

Institute of Electrical and Electronics Engineering

IEEE St. Joseph's College of Engineering Student Branch chapter (SBC60101)

Objective

The primary objective of the IEEE Student Branch is to engage members in technical, professional, and leadership activities that foster their personal and professional growth. Through active participation, collaboration, and hands-on learning, the branch aims to build a vibrant IEEE community that drives innovation and benefits society.

Vision

The IEEE Student Branch at St. Joseph's College of Engineering envisions inspiring and energizing students, sparking their technical interests through a dynamic platform. The branch encourages exploration, creativity, and innovation, empowering students for academic and professional growth. As a center for exchanging ideas and developing skills, the branch aims to prepare students to excel in an evolving technological landscape.

Mission

The branch's mission is to host events showcasing cutting-edge technologies, drive increased IEEE membership and retention, and create opportunities for project development through Special Interest Groups. Additionally, the branch aims to secure IEEE-sponsored awards and represent its work at international conferences, establishing a strong global academic presence.

The IEEE Student Branch at St. Joseph's College of Engineering, established in 2015, has steadily evolved into a powerful platform for promoting technical innovation, education, and leadership among engineering students. From its inception, the branch has been driven by the goal of nurturing young engineers, not only in technical prowess but also in essential soft skills that shape well-rounded professionals. Over time, the branch has expanded its scope and offerings, becoming a vibrant ecosystem that now includes 17 technical societies and 2 affinity groups. Notably, the branch hosts the SIGHT society (Special Interest Group on Humanitarian Technology), which is uniquely exclusive to the IEEE Madras Section. This society enables students to work on projects that address pressing societal issues, applying engineering solutions to humanitarian needs. Additionally, the Tamil Mandram Affinity Group has been established as a valuable resource, encouraging students to engage in technical learning in Tamil. This innovative initiative has made learning more inclusive, accessible, and culturally resonant, especially for those who may benefit from learning in their native language.

Since 2015, membership in the IEEE SJCE Student Branch has seen consistent growth, with numbers climbing from an initial count of 80 members to almost 300 by 2024. This growth reflects the branch's increasing appeal and its reputation for high-quality educational experiences, technical engagement, and career-building opportunities. The student branch has established itself as an integral part of campus life, offering resources, workshops, and opportunities that support students



across various stages of their engineering education. Its strong membership base underscores the enthusiasm and commitment of the student body toward IEEE's vision and mission.

In 2024, the IEEE SJCE Student Branch organized over 150 events, an impressive feat that underscores its commitment to meaningful, diverse student engagement. Each event offers unique value, enriching the learning experience and encouraging students to explore various domains of engineering and technology. Key events include the Ecorev Cycle Rally, a sustainability initiative organized in collaboration with the IEEE Madras Section to promote environmental awareness among students. Womansera, a prominent Women in Engineering (WIE) event, was also held to inspire and empower women pursuing careers in technology and engineering. This event aligns with IEEE's goal of supporting women in STEM and was well-received, strengthening the branch's reputation for promoting gender diversity in engineering fields.

Other flagship programs include the Erudite Webinars series, an international initiative that has featured over 80 speakers from around the world, offering insights across a variety of technical and professional topics. Another highlight is the Space Exploration Series, which provided students with the unique opportunity to interact with experts from NASA. This series fostered an environment where students could learn about cutting-edge advancements in aerospace technology, fueling their curiosity and ambitions in this specialized field. Additionally, the CONOCITHON 3.0 hackathon, a 36-hour event, brought together some of the brightest minds in engineering to solve real-world problems through technology. Events like IEEE Day, PELS Day, and the Tamil Symposium further exemplify the branch's dedication to fostering technical skills, creativity, and a strong sense of community.

The IEEE SJCE Student Branch has successfully garnered significant funding to support its wide range of initiatives, reflecting trust and recognition from IEEE and other supporting bodies. In 2024, the branch received \$850 for TechX, ₹15,000 for Conocithon 3.0, ₹50,000 for the PELS Project Expo and \$400 for the PES Best Student Branch award. The branch's Women's Day celebrations also received financial support of ₹5,000 from the IEEE WIE Madras Section. This funding has been crucial in enabling the branch to scale its events, host high-profile speakers, and offer state-of-the-art resources to its members. With this support, the branch has been able to execute events that meet professional standards and provide students with experiences that closely mirror real-world industry practices.

These achievements are complemented by an impressive roster of awards and recognitions, showcasing the branch's dedication to excellence and its impact on the IEEE community. The branch has been honored with the Outstanding Student Branch Award and Best WIE Student Branch Award from both the IEEE India Council and IEEE WIE Madras Section. Individual members have also excelled, with six students earning the prestigious Richard E. Merwin Scholarship, which is awarded to exemplary IEEE members who demonstrate academic and



leadership potential. Additionally, some students received the R10 Outstanding WIE Student Volunteer Award, further highlighting the branch's commitment to fostering talent and leadership.

The IEEE Student Branch at St. Joseph's College of Engineering continues to make a substantial impact, not only within its campus but also within the broader IEEE community. For the past four consecutive years, the branch has secured the EUREKA title from IEEE Pune Section, a testament to its consistency in maintaining high standards and achieving remarkable results. The branch has also earned numerous accolades in national and international competitions, positioning it as a competitive and well-respected entity in IEEE's global community. Moving forward, the branch aspires to expand its reach, collaborate with more technical societies, and continue providing a platform where students can develop the skills and knowledge required to excel in the rapidly evolving world of technology. Through its events, funding successes, and unwavering commitment to academic and professional development, the IEEE SJCE Student Branch exemplifies what a dedicated and innovative student organization can achieve.

Since its inception in 2015, the IEEE Student Branch at St. Joseph's College of Engineering has established itself as a dynamic entity within the academic community. Through diverse events and initiatives, it fosters technical expertise and professional growth among its members, actively engaging in outreach efforts that benefit society as a whole. The branch's commitment to innovation, education, and community service positions it as a leader among student branches in the region, continuously adapting to meet the needs of its growing membership base.













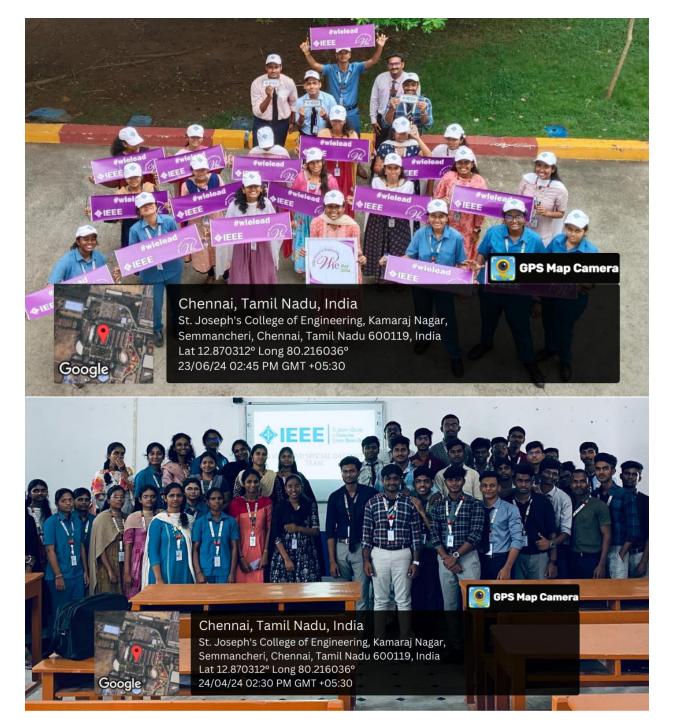










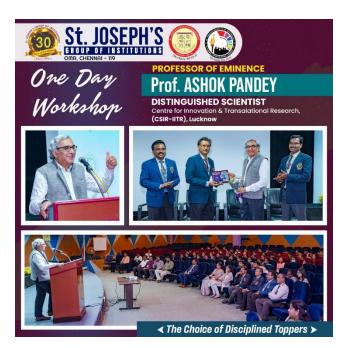




Biotech Research Society of India

The Biotech Research Society of India (BRSI) Chapter at St. Joseph's College of Engineering is dedicated to advancing research and innovation in the field of biotechnology. Our society serves as a dynamic platform for students and researchers to engage in scientific exploration, knowledge sharing, and skill enhancement. We regularly organize a variety of events, including workshops, seminars, conferences, and training programs, aimed at fostering research development and keeping participants abreast of the latest advancements in biotechnology.

Through these initiatives, the BRSI Chapter emphasizes hands-on learning, collaboration with industry experts, and the dissemination of innovative ideas. Our mission is to inspire and equip students with the tools and knowledge they need to excel in their academic and research endeavors, ultimately contributing to the growth and development of biotechnology in India and beyond.













Madras Management Association (MMA) Student Chapter

ABOUT MMA

Madras Management Association was established in 1956 with the prime objective of promoting management education, training, and development activities in this part of the country. The vision of MMA is "To be the fountainhead of World class Management Excellence in India".

Over the past 62 years, MMA has striven for development and nurturing management expertise, combining Indian ethos with International Management thoughts and practices. MMA has contributed immensely to the enhancement of management capability in this part of the country, and in particular Tamil Nadu and Puducherry. MMA has over 7000 corporate houses, industries, professionals, academics and executives on its rolls as members. MMA annually organizes about 650 executive development activities, including seminars for top management with a total participation of 45,000 executives and entrepreneurs.

MMA is the largest affiliate association of All India Management Association (AIMA) in the country and has been adjudged as the Best Management Association in the India by AIMA for ten times in a row including the "National Excellence Award" for the year 2017-18.

MMA STUDENT CHAPTER

We have established the MMA student's chapter in our institution which provides us an opportunity to work closely with management executives. Besides conducting guest lectures/workshops at our institution, we also participate in numerous events being conducted by MMA. In order to empower the students with industry exposure and management wisdom, MMA notify the students through e-mails/SMS, regarding the various complimentary events being held at MMA and other parts of the city. This would provide a good opportunity for the students to interact with the guest speakers, industry professionals and their counterparts from other institutions, to strengthen their professional network. The students are encouraged to participate and derive the benefits from such programmes, which will go a long way in enhancing their professional competencies and shaping their career. Each student member would also be issued with a certificate at the end of the academic session, for having participated in MMA activities. Details of activities offered to management students as part of MMA student chapter activity are



- Connectivity for Live webcast MMA series of evening talks on Success stories/ Leaders speak etc.,
- Guest Lectures for the benefit of management students
- Video discussion at campus on any of the video management title available at MMA library
- Workshops at college campus
- Participation in MMA workshops/Certificate courses at a special discounted fee
- Complimentary participation in video discussions at different locations organized by MMA in Chennai
- Participation in Annual Management Student convention at a special discounted fee
- Few complimentary copies of MMA monthly magazine
- Short term certificate courses at a special discounted fee at college campus for the benefit of student members
- Complimentary participation to Professors/Lecturers of the respective institutions in some of the very popular seminars/lectures.













Indian Institute of Chemical Engineers

The Indian Institute of Chemical Engineers (IIChE) Student Chapter at St. Joseph's College of Engineering is committed to fostering excellence in chemical engineering education and research. Our society serves as a hub for aspiring chemical engineers, providing them with opportunities to expand their academic and professional horizons through a variety of enriching activities.

Our chapter is actively involved in hosting a wide range of events aimed at enhancing both technical knowledge and practical skills. These include guest lectures from industry leaders, technical workshops, hands-on training sessions, and national and international conferences. By engaging with experts from academia and industry, students gain valuable insights into the latest trends and technological advancements in chemical engineering, making them well-prepared for future challenges in the field.

Workshops and training programs organized by the IIChE Chapter emphasize experiential learning, allowing students to apply theoretical concepts to real-world problems. For example, sessions on process simulation, safety engineering, and sustainable chemical processes equip students with the necessary skills to tackle industry-related challenges effectively. We also conduct plant visits and industrial tours to provide a practical understanding of chemical engineering operations and practices.

In addition to technical programs, the IIChE Chapter encourages students to participate in collaborative projects and research activities, fostering a spirit of innovation and problemsolving. The society also focuses on interdisciplinary collaboration, highlighting the role of chemical engineers in addressing global challenges such as environmental sustainability, energy efficiency, and clean technology development.

Furthermore, we promote student involvement in national and international competitions, enabling them to showcase their talents and compete with peers from other prestigious institutions. Through these diverse initiatives, the IIChE Student Chapter at St. Joseph's College of Engineering plays a pivotal role in shaping the future of chemical engineers by nurturing a culture of continuous learning, research excellence, and professional growth.









Society for Automotive Engineers

The Society of Automotive Engineers (SAE) India Chapter at St. Joseph's College of Engineering plays a pivotal role in shaping students into industry-ready professionals through practical, hands-on experiences and high-profile competitions.

A significant highlight of our chapter's initiatives is the BAJA SAEINDIA 2024 competition, which challenges engineering students to design, build, and test single-seater all-terrain vehicles (ATVs). The event is conducted in multiple phases:

1. Preliminary Round (Phase 1):

- Held in July 2022, this round involves a virtual presentation of finalized ATV designs and implementation strategies, focusing on teams' technical and professional capabilities.

2. Virtual BAJA SAEINDIA (Phase 2):

- This phase includes both Virtual Dynamic Events and Digital Static Events, testing knowledge in design, cost analysis, and sales presentation.

- Dynamic Events, like maneuverability and all-terrain performance, are conducted using benchmarked Automotive Simulation software (IPG CarMaker). This round evaluates software proficiency, design understanding, cost efficiency, and business skills.

3. Physical Round (Phase 3):

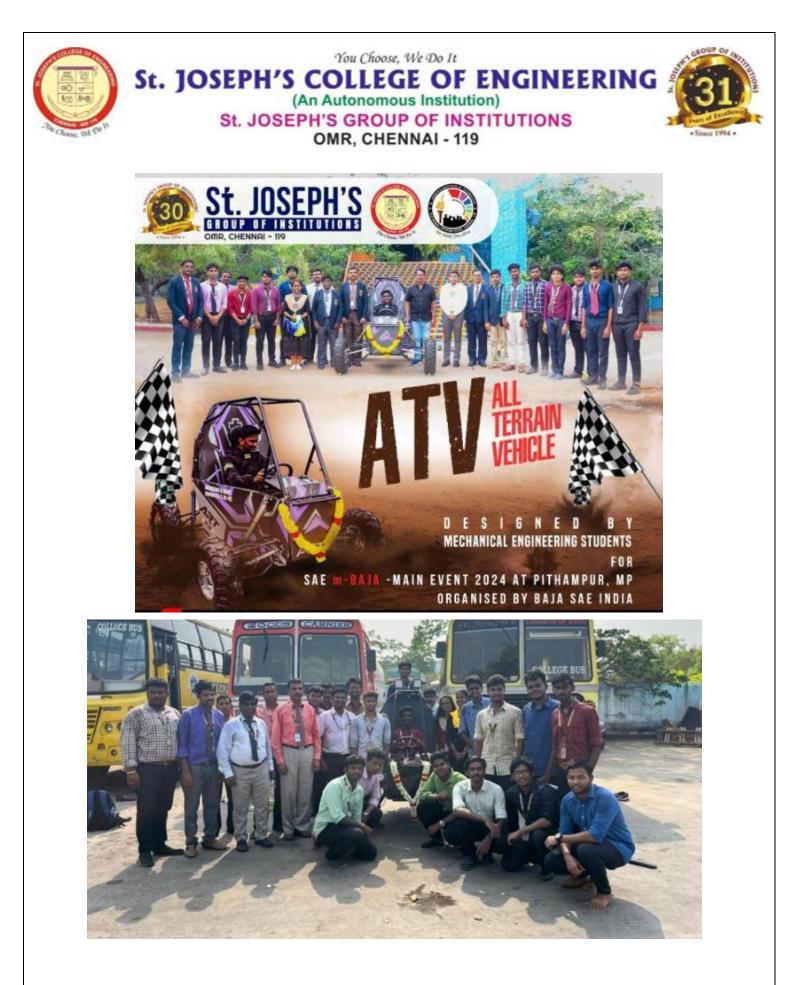
- The physical evaluation is split into mBAJA (January) and eBAJA (March) events, testing buggies in acceleration, maneuverability, suspension, traction, and endurance.

- Our M-Baja Team, Aurelian Racing Team, ranked in the top 100 out of 450 teams nationwide, and our E-Baja Team, Inferno Racing Team, secured a spot in the top 50 out of 300 teams. Both teams successfully competed in the physical rounds at Pithampur and Bangalore, respectively. Our chapter also hosted the Drone Design Challenge 2023, aimed at nurturing innovation and aero design skills among students. This event featured design presentations, prototype development, and flight testing, further enhancing our members' expertise in uncrewed aircraft systems. Through events like BAJA SAEINDIA and the Drone Design Challenge, the SAE India Chapter

at St. Joseph's College of Engineering fosters an environment of innovation, teamwork, and technical mastery, preparing students to excel in the automotive and aerospace industries.











Indian Society of Heating, Refrigerating and Air Conditioning Engineers Student Chapter

The Department of Mechanical Engineering at St. Joseph's College of Engineering, OMR, Chennai, organized the ISHRAE Student Chapter Installation Ceremony on30th September 2024. The event, held between 8:00 AM and 9:30 AM at the Placement Block, marked the formal inauguration of the ISHRAE Student Chapter for the new academic year.

The Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) is a professional organization dedicated to promoting the HVAC&R industry in India.

Objectives of the ISHRAE Student Chapter

The ISHRAE Student Chapter aims to bridge the gap between academia and industry, offering students opportunities to enhance their knowledge and skills in the HVAC&R field. The installation ceremony marked the beginning of various activities for the year, which include:

Technical Workshops: Offering students training on the latest HVAC&R technologies and tools. **Industrial Visits:** Allowing students to observe and understand real-world applications of

HVAC&R systems.

Guest Lectures: Featuring experts from industry to share insights and advancements in the field.

Research and Innovation Projects: Encouraging students to work on projects that address current challenges in energy efficiency, sustainability, and smart building solutions.

These initiatives aim to equip students with the necessary skills to excel in their careers and contribute meaningfully to the industry











Optical Society of America

The Optical Society (originally established as The Optical Society of America, OSA) is a scientific society dedicated to advancing the study of light—optics and photonics—in theory and application, by means of publishing, organizing conferences and exhibitions, partnership with industry, and education. The organization has members in more than 100 countries. As of 2017, OSA had over 20,000 individual members and more than 265 corporate member companies.

OSA was founded in 1916, under the leadership of Perley G. Nutting, with 30 optical scientists and instrument makers based in Rochester, New York. OSA soon began publication of its first journal of research results and established an annual meeting. It was founded as the "Optical Society of America" and has evolved into a global enterprise with a worldwide constituency. In recognition of this, the society was renamed in 2008 as The Optical Society (OSA).

Being a member of a professional society like the Optical Society of America (OSA) helps students build their professional identity early on and stay ahead in the rapidly evolving field of optical science and engineering. Membership provides access to certifications, specialized workshops, and a wealth of resources, including exclusive job boards, career development programs, and opportunities for global networking. These benefits not only enhance a student's resume but also demonstrate to potential employers a strong commitment to continuous learning and professional growth.

At the Department of Electronics and Communication Engineering (ECE) at St. Joseph's College of Engineering, the OSA Student Chapter plays a pivotal role in empowering students. The chapter regularly organizes events such as guest lectures, technical seminars, hands-on workshops, and international webinars that expose students to advanced concepts in optics, photonics, and laser technology.

Through the OSA, students at St. Joseph's College of Engineering gain not only technical expertise but also leadership and teamwork skills, preparing them for a successful transition from academics to professional life. The chapter's initiatives ensure that members are equipped with a global perspective and the confidence to contribute effectively to the advancements in optical science and engineering.















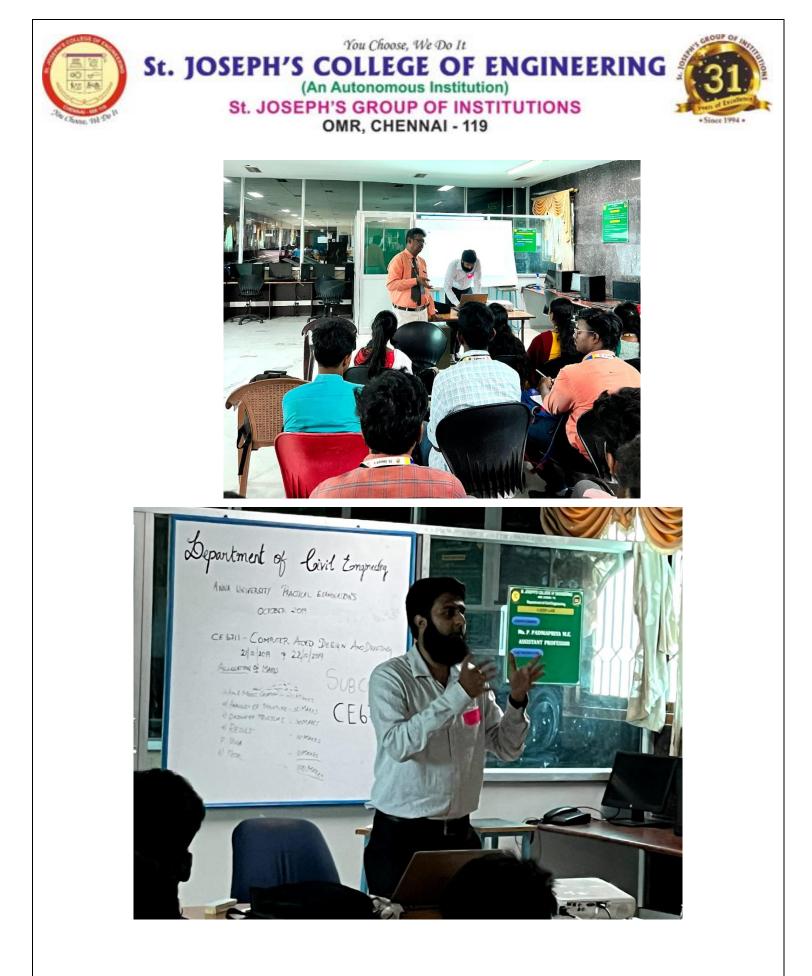
Indian Concrete Institute

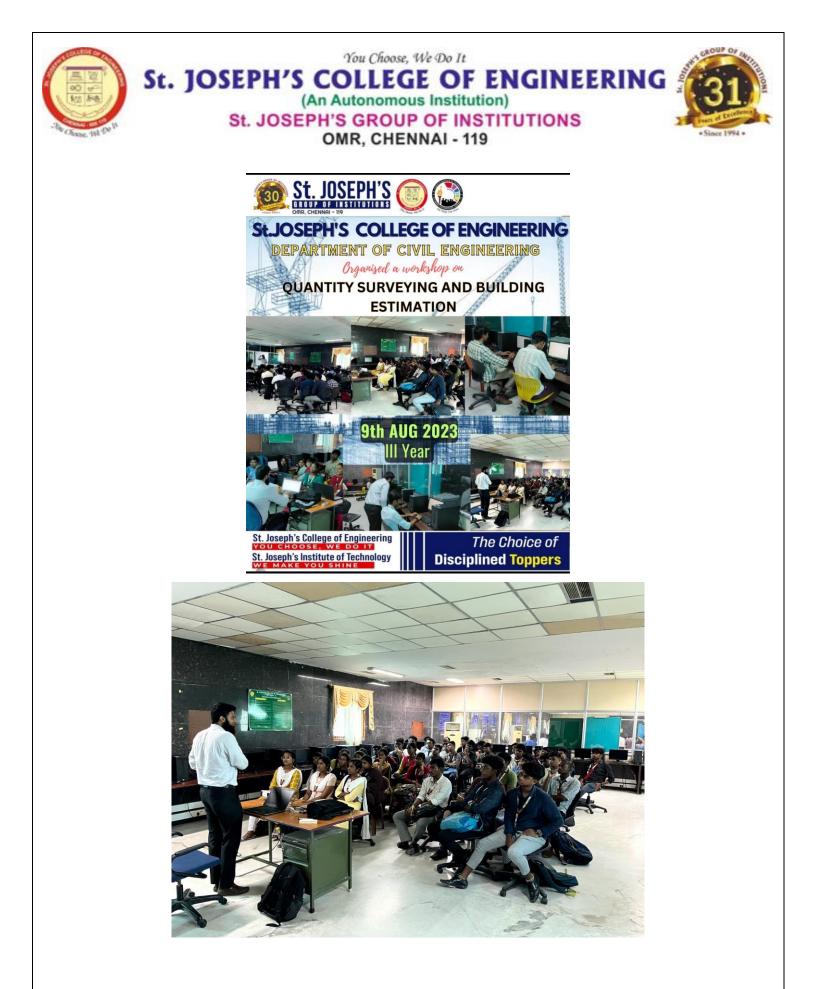
Indian Concrete Institute is one of the leading professional bodies in India, catering to the professional needs of individuals and organizations involved in Concrete. Being a non-profit Organization, it is dedicated to the cause of Disseminating Knowledge on Concrete, to Promote Concrete Technology and Construction and to address the Research Needs of Concrete. The Genesis of ICI dates back to the year 1982, when SERC Chennai and Anna University jointly conducted an International Seminar on Modern Concrete Construction Practices.

The overwhelming response to the seminar prompted the Organizers to start the Indian Concrete Institute. Thus, the ICI was born in 1982 with around 500 members from 5 regional Centres. Since then, there is no looking back and ICI has grown in leaps and bounds. Today ICI is a strong professional body having more than 12, 000 enrolled members, from 38 regional Centres in all major cities, spread across the entire length and breadth of the country. Of these, more than 270 are Organizational Members. All segments of cement and concrete industries are widely represented in the membership.

The Indian Concrete Institute (ICI) Society at St. Joseph's College of Engineering plays a vital role in equipping students with in-depth knowledge of concrete technology and construction practices. It organizes hands-on workshops, technical seminars, and industry visits to bridge the gap between academics and real-world applications.

The society promotes innovation in sustainable construction techniques and offers students a platform to engage with industry experts, enhancing their technical and practical skills. Through active participation in ICI activities, students gain insights into modern construction trends, preparing them for a successful career in civil engineering and contributing to the future of sustainable infrastructure.







Indian Welding Society

Indian Welding Society is a Professional Body devoted to welding in India. IWS is registered on 14th March 2002 under the Society's Act with its headquarters at New Delhi. IWS is promoted by Welding Professionals from leading Fabrication Industries, Academic & Research Institutes and progressive minded Welding Consumable & Equipment Manufacturers.

Key Objectives and Activities:

1. Promotion of Welding Science & Technology: IIW aims to advance the knowledge of welding and related processes by organizing seminars, conferences, workshops, and technical meetings.

2. Education and Training: IIW provides welding-related education and training programs to students, engineers, and technicians. These programs help in developing skilled professionals for industry. The institute also collaborates with educational institutions for curriculum development and training.

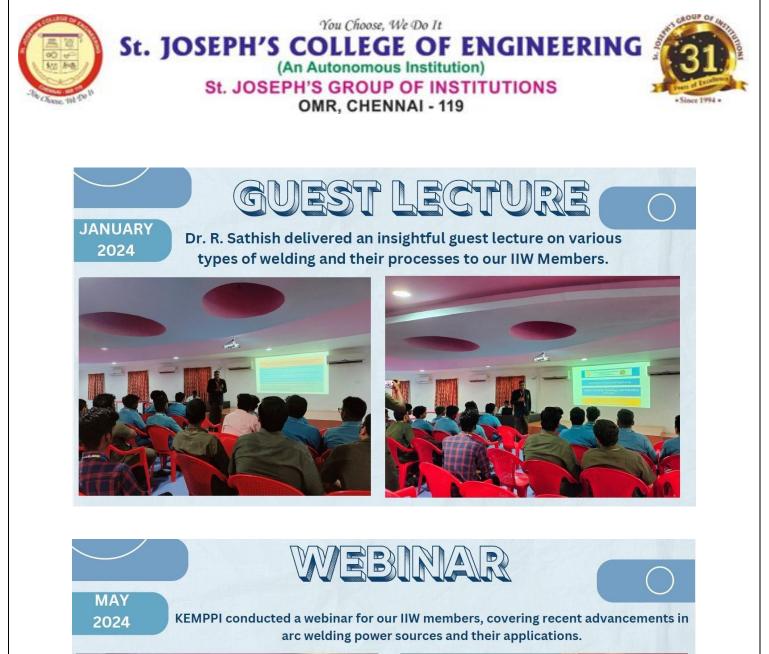
3. Certification: IIW offers various certification programs such as the certification of welding engineers, inspectors, and other professionals, in line with international standards. The institute is an authorized body for certification under the International Institute of Welding (IIW) programs.

4. National and International Collaboration: IIW-India is a member of the International Institute of Welding and works closely with various global organizations. It facilitates knowledge exchange between Indian and global welding communities through international conferences and collaborative programs.

5. Standards and Codes: IIW contributes to the development of welding standards and codes in collaboration with organizations like the Bureau of Indian Standards (BIS). This helps in setting the benchmark for quality and safety in welding processes.

6. Research and Development: IIW encourages research in welding technologies and processes to promote innovation. It partners with academic and industrial research institutions to drive technological advancements.











International Society of Automation

The International Society of Automation (ISA) at St. Joseph's College of Engineering is a valuable platform for students to explore and excel in the fields of automation and control systems.

Established in 1945, ISA is a globally recognized professional society that aims to advance the art and science of automation across various industries. With its mission to connect people, ideas, and technology, ISA provides a global network of professionals, resources, and certifications, enabling students to stay at the forefront of technological advancements.

At the college, the ISA chapter conducts technical workshops, expert lectures, and handson training programs covering key areas such as industrial automation, process control, IoT, robotics, and artificial intelligence.

These activities offer students in-depth exposure to cutting-edge technologies and prepare them for real-world applications. Students also gain access to ISA's global events, technical resources, and certifications like the Certified Automation Professional (CAP), enhancing their technical knowledge and career prospects.

The chapter organizes competitions, hackathons, and seminars, encouraging students to innovate and apply their skills to solve industrial challenges.

By fostering collaboration between academia and industry, ISA provides students with unique opportunities for networking and mentorship from professionals and experts in the field.

Participation in ISA equips students with the knowledge and skills needed for careers in automation, process industries, and control systems engineering.

It ensures global exposure and industry readiness, enabling students to build successful, future-proof careers in automation and related domains.

Through ISA, students gain not only technical expertise but also leadership and collaborative skills, making them valuable contributors to the ever-evolving world of automation.

















Computer Society of India

The seed for the Computer Society of India (CSI) was first shown in the year 1965 with a handful of IT enthusiasts who were a computer user group and felt the need to organize their activities. The purposes of the Society are scientific and educational directed towards the advancement of the theory and practice of computer science and IT. The organisation has grown to an enviable size of 100,000 strong members consisting of professionals with varied backgrounds including Software developers, Scientists, Academicians, Project Managers, CIO's, CTO's & IT vendors to just name a few. It has spread its branches all over the country. Currently having more than 500 student branches and rooted firmly at 73 different locations. Being closely associated with Students the Society has developed a well-established network of "Student Branches" all across the country. CSI has 488 student branches with more than 90,000 Student Volunteers across the nation. CSI has a strong Educational Directorate based at Chennai which undertakes activities related to Certification of professionals related to the latest technologies. Its recent initiative of distance education in the Business Domain areas offers technology enabled learning supported by personal counseling & expert advice. And this is done by being in close contact with it's young members through various events, conferences, symposia to name a few. CSI regularly organizes SEARCC Programming Contest, Alan Turning Quiz, Discover Thinking Project Contest, On-line Programming Contest etc. for the students.

As part of its endeavor to bring together and assimilate various aspects of IT, CSI conducts premier events such as a National Convention, Regional Conferences, Theme Conferences focusing on verticals etc. Apart from this number of workshops re-conducted at the local chapters to get such professionals together on a common platform. Besides the Convention, the Society also conducts an "Exhibition" which endeavors to bring in the manufacturers and system developers to exhibit their products & services to the professionals. The Society organizes various panel discussions and these views are compiled so that they can be protected as the views of CSI at the appropriate forums.















Indian Society for Technical Education (ISTE)

The Indian Society for Technical Education (ISTE) is the leading National Professional non-profit making Society for the Technical Education System in our country with the motto of Career Development of Teachers and Personality Development of Students and overall development of our Technical Education System.

At present, ISTE has a very large and an effective membership base consisting of more than 1,02,985 Life Members, 5,54,094 Student Members, 2410 Institutional Members (including IITs, IISc.., NITs and other leading technical institutions), 1214 Faculty Chapters and 1322 Students' Chapters and 17 Sections throughout the country.

The major objective of the ISTE is to provide quality training programmes to teachers and administrators of technical institutions to update their knowledge and skills in their fields of activity and to assist and contribute in the production and development of top quality professional engineers and technicians needed by the industry and other organizations.

The Indian Society for Technical Education (ISTE) chapter at St. Joseph's College of Engineering serves as a dynamic platform for students to develop their technical, professional, and leadership skills. Through regular seminars, workshops, and training programs, the chapter equips students with the latest technological advancements and industry trends.

ISTE fosters a culture of innovation by encouraging participation in national-level technical competitions, paper presentations, and research initiatives, enabling students to showcase their talents on prestigious platforms.

The society bridges the gap between academics and real-world applications by facilitating industry-academia collaboration, helping students gain hands-on experience and practical insights into their fields. ISTE also emphasizes teamwork and leadership through project-based learning and group activities. By being part of ISTE, students are better prepared for the demands of the professional world, equipped with the skills, knowledge, and confidence needed to excel in their engineering and technology careers.

