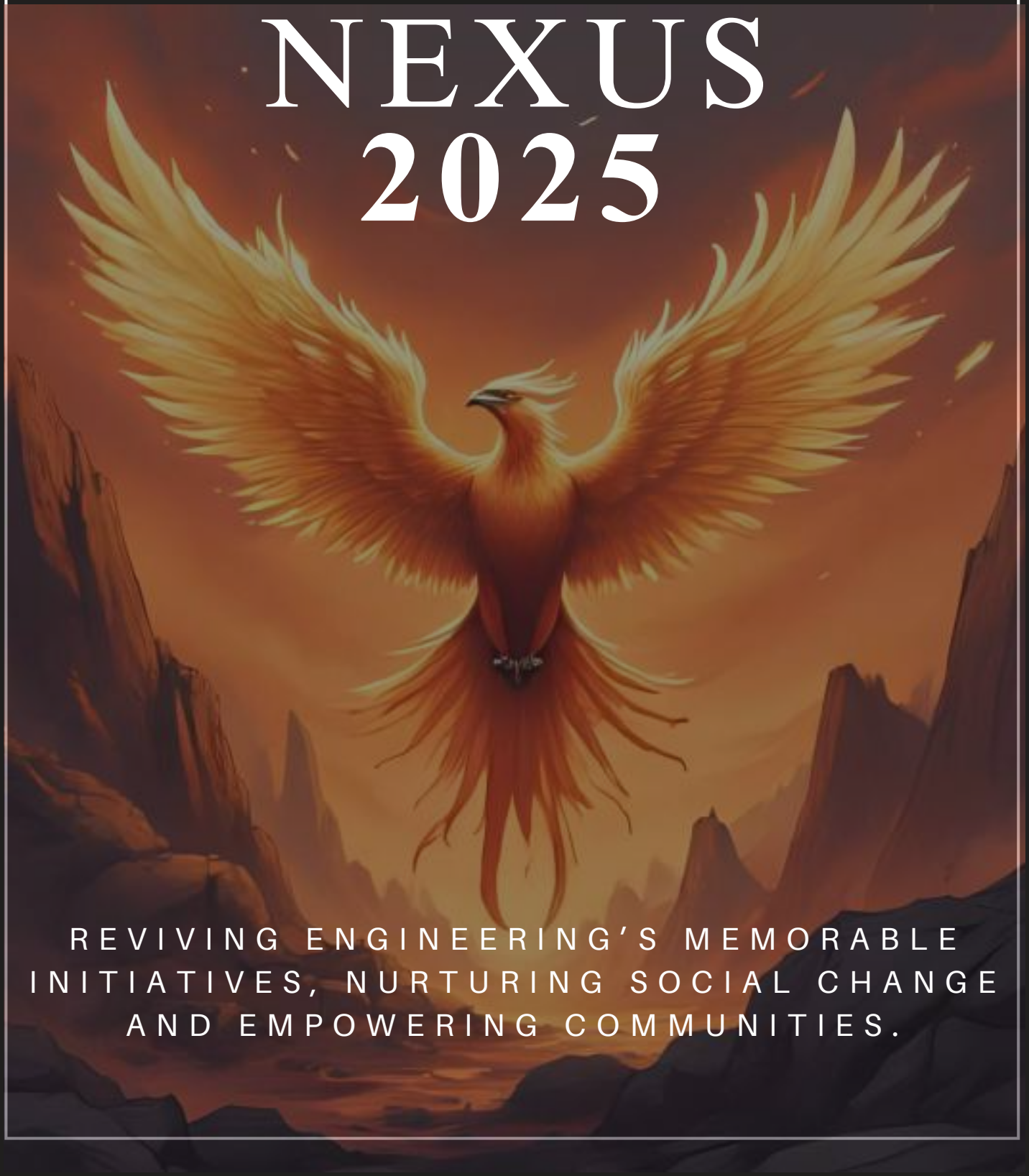
IEEE FCRIT SB

STB 61121

PRESENTS

NEXUS 2025



REVIVING ENGINEERING'S MEMORABLE INITIATIVES, NURTURING SOCIAL CHANGE AND EMPOWERING COMMUNITIES.

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ABOUT FCRIT

Fr. C. Rodrigues Institute of Technology was established in 1994 as an extension of the pioneering efforts of the Agnel Ashram fathers in the arena of Technical Education with the relentless pursuit of excellence as its guiding force.
FCRIT in a short span of time established itself as a leading engineering college in Mumbai, bagging at least one university rank every year starting with its first graduating batch.

The Government of Maharashtra awarded FCRIT an ‘A Grade’ in its initial assessment in recognition of the fact that it provides high quality, value-based technical education made possible by its devoted staff and extensive facilities.

The college has been recognised under NAAC and received accreditation from National Board of Accreditation(NBA) for four branches. Though its reputation rests mainly on the high quality, value-based technical education that it imparts, it has to its credit a verdant, well- maintained Campus and extensive facilities. It has also made its mark in sports, extra-curricular and co-curricular activities.

VISION AND MISSION

VISION

To evolve and flourish as a progressive center for modern technical education, stirring creativity in every student leading to self-sustainable professionals, through holistic development; nurtured by strength and legitimate pride of Indian values and ethics.

MISSION

1. To provide industry oriented quality education.
2. To provide holistic environment for overall personal development.
3. To foster relationship with other institute of repute, alumni and industry.

ABOUT IEEE FCRIT

IEEE student branch FCRIT, Vashi was created in the year 2000. Since then the student chapter has been organizing various intra collegiate events. Our mission is to provide the students with a platform and opportunity to enhance their abilities while motivating them to make new advances in technology.

We aim to develop communication, leadership, technical, and other soft skills for our members.We have organized a STEM workshop to inculcate young minds in the engineering field. We have also organized a Drone Building Workshop for students interested in it. In addition to these, we have organized a number of other events, webinars, and workshops relating to technical and non-technical areas. IEEE FCRIT SB would like to express our heartfelt gratitude to our esteemed principal Dr. S. M. Khot, respected HOD of Electrical Engineering Bindu S, our Branch counselor Dr. Mini Rajeev, and last but not least our whole student chapter for all their contributions to the advancement of IEEE FCRIT SB.

Let’s Hear From

Branch Counselor

IEEE FCRIT student chapter provides a platform for students to show case their skills, interact and learn from peers, interact with professionals in their field of interest to name a few. Learning that takes place outside the four walls of the classroom have a wide range of benefits for the student community and this transforms them to individuals contributing more towards the society.

Every year, our student chapter focuses on conducting technical and social activities and encourages students to take advantage of the benefits of IEEE membership, like attending seminars free of cost conducted by IEEE, availing scholarships, participating in competitions, availing discounted registration fees for conferences and conference grants.

I congratulate all the passionate members of the 2023-2024 IEEE FCRIT SB for their dedication, whole hearted support and cooperation in successfully conducting numerous events throughout the year. These events include online and offline seminars in several topics, workshops, competitions, workshop to promote STEM education in schools etc.

I appreciate the collective efforts of the team in bringing out this magazine which is released every year. Thanks are due to Dr. Bindu S., HoD of Electrical Engineering department and Dr. S.M. Khot, Principal for the support and guidance provided for conducting these activities. I thank and wish all the student volunteers who worked for IEEE FCRIT SB, a bright future ahead.

Let’s Hear From

Head Of Our Department

Engineering is a highly desirable field of study in India. However, the path from being an engineering student to a successful professional is filled with many challenges. Despite the high number of engineering graduates, only a small percentage are deemed employable. This is due to various factors, such as the quality of education, the lack of practical skills, and the gap between industry requirements and the academic curriculum.

While technical skills are undeniably important, soft skills like communication, teamwork, and problem-solving are equally vital in the engineering field. Employers frequently seek these skills during the hiring process. Developing these abilities can significantly boost an engineering graduate's employability and career success. The IEEE Student Council offers a valuable opportunity to develop skills such as leadership, communication, teamwork, organization, and public speaking. Every year, the IEEE Student Branch organizes various activities, including technical webinars, field visits for social causes, and initiatives for women's empowerment. Being an IEEE member provides access to a vast array of resources on the IEEE website, which can significantly enhance your technical knowledge. It is essential for the IEEE student branch to promote this awareness among all students, encouraging them to join the club. By taking advantage of IEEE's facilities, students can improve both their soft skills and technical expertise, making them adaptable in any industry

Dr Bindu S
Head Of Department
Department Of Electrical Engineering

Let’s Hear From

IEEE Chairperson

IEEE is an international organisation which I believe plays an important role in the professional lives of all engineers and future engineers. It provides fantastic networking opportunities and immensely fruitful educational incentives. It also supports collaborations at a global level

The IEEE FCRIT Student Branch has always made an attempt to make these same facilities available to all the students. Being the chairperson, it was an eye opening experience for me as I had the opportunity to interact with some of the most brilliant minds from all walks of life. When it came to being a leader, I did my best to foster an environment of camaraderie and appreciation. This is evident as the success of our events is nothing but a culmination of each and everyone’s hard work and efforts. The events conducted this year were not exclusively technical but also included some catering to professional development and philanthropy. One of my favorites was STEM EDUCATION wherein we got to help young students explore the world of electrical and electronics field. We were able to ignite their interest and hoped to opened their mindset to infinite possibilities. I want to extend my heartfelt gratitude to IEEE Bombay Section for sponsoring this wonderful workshop year after year.

Shivanee Shukla
IEEE Chairperson

EDITOR'S NOTE

Dear Readers,

It is my great pleasure to welcome you to this edition of our college magazine, dedicated to celebrating the achievements and activities of our IEEE council. This past year has been a remarkable journey filled with innovation, collaboration, and growth.

Our council has organized a variety of events, workshops, and seminars that have enriched the knowledge and skills of our members. From technical symposiums to hands-on projects, we have strived to create opportunities for learning and professional development. I am immensely proud of our dedicated team and enthusiastic members who have made these accomplishments possible. Their commitment to excellence and passion for technology is truly inspiring.

As we look ahead, we are excited to continue this journey, fostering a community where ideas thrive and leaders emerge. We encourage all students to join us, participate actively, and take advantage of the resources and opportunities we provide.

Thank you for your continued support and involvement in the IEEE council. Together, let's push the boundaries of innovation and make a lasting impact.

Alisha Crasto
Secretary
IEEE FCRIT SB

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2024-25

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SHIVANEE SHUKLA

VICE CHAIRPERSON

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Core Council
2024-25

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TECHNICAL
EVENTS

TECHNOXIAN– TECHNICAL QUIZ COMPETITION

The Technoxian event, held on Day 2 of the fest, brought together 150 enthusiastic participants for a challenging technical quiz organized by IEEE. Designed to test participants' knowledge across multiple engineering disciplines, the competition featured MCQ-based rounds covering the five departments of FCRIT. With a modest entry fee of ₹50 and a prize pool of ₹1500, the event attracted students eager to showcase their academic skills in a competitive yet engaging environment.

The contest unfolded over two rounds, with the top 15 participants from Round 1 advancing to Round 2. The difficulty level increased progressively, ensuring a stimulating experience for contestants. Questions were carefully curated to assess department-specific knowledge, with each round containing six questions per department. Participants were allotted 30 minutes for the first round and 20 minutes for the second, keeping the atmosphere fast-paced and intellectually charged. Technoxian succeeded in fostering healthy competition, cross-disciplinary learning, and a spirit of curiosity among students from diverse engineering backgrounds.

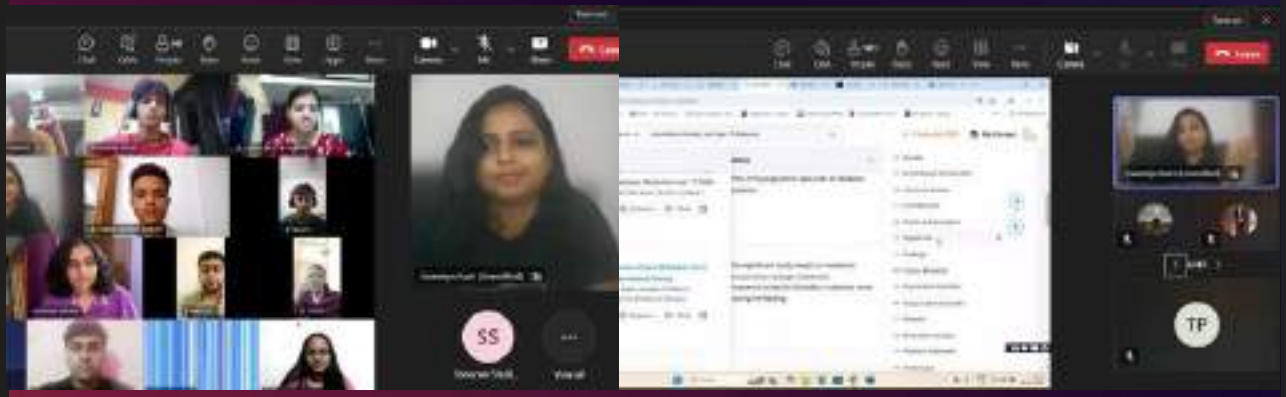
CODE SPRINT 2025

On 10 February 2025, IEEE FCRIT SB organized Code Sprint 2025, a coding competition held in AX 507 and AX 510, featuring 16 participants from various branches of FCRIT. The event, conducted on HackerRank, challenged participants with problems ranging from easy to hard in Python, Java, and C++, with a live leaderboard to track performance. The competition aimed to provide a platform for students to demonstrate and enhance their coding abilities, foster a competitive spirit, and promote the activities of IEEE FCRIT SB.

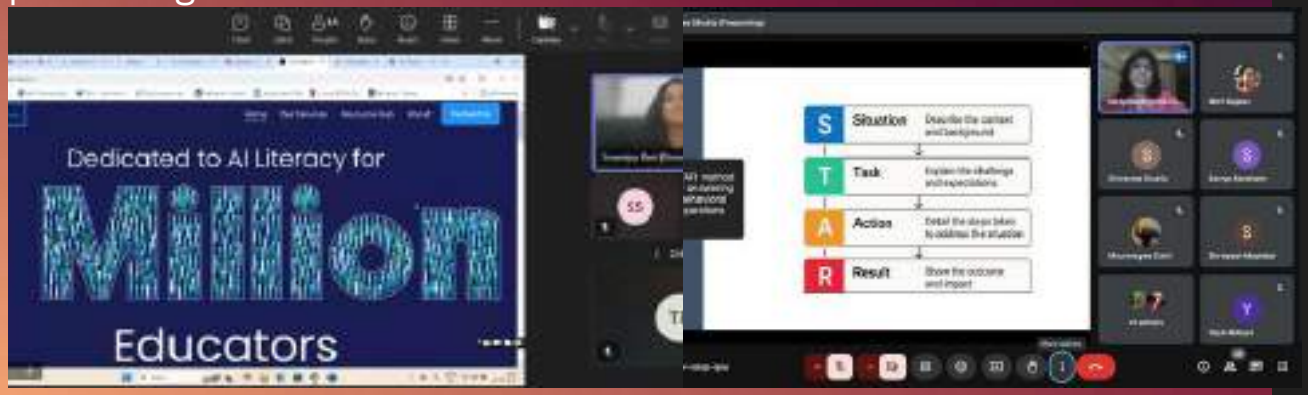
Participants engaged enthusiastically, showcasing problem-solving skills under timed conditions. The top three performers were awarded prizes, and feedback praised the event's organization, relevance, and smooth execution. The competition strengthened coding skills, encouraged peer learning, and boosted participants' confidence in tackling programming challenges. Code Sprint 2025 succeeded in fostering a community of tech-driven students while recognizing and rewarding programming talent.

AI FOR ACADEMIC WRITING

On 28 January 2025, IEEE FCRIT SB hosted an online webinar titled AI for Academic Writing on Microsoft Teams, led by Dr. K. S. Sowmiya Rani, Editor at Editage (Cactus Communication) and Founder of Sowmis_AWW. The session aimed to equip 116 participants, including students and faculty from various branches, with practical skills to enhance academic writing using AI tools. Dr. Rani demonstrated how AI can assist in improving grammar, checking plagiarism, and refining overall content while stressing the importance of ethical practices and maintaining academic integrity.



The event featured live demonstrations of AI-assisted editing and plagiarism detection tools, offering participants hands-on exposure to modern academic writing aids. Attendees appreciated the relevance and clarity of the session, praising the speaker's approachable teaching style. The webinar left participants confident in integrating AI into their writing process responsibly, improving both efficiency and quality. It also encouraged a commitment to ethical scholarship, inspiring participants to aim for higher standards in academic publishing.




SOCIAL
EVENTS

GREENPRINT FOR THE FUTURE: PATH TO SUSTAINABILITY

On 27 September 2024, IEEE FCRIT SB hosted a seminar titled Greenprint for the Future: Path to Sustainability at the FCRIT Seminar Hall AX 116, featuring Mohan Vilas Das from Govardhan Ecovillage, Wada, Maharashtra. The event, attended by 64 students from various engineering branches, explored the principles of sustainability, circular economy, and holistic approaches to balancing environmental, social, and economic needs. Drawing from his diverse background in engineering, finance, and education, Mr. Das shared real-world examples from the ecovillage, a model for sustainable living, inspiring participants to adopt eco-friendly practices in both personal and professional spheres.

The seminar provided practical strategies for implementing sustainable practices, covering environmental stewardship, green initiatives, and the economic benefits of circular systems. Attendees engaged actively, praising the seminar's interactive nature and relevance to current global challenges. The session not only raised awareness about sustainability but also fostered a community of like-minded individuals committed to reducing carbon footprints, promoting green innovation, and integrating sustainability principles into their academic and career goals.

STEM EDUCATION

On 19 September 2023, IEEE FCRIT SB conducted a STEM Education outreach program at Christ Academy, Navi Mumbai, benefiting 150 students from classes 9 and 10. Led by 16 student volunteers under the guidance of Dr. Mini Rajeev, the three-hour session aimed to introduce participants to IEEE's mission and inspire interest in key engineering and technology domains. The program featured interactive presentations on the Java Client-Server Chat Application, Solar Cells, and Simple Generators, each demonstrating the practical applications of theoretical concepts in real-world scenarios.

Students learned how Java's networking and GUI capabilities can create a functional client-server communication system, the science behind solar energy conversion using p-n junctions and photon absorption, and the principles of electromagnetic induction in AC and DC generators. Feedback from participants reflected enthusiasm and curiosity, with the event successfully fostering technical awareness and motivation. The outreach reinforced IEEE's role in promoting diversity, innovation, and inclusion in STEM, leaving a lasting impact on the students' perception of engineering careers.


SOFT SKILLS
EVENTS

MASTERING ENGINEERING INTERVIEWS & INDUSTRY SKILLS

On 7 April 2025, IEEE FCRIT SB organized an online webinar titled Mastering Engineering Interviews & Industry Skills, featuring Ms. Tara S Pillai, Engineering Manager at Bechtel India and Global Award Winner for Bechtel Women of the Year. With 32 years of EPC industry experience, Ms. Pillai shared real-world insights to help students bridge the gap between academics and industry expectations. The session aimed to equip participants with essential interview preparation techniques, personal branding strategies, and industry-relevant skills, while also inspiring women in engineering through the speaker's own professional journey.

The webinar saw 44 participants from various branches, who actively engaged in an interactive Q&A session. Ms. Pillai covered topics including resume building, communication skills, adaptability, and handling technical interviews with confidence. Students praised the session for its relevance, practical value, and motivational impact, especially the exposure to the experiences of a seasoned industry leader. The event left attendees more confident and industry-ready, encouraging continuous self-development and inclusivity in engineering careers.

UNLOCKING IEEE: YOUR GATEWAY TO SUCCESS

On 23 December 2024, IEEE FCRIT SB organized an online seminar via Zoom titled Unlocking IEEE: Your Gateway to Success, led by Dr. B. Satyanarayana, Professor of Practice at Sardar Patel Institute of Technology, Mumbai. The session introduced 45 participants from various branches to the structure, mission, and benefits of IEEE membership, emphasizing opportunities in research publishing, certifications, networking, and professional development. Students gained valuable insights into leveraging IEEE resources to enhance their academic achievements and career prospects.

The interactive session addressed the formation of IEEE, its global network, and the pathways it offers for skill-building and innovation. Participants appreciated the practical guidance and motivation to actively engage with IEEE activities. Feedback highlighted the usefulness of information on publishing research papers and certification programs. The seminar successfully inspired attendees to consider becoming IEEE members and reinforced the organization's role in advancing technology and fostering a collaborative professional community.

IEEE MEMBERSHIP

IEEE student membership offers several benefits tailored specifically for engineering undergraduates:

- **Networking Opportunities:** Connect with peers, faculty, and professionals through IEEE's local chapters and global events, facilitating valuable relationships and collaborations.
- **Discounted Conference Fees:** Receive reduced rates for IEEE-sponsored conferences and events, making it more affordable to attend and present research.
- **Career Resources:** Utilize IEEE's job boards, resume tips, and career development resources to enhance your job search and career planning.
- **Professional Development:** Engage in workshops, webinars, and tutorials designed to build skills and knowledge in various engineering disciplines.
- **Scholarships and Competitions:** Apply for scholarships and participate in IEEE-sponsored competitions and awards to gain recognition and financial support.
- **Technical Societies:** Join specialized technical societies within IEEE that align with your field of interest for more focused resources and networking.
- **Student Publications:** Contribute to and access student-run publications and newsletters to stay informed about the latest trends and innovations.
- **Leadership Experience**: Take on leadership roles within IEEE student chapters to build organizational and management skills.
- **Discounted IEEE Products**: Enjoy discounts on IEEE books, standards, and other resources, providing valuable tools for your studies and research.

MEMORIES


IEEE Presents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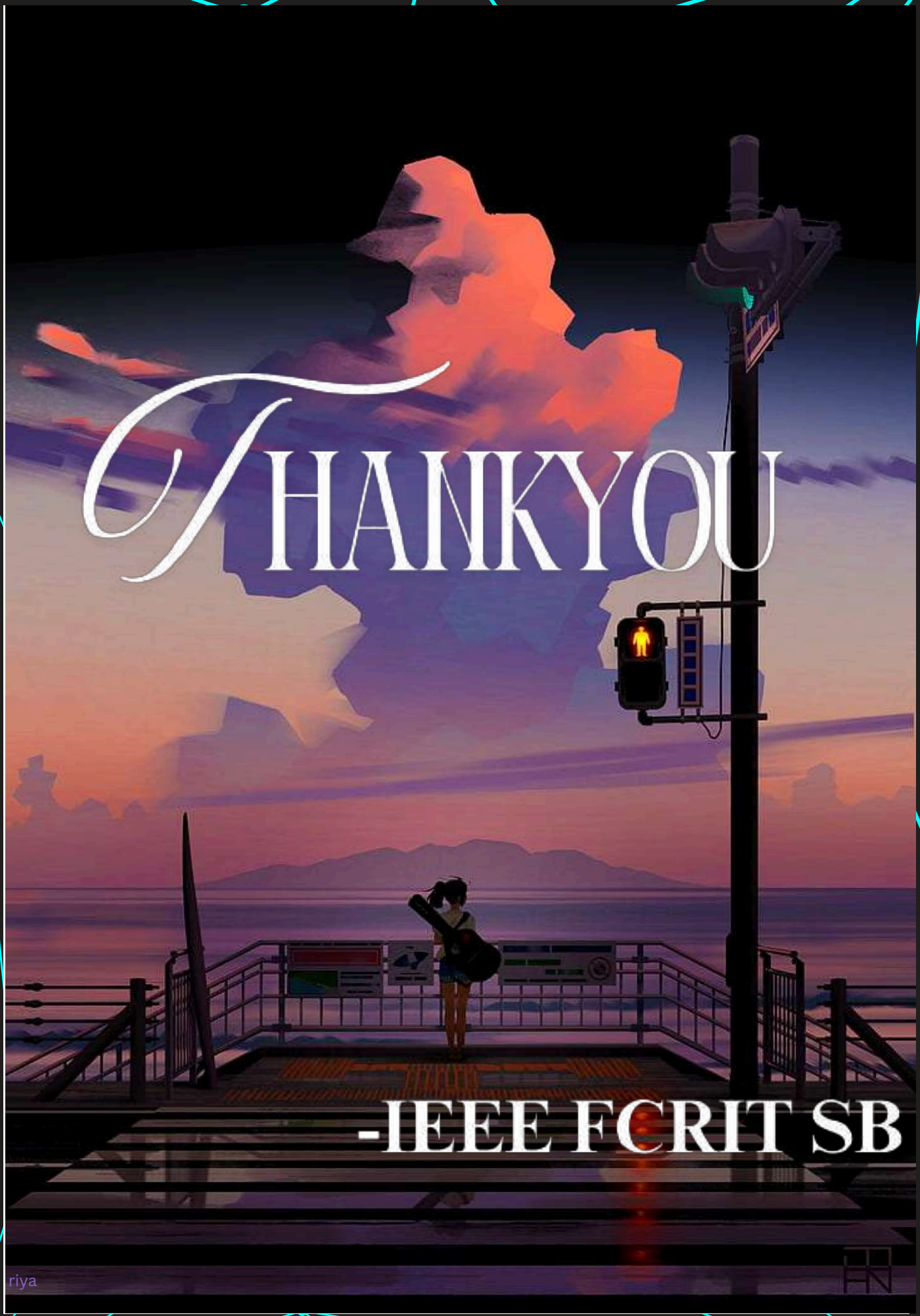
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2024-25

IEI NEWSLETTER RETROSPECT

IEI STUDENT CHAPTER

ELECTRICAL

Agnel Charities
Fr. C. Rodrigues Institute of Technology, Vashi
(An Autonomous Institute & Permanently Affiliated to University of Mumbai)

The Institution of Engineers (India)

IEI ELECTRICAL STUDENTS CHAPTER

IEI NEWSLETTER RETROSPECT 2024-25

IEI Student Chapter actively work to promote engineering excellence through various activities, including workshops, seminars, conferences, and technical events. The chapter provides opportunities for students to enhance their professional skills through networking events, industry interactions, and access to resources that help them prepare for their careers. IEI Student Chapters encourage research and innovation by organizing events that allow students to present their research findings and participate in technical competitions. IEI Student Chapter serves as a valuable platform for engineering students to connect with their peers, learn from experienced professionals, and develop the skills and knowledge necessary to excel in their chosen fields. The chapter's primary goal is to foster engineering excellence, promote professional development, and encourage research and innovation among students.

About Insititute

Fr. C. Rodrigues Institute of Technology (Fr. C.R.I.T.), Vashi, has firmly established itself as one of the top engineering colleges under the University of Mumbai. While its stellar reputation stems from the quality, value-driven technical education it offers, the institute also prides itself on its lush, well-maintained campus and diverse infrastructure. Promoting inclusivity and unity, its secular character is enriched by its proximity to several places of worship from different faiths.

FCRIT, Vashi Campus

Fr. C.R.I.T. is proud to be one of the few colleges with NBA accreditation for all five of its engineering programs — Computer, Mechanical, Electrical, Electronics & Telecommunication, and Information Technology — for the period 2025 to 2028. This reflects the institute's strong commitment to academic excellence and ongoing development.

The Department's Aim

Electrical Engineering is one of the earliest branches of engineering, with roots in scientific inquiry dating back to the 17th century. The department focuses on equipping students with the skills to design, analyse, implement, and operate electrical and electronic systems efficiently. Students are taught core subjects such as electrical machines, power systems, control systems, signal processing, electrical drives, power electronics, microprocessors, and switched-mode power supplies.

We have a team of well-qualified, experienced, and dedicated faculty members who are committed to delivering quality education. To support hands-on learning, students have access to well-equipped laboratories like the Renewable Energy Lab and the Project Lab, helping them strengthen their practical understanding and innovative thinking.

The department aims to build strong technical foundations while preparing students to take on real-world challenges with confidence and responsibility.

Department Vision:

The department's vision is to become a cutting-edge hub for contemporary technical education in the field of electrical engineering, producing individuals who can support themselves.

Departmental Goals:

- To offer cutting- edge technical instruction in the discipline of electrical engineering.
- To work together with reputable industries and institutions in order to advance
- To create a holistic environment for the growth of civically engaged individuals.

Program Educational Objectives (PEO):

Graduates will be able to:

- Demonstrate core competency in the areas of power system, power electronics, machines, renewable energy and allied disciplines
- Contribute to environmental sustainability through design, development and commissioning of green energy or clean energy systems
- Excel in professional career and higher education with ethical values.

Program Specific Outcomes (PSO):

Graduates will be qualified to...

1. Apply fundamental knowledge and demonstrate competencies in the area of electrical power system, electrical machines, power electronics and control systems.
2. Acquire technical knowledge, skill and competency in development of sustainable systems.
3. Apply modern software/hardware tools to design, simulate, implement and analyze electrical systems.

The IEI

Established in 1920 and incorporated by Royal Charter in 1935, the Institution of Engineers (India) [IEI] is a statutory body to improve engineering and technology. With more than 820,000 members and 15 (fifteen) engineering specialties covered, it is the largest multidisciplinary professional body of engineers and has been serving the country for more than nine decades. With a number of professional societies around the world, IEI has bilateral partnerships. Under the global International Professional Engineers Alliance (IntPEA), it maintains the International Professional Engineers (IntPE) Register for India. The Professional Engineers (PE) Certification is also given out by the Institution.

The Indian Institution of Engineers has its IEI's President serves as the leader of a National Council that manages the organization's headquarters in Kolkata, India.

IEI Electrical Students' Chapter

The IEI students' chapter includes all of the electrical department's students. Eight members of the council for the academic year 2024– 2025 are chosen among the second-year students. The council will be in place for a full year.

For the academic year 2024– 2025, the following events were held as part of IEI.

IEI Events 2024-25

1.Expert Lectures:
2.Arduino Workshop
3. Yoga Session
4. Mini Project Competition
5. Latex Workshop
6.Industrial Visit to Powergrid 400/220KV GIS Substation
7. FCRIT Avishkar 2025
8. Expert Lectures
9. IOT Workshop

Arduino Workshop

On 12th of August 2024, a workshop on Arduino was conducted by Dr. Diptiman Dey, Prime Minister's Research Fellow (PMRF) from IIT Bombay, Department of energy science and engineering. The Arduino workshop offered to students was a really interesting and educational event that helped students gain a deeper understanding of electronics and programming ideas. The programme offered a venue for practical learning and creativity with the goal of introducing students to the world of open-source hardware and microcontrollers.

Brochure for Arduino Workshop

The Arduino workshop successfully engaged students through practical exercises that involved assembling circuits, coding, and interfacing with various electronic components .

Group activities and real-time troubleshooting fostered a collaborative learning environment, where students could share insights and learn from one another. By the end of the workshop, students not only acquired valuable technical skills but also developed confidence in using open-source tools for innovation.

Yoga Session

On August 17th 2024, the IEI (Electrical) Students Council organized a rejuvenating yoga session, aimed at promoting physical and mental well-being among students. The event, held on campus, was attended by a diverse group of participants who engaged in various yoga postures and breathing exercises under the guidance of experienced instructor Dr. Swaranjali Gaikwad. The session provided a perfect opportunity for students to relax, de-stress, and recharge, fostering a sense of community and holistic health.

Brochure for Yoga Session

Latex Workshop

On 11th and 12th February, a hands-on LaTeX workshop was conducted to help students prepare their Mini Project – 1A reports using the LaTeX format. Participants were guided through the process of creating .tex files using an online YouTube video as a reference. The workshop covered essential topics such as document structuring, text formatting, and inserting figures and tables. Students were then required to apply these skills to format their mini project reports in LaTeX—enhancing their technical documentation abilities and familiarizing them with a powerful tool widely used in academia and industry.

Brochure for Latex workshop

Mini Project Competition

On the day of 17 August 2024, a Mini Project Competition was organized for undergraduate students, coordinated by the IEI Electrical Student Chapter and Mrs. Divya Sajeesh. A total of 40 students participated, with Mr. Devendra Shantaram Patole, Assistant Engineer at MSEDCL, as the resource person.

Brochure for Mini Project Competition

The competition aimed to provide a platform for students to showcase innovative ideas and promote teamwork.

It also focused on enhancing project planning, execution, and presentation skills. The event encouraged creative thinking, boosted self-confidence, and fostered a spirit of collaboration. Additionally, it offered students hands-on experience in solving real-world engineering problems.

Industrial Visit

On the day of 20th March 2025, an industrial visit was organized for Semester 4 Electrical students to the POWERGRID 400/220 KV GIS Substation in Navi Mumbai, coordinated by the IEI Electrical Students Chapter and Mrs. Divya Sajeesh. A total of 62 students participated, guided by Mr. Vaibhav Bhandarkar. The visit aimed to provide practical exposure to high-voltage substation operations, especially the role of Gas Insulated Switchgear (GIS) technology. Students gained insights into power system reliability, grid stability, and industry safety protocols.

Industrial visit to Powergrid substation

The experience enhanced their understanding of real-world electrical systems and motivated them to explore careers in power transmission. It also offered valuable interaction with professionals in the field. The visit also helped bridge the gap between academic learning and industry practices through firsthand observation and discussion.

FCRIT Avishkar 2025

On the 19th of April 2025, FCRIT Avishkar 2025, a prestigious National Level Project Competition, brought together students from the Electrical, Mechanical, and Electronics & Telecommunication Engineering (EXTC) branches for a thrilling display of innovation and creativity. The event witnessed enthusiastic participation from a total of 47 teams of talented students and was successfully conducted under the guidance of the IEI Electrical Student Council in collaboration with Mrs. Divya Sajeesh, who coordinated the proceedings with precision and dedication.

The competition was designed with a vision to encourage innovation, bridge the gap between theoretical knowledge and practical applications, and promote a culture of research among budding engineers. Participants enthusiastically showcased projects that reflected not only technical competence but also creativity in addressing real-world engineering challenges. The event placed particular emphasis on providing hands-on experience in design, testing, and implementation of systems, thereby nurturing practical skills essential for professional growth.

A strong focus was placed on sustainability and social impact, with many projects aligning their objectives with global development goals such as clean energy, smart mobility, efficient resource management, and inclusive technology.

Poster for Avishkar 2024

One of the most enriching aspects of the event was the opportunity it provided students to interact directly with industry experts, academicians, and professionals. These interactions offered invaluable insights into current industry expectations, future trends, and skill requirements. The evaluation process itself was carried out by a distinguished panel of professionals and faculty members, ensuring that projects were judged fairly on originality, technical merit, practicality, innovation, and potential for real-world impact.

Beyond the awards and accolades, FCRIT Avishkar 2025 succeeded in fostering a spirit of collaboration, interdisciplinary learning, and entrepreneurial thinking. It provided a platform for students to transform classroom knowledge into practical solutions, preparing them to contribute meaningfully to the rapidly evolving engineering landscape. The event stood as a testament to the institute's commitment to cultivating a culture of innovation, leadership, and societal responsibility among its students.

IoT Workshop

On 12th August 2024, the Electrical Engineering Students Association (EESA), in collaboration with the Institution of Engineers India (IEI) – Electrical Students Chapter, conducted a workshop on the Internet of Things (IoT) for electrical engineering students.

The workshop provided an introduction to IoT technologies, covering system architecture, sensors, cloud platforms, and wireless protocols. It included live demonstrations and hands-on activities focused on real-world applications such as smart homes and industrial automation.

Poster for IoT Workshop

Students gained practical exposure by working with IoT devices and completing assigned tasks. The session bridged theoretical learning with real-time implementation, boosting students' confidence in using modern IoT tools and exploring new trends in the field.

Expert Lecture

The IEI Student Council organized a series of expert lectures covering diverse domains of electrical and allied engineering. The sessions included insights into industry expectations, power distribution, energy storage, sensor technology, protection relay coordination, and switchgear (HV & MV systems). Experts also discussed autonomous IoT systems, control systems beyond textbooks, electrical drives, and lighting system design. Broader perspectives such as industrial insights, management consulting, data science applications, and career branding were also highlighted. Motivational talks and sessions on personal growth, higher studies, and successful career paths added value, bridging technical knowledge with professional development.

1. Autonomous IoT Systems with Local Decision-Making and Non-Linear Control

Delivered by Mr. Chaitanya Mahamuni, Research Scholar, IIT Bombay–Monash Research Academy, this lecture highlighted the emerging role of autonomous IoT systems capable of making local decisions without relying entirely on cloud servers. The session emphasized the importance of non-linear control strategies in boosting the efficiency and reliability of real-world applications such as smart grids, autonomous vehicles, and industrial automation.

2. Switchgear – HV & MV Present & Future

Presented by Dr. Rosy Balaram Raysaha, Senior R&D Engineer & Project Leader (Medium Voltage), ABB AG, Ratingen, Germany this session provided deep insights into high-voltage and medium-voltage switchgear technologies. It focused on their role in power system protection while exploring future directions such as digital switchgear, IoT-enabled monitoring, and sustainable eco-friendly designs, showcasing how the industry is moving toward smarter and more resilient systems.

3. Energy Storage

Conducted by Mr. Sanket Dalvi, Electrical Engineer, Burns & McDonnell India, this lecture addressed the crucial role of energy storage systems in the modern energy landscape. It covered various technologies including advanced batteries, supercapacitors, and pumped hydro storage, highlighting their applications in grid stability, peak load management, and integrating renewable energy sources to ensure a sustainable and reliable power supply.

Expert Lecture on switchgear

Expert Lecture on infrastructure and power

Distinguished personalities in Electrical Engineering

Dr. Arogyaswami Paulraj

Dr. Arogyaswami Paulraj is an Indian-American electrical engineer known globally for pioneering MIMO (Multiple Input Multiple Output) wireless technology, which is the backbone of modern Wi-Fi and 4G/5G systems.

Born in India and a former Indian Navy officer, he completed his Ph.D. from the Indian Institute of Technology (IIT) Delhi. His work revolutionized high-speed wireless data communication. Dr. Paulraj has received prestigious honors including the Marconi Prize and the Padma Bhushan from the Government of India.

Dr. E. Sreedharan

Known as the "Metro Man of India," Dr. Elattuvalapil Sreedharan is a renowned technocrat and electrical engineer who transformed urban transport in India. He first gained fame for completing the restoration of the Pamban Bridge in record time and later led the Konkan Railway project, one of India's toughest engineering challenges.

As the head of the Delhi Metro Rail Corporation, he revolutionized urban transit by delivering a world-class metro system with unmatched efficiency and transparency. A recipient of the Padma Shri, Padma Vibhushan, and France's Chevalier de la Légion d'honneur, his legacy stands as a model of integrity, leadership, and engineering excellence.

Dr. Satish Dhawan

Dr. Satish Dhawan was a pioneering Indian aerospace and electrical engineer who played a vital role in advancing India's space and satellite technology.

Born in Srinagar, he completed his engineering from Punjab University and later pursued higher studies in the U.S. As Chairman of ISRO, he led major projects in space research and communication satellites. He was awarded the Padma Vibhushan for his contributions to science and engineering.

Dr. H. J. Bhabha

Dr. Homi Jehangir Bhabha, often called the "Father of the Indian Nuclear Program," was a physicist and electrical engineer who laid the foundation for India's atomic energy research.

Educated at the University of Cambridge, he specialized in electrical systems and nuclear physics, where he made significant early contributions to quantum theory and cosmic ray research.

Quotes by Famous People :

1. "Your best teacher is your last mistake. "
— (Dr. A.P.J. Abdul Kalam)

2. "It is better to light a candle than to curse the darkness. "
— (Sarojini Naidu)

3. "Don't take rest after your first victory because if you fail in second, more lips are waiting to say that your first victory was just luck. " — (Dr. A.P.J. Abdul Kalam)

4. "An ounce of practice is worth more than tons of preaching. "
— (Mahatma Gandhi)

5. "We are what our thoughts have made us; so take care of what you think. Words are secondary. Thoughts live; they travel far. "
— (Swami Vivekananda)

6. "Science is a beautiful gift to humanity; we should not distort it."
— (Dr. A.P.J. Abdul Kalam)

7. "Arise, awake, and stop not till the goal is reached."
—(Swami Vivekananda)

8. "Success is not final, failure is not fatal: It is the courage to continue that counts."
— (Winston Churchill)

Facts about Electrical Engineering

Electrical engineering is one of the most transformative disciplines of modern science, influencing nearly every aspect of human life. From the generation and distribution of electricity to the design of advanced communication systems, medical technologies, and space exploration, its impact is profound and far-reaching. The fascinating blend of history, innovation, and natural phenomena continues to inspire new discoveries. The following facts illustrate some of the most remarkable and lesser-known aspects of electrical engineering, offering a glimpse into its extraordinary scope and significance:

Human Body as a Power Source:

The human body is often compared to a biological machine, and in terms of electricity, it is not far from the truth. A resting human body continuously generates around 100 watts of electrical power, mainly through metabolic processes. This is equivalent to the energy required to keep a small household light bulb glowing. Although harnessing this energy for practical purposes is not efficient with current technology, the concept has inspired research in bioelectric devices and energy harvesting systems that could one day power wearable medical sensors or low-energy electronics directly from the human body.

Record-Breaking Transmission Lines:

The North Sea Link, completed in 2021, is the world's longest subsea electricity interconnector, stretching more than 720 kilometers between Norway and the United Kingdom. This engineering marvel transmits up to 1,400 megawatts of renewable hydropower, enough to supply electricity to over 1.4 million homes. Its construction demonstrates the global push towards clean energy integration and highlights the incredible feats of electrical engineering in overcoming geographical challenges to deliver sustainable power across nations.

The Immense Power of Lightning:

A single bolt of lightning can release up to 5 billion joules of energy within fractions of a second. To put this into perspective, this is enough energy to power a 100-watt light bulb continuously for more than six months. Although capturing and storing lightning energy remains impractical due to its unpredictability and extreme intensity, it represents nature's raw demonstration of electrical phenomena. Engineers and scientists continue to study lightning both to improve power protection systems and to develop safer infrastructure.

Speed of Electrical Signals:

Electrical signals traveling through copper conductors do so at astonishing speeds, typically around 96% of the speed of light. This rapid transmission is the basis of global communication systems, enabling information to be sent across continents in fractions of a second. While signal propagation is slightly slower in fiber-optic cables due to the medium, it is still fast enough to allow real-time communication and data transfer on a global scale—an achievement that lies at the core of today's interconnected world.

Energy Demands of Supercomputers and Data Centers:

The digital age has brought remarkable advances in computing power, but with it comes enormous energy consumption. Large-scale data centers, which house supercomputers and cloud infrastructure, consume as much electricity as an entire small city. This demand has driven innovation in cooling technologies, with some companies locating data centers near oceans or rivers to use natural water circulation for thermal management. Such practices highlight how electrical engineering intersects with environmental sustainability, ensuring that computing growth does not come at the expense of ecological balance.

The History of Electric Vehicles:

While electric cars may seem like a recent innovation, their history dates back to the 1880s, when they were among the first practical automobiles. In fact, during the late 19th and early 20th centuries, electric vehicles briefly outsold their gasoline counterparts, thanks to their simplicity and quiet operation. However, with the rise of mass-produced combustion engines, electric vehicles fell out of favor—only to re-emerge in the 21st century as a leading solution to environmental challenges and sustainable transportation.

Electrical engineering is far more than wires, circuits, and machines. From the electricity within the human body to the vision of harvesting solar energy in space, the field continues to redefine what is possible. Electrical engineering powers our present but, lights the way toward an innovative and sustainable future.

AVISHKAR 2025 PHOTOGRAPHS:

Judges evaluating a river cleaning bot based project

Judges evaluating a Rover based robot project named Raha Bot

Lighting of the lamp ceremony Avishkar 2025

Valedictory Ceremony of AVISHKAR 2025

Principal sir felicitating runners-up of Fr.CRIT Avishkar 2025

IEI Council with faculty advisor and HOD ma'am

All the winners of Avishkar 2025 along with the faculty and the judges

EVENT PHOTOGRAPHS:

Reveal of IEI Newsletter for 2023-24

Yoga Session organised by IEI Coucnil

Latex Workshop conducted by IEI members

Arduino Workshop conducted by IEI Council

Dr. Diptiman Dey helping student solve problem in Arduino workshop

Students Attending the IOT Workshop

Speaker Sarthak Verma explaining the students about the IOT Workshop

PHOTOGRAPHS OF EXPERT LECTURES CONDUCTED (2024-25)

Expert Lecture on Industrial Perspective

Expert Lecture on Electrical System Design

Expert Lecture on Control Systems

Expert Lecture on Management Consulting

Expert Lecture on Protection Relay Cordination

Expert Lecture on Infrastructure and Power Distribution in Telecom Industry

Council Members...

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Editor

Shravani Juikar
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PROF. DIVYA SAJEESH

Agnel Charities
Fr. C. Rodrigues Institute of Technology, Vashi
(An Autonomous Institute & Permanently Affiliated to University of Mumbai)

Department of Electrical Engineering

Electrical Engineering Students Association (EESA) 2024-25

ELEVATE

HOD's Message

Dear students,

The primary aim of a student association is to enhance the skills and knowledge of its members while offering valuable opportunities for students to cultivate leadership through the planning and execution of events. Each year, the Electrical Engineering Students Association (EESA) at Fr. C. Rodrigues Institute of Technology (FCRIT), Vashi, organizes a diverse range of technical and non-technical activities for the holistic development of electrical engineering students. EESA fosters a dynamic and engaging environment that promotes both academic and professional growth. It also extends its impact beyond the campus by conducting community outreach programs and sustainable energy initiatives that address pressing real-world challenges. These efforts contribute meaningfully to societal welfare while nurturing socially responsible engineers. In addition, EESA publishes an annual magazine that serves as a creative platform for students to showcase their talents and express their ideas.I extend my heartfelt congratulations to the EESA council on the successful completion of its tenure and commend their dedication to enriching the student experience.

-Dr.Bindu S.
HOD
Electrical Department

EESA Convener

Dear Students and Readers,

Greetings and welcome to the latest edition of the Electrical Engineering Students Association (EESA) Magazine! It is a moment of great pride to present this publication, which captures the creativity, intellect, and vibrant spirit of our student community. More than a collection of articles and artwork, this magazine serves as a reflection of the diverse talents, perspectives, and voices that make our committee truly special. The past year has brought its share of challenges and achievements. Throughout it all, our students have shown remarkable resilience, innovation, and a strong commitment to building an inclusive and dynamic campus environment. This edition is a tribute to that unwavering spirit. I extend heartfelt thanks to all contributors for your creativity and dedication, and to the editorial team for your tireless effort in bringing this magazine to life. As you explore this issue, may you find inspiration, pride, and a renewed sense of connection to our community. Let it serve as a reminder of what we've accomplished together—and of the exciting path ahead. Thank you for your continued support. Together, we are shaping a legacy of excellence and unity.

Warm regards,
Mrs. Nikita Jadhav
Convener, Electrical Engineering Students Association

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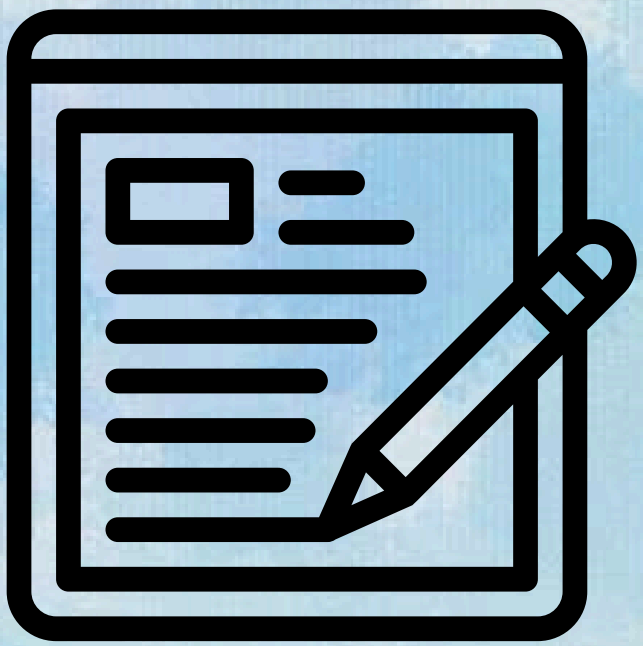
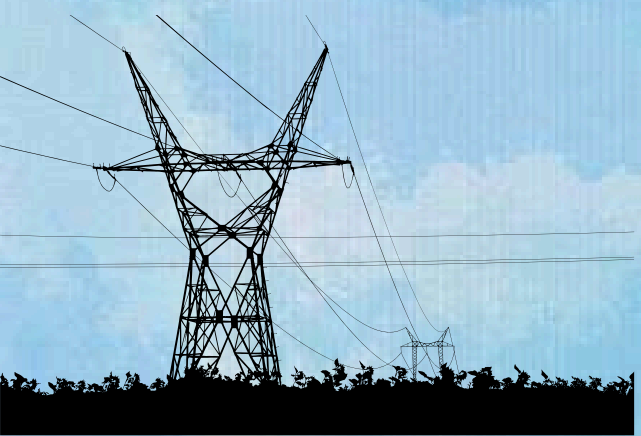


Electrical Engineering At FCRIT

Electricity has been a subject of scientific interest since at least the 17th century and hence is considered one of the oldest branches of engineering. The students are taught to design, analyze, implement, and operate electrical and electronic systems efficiently, thus opening the doors to new challenges. In this aspect, the students are given in-depth knowledge of Machines, Power Systems, Control Systems, Signal Processing, Drives, Power Electronics, Microprocessors, Switched Mode Power Supplies and allied software. To impart this, we have well-qualified, experienced, dedicated staff and excellent infrastructure in the department



Vision & Mission of the Institiute

Vision

To evolve and flourish as a progressive centre for modern technical education, stirring creativity in every student leading to self-sustainable professionals, through holistic development; nurtured by strength and legitimate pride of Indian values and ethics.

Mission

- To provide industry oriented quality education.
- To provide a holistic environment for overall personality development.
- To foster relationships with other institutes of repute,alumni and industry.

PEO & PSO of Electrical Engineering Department

Program Educational Objective (PEO)

Graduates will be able to...

- Demonstrate core competency in the areas of power system, power electronics, machines, renewable energy and allied disciplines.
- Contribute to environmental sustainability through design, development and commissioning of green energy or clean energy systems.
- Excel in professional career and higher education with ethical values.

PEO & PSO of Electrical Engineering Department

Program Specific Objective (PSO)

Graduates will be able to...

- Comprehend and analyze the problems in power generation, transmission and distribution systems.
- Acquire technical knowledge, skill and competency in development of Renewable energy system and contribute to energy efficiency.

Staff Publications

Journal Publications

Sr. No	Title of Paper	Details	Author	Month and Year
1	Optimizing State Space Integral Controllers for DC-DC Buck Converters Using FPGA-Based Genetic Algorithms	International Journal of Computing and Digital Systems, Vol. 18, No. 1, pp.1–11 ISSN: 2210-142X https://journal.uob.edu.bh/handle/123456789/5732	Mini K. Namboothiripad	May 2025
2	Efficient implementation of artificial neural networks on FPGAs using highlevel synthesis and parallelism	International Journal of Advanced Technology and Engineering Exploration, Vol 11(119)ISSN (Print): 2394-5443 ISSN (Online): 2394-7454 http://dx.doi.org/10.19101/IJATEE.2023.10102538	Mini K. Namboothiripad, Gayathri Vadhyan	Oct 2024
3	Arc Fault Detection and Classification in DC Microgrid Using Deep Neural Network	SSRG International Journal of Electronics and Communication Engineering ISSN: 2348-8549/ , Volume 11 Issue 8, 131-139, August 2024 © 2024 Seventh Sense Research Group® https://doi.org/10.14445/23488549/IJECE-V11I8P114	Dipti Patil, Bindu S, Sushil Thale	August 2024

Staff Publications

Conference Publications

Sr.No	Title of Paper	Details	Author	Month and Year
1	DC Motor Speed Control of Surface Operated Rover	2024 Asia Pacific Conference on Innovation in Technology (APCIT), https://doi.org/10.1109/APCIT62007.2024.10673572	Swayash Gaikwad, Om Malunjkar, Rohit Mandve, Vaibhavi Mhatre, Mini Namboothiripad	July 24
2	Anticipating Cleaning Schedules for 22kV Porcelain Insulators through Leakage Current Analysis and Machine Learning	2024 Third IEEE International Conference on Electrical, Electronics, Information, and Communication Technologies (ICEEICT 2024)	Devendra Patole, Bindu S	July 24
3	Closed loop operation of transformer less inverter in voltage and current controlled mode	2024 IEEE 1st International Conference on Green Industrial Electronics and Sustainable Technologies (GIEST-2024)	Sushant Khetle, Mini Rajeev	Oct 2024
4	Power Flow and Performance Analysis of Three Port Converter in Street Light	2024 IEEE 1st International Conference on Green Industrial Electronics and Sustainable Technologies (GIEST-2024)	Shubham Pawar, Yash Prajapati, Mini Rajeev	Oct 2024
5	Hardware Implementation of V/F Control for Solar Water Pumping System	1st IEEE International Conference on Green Industrial Electronics and Sustainable Technologies	Mahendra Rane, Abhishek Shiwalkar	Oct 2024

Staff Publications

Conference Publications

Sr. No	Title of Paper	Details	Author	Month and Year
6	Performance Assessment of Distance Protection in UPFC – Compensated Transmission Networks with Integrated Converter-Interfaced Renewable Energy Plants	IEEE 1st International Conference on Green Industrial Electronics and Sustainable Technologies (GIEST-2024)	Aniruddha Ray, Bindu S	Oct 2024
7	Dynamic Phasor Modelling of Z source Converter	3rd International Conference on Advancement in Science, Technology & Management (ICASTM - 2025)	Mahendra Rane, Abhishek Shiwalkar	Oct 24
8	Application of Python Based Machine Learning for Transformer Performance and Transmission Line Fault Prediction	2nd IEEE International Conference on Artificial Intelligence and Quantum Computation Based Sensor Applications (ICAIQSA-2024)	Rajendra Soni, Bindu R, Divya S, Bindu S	Dec 2024
9	Assessment in Distribution System Integrated with Distributed Generation	2nd International Conference on Trends in Engineering Systems and Technologies (ICTEST), 3-5 April 2025	Seema Jadhav, Bindu S	April 25

Staff Achievements

Sr.No	Description	Year
1	Successful completion of 12 WEEK online NPTEL course and being topper in the exam with 79% overall score. Staff name: Rashmi Kale	SH24
2	Best paper award to Dr. Mahendra Rane and Abhishek Shiwalkar for presenting paper titled 'Hardware Implementation of V/F Control for Solar Water Pumping System', at 2024 IEEE 1st International Conference on Green Industrial Electronics and Sustainable Technologies (GIEST – 2024) organized by NIT, Manipur.	SH24
3	Incentive of amount 5000/- received by Dr. Mini Namboothiripad for publication in reputed journal in academic year 2024-25.	FH25

Students's Publication

Conference Publications

Sr.No	Title of Paper	Details	Author	Month and Year
1	DC Motor Speed Control of Surface Operated Rover	2024 Asia Pacific Conference on Innovation in Technology (APCIT), https://doi.org/10.1109/APCIT62007.2024.10673572	Swayash Gaikwad, Om Malunjkar, Rohit Mandve, Vaibhavi Mhatre, Mini Namboothiripad	July 2024
2	Closed loop operation of transformer less inverter in voltage and current controlled mode	2024 IEEE 1st International Conference on Green Industrial Electronics and Sustainable Technologies (GIEST-2024) https://doi.org/10.1109/GIEST62955.2024.10960198	Sushant Khetle, Mini Rajeev	Oct 2024
3	Power Flow and Performance Analysis of Three Port Converter in Street Light	2024 IEEE 1st International Conference on Green Industrial Electronics and Sustainable Technologies (GIEST-2024) https://doi.org/10.1109/GIEST62955.2024.10960083	Shubham Pawar, Yash Prajapati, Mini Rajeev	Oct 2024

Students's Achievement

Sr.No	Description	Year
1	All India Rank 2 in Best Aerodynamic Analysis (CFD) in SAE DDC (Drone Development Challenge) 2024 held at SRM, Chennai in August 2024 Students (Final Year): Vaibhav Chavan, Omkar Ghag	SH24
2	First Prize IEI Mini Project Competition organized by Electrical Engineering Department, FCRIT, Vashi. 17th August 2024 Student Names (TE): Geber DE SA, Shreyas Shigam, Rani Lugde	SH24
3	Second Prize IEI Mini Project Competition organized by Electrical Engineering Department, FCRIT, Vashi. 17th August 2024 Student Names (TE): Ranvir Mathadu, Atharva Patil, Hitesh Patil, Mahesh Epili	SH24
4	Third Prize IEI Mini Project Competition organized by Electrical Engineering Department, FCRIT, Vashi. 17th August 2024 Student Names (TE): Neena Chauhan, Isha Dewangan, Hrutuja Khamkar	SH24
5	Second Prize in event “Naadsphurti” subcategory “Kavita Sadarikaran” at Intercollege competition organized by SIES, Nerul. Student Name (TE): Sanket Dinkar	SH24
6	First prize in Spark-A-Thon 2024 organized by E-Cell FCRIT. Student Names (SE): Akshaya Balam, Tanish Thakare, Aditya Shetye, Vedant Patare	SH24

Students's Achievement

Sr.No	Description	Year
7	First runner up in Football (Boys) at Mumbai University Intercollegiate Sports 2024-25 (Thane Zone -3) Student Name (SE): Kartik Solunke	SH24
8	Second runner up in Basketball (Girls) at Mumbai University Intercollegiate Sports 2024-25 (Thane Zone -3) Student Name (SE): Arya Nikam	SH24
9	IEI Scholarship of INR 6000 to following students Ms. Swagata Laxmi Das (Second Year) Ms. Hrutuja Shrikant Khamkar (Third Year) Mr. Satwik Panda (Third Year) Mr. Sarthak Ramvriksh Varma (Final Year)	FH25
10	BE Poster Presentation Competition Winners · 1st Prize to project titled, 'Development of MPPT P&O System for Synchronous Wind Turbine Generator', by students Siddhesh Daingade, Punit Revannavar, Shshank Shetty, Sarthak Varma 2nd Prize to project titled, 'Electric Mobility Bicycle', by students Vikram Kamble, Yash Kohad, Om Prabhu, Vinayak Salunkhe	FH25
11	1st Prize and cash prize of INR 5000 to team Pedal to Power comprising of students Vikram Kamble, Yash Kohad, Om Prabhu, and Vinayak Salunkhe for their final year project at Tantravihar organized by Vidyalankar Institute of Technology.	FH25

Students's Achievement

Sr.No	Description	Year
12	All India Rank 1 in Overall Performance and All India Rank in Safe Design System to Team Thestral of Aero FCRIT in SAEISS ADDC 2025 (Autonomous Drone Development Challenge) held at KCG College of Engineering, Chennai. Following Electrical students were part of the team 1. Aditya Brahmankar (Second Year)	FH25
13	All India Rank 3 to Team Garuda of Aero FCRIT in Best Aerodynamic Analysis (CFD) in SAEISS DDC (Drone Development Challenge) 2025 held at Karpaga Vinayaga College of Engineering and Technology Following Electrical students were part of the team 1. Soham Shinde (Third Year) 2. Vishnu Vardhan (Second Year) 3. Shravani Shinde (Second Year) 4. Sameehan Paluskar (Third Year)	FH25
14	Sahil Chaugule from Second Year Electrical secured 2nd runner up position in the prestigious StartFit Arena pitching competition held by Ecell FCRIT for idea 'AI – powered glasses'.	FH25
15	2nd Runner up and cash (INR 4000) Prize to project titled, 'Development of MPPT P&O System for Synchronous Wind Turbine Generator', by students Siddhesh Daingade, Punit Revannavar, Shshank Shetty, Sarthak Varma at Tantragyan 2025, hosted by Lokmanya College of Engineering.	FH25
16	2nd Prize in FCRIT AVISHKAR 2025, 'A National Level Project Competition' organized by IEI Electrical Students Chapter in collaboration with IEI Navi Mumbai Local Center for project titled 'Design and Development of MPPT System for Wind Turbine Generators'. The project group members names are Sarthak Varma, Siddhesh Daingade, Shshank Shetty, and Punit Reannavar	FH25

EVENTS UNDER EESA

Vidyut Seminar 1

The Guideline Steps to Elevate Professional Career Seminar Series is organized by the Electrical Engineering Students Association of the department. Experts from various industries are invited to deliver sessions on diverse topics that help individuals enhance their professional skills beyond their formal education. Participants are introduced to strategies for career growth, including effective networking, personal branding, and continuous learning. The speakers also emphasize the importance of setting clear career goals and staying adaptable in a rapidly changing job market, which can inspire individuals to develop proactive approaches for achieving long-term career success.

Glimpses of the Event

Vidyut Seminar 2

The Project Management Seminar Series is organized by the Electrical Engineering Students Association of the department every semester. Experts from the industry are invited to deliver sessions on diverse topics that help students gain knowledge beyond their engineering curriculum. Students were introduced to the principles of project management and the ways in which they could apply these skills to improve efficiency and effectiveness in various projects. The speaker also emphasized the importance of time management and resource optimization, which can inspire students to develop innovative strategies for successful project execution.

Glimpses of the Event

Polycab Workshop

The Electrical Engineering Students Association Council organized a workshop, "Be an AMPion", in collaboration with Polycab India. The event was attended by Sem 5 and Sem 7 students, who were showcased various types of cables by Polycab India. The workshop aimed to provide students with practical knowledge and industry insights.

The workshop provided a valuable learning experience for the participating students, offering them a chance to gain practical knowledge and insights into the electrical engineering industry. The workshop provided students with practical knowledge about cables, fostered industryacademia collaboration, exposed them to career opportunities, and fostered networking with industry professionals. It also inspired students to become leaders in the industry, promoting innovation and entrepreneurship, and improved their employability in the field.

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Glimpses of the Event

Vidyut Seminar 3

The seminar on Sustainable Nuclear Energy Solutions: Challenges and Opportunities was organized by the Electrical Engineering Students Association(EESA) in collaboration with IEI student chapter of the department. Experts were invited from the energy sector to provide insights into the future of nuclear power as a sustainable energy source. The sessions delved into diverse topics, including advanced reactor designs, renewable energy synergy, nuclear waste solutions, and the potential for zero-carbon energy. Speakers emphasized the importance of interdisciplinary approaches in addressing safety, efficiency, and cost-effectiveness in nuclear technology. Students gained a comprehensive understanding of nuclear energy's role in combating climate change while balancing technological, societal, and economic factors.

Glimpses of the Event

Vidyut Seminar 4

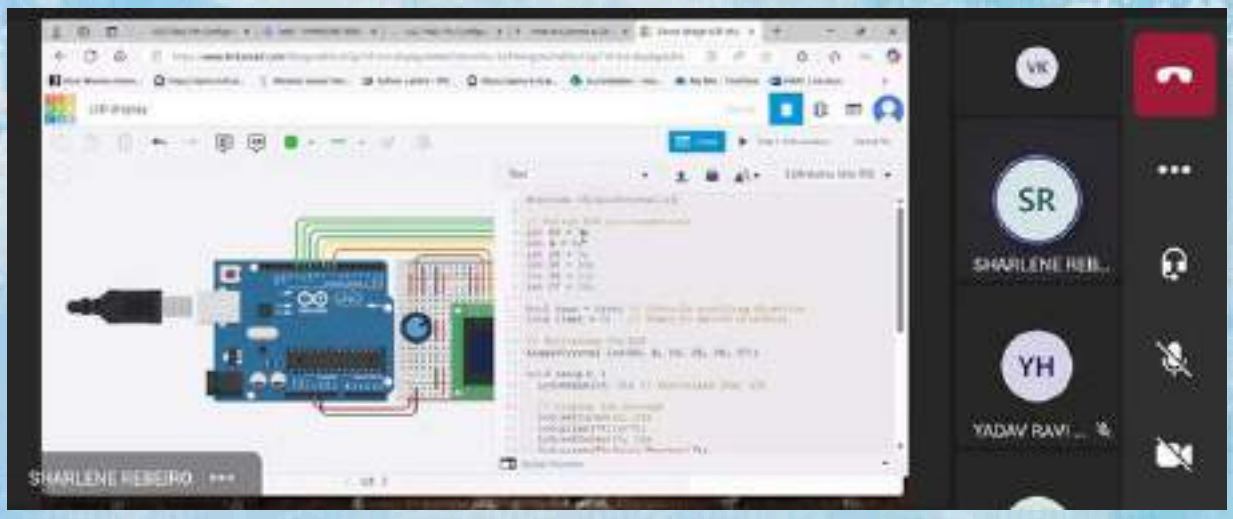
The seminar on Safety Protocols and Innovations in Nuclear Reactors is organized by the Electrical Engineering Students Association(EESA) in collaboration with IEI Student chapter of the department. Industry experts and researchers were invited to deliver insights into modern safety protocols and the innovative technologies shaping the future of nuclear reactors. The session covered a range of topics, including passive safety systems, real-time monitoring technologies, advanced materials for reactor cores, and lessons learned from past incidents. Speaker highlighted the importance of risk assessment, regulatory frameworks, and public trust in the nuclear sector. Students gained valuable knowledge about the intersection of safety and innovation in nuclear technology, preparing them to contribute to advancements in the field responsibly.

Glimpses of the event

IOT Workshop

The Electrical Engineering Students Association (EESA) and Institution of Engineers India (IEI) Electrical Students Chapter organized a workshop on the Internet of Things (IoT) for electrical engineering students. The workshop aimed to provide a comprehensive introduction to IoT, covering essential concepts, system architecture, and real-world applications. Participants were given hands-on exposure to IoT devices, sensors, and cloud platforms. The session included live demonstrations, showcasing how IoT technology is used in smart homes, healthcare monitoring, and industrial automation. Students also learned about data collection, wireless communication protocols, and basic integration techniques, helping them bridge the gap between theory and practical implementation.

Glimpses of the event



Vidyut Seminar 5

The Electrical Engineering Students Association (EESA) organized Vidyut seminar on topic 'How to become successful Entrepreneur' for electrical engineering students. The workshop aimed to provide a comprehensive introduction to IoT, covering essential concepts, system architecture, and real-world applications. The seminar focused on the key aspects of entrepreneurship, specifically within the electrical industry. Experts shared experiences and strategies for launching and managing a successful business. Topics included market analysis, funding opportunities, branding, marketing, and business scalability. Real-world case studies and success stories were discussed to provide practical insights. Interactive Q&A sessions allowed participants to engage with speakers and clarify doubts.

Glimpses of the event

Industrial Visit

Tata Power, Kalyan (T.E)

Industrial Visit

MSEDC Kalyan (S.E)

Power Grid, Panvel (S.E)

DOL Motor, Rabale (S.E)

Placement


Agnel Charities
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Kiran L. Tata Power
Shreshtha P. Godrej & Boyce
Harsh S. Godrej & Boyce
Swayash G. Godrej & Boyce
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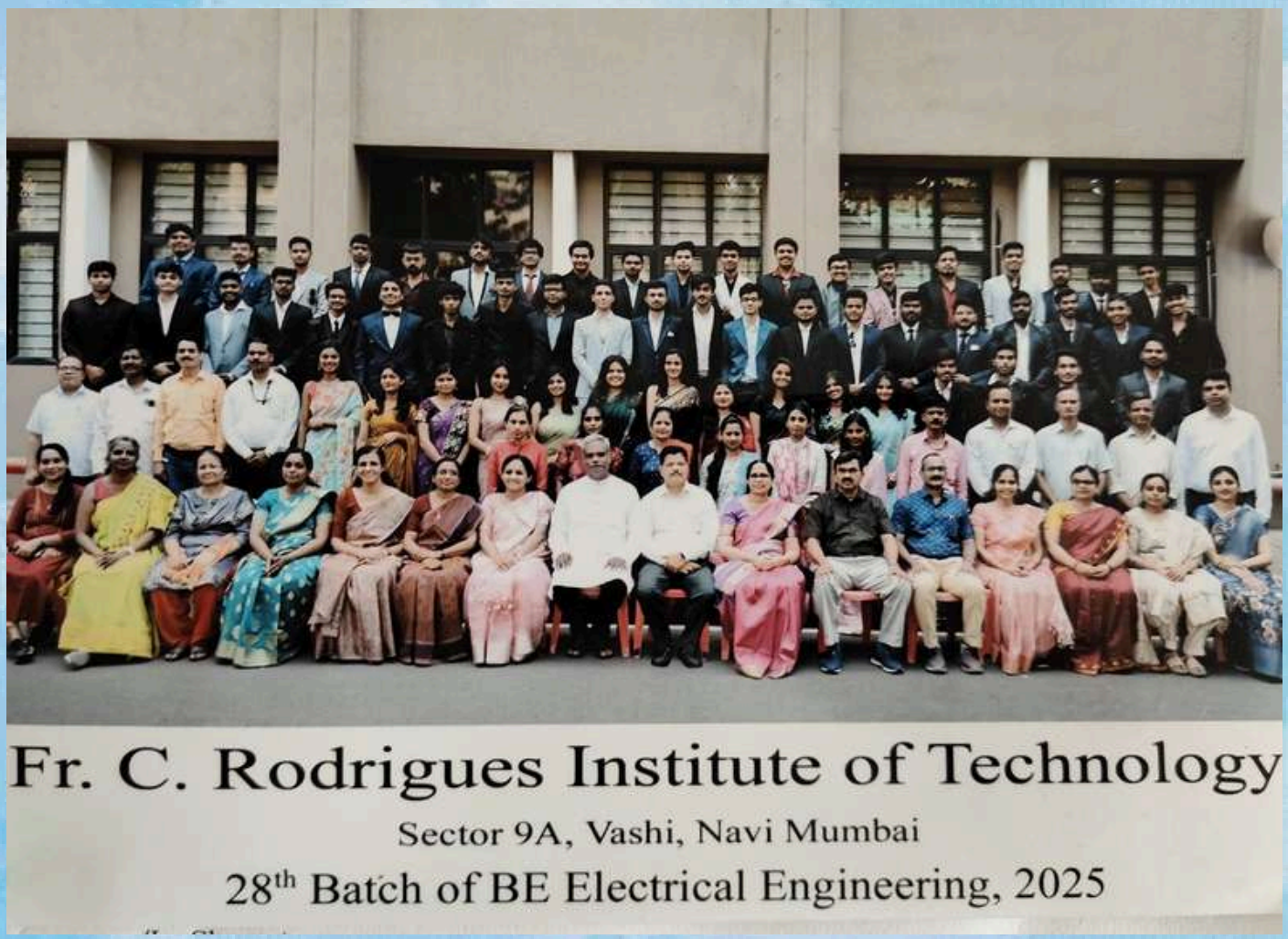
Ayman Thakur Torrent Power
Omkar Ghag Torrent Power
Rohit Kumbhar Torrent Power
Sahil T. Torrent Power
Vikram Kamble Torrent Power
Prathamesh S. IAVL
Roshani C. Hadwise Technologies
Kirti S. Corrosion Technolog
Surabhi S. Corrosion Technology
Gaurang R. InstaSine
Atharva B. InstaSine
Shivam P. Polycab
Rahil B. Polycab
Yash G. Nippen Electricals
Siddhi P. Samcon
Ajay P. CPALS
Total Placed Through Campus : 44 Out of 46 Students Opted for Placement
Congratulations
BE Elect Batch 2024-25

Batch of 2024-25



Fr. C. Rodrigues Institute of Technology

Sector 9A, Vashi, Navi Mumbai

28th Batch of BE Electrical Engineering, 2025

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Council Members

Magazine editor
Ramchandra Bhoge

Magazine editor
Mohanish Nemade

Thank you

Confidence is better than perfection, because perfection means doing the best, but confidence means knowing how to handle the worst.

~A P J Abdul Kalam