asia Best Preparatory Centers for Business English Certification (BEC).
- O So far 57 Sponsored Research Projects to the value of Rs. 5.04 Crores and 48 Faculty Training Programs with a grant of Rs.71.51 lakhs and FIST grant of Rs.71 Lakhs were received from AICTE, NRB, DST, SERB, DBT, NRDMS, ISRO, TNSCST & Anna University etc.
- O INAE Innovative Project Awards (21 Projects) were bagged by our students for their innovative projects.



ABOUT THE COLLEGE

- Our Institution is selected under the National level "Unnat Bharath Abyan Programme" by MHRD Government of India and Skill and Personality Development program Centre (SPDP) for SC/ST by AICTE, and received a grant of Rs.17 lakhs grant under PMKVY program.
- O Won First AICTE-ECI Chhatra Vishwakarma award in 2017 as a Best Institute at National level.
- O Won 1st position in "Utkrisht Sansthan Vishwakarma Award", 2020 by AICTE in association with Ministry of Human Resource and Development (MHRD).
- Secured AICTE-Lilavati Awards in 2021 and 2022: Winner under the stream of Women Security, Runner under Hygiene and Sanitation themes in 2021 and Runner in Women Empowerment 2022.
- College has secured 4star rating for the activities carried out in the campus by Institution's Innovation Council (IIC). In 2023 the college has received 4 project grants worth of Rs.56

 Lakhs for Business incubation by MSME, MOE, & Government of India
- O Consistently our students are securing winning positions in National Level Innovative idea competitions such as AICTE Smart India Hackathon in Hardware and software, Toycathon, Mapathon etc.
- O We have Secured 58th Rank by Internshala Annual Ranking 2023 and our Institution is consistently awarded "National Employability Award" every year since 2017 by Aspiring Minds.
- Our college is recognized as India's Best Engineering Institute 2023 with AAAA rating by Careers 360 organization.
- Our Institution is listed in India Book of Records for hosting National Level FDP on Cloud Infrastructure organized by BRAIN O VISION, and supported by AICTE, Ministry of Education, Govt. of India.



Vinayagar Chathurthi Celebrations



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Teacher's Day

Department of Mechanical Conducted Teachers day Celebration on 04/05/2024 in Indoore Auditorium. Students with 9and Above CGPA was Felicitated and Cultural Activity was conducted







Teacher's Day

"The MBA department celebrated Teachers' Day in a grand manner, which included teacher engagement activities, student cultural events, and the distribution of mementos to the staff."



"The MBA department awarded a cash reward of ₹10,000 to students who achieved a CGPA of more than 9, with a total of ₹1.56 lakh distributed."



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Department of EEE celebrated Teacher's Day on 5 September. Various cultural activities were showcased by our students. Prizes for Various Clubs winners, Student Chapter members and Academic Toppers were awarded during the event











INDUSTRY ACADEMIA INTERACTION

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Department of Biotechnology has signed a Memorandum of understanding with Bioregen Technologies-Keelkattali on 04/09/2024.

Tamil Nadu project

"The Department of MBA has secured a Tamil Nadu project worth ₹20 lakhs. As part of the project, the team conducted a field visit for data collection. In the picture, MBA staff members Dr. Jawahar Rani and Dr. Lekshmi can be seen in the field with the farmers."



TNSCST Project







Dr. R. Selvam



Mr, S. Badrinath

Dr. R. Selvam, Associate Professor from Department of Mechanical Engineering, along with Two final year Students, Mr. M. Aaron Felito & Mr, S. Badrinath received Grant of Rs. 7500/- from Tamil Nadu State Council for Science and Technology for the Title "Sustainable Design and Development of a Cost Effective Vacuum Pump for Waste Water".





Dr. K. Jayamoorthy from the Department of Chemistry has received project by the Tamil Nadu State Council for Science and Technology, located at the DOTE Campus in Chennai-25. This project, titled "Solvent-Free Synthesis of Chemosensor for the Detection of Metal Ions" (project code CHE-464), falls under the Student Project Scheme for the year 2023-24 and is funded with an amount of Rs. 7,500.



The Department of Artificial Intelligence and Machine Learning at St. Joseph's College of Engineering, in association with the National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, conducted a National Level Faculty Development Programme on deep learning for engineering applications. This five-day event brought together faculty members from across the nation to explore the latest advancements in deep learning and its applications in engineering. The program offered hands-on training and expert-led sessions designed to enhance participants' knowledge and skills, fostering the integration of deep learning techniques into engineering education.

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GUEST LECTURES

Dr.Rayala Suresh, Professor in Indian Institute of Technology-Madras, delivered a guest lecture titled "Patient derived explant (PDex) and patient derived xenograft model for anticancer drug discovery. on 06/09/2024 at Library AV Hall.









The Department of Artificial Intelligence and Machine Learning at St. Joseph's College of Engineering recently organized an engaging guest lecture on the benefits of CSI membership. The session was led by Dr. M. Senthil Kumar, Chairman of the Kancheepuram Chapter of the Computer Society of India (CSI). During the session, he elaborated on how membership in CSI can open doors to a wide range of professional development opportunities, networking platforms, and access to cutting-edge resources in the field of computer science and IT.

St. Joseph's College of Engineering hosted an exciting quest lecture on initiatives entrepreneurship students in their second and third years. The session was delivered by Mr. Balaji Arumugam, Founder and CEO of BigBucks Innovation Private Balaji Limited. Mr. shared his insights into entrepreneurship, emphasizing importance the innovation, leadership, and strategic planning for aspiring entrepreneurs.

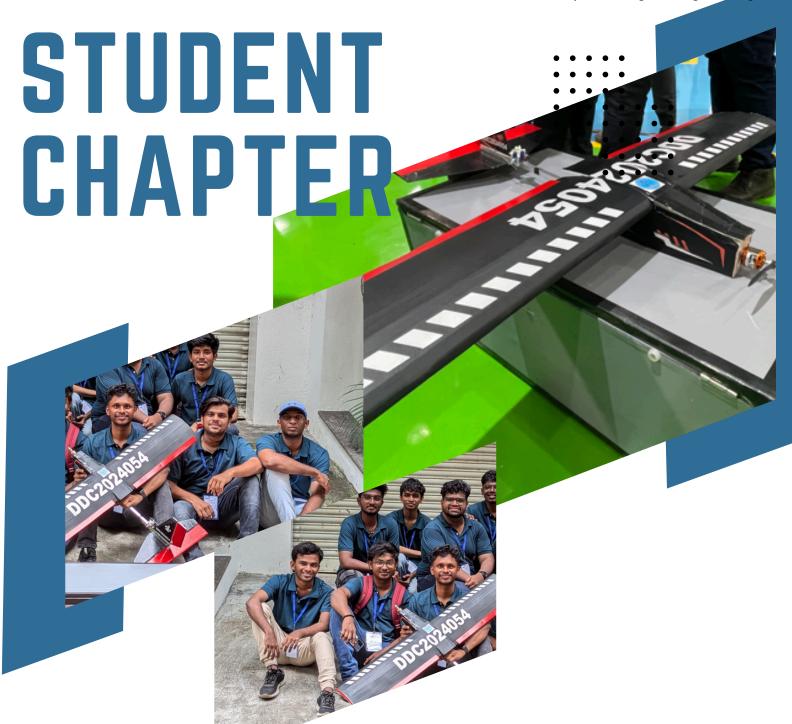


Dr. Nabeel from IITM Research Campus delivered a guest lecture on September 4, 2024 to Second year ECE Students, highlighting the innovative potential of healthcare startups. He emphasized the rapid growth of the sector, driven by technological advancements and personalized healthcare solutions. Dr. Nabeel provided a comprehensive overview of different categories within health startups, including telemedicine, wearable devices, digital therapeutics, and Al-driven diagnostics.





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As part of SAE Student Chapter Activity, Mechanical Department students from 2024 passed out students, 4th and 3rd year Students participated in Drone Design Challenge 2024, took place in SRMIST Kattankulathur 28/08/2024 to 31/08/2024. 100 Teams from All over India participated in this Event from 3 level of Scrutiny which is happening from July 2023. From 800 Teams, 100 teams where shortlisted in Micro Class Aircraft Category. Team ACES HIGH Being Finalist we secured All India Rank 8th out of 50 top teams and state rank 2nd out of 22 State teams.

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Dr. Jacinta Lamontagne, an Executive Coach, Consultant, and Dentist

Department of EEE and IEEE conducted a webinar titled "Powering the Future: How to Communicate like a Leader" on 2nd September 2024. The session aimed to equip participants with essential communication skills necessary for leadership roles, discussing strategies for clear and impactful communication.



Ms. Reshmaja K Ramesh, Avionics Engineer at The ePlane Co Citizen Scientist, NASA

Department of EEE and IEEE conducted Space Exploration Webinar Series. Held on September 06 2024. Presentation, titled "Autonomous Flight Systems: The role of Avionics in Enabling Aircraft & Drones," offered in-depth insights into Avionics Technology in Enabling Aircraft and Drones.

OUTCOME:

- To know about the Advanced Avionics.
- To Enable Safe & Efficient Operation of Aircraft & Drones.
- Understand about it's Operation & Working Principles.



Ms. Simran Khokha, Product manager at Infineon Technologies, Germany.

Department of EEE and IEEE organized A Webinar Session titled "SEMICONGLOBAL" on September 7, 2024. The topic for the session was "Navigating Semiconductor Industry Globally". Discussions were about the global semiconductor industry faces rising demand, supply chain disruptions, geopolitical tensions, and rapid technological advancements, requiring strategic innovation and regional diversification to navigate successfully.

DATA ECHELON'24



National Level Technical Symposium

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE





TECHNO TALENTUM 24 @ Thiruvarur



TECHNO TALENTUM 24 @Tiruchirappalli



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NGO 10.09.2024



Little Flocks Children Home, SP Kovil

Anbu Thondu Nilaiyam
Chengalpattu,
12.667789,79.995676

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Staff Achievements

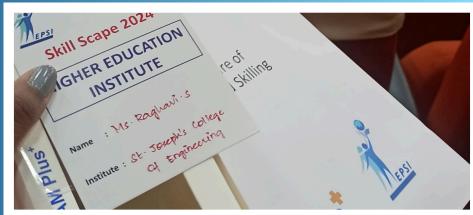
- Dr. G. Meena Devi, Professor & Head, Department of Mathematics & English has published three research articles titled, "Echocardiographic cardiac views classification using whale optimization and weighted support vector machine" in Bernabe et al. Vessel Plus with Vol 8:29 (2024), "Breast Cancer Detection based on PCA feature selection process using an ensemble learning algorithm" in AIP Conference Proceedings with Vol 2937, 020024 (2024), "Machine Learning for autonomous vehicles" in AIP Conference Proceedings with Vol 2937, 020031 (2024),
- Dr. G. Purushothaman, Professor, Department of Mathematics & English has published a research article titled, "Second-Order Noncanonical Delay Differential Equations with Sublinear and Superlinear Terms: New Oscillation Criteria via Canonical Transform and Arithmetic-Geometric Inequality" in Qualitative Theory of Dynamical Systems with Vol 23:269 (2024).
- Dr. S. Gopi Krishna, Assistant Professor, Department of Mathematics & English has published a research article titled, "Magnetized Casson hybrid nanfluid flow under the influence of surface-catalyzed reactions over a porous moving wedge" in AIP Advances with Vol 14, 085324 (2024).
- Dr.G.Baskar from Department of Biotechnology has published a book chapter titled" Industrial organic waste and byproducts as sustainable feedstock for bioenergy production" circular bioeconomy perspective in sustainable bioenergy production.
- Dr. S. Sujatha, Assistant Professor in the Department of Chemical Engineering, has published a research paper titled "Metal-organic framework-enabled biomass conversion technologies for microalgae bio-refinery in the food industry," published in the Journal of the Science of Food and Agriculture. The paper, co-authored with Rajasimman, M., Sanjay, S., Kishore, V., Senthil Rathi, B., Rezania, S., Kamyab, H., and Vasseghian, Y., explores innovative biomass conversion technologies using metal-organic frameworks for applications in the food industry with an Impact Factor of 3.6
- Dr. P. SARAVANAN from the Department of Chemistry has authored a research article titled "Growth and Characterization of Oxalic Acid Di-Hydrate Crystals: Pure, Milled, and Shocked Impact of 50 Scaling for Applications in Electronics, Photonics, Displays, and Sensors, Supported by Theoretical and Practical Insights." This article is published in the ECS Journal of Solid State Science and Technology, Volume 13, Issue 8, on 30 August 2024.

Staff Achievements

- Dr. N. PUNITHA from the Department of Physics has recently authored a book chapter titled "The Physics of Material Strength and Deformation." This chapter is included as Chapter 5 in the publication "Exploring Advanced Materials for Engineering Applications."
- Dr. V. Swarnalatha from the Department of Chemistry has published research article on "Synthesis, Studies of Shocked Pulse of 50 Scale on 100 Gy Irradiated Zinc Acetate Crystals for Photonic, NLO, Phase-Matching and Electronic Utilities." ECS Journal of Solid State Science and Technology (2024), Volume 13, Number 8, Published 27 August 2024.
- Dr. S.Aghalya Published a journal titled "Cloud based prediction of epileptic seizures using real-time electroencephalograms analysis", in International Journal of Electrical and Computer Engineering.
- Dr.R.Niruban Published a journal titled "Enhancing hyperspectral image classification with graph attention neural network", in Journal of Electronic Imaging.
- Dr. K. Jayamoorthy from the Department of Chemistry served as a Resource Person at the International E-Conference titled "AI Meets Physics: Current Trends & Future Prospects" (ICAIP 2024). This event was organized by the Department of Physics at Chevalier T. Thomas Elizabeth College for Women and took place on August 29, 2024.
- Dr. K. Jayamoorthy from the Department of Chemistry has received project by the Tamil Nadu State Council for Science and Technology, located at the DOTE Campus in Chennai-25. This project, titled "Solvent-Free Synthesis of Chemosensor for the Detection of Metal lons" (project code CHE-464), falls under the Student Project Scheme for the year 2023-24 and is funded with an amount of Rs. 7,500.
- 7 Dr. Justin Packiaraj Jacobs from Department of Biotechnology has served as External Expert for the Academic Audit at Vels Institute of Science, Technology and Advanced Studies on 4/09/2024.







"Ms Raghavi.S" from Department of computer science and engineering, Attended a workshop at IIT Madras as part of **Skillscape 2024** on SWAYAM Plus, focusing on integrating industry-relevant syllabi into higher education to ensure students are "industry-ready from day 0." The workshop highlighted the need for academia to collaborate with industry partners to update curricula, incorporate practical skills, and enhance employability. It also showcased the SWAYAM Plus platform as a valuable tool for flexible learning and bridging the skills gap. The insights gained will help align academic programs with current industry needs, preparing students for a seamless transition into their careers.



Students Achievement

MICROSOFT CERTIFIED POWER BI DATA ANALYST ASSOCIATE



Congratulations to Jeev Toby for Achieving Microsoft Certification!We are proud to announce that Jeev Toby has successfully earned the Microsoft Certified: Power BI Data Analyst Associate certification. This prestigious certification recognizes Jeev's expertise in using Microsoft Power BI to transform, analyze, and visualize data, providing valuable insights for business decision-making. Congratulations, Jeev, on this remarkable achievement!

Ms. Ishanha Karan, a fourth-year Chemical Engineering student, has achieved outstanding results in the GRE exam, scoring 160 out of 170 in Verbal Reasoning, a perfect 170 out of 170 in Quantitative Reasoning, and 5 out of 6 in Analytical Writing. Her exceptional performance reflects her strong analytical and verbal skills, positioning her well for future academic and professional opportunities.



R. Vaishali, a second-year Chemical Engineering student, earned a bronze medal in the "Above 19 to 21 PI(-210)" category at the 2nd KUDO National Championship, held at Green Hills College of Engineering in Solan, Himachal Pradesh, from May 25th to 30th. Her achievement reflects exceptional skill and determination, bringing pride to her institution and inspiring her peers. In recognition of her success, she was awarded Form-2, underscoring her accomplishment on the national stage.

From the Department of computer science and engineering, we proudly present the achievers Students"Shivasreetha.S,Srivarshini.P,Yashawini Chandrasekar,Yashwanth B". Won "Second place" on technical symposium named "wissenaire'3" at "Saveetha Engineering college".



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From the Department of computer science and engineering, we proudly present students from batch (2021-2025) "Srinithi k, Sandeep Roshan T R, srivarshini S" has been selected for "District wise boot camp" under the guidance of Dr.G.Brindha. The event was held among various students from different institutions at Thiruvallur district, Chengalpattu district, kanchipuram district, Cuddalore district boot camp in MIT Chennai



Department of Computer Science and Engineering, are happy to share that our second year students from batch (2023-2027) has attended workshop at "IIT MADRAS" on emerging field "Python Programming".



From the Department of computer science and engineering, students from batch (2023-2027) "shobika.k, Tiffany.A, Sai varshini" has participated and won "Second place" with cash award of "Rs 1000/-" in National level symposium, technical event "GUESSTIMATE" which was held at "Velammal Engineering College", Chennai.





Adithyaa R, a final-year mechanical engineering student, has secured an internship in Gemini Cooling Systems Projects Pvt.Ltd. in Chennai. The position offers a monthly stipend of Rs. 6500.Gemini Cooling Systems Projects Pvt Ltd is a specialist in HVAC (Heating, Ventilation, and Air Conditioning) and undertakes prestigious projects in both ElectroMechanical and HVAC, including ventilation, BMS, electrification, and relevant works as per international standards.

Charan Velavan of Final year ECE secured second place in the Speech Contest held by Toastmasters International. This is a remarkable achievement that showcases his excellent communication and public speaking skills.







ECE Student Benie Jaison Secures Prestigious Internship at MANTISWAVE.



Benie Jaison, a final-year ECE student, has landed a prestigious internship at MANTISWAVE, a leading 5G network developer. As part of the internship, Benie will be collaborating with talented IITians at IIT Roorkee, providing him with a unique chance to learn from industry experts and network with like-minded individuals. With a generous stipend of Rs. 20,000 per month, Benie is well-supported to focus on his internship and make the most of this experience and for his future career in the telecommunications industry.

















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