



**SAMBHRAM**  
INSTITUTE OF TECHNOLOGY



# HALF YEARLY ELITE NEWSLETTER

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FEB 2023- JULY 2023



[www.sambhram.org](http://www.sambhram.org)

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# SAMBHRAM INSTITUTE OF TECHNOLOGY

## »»» OUR MISSION

**OUR MISSION IS TO PROVIDE WORK ORIENTED EDUCATION COMBINED WITH ETHICAL VALUES, CHARACTER BUILDING IN CONTEXT OF TODAY'S MILLENNIUM.**

**OUR AIM IS TO TEACH STUDENTS THE ETHICAL VALUES, AND BUILD CHARACTER ALONG WITH WORK ORIENTED COURSE. HENCE, WE STRIVE TO TRAVEL BEYOND THE BOUNDARIES OF MERE BOOKS. WE HAVE REALIZED THAT THE FUTURE IS ABSTRACT AND UNKNOWN BUT THE YOUTH IN OUR HANDS ARE REAL AND CAN BE MOULDED.**

## »»» OUR VISION

**THE FUTURE IS EMBODIED IN THE PRESENT GENERATION. PROFESSIONAL EDUCATION COMBINED WITH PRACTICAL EXPOSURE TO CREATE VALUES IN THE STUDENTS WHO ARE THE FUTURE OF OUR NATION.**



# ***YOUR FUTURE IS CREATED BY WHAT YOU DO TODAY, NOT TOMORROW***



It is my pleasure to congratulate the editorial board on this pleasant occasion of releasing the newsletter for the period August 2022 to January 2023. It is great to find a considerable number of winners and participants in co-curricular and extracurricular activities which certainly prove that our staff and students are adequately equipped and possess necessary quality skill-sets to bring such laurels to the institution. I wish that this number may grow in the years to come. I am sure that publishing a newsletter of this sort containing the achievements of the Salt family will be a recognition to them. I wish them all the very best for future endeavors.

Dr. V. Nagaraj  
Chairman  
Sambhram Group of Institutions

The newsletter which is being rolled out today marks the launch of an effervescent activity that would enable the Management to bring out to the eyes of the competitive world, the academic achievements of our prestigious institution. Sambhram Institute of Technology has grown in leaps and bounds, hurtling across barriers along the way. This has been made possible with the collaborative effort of the Management, the Staff and the Students. I congratulate everyone for their commitment.

Dr. H. G. Chandrakanth  
Principal  
Sambhram Institute of Technology



# MESSAGE FROM HOD'S

**DR. T. JOHN PETER**

**HOD, CSE**



The Computer Science and Engineering department stands as a beacon of digital transformation, where students and faculty collaborate to shape the future. We're in the midst of an exciting era where technology is the driving force behind almost every aspect of our lives. At CSE, we're committed to preparing our students to be leaders in this digital age. We provide them with the knowledge and skills needed to navigate the ever-changing tech landscape and make a meaningful impact.

**DR. RAVISHANKAR. C. V**

**HOD, ECE**

The Electronics and communication engineering department is more than just an academic unit. It's a thriving hub of innovation, where students and faculty collaborate on cutting-edge research, pushing the boundaries of technology. We continue to prepare our students for the dynamic world of electrical and computer engineering, equipping them with the knowledge and skills to solve the world's most pressing challenges. We embrace the latest advancements, from AI and cyber security to renewable energy and IoT. I look forward to the remarkable work that our students and faculty will continue to produce.



**DR. LATHA. P. H**

**HOD, ISE**



The Information Science and Technology department offers engineering and industry oriented subjects where the students can excel in the interested domain. These diversified programmes are application-oriented and are designed to produce competent graduates who can apply theories in practice. Our students are set to participate in industrial and research projects with a strong applied nature for industrial, commercial and community needs.



## DR. MALLIKARJUN HOD, CIVIL



The Civil department's commitment to shaping the physical and societal landscape has never been stronger. We are dedicated to providing our students with the knowledge and skills needed to design, construct, and manage infrastructure that enhances the quality of life. In an era of environmental consciousness, sustainable design, and urban development, our Civil Engineering Department stands at the forefront of innovation. We are nurturing future engineers and leaders who understand the importance of balancing progress with environmental responsibility.

## DR. APPAJI GOWDA. C HOD, DEPT. OF MATHEMATICS

The Basic Science Department is the cornerstone of scientific knowledge and exploration, providing a solid foundation upon which all scientific disciplines are built. In our department, we instill the fundamental principles of physics, chemistry, biology, and mathematics into the minds of our students. We believe that these principles are the keys to unlocking the mysteries of the universe and advancing human understanding.



## DR. SANGEETHA. R HOD, CSE - CYBER SECURITY



Our students and faculty are passionate about understanding and defending against cyber threats, ensuring the confidentiality, integrity, and availability of information. In a world where data is currency and privacy is paramount, we are the sentinels who ensure the safe passage of information. We embrace the challenge of cyber security with a mix of cutting-edge technology, innovative research, and ethical responsibility.



## DR. AJEETH HOD, AIML



The field of Artificial Intelligence and Machine Learning is experiencing an incredible revolution, and our department stands at the forefront of this transformative journey. In our AI/ML Department, we embark on a quest to understand, replicate, and expand upon human intelligence. Our students and faculty are explorers in a world where data becomes knowledge, and machines become learners. Artificial Intelligence and Machine Learning are no longer just buzzwords; they are integral to every aspect of our lives.

## DR. R. SEETHARAMIAH HOD, MECHANICAL

In the Mechanical Engineering Department, we foster innovation, curiosity, and precision. Our students and faculty are the architects of solutions that span industries, from aerospace and automotive to energy and robotics. We are the driving force behind the machines and systems that drive progress. Our department is more than just classrooms and laboratories. It's a community that thrives on collaboration and ingenuity.





Dear Esteemed Readers,

As we embark on another exciting edition of our newsletter, I am filled with immense pride and enthusiasm to present to you the latest developments and insightful contributions from the field of Electrical and Computer Engineering. Our dedicated team has worked tirelessly to curate a collection of articles, research findings, and industry updates that reflect the cutting-edge advancements in ECE. In this edition, we delve into emerging technologies, innovative research projects, and the impactful work of our esteemed faculty and students. It is my sincere hope that this newsletter serves as a valuable resource, fostering a sense of connection and shared knowledge within our vibrant ECE community. I extend my gratitude to all contributors and encourage our readers to engage, question, and explore the exciting possibilities that lie ahead in the ever-evolving landscape of Electrical and Computer Engineering.

Best Regards,  
Dr. Ravishankar. C. V  
Chief Editor  
The Elite  
Newsletter



**"COOPERATION IS THE THOROUGH CONVICTION THAT NOBODY CAN GET THERE UNLESS EVERYBODY GETS THERE."**

**~ VIRGINIA BURDEN**

## **EDITOR'S NOTE**

"Welcome to the freshest instalment of our engineering college newsletter! Step into the thrilling realm of innovation and advancement, where we serve as your bridge. Our editorial squad is wholeheartedly committed to delivering compelling narratives, remarkable accomplishments, and the latest in groundbreaking research from our vibrant campus. We're a harmonious engine, propelling the triumph of this publication. Our pledge is to bring you the utmost in engineering brilliance. Keep an eye out, stay motivated, and remain linked with our vibrant community."



**Dr. Ravishankar. C. V**  
Chief Coordinator  
Dept. of ECE

**Faculty coordinators:**

: Prof. Saranya (CSE)  
: Prof. Nithiya K (ECE)  
: Prof. Nayana H R (Basic Science)  
: Prof. Pankaja Manjunath (ISE)  
: Prof. Ashwini (Civil)  
: Dr. Yuvaraj (Mech)



**SONIYA KUMARI B.**  
6th Sem  
Dept. of CSE



**TEJAS P. M.**  
6th Sem  
Dept. of CSE



**RANGA KAVYA**  
4th Sem  
Dept. of CSE

# **ACKNOWLEDGEMENT**

***“The price of success is hard work, dedication to the job at hand, and the determination that whether we win or lose, we have applied the best of ourselves to the task at hand.”***

***It gives us immense pleasure to release the 11th edition of the College Newsletter "The ELITE NEWSLETTER".***

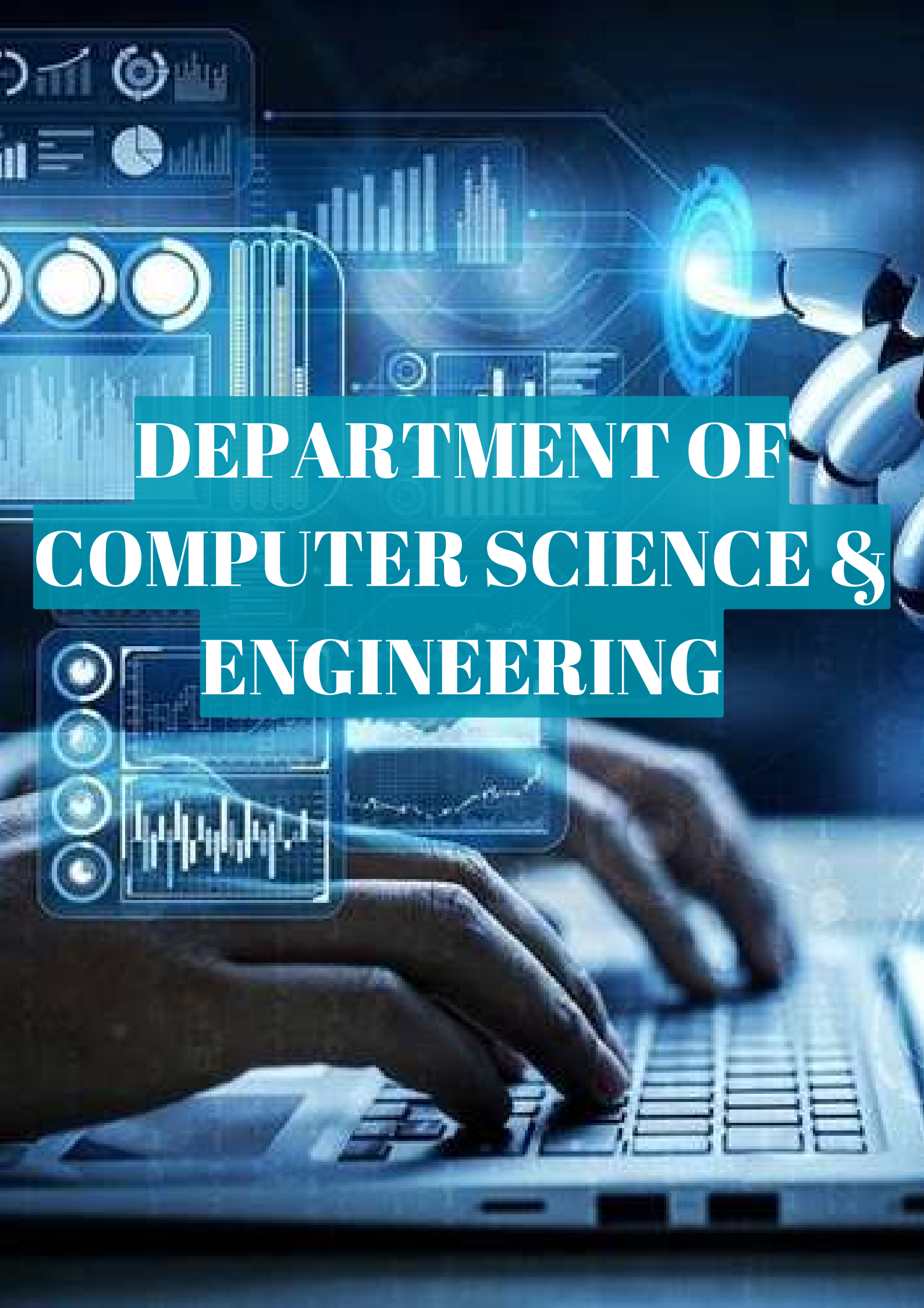
***We would like to express our deep gratitude to Dr. V. Nagaraj, The Honourable Chairman, The Dean Academics & The Dean Research, Dr. H. G. Chandrakanth, The Principal, Sambhram Institute of Technology, in bringing out this magazine.***

***We take pride in acknowledging the insightful guidance of Dr. Ravishankar. C. V, Head of the Department, ECE in making of the magazine. Of the many people who have been enormously helpful in the production of the magazine, we are very grateful to the forum coordinators Prof. Mallamma and Prof. Nithiya and students of Electronics & Communication Engineering and Computer Science & Engineering.***

***We would like to offer our special thanks to the faculty of CSE and ECE. Their support, encouragement and credible ideas have been great contribution in the successful completion of this magazine.***

# **PREFACE**

***The Sambhram Institute of Technology was established by a team of experts who are a perfect blend of industry and academia. The founders of this Institution and others, who are associated with us, are eminent educationists, distinguished personalities and philanthropic minded persons who have laid a solid foundation and are nurturing it to grow phenomenally. With commendable dedication, determination, optimistic and indomitable courage, the managing committee members have pledged to shape the institution to a gigantic position in the near future. It was Established in 2001 with four engineering branches namely Computer Science, Electronics & Communication, Information Science & Mechanical, today Salt offers 5 Undergraduate Engineering programmes, 2 Master Degree programmes and 5 Doctoral programmes and rated among top Engineering Institutions in the Bangalore. Current annual student intake for Undergraduate Programmes & Post Graduate Programmes in Engineering is around 1200. Salt aims at an integral training of students forming them into genuine persons with relevant skills, values and attributes in such a way that they are enabled to develop a career sensitive to the challenging world of technological advancement and to live for the prosperity of every human being. We cultivate the basic qualities among students to build up a strong character and imbibe a sense of moral, ethical and spiritual values. Towards this end, we are imparting an integral training to transform students to genuine citizens for the prosperity of every man and woman in our country. The Sambhram Institute of Technology is committed to create quality professionals to meet the emerging industrial and social needs through innovative teaching applied research, Industrial Interaction, Placing faith in human values and aiming at continual improvement in all activities. We strive to provide the quality education that meets the need and aspirations of the students, employers and society. The institute aims to respond to all of these groups by providing curriculum and support which is necessary to enable the progression and to allow individuals to grow, develop and become universally accepted technocrat.***



**DEPARTMENT OF  
COMPUTER SCIENCE &  
ENGINEERING**

## DEPARTMENT OF CSE

and Engineering (CSE) has witnessed a remarkable transformation, aligning its curriculum with the dynamic landscape of technological advancements. Through a rigorous academic framework, students delve into the intricate realms of information theory, algorithmic design, and computational paradigms, preparing them to tackle real-world challenges with innovative solutions. Beyond the traditional scope of programming and software development, the CSE program emphasizes interdisciplinary collaboration, encouraging students to explore intersections with fields like artificial intelligence, machine learning, and cybersecurity.

Moreover, CSE graduates emerge as versatile problem solvers, equipped with the analytical thinking and critical reasoning skills essential for navigating complexities of today's digital age. The curriculum integrates hands-on experiences, project-based learning, and industry internships, fostering practical proficiency alongside theoretical knowledge. This holistic approach not only nurtures technical expertise but also cultivates attributes like teamwork, communication, and adaptability, which are invaluable in professional settings.

In addition to academic excellence, the CSE department fosters a culture of innovation and research, providing avenues for students and faculty to engage in cutting-edge projects and collaborative endeavours. By leveraging state-of-the-art facilities and partnerships with industry leaders, students gain exposure to emerging technologies and industry best practices, preparing them to drive innovation and contribute meaningfully to society.

Furthermore, the demand for skilled Computer Science Engineers continues to soar across diverse sectors, ranging from IT giants and startups to government agencies and research institutions. The interdisciplinary nature of the field enables graduates to explore diverse career paths, from software development and cybersecurity to data science and robotics. As pioneers in the digital frontier, CSE graduates play a pivotal role in shaping the future of technology, driving innovation, and addressing global challenges through technology-driven solutions.



**Dr. T. JOHN PETER**  
HOD, CSE

In essence, the Department of Computer Science and Engineering serves as a crucible of innovation, nurturing the next generation of technologists, entrepreneurs, and thought leaders who will redefine the boundaries of what is possible in the digital era. Through its comprehensive curriculum, research initiatives, and industry collaborations, the department continues to empower students to become catalysts for positive change, driving progress and shaping the future of technology and society.

### **PAPERS PUBLISHED OR PRESENTED BY FACULTIES/STUDENTS**

1. Dr. Sanjeetha R submitted a proposal titled "Interactive Voice-Based Virtual Scribe for Visually Impaired Students" to VTU on February 28th, 2023.
2. Dr. Sanjeetha R presented two papers titled "Botnet Forensic Analysis in Software Defined Networks using Ensemble Based Classifier" and "Mitigation of DDoS Attack in SDN using Table Miss-entry" at the 4th International Conference on Circuits, Control, Communication and Computing (I4C) 2022, held in Bangalore, India, in 2022, with respective page numbers 462-467, and 6-11, and DOIs: 10.1109/I4C57141.2022.10057656, 10.1109/I4C57141.2022.10057725. Additionally, she completed an online course on AICTE recommended Energy Literacy as a part of the "ENERGY LITERACY TRAINING" by the Energy Swaraj Foundation in March 2023.
3. Dr. K Balakrishnan published a patent titled "Improving Spectrum Sensing in Cognitive Radio Internet of Things using Machine Learning Algorithm" with the application number 202341015855 on March 17th, 2023.
4. Prof. Vani B published a paper titled "Number Plate Detection in Vehicles Using Faster R-CNN" in Volume 3, Issue 05, May 2023, of the International Journal of Progressive Research in Engineering Management and Science (IJPREMS).
5. Prof. Vani B's paper titled "Finding Missing Person Using AI" was published in Volume 03, Issue 05, May 2023, of the International Journal of Progressive Research in Engineering Management and Science (IJPREMS).
6. Prof. Vani B's paper titled "Real-Time Application for Vehicle Antitheft & Drowsiness Detection Using Computer Vision & IoT" was published in Volume 03, Issue 05, May 2023, of the International Journal of Progressive Research in Engineering Management and Science (IJPREMS).

## MOU's Signed

1. On March 23rd, 2023, an MoU was signed with Pragyani AI, encompassing sponsored projects, consultancy projects, the organization of hackathons, AI events, virtual technology clubs, faculty development programs, guest lectures, skill development programs, internships, placements, industrial training and visits, as well as research and development initiatives.



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## FACULTY ACHIEVEMENTS

1. Female faculty members from the Computer Science and Engineering department emerged victorious in a throw ball match held in celebration of International Women's Day 2023 on March 9th, 2023. 2. Prof. Mallamma C G was awarded the title of Best Women Faculty for the year 2023 on International Women's Day, honoured by the Women's Cell at SaIT, Bangalore, on March 13th, 2023. 3. Prof. Mohana Priya M was honoured as the Best Alumni of the year 2023 during the International Women's Day celebrations organized by the Women's Cell at SaIT, Bangalore, on March 13th, 2023.

## **FACULTY AND STUDENTS PROJECTS FUNDED BY KSCST**

1. The department has received KSCST proposals for student projects, marking the 46th series of the Student Project Programme. This initiative likely aims to foster innovation and practical learning experiences among students by providing them with opportunities to work on real-world projects under the guidance of faculty mentors.

2. Department of CSE secured approval for a Rs. 20,000 consultancy project funding from Creatise for the project titled "Domestic Water Supply Monitoring and Water Theft Identification System."

3. Prof. Vani B and her team received KSCST funding of Rs. 4000 for the project titled "Finding Missing Persons using Artificial Intelligence."

4. Prof. Vani B and her team also received KSCST funding of Rs. 4000 for the project titled "Automatic Number Plate Detection in Vehicles using Faster R-CNN."

5. Prof. Suchitra Devi and her team received KSCST funding of Rs. 4000 for the project titled "Street Photos to Industrial Fashion Trends: Leveraging User-Provided Noisy Labels for Cost-Effective Management."

6. Prof Sindhu K and her team received KSCST funding of Rs. 4000 for the project titled "Smart Helmet with Integrated Air Bag System."

7. Prof Mohanapriya M and her team received KSCST funding of Rs. 4000 for the project titled "Smart Waste Segregator with Organic Fertilizer Production."

8. Prof. Kishore PJ and his team received KSCST funding of Rs. 4000 for the project titled "Real-Time Voice Cloning."

9. Prof. Dhanashree KJ and her team received KSCST funding of Rs. 4000 for the project titled "Automated HTML Code Generation from Hand-Drawn Images Using Machine Learning Algorithm."

10. Prof. Hanumantha Rao and his team received KSCST funding of Rs. 4000 for the project titled "Enhancing Algorithmic Performance of Programming Language Predicament Using Educational Data Mining."

11. Prof. Hanumantha Rao and his team received KSCST funding of Rs. 4000 for the project titled "Wi-Fi Door Lock System Using ESP32 CAM Through BLYNK."



## **POST DOCTORAL FELLOWSHIP REGISTERED FACULTY DETAILS**

1. Dr. K Srinivas Rao has registered for the Post Doctoral Fellowship (IIP-PDF) in the Computer Science Engineering domain, facilitated by ERC (Eudoxia Research Centre), MoCA (Ministry of Civil Aviation), Government of India. This fellowship, conducted in collaboration with Eudoxia Research University USA, offers an opportunity for advanced research and innovation in the field of Computer Science Engineering.

## **FACULTIES EVENT'S ORGANIZED / PIONEERED / PARTICIPATION HIGHLIGHTS**

1. On February 2nd, 2023, all faculty members participated in a virtual webinar titled "Advancing Higher Education with Industry-led Micro-Credentials." During the webinar, faculty members gained insights into the integration of industry-led micro-credentials into higher education curriculum, fostering a deeper understanding of emerging trends and practices in academia and industry collaboration.

2. All faculty members participated in a three-day virtual workshop titled "Scholarly Publishing Tools Tips," organized by BIT Bangalore from February 15th to February 17th, 2023, enhancing their proficiency in academic publishing techniques and tools.

3. Dr. Sanjeetha R participated in a Faculty Development Programme focused on "Cyber Security Challenges and Ideations," held from February 20th to February 24th, 2023, organized by Ramaiah Institute of Technology in Bengaluru, Karnataka, expanding her knowledge and skills in addressing contemporary cybersecurity issues.

4. Dr. Sanjeetha R attended the "Cyber Security R&D and Innovation Roadshow 2023" on February 2nd, 2023, hosted by the National Centre of Excellence National Cyber Security Centre of Excellence (NCoE), a collaborative effort between the Data Security Council of India (DSCI) and the Ministry of Electronics and IT (MeitY), in partnership with the Indian Institute of Science (IISc) Bangalore and Cy-Seck, gaining insights into the latest advancements and innovations in cybersecurity research and development.

5. Prof. Mallamma C G participated in a 7-day national level Faculty Development Programme (FDP) titled "Selection of Scholarly Journal & Web Visibility - Strategies & Techniques," held from February 20th to February 28th, 2023, organized by the Department of Corporate Secretaryship, Computer Applications & Accounting & Finance at Dhanraj Baid Jain College, Thoraipakkam, Chennai, enhancing her knowledge and skills in effective scholarly journal selection and strategies for improving web visibility.

6. Prof. Anuradha U, Prof. Pooja M V, Prof. Jyothi, Prof. Mohan Priya, Prof. Suchitra Devi, Prof. Kishore P J, and Prof. Hanumanth Rao participated in a 5-day online Faculty Development Programme (FDP) focused on "Incorporating Universal Human Values in Technical Education," held from February 20th to February 24th, 2023, organized by AICTE, New Delhi, enriching their understanding of integrating universal human values into technical education curricula.

7. Prof. Mallamma C G and Prof. Suchitra Devi collaborated to prepare the College Handbook for Students in March 2023.

8. Dr. Sanjeetha R, Dr. K Balakrishnan, Prof. Mallamma C G, Prof. Anuradha U, Prof. Mohan Priya, Prof. Priyanka S T, and Prof. Sindhu K, participated in a virtual three-day Faculty Development Programme on "Mentoring Skills and Cognitive Strategies," "Research Grants," and "Publications and Consultancy Skills for Academicians" organized by Bangalore Institute of Technology, held from March 29th to March 31st, 2023, and from March 6th to March 8th, 2023, respectively.

9. Prof. Mallamma C G, Prof. Mohan Priya, Prof. Dhanashree, Prof. Sindhu K, Prof. Mallamma C G, Prof. Anuradha U, Prof. Pooja M V, Prof. Suchitra Devi, Prof. Jyothi S S, and Prof. Mohan Priya attended a one-week online Teachers Training Program on "Introduction to Python Programming & its Applications" and "Introduction to WEB Programming & its Applications," organized by Visvesvaraya Technological University, Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur, held from March 13th to March 17th, 2023, and from March 27th to March 31st, 2023, respectively.

10. All the faculties attended an online webinar on "Emerging Trends in Cyber Security" on March 27th, 2023, and an interactive session with a Red Hat representative regarding the computation of Continuous Internal Evaluation (CIE) for the VTU-2022 scheme syllabus on March 31st, 2023. Additionally, an interactive session with Dr. K V Prasad, the Dean of Research, was conducted on March 21st, 2023, organized by Sambhram Institute of Technology in association with Career Technology Cyber Security India Pvt Ltd.

11. Dr. T John Peter participated in the Senior Leadership workshop on higher education for the digital economy: A new Architecture, organized by Digital Commonwealth in London, United Kingdom, on April 23rd, 2023.

12. Dr. Sanjeetha R and Dr. K Balakrishnan attended an online course/workshop on "Ethical Hacking & Cyber Security" organized by EduXLabs in association with Mechanica, IIT Madras, from April 3rd to April 7th, 2023.

13. Dr. K Balakrishnan and Prof. Mallamma C G attended a one-week online Teachers Training Program on "Introduction to Internet of Things (IoT)" organized by Visvesvaraya Technological University, Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur, from April 17th to April 21st, 2023, and a one-week online Teachers Training Program on "Robotics & AI" organized by the same institution from April 24th to April 28th, 2023.

14. Prof. Mallamma C G, Prof. Sindhu K, Prof. Mohanapriya M, Prof. Hanumantha Rao, Prof. Anuradha U, and Prof. Priyanka S T attended a one-week online Teachers Training Program on "Robotics & AI" organized by Visvesvaraya Technological University, Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur, from April 24th to April 28th, 2023.

15. Prof. Mohanapriya M, Prof. Hanumantha Rao, and Prof. Deepa Bhat attended a one-week online Teachers Training Program on "Introduction to Internet of Things (IoT)" organized by Visvesvaraya Technological University, Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur, from April 17th to April 21st, 2023.

16. All faculty members attended a one-day workshop on "IoT and its applications" given by Dr. Sreenivasa Setty of SST Technologies on April 22nd, 2023.

17. Dr. T John Peter participated in a five-day DST-sponsored Faculty Development Program (FDP) on Generative AI and Cyber Security held from July 24th to July 28th, 2023.

18. Prof. Mallamma C G participated in a two-week Faculty Development Program (FDP) on "Empowering Tomorrow Through Agripreneurship" from July 3rd to July 15th, 2023, provided by the AICTE-VTU Joint Teachers Training Programme.

19. Prof. Mallamma C G also attended a five-day online Faculty Development Program (FDP) on AI and Cybersecurity from July 24th to July 28th, 2023.

20 Prof. Mallamma C G participated in a webinar titled "Navigating the World of Intellectual Property Rights" held on July 7th, organized by the IP Promotion Outreach Foundation (IPPO) in Ahmedabad, Gujarat, and attended a webinar titled "From Innovation to Protection - Exploring the World of Novelty in Patent" organized by IPPO and NiPAM, Government of India.

21. Prof. Vani B actively engaged in "Har Ghar Dhyam," organized by the Art of Living Program, showcasing her dedication to fostering mindfulness and well-being in households, thus emphasizing her commitment to promoting holistic health and welfare.

22. Prof. Vani B also actively participated and successfully completed the One Week AICTE-VTU Joint Teachers Training Programme on "Introduction to Cyber Security" from May 22nd to May 26th, 2023. The program was organized by Visvesvaraya Technological University, Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur, demonstrating her commitment to professional development in the field of cybersecurity.

23. Prof. Suchitra Devi, Prof. Deepa Bhat, Prof. Priyanka S T, Prof. Sindhu K, and Prof. Mohanapriya M participated in a 5-day Faculty Development Program (FDP) on R Programming and a separate 5-day online FDP on AI and Cybersecurity, both organized as part of the AICTE-VTU Joint Teachers Training Programme.

24. Prof. Mohanapriya M actively participated in the AMD-Xilinx Webinar on System Design Flow held on July 24th, in collaboration with CoreEL Technologies and AMD-Xilinx. Additionally, she participated in the webinar titled "From Innovation to Protection - Exploring the World of Novelty in Patents" organized by IPPO (Intellectual Property Promotion Outreach) to delve into the intricacies of patent protection and innovation.

25. Dr. K Srinivas Rao participated in an International Advanced Faculty Development Program (FDP) focused on manuscript and thesis drafting, as well as the application of research software. The program spanned from May 12th to May 19th, 2023, offering comprehensive insights into advanced research methodologies and academic writing techniques.

26. Dr. K Srinivas Rao actively participated in ICNMR-2023, the International Conference on New Frontiers on the Global Stage of Multidisciplinary Research, held on May 23rd and 24th, 2023. This engagement provided a platform for sharing insights and exploring new avenues in multidisciplinary research.

27 Dr. K Srinivas Rao played a pivotal role in coordinating with the IISc GATE Office to plan and execute a successful collaborative initiative, the IISc GATE Awareness Program. This program aimed to provide valuable insights and guidance to aspiring candidates regarding the Graduate Aptitude Test in Engineering (GATE), fostering awareness and preparation strategies for this prestigious examination.

28.Prof. Pooja M.V participated in a week-long Faculty Development Program (FDP) focusing on the fundamentals of data science and analytics from June 5th to June 9th, 2023. Additionally, she attended an FDP on R-programming from June 26th to July 1st, enhancing her proficiency in this essential programming language for data analysis and statistical computing.

29.Prof. Jyothi and Prof. Hanumantha Rao participated in a 5-day online Faculty Development Program (FDP) focused on AI and cybersecurity, enhancing their knowledge and skills in these critical areas of technology.

30.Prof. Anuradha U enhanced her proficiency in R programming during a 5-day FDP and further enriched her expertise in AI and cybersecurity through a separate 5- day online FDP.

## **STUDENTS METRIC ACTIVITIES EVENT CONDUCTED / PARTICIPATIONS**

1.Third-semester students actively engaged in a comprehensive Faculty Development Programme at Ramaiah Institute of Technology in Bengaluru, Karnataka. The program, centered around the theme of "Cyber Security Challenges and Ideations," encompassing a diverse range of topics including but not limited to threat detection, encryption techniques, network security, and cybersecurity best practices.

2. Tayyaba A Girni, a fifth-semester student, participated in a comprehensive training program at CloudInformatics Pvt. Ltd from September 20th, 2022, to February 3rd, 2023, where she gained hands-on experience and knowledge in various aspects of cloud computing, data analytics, and informatics, enhancing her skills and preparing her for future endeavours in the field.

3. Third-semester students embarked on an industrial visit to U R Rao Satellite Centre in Bangalore on February 9th, 2023, gaining valuable insights into satellite technology and space research methodologies.

4. In February 2023, Dileep Kumar K R, a third-semester student, participated in a boot camp focused on web animation utilizing advanced JavaScript and CSS, honing his skills in dynamic web development techniques.

5. The Police Hackathon, organized by IIIT Bangalore on February 4th and 5th, 2023, saw the participation of Darshan R, Bhavana B, Ajith B M, and Charan T L, third-semester students, who presented their innovative concept: "AI face detection and Crowd Sourcing of criminal Database."

6. Akhila Anant Gouda, Bhoomika H, Anishu Banu, and Aparna Biswas, third-semester students, also participated in a Police Hackathon hosted by IIIT Bangalore on February 4th and 5th, 2023, presenting their innovative idea titled "Solution for Crowd Sourcing of Records."

7. Lavanya B, an eighth-semester student, attended the IETE Program C V Raman 26th Memorial Lecture on Nanotechnology, which took place on February 26th, 2023.

8. Participating in Fashion Show competitions held at Ramaiah University, Garden City University, and RRIT, the College Fashion Show Team, comprising 4 CSE students, secured the 3rd prize on March 10th, 24th, and 31st, 2023, respectively.

9. The College Dance Team, composed of 4 CSE students, also participated in group dance competitions at Ramaiah University, Garden City University, and RRIT on March 10th, 24th, and 31st, 2023, respectively.

10. Several 3rd semester students successfully completed a 30-day Masterclass on Python full-stack development at Pantech e Learning Pvt Ltd in Chennai, spanning from February 28th to March 29th, 2023.

11. Third-semester students also completed a course spanning over 12 modules organized by the Energy Swaraj Foundation, concluding on March 15th, 2023.

12. Ms. Vidya G, a third-semester student, has successfully completed a free online course on "Python Fundamentals for Beginners" on March 22nd, 2023.

13. Mr. Uday R, a third-semester student, participated in a one-day International Technical webinar on "Driverless Smart Car ADAS and ROS" on March 12th, 2023.

14. Mr. Utkarsh Maurya, a third-semester student, successfully completed the "Energy Literacy" training course organized by the Energy Swaraj Foundation on March 11th, 2023.

15. 3rd and 6th semester students attended an online webinar on "Emerging Trends in Cyber Security" on March 27th, 2023, where they learned about the latest advancements and challenges in the field.

16. On March 15th, 2023, Tayyaba A Girni, a sixth-semester student, demonstrated exceptional performance and achieved her targets during the HRM training period with Lernx. Additionally, on March 19th, 2023, she successfully completed the Python 3 course offered by Lernx.

17. Monisha C, a sixth-semester student, participated and won the third prize in Mehendi at an inter-college event organized by East-Point Group of Institutions.

18. Mr. Sagar S T and Mr. Manjunath J, students of CSE department have two projects shortlisted for the CMIT Design and Innovation Clinic 2023.

19. 6th semester students successfully completed data analysis in Power BI through the Microsoft Azure & OpenAI workshop.

20. Manjula V, a sixth-semester student, completed a one-month internship on Machine Learning with Python from March 23rd to April 24th.

20. Archa Saji and Anusha M, third-semester students, attended a workshop on Power Python organized by LUDIFU on April 30th, 2023.

## ***EVENTS / ACTIVITIES CONDUCTED BY DEPARTMENT***

1. On February 11th, 2023, the department organized a Technical Talk titled "The IT Placement" delivered by Karthik Chandrashekar, a Software Engineer from Siemens Technologies & Services Ltd., providing valuable insights into IT placement strategies and industry practices
2. On January 7th, 2023, a Technical Talk titled "Entrepreneurship as a Career with Pros and Cons" was conducted, featuring Vijay Honnabandi, the Founder & CEO of Possibilities Media & Marketing Thicketing.in, offering valuable insights into the opportunities and challenges of pursuing entrepreneurship as a career path.
3. Third-semester students visited the IISC Open Day Science Exhibition at the Indian Institute of Science on March 8th, 2023.
4. Mr. Sachin Hiremath from VTU MySmartShala conducted a demonstration of the web portal for project upload, which was attended by CSE students on March 3rd, 2023, at 12:30 pm.
5. On March 3rd, 2023, at 3:00 pm, an online session was conducted with Mr. Krishnakanth M Naik of IBM, which was attended by CSE students.
6. On March 3rd, 2023, a talk on "How to Start Up & Face the Challenges" was conducted by Mr. Sachin Hiremath, Co-founder and Sales Head of Edu-Easy India Pvt. Ltd. MySmartShala. The session was attended by all 3rd semester CSE students.







7. On March 10th, 2023, a Food Walk event was organized for all third-semester students.

8. On March 27th, 2023, a Department Hackathon was conducted for sixth-semester students, with CSE students participating in the event.

9. On March 27th, 2023, an online webinar on Emerging Trends in Cyber Security was conducted in association with Career Technology Cyber Security India Pvt Ltd. The webinar was attended by 20 students.

10. On April 17th, 2023, Mr. Santhosh Rebello, University Program Manager for India at Salesforce, conducted an online talk on "Learn In-Demand Skills, Connect, and Build Your Career Path with Salesforce" for all sixth-semester students.

11. On April 1st, 2023, an online talk was conducted by Mr. Sateesh Ambesange of PragyanAI regarding an AI project titled "Agriculture Support for Farmers using NLP and ChatGPT," for the students.

12. From June 1 to June 21, 2023, an HYPM IKS CYPTC International Yoga Course was conducted, involving participation from all students and faculty members. This comprehensive course aimed to promote physical and mental well-being through the practice of yoga, fostering a culture of holistic health within the academic community.



13. On June 13, 2023, the Computer Science and Engineering (CSE) department organized a Global Education Awareness Program, was attended by 150 students and faculty members. The program aimed to raise awareness about global educational opportunities, providing insights into various academic pursuits, career paths, and international collaborations.

14. On June 15, 2023, a Hackathon event was organized, involving students and faculty members from the department. The Hackathon provided participants with a platform to showcase their innovation, problem-solving skills, and teamwork.

15. On June 20, 2023, the Computer Society of India (CSI) Bengaluru Chapter was inaugurated at the CSE Department of SaIT. The event saw the participation of around 200 students, faculty members, Heads of Departments (HODs), and Deans. The inauguration marked the beginning of a new chapter aimed at promoting collaboration, networking, and knowledge sharing among students and professionals in the field of computer science and technology.

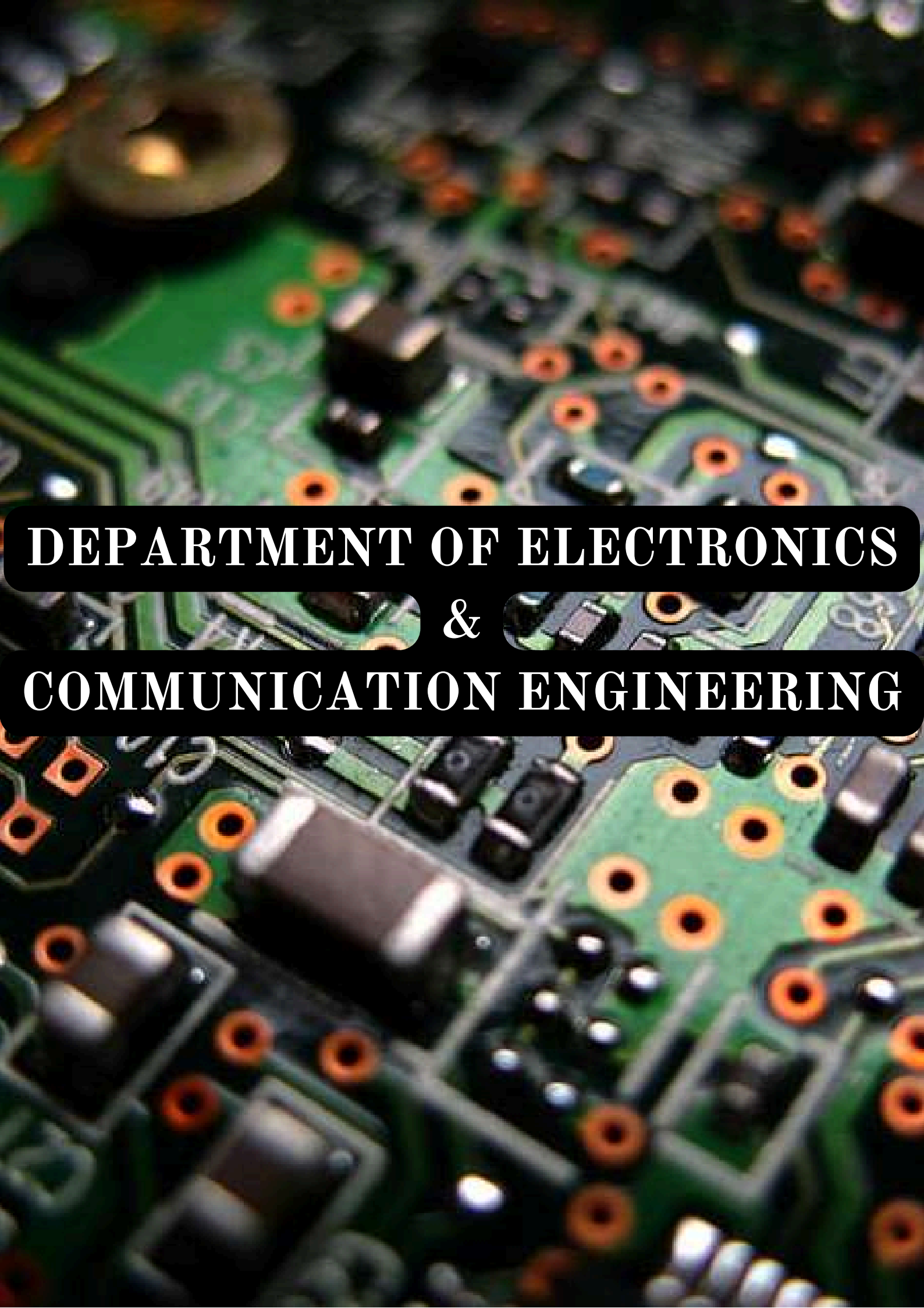
16. On June 22, 2023, a group of CSE students from SaIT participated in sports activities, achieving commendable results and showcasing their skills and teamwork.

17. The Graduation Day, held at SaIT on June 24, 2023, featured a vibrant Cultural Program where the group of CSE students showcased their talents, contributing to the event's success with their dynamic and energetic performance.



## PLACED STUDENTS –VIII SEMESTER

1. Rakesh D, CSE student, secured a placement with a package of 4 lakhs per annum.
2. Meghana G N, as a recent graduate secured a position as an Associate Software Engineer with a package of 4.5 lakhs per annum.
3. A student from CSE was recently placed in Logixhealth as Software Engineers, securing a competitive salary package of 5 lakhs per annum.
4. Two students from CSE department have secured internships at PEOL, each with a salary package of 3 lakhs per annum.
5. Neosys Software Pvt Ltd has hired a student from CSE department as a Software Engineer, offering a salary package of 4 lakhs per annum.
6. Diksha Srivastava, CSE student, secured a position as a Software Engineer at Robosoft Technologies with a salary package of 4.5 lakhs per annum.



**DEPARTMENT OF ELECTRONICS**

**&**

**COMMUNICATION ENGINEERING**

# DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

The ECE (Electronics and Communication Engineering) department is a pivotal player in the realm of engineering and technology. It focuses on the conception, evolution, and practical application of electronic devices, systems, and communication networks. Including a mention of the ECE department in a newsletter holds substantial significance for several compelling reasons. Firstly, the ECE department is at the forefront of driving innovation within the electronics and communication engineering field. A newsletter can serve as a platform to spotlight the cutting-edge research and developmental strides occurring within the department. Moreover, the ECE department's relevance extends across a diverse spectrum of industries, encompassing telecommunications, information technology, aerospace, and defense, among others. By featuring the work being conducted within the ECE department, the newsletter can effectively demonstrate how the department's research and expertise address real-world issues and tackle contemporary challenges in these industries.

The ECE (Electronics and Communication Engineering) department is highly sought after by graduates due to its strong reputation in the job market. Mentioning the department in your newsletter can help attract potential students who are interested in pursuing a career in this field. Additionally, it can promote the department's partnerships and collaborations with other university departments, industry partners, and government agencies. This exposure can lead to new opportunities and initiatives that benefit students and the broader community. Furthermore, featuring the ECE department in the newsletter can raise awareness of its research, expertise, and impact both within and beyond the university. It's worth noting that the department's final-year student projects consistently receive funding from organizations like KSCST and others, further demonstrating its excellence.

**PhD REGISTERED FACULTY DETAILS:**

**1. Prof S. Sowndeswari (Completed Open seminar I).**



**2. Prof. Manjula.G.Hegde (Completed Comprehensive Viva).**



**3. Prof. Shilpa.C (Completed Comprehensive Viva).**

**FACULTIES EVENT'S ORGANIZED**  
**/PIONEERED / PARTICIPATION**  
**HIGHLIGHTS**

**Prof. Manjula G. Hedge:**

Involved in the development of a patent related to a Creative Personal Voice Assistant.

Participated in "Anveshana" and provided guidance during this activity.

Joined the AICTE VTU Teachers Training Programme (FDP) and worked with the student batch consisting of Nagarjuna and Manu.

**Prof. V. Geetha:**

Applied to the patent associated with a Creative Personal Voice Assistant.

Organized a Mini Project Competition, and the team led by Likitha and group received the second prize.

Coordinated a Redhat Interaction session on March 21st.

**Prof. Anupama**

Applied to the patent concerning a Creative Personal Voice Assistant.

**Prof. Shilpa C**

Attended the IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions (CSITSS-2022).

Guided a winning project titled "EFALCON," which earned a cash prize of 50,000 rupees. The project was completed by the student batch comprising Christopher, Dhanush Gangatkar, and Dasam Venkata Manikandan at Dr. Ambedkar Institute of Technology

Prof. K. Nithiya

Organized a Mini Project Competition, and teams from Mahendar's batch and Sowmya's batch achieved the third prize. Completed a course on AWS vs. Azure and played a role in coordinating the ICT program

Prof. Sowndeswari

Joined the AICTE VTU Teachers Training Programme (FDP) and acted as a resource person at Paavai Engineering College in Tamil Nadu on March 31, 2023.

Published a paper titled "Enhanced Security against Intruder" and conducted sessions on "Introduction to Python Programming and Its Applications" as well as "Hands-on Training on Signal Processing" in the Journal of Data Acquisition and Processing, 38th volume, by Chinese Physical Society Publications.

Prof. Abishek DG:

Participated in "Anveshana" and provided guidance to the student batch consisting of Ambika and Pranav Rao.

### **FACULTIES CONDUCTION OF /FDP/CONFERENCE/TECHNICAL TALK / PATENTS/ ACHIEVEMENTS**

Dr. C.V. Ravishankar served as a guest of honor and resource person at the inauguration of the IETE Students Forum held at Dayananda Sagar University.

Prof. Manjula G. Hedge was involved in the development of a patent related to a Creative Personal Voice Assistant. Prof. V. Geetha also applied to the patent associated with a Creative Personal Voice Assistant. Prof. Anupama was another contributor to the patent concerning a Creative Personal Voice Assistant.

Prof. Shilpa C attended the IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions (CSITSS-2022).

4. Prof. Geetha organized a Mini Project Competition, and the team led by Likitha and group received the second prize.

5. Prof. K. Nithiya organized a Mini Project Competition, and teams from Mahendar's batch and Sowmya's batch achieved the third prize.

6. Prof. Manjula G. Hedge participated in "Anveshana" and provided guidance during this activity. Additionally, she joined the AICTE VTU Teachers Training Programme (FDP) and worked with the student batch consisting of Nagarjuna and Manu.

7. Prof. Sowndeswari also joined the AICTE VTU Teachers Training Programme (FDP) and acted as a resource person at Paavai Engineering College in Tamil Nadu on March 31, 2023. She has also published a paper titled "Enhanced Security against Intruder" and conducted sessions on "Introduction to Python Programming and Its Applications" as well as "Hands-on Training on Signal Processing" in the Journal of Data Acquisition and Processing, 38th volume, by Chinese Physical Society Publications.

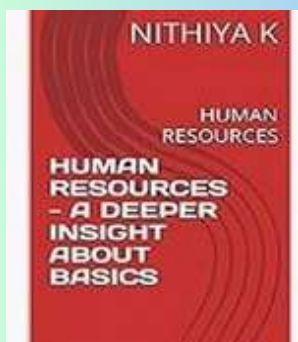
Prof. Geetha conducted a Redhat Interaction session on March 21st.

9. Prof. K. Nithiya completed a course on AWS vs. Azure and played a role in coordinating the ICT program.

10. Prof. Abishek DG participated in "Anveshana" and provided guidance to the student batch consisting of Ambika and Pranav Rao.

11. Prof. Shilpa C guided a winning project titled "E-FALCON," which earned a cash prize of 50,000 rupees. The project was completed by the student batch comprising Christopher, Dhanush Gangatkar, and Dasam Venkata Manikandan at Dr. Ambedkar Institute of Technology.

12. Prof. K. Nithiya accomplished the following: a. Published a book on Human Resources, providing a deeper insight into the basics. b. Completed a course on search engine optimization supported by AICTE. c. Attended an online workshop on cybersecurity and hacking on April 18, 2023, with Certificate ID 38AE587835. The workshop was conducted by Gautam Kumawat from Hacking Flix.



13. Prof. Bharath coordinated an NSS event titled "Har Ghar Dhyam," which included a session on meditation and mental health. This event took place on May 4, 2023.

14. Dr. Shreesha Kalkoor published a paper titled "Visual Object Detection in Extreme Dark Conditions" in IEEE Digital Explore.

15. Prof. Shilpa C published a paper on "E FALCON" in the International Journal of Innovative Research in Science and Engineering, Volume 9, Issue 5, 2023.

16. Prof. Manjula Hedge delivered an online technical talk on "Impacts of Technology" at the Agastya International Foundation on May 27, 2023, from 5 to 6:30 PM.

17. Prof. K. Nithiya completed a one-week course on "Presentation Skills" and received a certificate. She also presented and published a paper on "ML-based Formalin Ascertain Model" during a national conference on May 12, with ISBN - 9789391535506.

18. Prof. Anupama Hongal gave a paper presentation on "CHAKRASANDHA: A Simplified Way of Living for Confined" and published a paper on sustainable aquaculture and smart agriculture using IoT during a national conference on May 12, held at SaIT, NLCAFTET, with ISBN - 9789391535506.

19. Dr. Sapna participated in the National Intellectual Property Awareness Mission on May 11 and attended an FDP on ML & Data Analysis using MATLAB organized by NIPAM (IP Awareness Mission) through online training at Kalpataru Institute.





20. Prof. S. Sowndeswari completed a one-month NIELIT course titled "Data Science & Machine Learning using Python" with the course ID 2310225.



21. Prof. S. Sowndeswari served as a moderator at the International Conference FRACTION during the Innovative Educational Practice Days held on June 27 and 28.

22. Prof. Nithiya K earned a certification in Data Science with Certificate ID 1687855633690.

23. Prof. Nithiya K also completed a certification course in Responsive Web Design, and the certificate ID for this course is 1301205669.

24. Dr. Shreesha Kalkoor received an Appreciation Certificate for serving as a reviewer for the International Conference on Smart Systems for Applications in Electrical Sciences (ICSSSES). The conference was organized by SIT, Tumakuru, and took place from July 7, 2023, to July 8, 2023.

25. Shilpa C (Assistant Professor in ECE) and Prof. Manjula Hedge (Assistant Professor in ECE) were involved in the International Conference on "Green Energy Technology and EV." The conference was convened by Dr. C.V. Ravishankar, HOD of ECE, and the program was coordinated by Prof. Shilpa C and Prof. Manjula Hedge. The event brought together delegates from all parts of the country on July 15, 2023.

26. Dr. Sapna M K participated in an FDP on "RTL to GDSII using Cadence Tools," which took place on August 17th and 18th, 2023.

27. Dr. Sapna M K served as a reviewer for the IEEE International Conference on Networks, Multimedia, and Information Technology held in August 2023.

28. Prof. K. Nithiya was involved in the publication of an e-book based on "Prompt Engineering" with the ASIN number B0CGNT53L6, released on August 25.

29. Prof. Manjula Hegde awarded "Best teacher award" during the Teachers day function held in September 9, 2023



**Prof .Manjula honoured as Best Teacher Award on September 9th, 2023**

## STUDENTS METRIC ACTIVITIES

### EVENT CONDUCTED / PARTICIPATIONS

1. Vithun, a final year ECE student, participated in the RRIT Cricket Tournament on February 23, 2023.

2. T. Sanjay (IST19EC027) participated in the celebration of IETE-Students Day, which took place on February 26, 2023.

3. A Java placement course took place at the Destination Institute, and it was attended by Pranav Rao, Spurthi, and Dhanush Nayaka.

4. The Fraction Pg PTE program was conducted daily for one hour throughout the month of February. It involved Dr. Sapna, Prof. Geetha, Prof. Anupama, Prof. Sowndeswari, and Prof. Manjula and focused on innovative teaching.

5. A Mini Project Exhibition was organized on February 15, 2023, and it was coordinated by Dr. Shreasha Kalkoor and Prof. Abishek DG. The event had Prof. H.S. Bhatia as the Guest of Honor and was supported by IETE, ISTE, ISTE, and EWB.

6. Sanjay T, a final year ECE student, participated in the IISC Open Day visit in Bangalore, which took place on March 4, 2023. The event was coordinated by Prof. Shreasha Kalkoor.

7. On March 6, 2023, a 20-day training program titled "ICT PAYPAL" took place, coordinated by Prof. Manjula Hegde and involving the CS, IS, and ECE departments. Prabhakar Kumar served as the resource person.

8. The Anveshana project competition occurred on March 4, 2023, and it was organized by Prof. Manjula Hegde and Prof. Abishek DG.

9. Backlog exams for the III semester started on March 3, 2023.

10. The VI semester commenced on March 27, 2023

11. The IISC Open Day event took place on March 4, 2023.

12. A Food Walk with a focus on social connect and responsibility was organized on March 10, 2023.

13. Celebrations for International Women's Day by PayPal and IETE Women's Day were held on March 16, 2023, at IETE Bangalore, coordinated by Prof. Sowndeswari, with participation from SaIT's 6th students.

14. A Skill Enhancement Program, specifically an ADE workshop, occurred from March 5 to March 10, 2023, at the SaIT campus. Professors Anupama, Manjula, K. Nithiya, and Abishek DG coordinated the program, which saw participation from all four sections of CS and EC III semester students who learned about ADE core structure and Xilinx software.

15. The Design and Innovation Clinic 2023 received applications from 7 batches, with 2 batches being selected.

16. Gopalan College hosted a project competition event on March 31, 2023, guided by Prof. Manjula Hegde and Prof. Abishek DG. Final-year students participated and won prizes for their projects "Drone Jatayu" and "Smart Cinderoomba."

17. A Redhat Interaction Session was organized, with Prof. Geetha V serving as the resource person.
18. A resume entry activity for the 1st- year students took place on March 15, 16, and 17, 2023, with Professors Bharath, Geetha V, Shilpa C, Abhishek DG, and Anupama involved.
19. Consumer Rights Day was observed on March 15, 2023.
20. Dr. C.V. Ravishankar conducted a Senior Leadership Workshop on April 15, 2023, at Vivanta in Bangalore.
21. Dr. C.V. Ravishankar was also involved in the Design & Innovation Clinic 2023, which took place from April 11 to 13, 2023, at the Central Manufacturing Technology Institute (CMTI).
22. All ECE staff members participated in an AICTE-VTU Joint Teachers Training Program on "Introduction to IoT," held from April 17 to 21, 2023, through an online webinar.
23. Another AICTE-VTU Joint Teachers Training Program, focusing on "Robotics & Artificial Intelligence," took place from April 24 to 28, 2023, also conducted as an online webinar and attended by all ECE staff members.
24. Planning and discussions for the PRATIRA'23 event were carried out by all ECE staff members, as it involved a project competition.
25. Ambedkar Jayanthi was observed on April 18, 2023, with participation from all ECE staff members.
26. An one-day FDP on "IoT and its Applications" occurred on April 18, 2023, with all ECE staff members attending. The resource person for this event was Dr. Srinivas from BNMIT.
27. Dr. C.V. Ravishankar organized the HMSS 23 – International Conference on Humanities for Smart Societies," which took place from May 27 to 28.
28. Prof. Geetha, Dr. Sapna, and Prof. Shilpa conducted an online Five-Day Faculty Development Program (FDP) titled "UHV Program" from May 22 to 26.
29. A National Conference on "Advancement & Future Trends in Engineering and Technology" took place on May 12, with coordination led by Dr. Shreesha Kalkoor as chief and participation from all other faculties. The event was supported by IETE and ISTE.
30. Prof. K. Nithiya participated as jury member for Mother's Day Speech Contest on May 22, 2023, where she served as the scorer/jury.
31. Abishek DG coordinated a Power BI event for certificate distribution on May 12 from 4 to 5 PM.
32. Prof. Sowndeswari and Prof. K. Nithiya handled the Exam Portal Entry Activity for VIII-semester students and the Convocation Registration process on May 22-23, ensuring that convocation forms were registered for VIII semester students.

33. On May 27, the Newsletter Editorial Team meeting took place with Dr. C.V. Ravishankar as the Editor-in-Chief and Prof. K. Nithiya as a team member. They defined circular copies regarding upcoming tasks.

34. An FDP on "Internet of Things" was conducted from May 18 to 24, featuring Dr. C.V. Ravishankar, Prof. Abishek DG, and Prof. Bharath. Dr. C.V. Ravishankar delivered a speech at SJCIT, Bangalore.

35. On May 5, "PRATIRA - 2023," a national-level intercollegiate project competition, involved participation from all ECE department faculties and final year students.

36. Dr. Sapna contributed an editorial article for SSPR publication regarding "SWANIRMAN SUNIRMIT," an online event scheduled for May 20.

37. Dr. Sapna will lead an offline Faculty Development Program (FDP) on R programming from June 26 to July 1, 2023, at the SaIT campus.

38. Prof. Manjula Hedge will also conduct an offline FDP on R programming from June 26 to July 1, 2023, at the SaIT campus.

39. Prof. Geetha V is organizing an offline FDP on R programming from June 26 to July 1, 2023, at the SaIT campus.

40. Prof. Shilpa is leading an offline FDP on R programming from June 26 to July 1, 2023, at the SaIT campus.

41. Prof. Sowndeswari will conduct an offline FDP on R programming from June 26 to July 1, 2023, at the SaIT campus.

42. Prof. Nithiya K is attended an offline FDP on R programming from June 26 to July 1, 2023, at the SaIT campus.

43. Prof. Geetha V will conduct a 5-day offline Faculty Development Program on "Inculcating Universal Human Values" from May 22 to 26.

44. Prof. S. Sowndeswari will lead a one-week online teacher training program on "Electronic Circuit Design uses LabVIEW" from June 12 to 16, 2023.

45. Prof. S. Sowndeswari is serving as a reviewer for the "International Conference on Applied Intelligence and Sustainable Computing" on June 16 and 17.



**Certificate International Conference on Applied Intelligence and Sustainable Computing received by prof.Sowndeswari**

46. Dr. Sapna participated in a 5-day online FDP on "Inculcating Universal Human Values" from May 22 to 26, with an ID - /201/187785.

47. Dr. Sapna conducted an FDP on machine learning using MATLAB from April 24 to 29 at the Kalpataru Institute of Technology.

48. Prof. Anupma Hongal presented a project paper titled "Chakrasandha" at the National Conference on Advancement and Future Trends in Engineering & Technology on May 12, 2023.



**"Chakrasandha" at the National Conference on Advancement and Future Trends in Engineering & Technology**

49. ECE faculties and students coordinated International Yoga Day on June 21, 2023.



**International Yoga Day on June 21, 2023.**

50. A talk on "Saving Schemes - Post Office" was held on June 23, 2023, for ECE faculties. It was conducted by the Women's Cell, and the speech was delivered by Gundanna HV, the Post Master of Jalahalli.

51. On July 27, a Technical Talk titled "Unlocking Cyber-security Careers" took place, with participation from IV Semester Students and Prof. K. Nithiya. The event was held online.

52. Prof. Shilpa C conducted a webinar on "Navigating The World Of IPR" on July 7, with Dr. Kannan Divetia serving as the Resource Person.

53. On July 28 and 29, Prof. Sowndeswari served as a reviewer for the International Conference at Kalpataru Institute Of Technology.

54. Prof. Sowndeswari also participated in an International Conference at Nitte Meenatchi Institute Of Technology in July.

55. Mrs. Shahina and Mrs. Sumamma B.N participated in a program titled "Technology And Office Management" from July 31 to August 04, organized by AIU - Avinashilingam Institute - Academic & Administrative Development Centre.



**Mrs. Shahina and Mrs. Sumamma B.N participated in a program titled "Technology And Office Management"**

56. Prof. Anupama Hongal participated in a 5-day FDP on R-Programming conducted by ICT Academy from June 26 to July 1, 2023.

57. Prof. Geetha V also participated in the same 5-day FDP on R-Programming conducted by ICT Academy from June 26 to July 1, 2023.

58. Dr. Sapna M K served as a reviewer for the IEEE International Conference on Data Science and Network Security, which took place on July 28-29, 2023.

59. Dr. Sapna M K participated in the R-Programming FDP conducted from June 26 to July 1, 2023.

60. Prof. K. Nithiya participated in the R-Programming FDP conducted from June 26 to July 1, 2023.

61. Prof. Sowndeswari also participated in the R-Programming FDP conducted from June 26 to July 1, 2023.

62. Dr. Shreesha Kalkoor M attended a webinar on "Designing the Course Outcomes and Outcomes Focused Questions" on August 4, 2023, organized by Inpods ed-tech.

63. Prof. Anupama Hongal participated in a 2-day national-level FDP on "RTL to GDSII using Cadence Tool" on August 17 and 18, 2023, organized by CMR University in association with Entuple Technologies.

64. Prof. Geetha V also took part in the same 2-day national-level FDP on "RTL to GDSII using Cadence Tool" on August 17 and 18, 2023, organized by CMR University in association with Entuple Technologies.

65. Prof. Anupama Hongal organized an event on "Designing Course Outcomes and Outcomes Focused Questions" on August 9, 2023, with the support of Inpods Ed-tech.

66. Prof. Sowdeswari organized an event on "Designing Course Outcomes and Outcomes Focused Questions" on August 4, 2023, with the support of Inpods Ed-tech.

67. Prof. Sowdeswari coordinated an event involving MOU signing, IETE Student member certificate distribution, and a technical talk on August 18.

68. Prof. Shilpa C participated in a 2-day national-level FDP on "RTL to GDSII using Cadence Tool" on August 17 and 18, 2023, organized by CMR University in association with Entuple Technologies.

69. Prof. Sowdeswari also participated in the same national-level FDP on "RTL to GDSII using Cadence Tools" on August 17 and 18, 2023.

70. Prof. Sowdeswari took part in a webinar on "Thesis Writing for Research Scholars" on August 26.

71. Prof. Shilpa C organized an event on "Designing Course Outcomes and Outcomes Focused Questions" on August 4, 2023, with the support of Inpods Ed-tech.

72. Prof. Shilpa C attended BC MEET 3 on August 24, 2023, organized by IEEE Bangalore Section.

73. Mrs. Shahina and Mrs. Sumamma B N participated in a program on "Technology and Office Management" from July 31 to August 04, organized by AIU - Avinashilingam Institute - Academic & Administrative Development Centre.

74. Prof. Abishek and Prof. Bharath coordinated South Asian International Games - 2023, which took place from August 25 to 27 in SaIT Venkatesh Auditorium. ECE students participated in the event.

75. Ganesh Chaturthi celebration took place from September 18 to 20, 2023, and all ECE faculties participated. The event involved collecting 500 Rs from staff members and 200 Rs from students.

76. An FDP on Salesforce Platform Development occurred from September 11 to 15, 2023, at BNM Institute.

77. The DPIT-IPR Chair at National Law University and Judicial Academy conducted an online knowledge series.

78. Teachers' Day was celebrated on September 5th and 9th, 2023, with participation from all ECE faculties. The celebrations took place both within the department and in the auditorium.

79. Prof. S. Sowndeswari served as a jury member in IDEATHON on September 4, 2023, organized by the Department of Telecom Engineering at SIR M. Visvesvaraya Institute of Technology.

80. Onam celebration was held on September 2nd, 2023, with the participation of all ECE faculties at the SaIT Auditorium at 10:30 AM.

81. Founder Chairman's remembrance took place on September 2nd and was coordinated by Dr. C.V. Ravishankar in the Yoga room.

82. An LLMOps platform-based AI hosted webinar occurred on September 19, organized by Kdnuggets management, featuring Bindu Reddy from Abacus.AI.

84. A book donation drive and book exhibition were organized on September 7, 2023, with Prof. Sapna as the coordinator at the SaIT campus.

85. Prof. Nithiya K attended an online addressal on "Testing-2023" on September 13, 2023. The speaker was Steve Adze.

86. World Suicide Prevention Day was celebrated on September 11, 2023, with participation from all faculties at the SaIT campus.

87. A departmental first-year SIP 2023-24 meeting was held on September 19, 2023, with participation from all faculties at the SaIT Auditorium.

88. Ganesha festival took place on September 19, 2023, with the participation of all faculties at the SaIT campus. Student coordinators were Sachin and Rahul from VII semester.

89. An Ethnic Day celebration was scheduled for September 20, 2023, with participation from all faculties at the SaIT campus.

90. Students participated CMTI design & Innovation clinic 2023, Bangalore on April 11 to 13, 2023 led by Dr.C.Ravishankar , HOD ECE



**ECE students participated in International conference (ICSGET2023) on “Green energy Technologies & Electrical Vehicles -2023” held on July 7, 2023 in association with SDL Globe @ Venkatesh Auditorium, SaIT campus**



**Dr.Ravishankar C.V HOD-ECE @CMTI design & Innovation clinic**



91. IV semester ECE students and faculties participated in Career development session on “Unlocking Cyber security careers” conducted online by Resource person Mr.Vinit sinha Director of cyber security, New delhi on July27, 2023

**UNLOCKING CYBERSECURITY CAREERS**  
CAREER DEVELOPMENT SESSION

**Guest Speaker**  
**Vinit Sinha**  
Director of Cybersecurity  
SME for Asia-Pacific  
region at Mastercard  
Joint Secretary of ISACA,  
New Delhi Chapter

**Moderator**  
**Sneha Guhathakurta**  
Mentor at Employability.life

27TH JULY 2023  
6:00 PM TO 6:45 PM

SCAN THE QR CODE TO REGISTER FOR THE SESSION

**Emplife TALKS**  
Connecting Employers & Learners

92. Sahana bai IV semester ECE Student participated in inter-college solo dance Competition organised by sambhram institute of technology and received prize. She is known for her traditional dancing skills.



### IV semester ECE student-Sahana bai - Prize awards

93. VI semester students attended “International Women’s day event with panel discussion theme “DigiALL:Innovation & Technology for gender equality ”@ IETE Bangalore on March 12 ,2023 under the guidance of prof.Sowndeswari S”



94. VI semester ECE students @ IETE banglore

95. ECE department & Institution's Innovation council in association with SST technologies conducted one week value added course for IV semester students on "Sensing, Automation and IOT using IOT development board" on 28th august, 2023

**SAMBHRAM**  
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
&  
INSTITUTION'S INNOVATION COUNCIL-SaIT  
In association with  
**SST TECHNOLOGIES**  
Supported by  
**ISTE-SaIT & CSI-SaIT**

Cordially invites you to the inauguration of  
**One Week Value Added Course for IV Semester Students**  
On  
**"SENSING, AUTOMATION AND IOT  
USING SST IOT DEVELOPMENT BOARD"**  
28th AUGUST 2023

**CHIEF GUEST**  
**Dr. SREENIVASA SHETTY**  
CHIEF TECHNICAL OFFICER  
SST TECHNOLOGIES, BANGALORE

Presided By  
**Dr. H. G. Chandrakanth**  
Principal, SaIT

Invited By

<b>Prof. Manjula G Hegde</b> Asst. Prof., Dept. of ECE, SaIT ISTE-SaIT & Program Coordinator	<b>Dr. K. Balakrishnan</b> Asst. Prof., Dept. of CSE, SaIT CSI-SaIT Coordinator
<b>Dr. Padmini B. V.</b> Asst. Prof., Dept. of MECH, SaIT TIC-SaIT Coordinator	<b>Dr. Ravishankar C. V.</b> HOD, Dept. of ECE SaIT, Bangalore

**PATRONS**

<b>Dr. K. V. Prasad</b> Dean-Research, SaIT	<b>Dr. M. N. SreeRangaraju</b> Dean-Academics, SaIT	<b>Dr. H. G. Chandrakanth</b> Principal, SaIT
<b>Mrs. Dhanya Nagaraj</b> Director, ICI	<b>Mr. B. N. Nagaraj</b> IPS (Retd.), CEO, ICI	<b>Dr. V. Nagaraj</b> Chairman, ICI

Venue: CSE Seminar Hall      Timings: 9:30AM - 10:30AM

96. ECE students participated and won cash prizes in south asian International games -2023 held on August 25th to 27th at Sambhram institute of technology

**MSME**

South Asian International Games - 2023  
Date: 25, 26 & 27 Aug 2023  
Venue: Sambhram College, Bangalore, Karnataka, India  
Hosted By:  
**SAMBHRAM INSTITUTIONS**

Organized By  
International All Sports Game Federation And South Asian All Sports Games Federation  
Supported By  
Nepal All Sports Games Federation  
Recognised by world all sports games Federation  
(MSME- REGD. NO AS-03-0011800)

SPORTS LISTED: VOLLEY BALL, KARATE, KICK BOXING, STICK FIGHTING, YOGA, BASKET BALL, TAEKWONDO

FOR DETAIL CONTACT:  
Mr. Anik Sarkis - 91 827758718  
President, Karnataka state, IASGF  
Dr. Priyankhi Chibber - 91 988824886  
organizing Secretary

Sponsors: DH, VIKI, VISTARA NEWS, etc.

Awards: Free T-Shirt To All Participants, Certificate To All Participants, Trophies To The Team, Various Other Awards, Medals

ECE department conducted a "MOU signing and Technical talk on Semiconductor Ecosystem in association with Semicon design technologies pvt.Ltd held on August 4, Presided by Principal H.G Chandrakanth and coordinated by Dr.C.V Ravishankar and Prof.Shilpa C supported by student chapters IEEE,ISTE,IETE & EWB



**SAMBHRAM**  
INSTITUTE OF TECHNOLOGY  
Department of Electronics and Communication Engineering  
&  
Alumni Association-SaIT  
in association with  
Karunadu Technologies Private Ltd.  
cordially invites you to  
"MoU Signing"  
IETE-SaIT  
"IETE STUDENT MEMBERSHIP CERTIFICATE DISTRIBUTION"  
&  
TECHNICAL TALK  
On  
"AISHE and its Applications"  
On  
15th AUGUST 2023

**CHIEF GUEST**  
Mr. Mahesh Deginal  
Managing Director & CEO  
Karunadu Technologies Pvt. Ltd.

**GUEST OF HONOUR**  
Mr. Darshan Kumar S  
CEO & Co-Founder  
Karunadu Technologies Pvt. Ltd.

Presided By  
Dr. H. G. Chandrakanth  
Principal, SaIT

Invited By  
Prof. S. Sowndeswari  
Asst. Prof. ECE, SaIT  
IETE-SaIT Program Co-ordinator

Dr. Ravishankar C.V.  
HOD-ECE  
SaIT, Bangalore

Prof. Girish Kumar H. G.  
President, Alumni Association  
SaIT, Bangalore

Dr. K. V. Prasad  
Dean-Research, SaIT

Mrs. Dhanya Nagaraj  
Director, SaIT

Dr. H. H. SreeRangaraju  
Dean -Academics, SaIT

Mr. B. H. Nagaraj  
IFS(Retd.), CEO, SaIT

Dr. H. G. Chandrakanth  
Principal, SaIT

Dr. V. Nagaraj  
Chairman, SaIT

Venue: New Seminar Hall behind Library  
Timings: 11:30AM - 1:00PM  
Supported by Student Chapters of IEEE, IETE, ISTE & EWB



98. National level Inter collegiate Project exhibition and competition PRATIRA-2023 conducted on May5,2023 by ECE department coordinated by Dr.Sapna K and Prof. Manjula hedge in association with IQAC cell

**SAMBHRAM**  
INSTITUTE OF TECHNOLOGY  
Ambabevram Temple Road, Near MS Palya, Indahalli East, Vidyananyapura Post, Bangalore-57  
Department of Electronics & Communication Engineering  
Cordially Invite You to  
"National Level Inter Collegiate Project Exhibition and Competition"  
IQAC - SAIT  
PRATIRA-2023  
(Offline / Online)  
In Association with  
IETE, Bangalore

INSTITUTION'S INNOVATION COUNCIL

THE INSTITUTE OF ELECTRONICS AND TELECOMMUNICATIONS ENGINEERS  
INDIA  
ALL ARE WELCOME

INVITED BY: DR. RAVISHANKAR C.V.  
HOD-ECE, SAIT COORDINATORS, FACULTY  
AND STUDENTS.

**WHO CAN PARTICIPATE ?**  
Pre final & Final Year students  
Open to All Circuit Branches  
ECE, ETE/TCE, EEE and EIE  
Special Category for B.E & Diploma

Registration Fees:  
Rs.600/-

May 5<sup>th</sup>, 2023  
Inauguration: 9:30 AM  
Valediction: 3:00PM

For Registration Contact Co-ordinators  
Dr. Sapna M K : +91 98809 72937  
Prof. Manjula G Hegde : +91 9448425100



Dean Academics Dr.Sreerangaraju and Dr.Ravishankar C.V HOD, ECE distributing prizes for the students in Pratira 2023, Project competition event

National Conference on Advancements & Future Trends in Engineering and Technology NCAFTET-2023 was jointly organized by Sambhram Institute of Technology (SaIT), Bangalore and International Association of Research and Developed Organization with the collaboration of Conference World on 12-05-2023.

<https://youtube.com/live/yvSC1dfvzd0>

**SAMBHRAM**  
INSTITUTE OF TECHNOLOGY  
Anahallur Temple Road, Near M S Palya, Jalahalli East, Vijayanagara Post, Bangalore 97  
Department of Electronics & Communication Engineering  
Cordially Invites You to

**"National Conference on Advancements & Future Trends in Engineering and Technology"**  
**NCAFTET-2023**  
(Offline/Online)  
In association with

**ICTACADEMY**  
**IETE Bangalore**  
**Association**  
**Conference World**

**Inauguration**  
12<sup>th</sup> May 2023

**Guest of Honour**  
Mr.Ravi K.S  
Joint Secretary,  
IETE Bangalore

**Chief Guest**  
Dr.(J.R.L.)A.T. Kishore  
Founder & CEO,  
Vidhya Sanga Technologies  
Pvt. Ltd, Bangalore.

**Conference Key Note Speakers**

**International Speaker**  
Prof.Narayana Aksharajra Garha  
College of Education, Zing,  
Tumkur Dist.,  
Nigeria

**National Speakers**  
Mr. Abhijit Thorat  
Development Manager and Senior IT  
Consultant ValueVerge Group  
Technology Solution, India

**Mr. Ajit Kumar**  
Operations Manager  
Integration Eductor Pvt. Ltd,  
Hyderabad.

**Presided by**  
Dr.H.G.Chandrasekanth  
Principal  
SaIT, Bangalore.

**Invited by**  
Dr.C.V.Ravishankar  
Chairman NCAFTET 2023  
HOD, Dept of ECE,  
SaIT, Bangalore

**Patrons**

Dr.K.V.Prasad  
Dean Research  
SaIT, Bangalore.

Dr.M.N.SreeRangaraju  
Dean Academics  
SaIT, Bangalore.

Dr.H.G.Chandrasekanth  
Principal  
SaIT, Bangalore.

Mrs. Dhanya Nagaraj  
Director  
SGL Bangalore.

Mr.B.N.Nagaraj  
IPS(Rtd), CEO  
SGL Bangalore.

Dr.V.Nagaraj  
Chairman  
SGL Bangalore.

**Venue:** New Conference Hall **Timings:** 9:30 Onwards

Supported By: Alumni Association-SaIT, Student Chapters of IETE, IEEE, ISTE & EWB

99. Miniproject Exhibition - 2023 is scheduled for 2023 from 10am to 1pm in the laboratories of ECE department of Sambhram Institute of Technology, Bangalore.

**SAMBHRAM**  
INSTITUTE OF TECHNOLOGY  
Department of Electronics and Communication Engineering  
In Association with  
**IETE, Bangalore**  
Supported By  
**Institution's Innovation Council (IIC) - SaIT**  
&  
**Alumni Association, SaIT**  
Cordially Invites you  
To  
**INTRA COLLEGEATE**  
**"Mini Project Exhibition - 2023"**  
On  
**15<sup>th</sup> February 2023**  
Invited by  
**Coordinators**  
Prof.GirishKumar N.G.  
President  
Alumni Association-SaIT  
Dr.Ravishankar C.V.  
HOD - ECE-SaIT  
Dr.K.V.Prasad  
Dean, Research SaIT  
Dr.Shreevishwakulkarni M  
Associate Professor, ECE,SaIT  
Dr.Sreerangaraju,M.N.  
Dean, Academics,SaIT

**Patrons**  
Dr.H.G.Chandrasekanth  
Principal,SaIT  
Mrs. Dhanya Nagaraj  
Director SGL  
Mr.B.N.Nagaraj  
IPS(Rtd), CEO, SGL  
Dr.V.Nagaraj  
Chairman SGL

**Venue:** Laboratories of ECE Department **Timings:** 10 AM - 1 PM  
\*Certificate will be given to all the participants & Winners.  
Supported by:  
Student Chapters of SaIT - IETE, IEEE, ISTE & EWB

ECE department HOD Dr.Ravishankar C.V delivered a technical talk on "Research- How to do & its Systematic Etiquette dated July 26, 2023 @ EDUSAT seminar hall



Commemorating Ambedkar Jayanthi celebrated at ECE department @ECE seminar hall on April 17, 2023 Coordinated by Prof.Anupama Hongal presided by Dr.H.G Chandrakanth, Principal , SaIT



**Dr.Ravishankar C.V, HOD-ECE addressing students regarding the trending benefits of power BI and the importance to learn it**

100. The 2 weeks youth empowerment program held on “Microsoft Power BI” by Electronics & Communication Engineering jointly with CSE and IS departments ,SaIT from 30th November 2022 to 15th December 2022. Youth empowerment on “Microsoft Power BI” Resource Persons : Mr. Ramees (Subject matter expert - Power BI from ICT Academy)

101. Intra-Collegiate Innovative Idea Contest was organized by the Department of Electronics & Communication Engineering on 21/12/2022 under Alumni Association-SaIT & Institution’s Innovation Council (IIC) in association with IETE, ISTE, IEEE & EWB Student Chapters of SaIT jointly supported by IETE-Bangalore section



101. "SKILL ENHANCEMENT PROGRAM ON SOFTWARE TOOLS & SIMULATORS" one week event conducted by ECE department In Association with IETE (Institution of Electronics and Telecommunication Engineers) Supported by Institution's Innovation Council (IIC)-SaIT & Alumni Association, SaIT started on March 9, 2023

## EVENTS /ACTIVITIES CONDUCTED BY DEPARTMENT

1. On February 15, 2023, a Mini Project Exhibition was organized, and it involved participation from all ECE students.



2. From February 22nd to 25th, 2023, the second internals were conducted for the I-semester students.

3. On February 27, 28, and March 1, 2023, the first internal assessment (IA) exams took place for the III-semester Lateral Entry students.

4. The VIII-semester commenced on February 2023, with participation from the VIII-semester students.

5. From March 5 to March 10, 2023, a Skill Enhancement Program called the ADE Workshop was held at SaIT campus. The coordinators for this workshop were Prof. Anupama, Prof. Manjula, Prof. K. Nithiya, and Prof. Abishek DG. This program involved the participation of all four sections of Computer Science and Electronics and Communication Engineering (CS and EC) third-semester students, who learned about the ADE core structure and Xilinx software.

**SAMBHRAM**  
INSTITUTE OF TECHNOLOGY

Departments of ECE, CSE & ISE  
In Association with  
**IETE, Bangalore**  
Supported By  
**Institution's Innovation Council (IIC) – SaIT & Alumni Association, SaIT**

Cordially Invites you to  
Inauguration of Hands-on Workshop  
on  
"Skill Enhancement Program on Software Tools & Simulators"  
on  
9<sup>th</sup> March 2023 @ 10:30AM

**Chief Guest**  
**Prof. C. Murali**  
Former Vice-President, IETE-New Delhi, India

**Resource Persons**

Prof. S. Sowdenwar Prof. Dept. of ECE	Prof. Anupama Hongal Asst. Prof., Dept. of ECE	Prof. Manjula G Hegde Asst. Prof., Dept. of ECE	Prof. Abhishek D G Asst. Prof., Dept. of ECE	Prof. Nithi Asst. Prof., Dept.
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**Coordinators**

Dr. Sapna M K Asst. Prof., Dept. of ECE	Prof. Geetha V Asst. Prof., Dept. of ECE	Prof. Shilpa C Asst. Prof., Dept. of ECE
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**Invited by**

Prof. Girish Kumar N G President Alumni Association	Dr. Ravishankar C V HOD-ECE	Dr. T John Peter HOD-CSE	Dr. Latha P I HOD-ISE
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**Patrons**

Dr. K.V. Prasad Dean - Research, SaIT	Dr. M. N. Sree Rangaraju Dean - Academics, SaIT	Dr. H. G. Chandrakanth Principal, SaIT
Mrs. Dhanya Nagaraj	Mr. B.N. Nagaraj	Dr. V. Nagaraj

6. On March 4, 2023, the Anveshana Project Competition took place, involving all ECE students.

7. On April 18, 2023, Ambedkar Jayanthi was celebrated, with participation from all ECE staff members.

8. On May 12, 2023, a National Conference on Advancement and Future Trends in Engineering and Technology was held, with 60 participants.

9. On June 27, 2023, the Graduation Day for the year 2023 was celebrated, with the participation of all department final year students and faculties.

10. On July 15, 2023, an International Conference on "Green Energy Technology and Electric Vehicles (EV)" was held. The conference was convened by Dr. C.V. Ravishankar, who is the Head of the Department (HOD) of ECE. The program was coordinated by Prof. Shilpa C, Assistant Professor in ECE, and Prof. Manjula Hegde, Assistant Professor in ECE. The event saw the participation of delegates from all parts of the country.

11. On August 4, 2023, a program titled "VLSI MOU and Technical Talk" was organized, with Prof. Shilpa C, Assistant Professor in ECE, serving as the Program Coordinator. This event was attended by ECE students from the 1st and 2nd years.

On August 18, 2023, there was an MOU signing and a technical talk conducted in association with Karunadu Technologies and IETE. Prof. Sowndeswari served as the Program Coordinator, and the event involved students from the IV and II semesters.



13. On August 28, 2023, the inauguration of a one-week Value Added Course on "Sensing, Automation & IoT using SST IoT Development Board" took place. Dr. C.V. Ravishankar, the HOD of ECE, was the Convenor, and Prof. Manjula Hegde, an Assistant Professor in ECE, served as the Program Coordinator. This course was attended by ECE and CSE students from the IV semester.



Dr. Ravishankar Pioneered as a guest of honour in CIPHER BATTLE 2.0 at Channabasaveshwara institute of technology on July 8, 2023



## RESEARCH /FUNDED PROJECTS

1. Dr. Sapna K, an Associate Professor in the ECE department, and Shilpa C, an Assistant Professor in the same department, have applied for a project titled "Latest Trends And Challenges For Electrical Vehicles (EV) Technologies." This project is associated with the Atal- AICTE Faculty Development Program (FDP) and has a proposed duration of 2 months (2L). The application for this project has been submitted.

2. Another project, "Analysis of Pathloss Models on 5G Network Technology in Urban and Rural Areas," has been applied for by Prof. S. Sowndeswari, an Assistant Professor in the ECE department, and Shilpa C, also an Assistant Professor in ECE. This project is affiliated with VGST (Vishweshvaraya Graduate Scheme for Electronics and IT) and is proposed to span 3 months (3L). The application for this project has been submitted as well.

3. Additionally, Prof. Shilpa C and Prof. S. Sowndeswari, both Assistant Professors in the ECE department, have jointly applied for a project focused on the "Establishment of Research Laboratory for RF/Microwave Antenna Test Facility." This project is also associated with VGST and has a proposed duration of 3 months (3L). The application for this project has been submitted, reflecting the department's commitment to advancing research and laboratory facilities in RF/Microwave technology.



## STUDENT ARTICLES

1. ECE IV Semester student Shilpa K submitted an article on Farmer's Suicide in India selected as the best article

FARMER'S SUICIDES IN INDIA :-

India is an agrarian country with around 70% of its people depending directly or indirectly upon agriculture. But farmer's suicides in India is increasing.

As per the central government despite a multi-pronged approach to improving income and social security of farmers over 12,000 suicides were reported in the agricultural sector every year since 2013. Farmer suicides account for approximately 10% of all suicides in India.

There is no denying that the menace of farmer's suicide will and soon contribute to the operations of economic benefits of our demographic dividend. In this article, what do the facts say:-

Seven states account for 87.5% of total suicides in the farming sector in the country. The states were Maharashtra, Karnataka, Telangana, Madhya Pradesh, Chhattisgarh, Andhra Pradesh and Tamil Nadu 60%.

Both the marginal farmers and small farmers are committing suicide.

The reasons behind farmer's suicide in India

They had so many reasons such as monsoon failure, climate change, high debt burdens, government policies, mental health, personal issues and family problems among the reasons for farmer's suicides in India.

The cost of chemicals and seeds:-

Be it the fertilizers, crop protection chemicals or even the seeds for cultivation, farming has become expensive for the already indebted farmers.

2. IV semester students Sahana bai wrote a article on Robotics as an Technological advancement in 2023 inspires everyone.

ROBOTICS SAHANA BAI-5  
15121K1062

INTRODUCTION

Robotics develops machine that can substitute for humans and replicate human actions. Robots can be used in many situations for many purposes, but today many are used in dangerous environments manufacturing purposes or where humans cannot survive.

ADVANCEMENT IN ROBOTICS

From Industrial automation to humanoid Robots Robotics has come a long way from its early days of industrial automation. Today, robots are being used in a wide range of applications, from healthcare to space exploration. With the advancements in technology, robots are becoming more sophisticated and capable of performing tasks that were once thought impossible.

One of the major advancements in robotics is the development of humanoid robots. These robots are designed to look and move like humans, making them ideal for tasks that require human-like dexterity & mobility. Humanoid robots are being used in a variety of applications, from assisting with surgeries to performing tasks in hazardous environment.

IMPORTANCE OF ROBOTICS

They increase productivity; Robots are used to perform repetitive tasks and infinities; the human brain is not. Industries use robots to accomplish the tedious, redundant work, freeing employees to take more challenging tasks & even learn new skills.

ADVANTAGES OF ROBOTS

- Robots can offer increased productivity, efficiency, quality, & consistency.
- Robots can't get bored with job.
- Until they switch off, they can repeat the same task continuously.
- Robots can be very accurate than humans; that's why robots are used in manufacturing of microelectronics.

3. VII Semester student named Suhas M wrote an article on Role of Computer vision by 2024 is selected as best and awarded

### Role of Computer Vision in AI World by 2024

Computer vision is a field of artificial intelligence that enables computers and systems to derive meaningful information from digital images, videos and other visual inputs — and take actions or make recommendations based on that information. It is one of the most compelling types of artificial intelligence that we regularly implement in our daily routines, such as using face recognition to unlock our phones, getting movie recommendations from Netflix, or asking Alexa to show us the weather forecast.

Computer vision has made tremendous progress in the last five years, due to the advances in machine learning and deep learning techniques, such as convolutional neural networks (CNNs) and recurrent neural networks (RNNs), that can process and analyze large amounts of visual data. For example, DeepMind's AlphaZero became the best Go player entirely through self-play, and computer vision applications such as grammar checks, autocomplete, personal photo organization and speech recognition have become commonplace for large numbers of people.

As the global data creation is projected to grow to more than 180 zettabytes by 2025, up from 64.2 zettabytes in 2020, computer vision will play an increasingly important role in extracting insights and value from this massive amount of visual data. Computer vision will also enable new applications and opportunities across various industries and domains, such as healthcare, manufacturing, retail, security, education, entertainment and more.

### Trends

**Augmented reality (AR) and virtual reality (VR):** AR and VR are technologies that create immersive and interactive experiences by overlaying digital content onto the real world or creating a simulated environment. Computer vision is essential for AR and VR applications, as it enables the detection and tracking of objects, faces, gestures, motions and scenes in real time. AR and VR applications can be used for various purposes, such as entertainment, education, training, gaming, tourism, social media and more. For example, Snapchat uses computer vision to create fun filters and lenses for its users; Google Maps uses computer vision to provide live view navigation with AR directions; and Microsoft HoloLens uses computer vision to create mixed reality experiences for enterprise customers.

**Self-driving cars:** Self-driving cars are vehicles that can drive autonomously without human intervention, using sensors, cameras, radars, lidars and GPS to perceive the environment and navigate safely. Computer vision is a key component of self-driving cars, as it enables the recognition and classification of objects such as pedestrians, vehicles, traffic signs, lanes and road markings. Computer vision also enables the prediction of the behavior and intention of other road users, such as whether a pedestrian will cross the street or whether a car will change lanes. Self-driving cars have the potential to reduce traffic accidents, improve mobility and accessibility, save time and fuel, and create new business models and services. For example, Tesla uses computer vision to power its Autopilot system; Amazon uses

help users ensure that AI systems are fair, inclusive, respectful, trustworthy and beneficial for all. For example, IBM uses computer vision to enable its AI Fairness 360 toolkit that provides metrics and algorithms for fair AI; Google uses computer vision to enable its Differential Privacy library that protects the privacy of users' data; and Microsoft uses computer vision to enable its Responsible AI toolkit that provides guidelines and best practices for ethical AI.

### Conclusion

Computer vision is a rapidly evolving field of artificial intelligence that has a profound impact on our lives and society. It enables computers and systems to see, understand and interact with the world in ways that were previously unimaginable. Computer vision will continue to advance and innovate in the coming years, creating new possibilities and challenges for various domains and applications. As computer vision becomes more ubiquitous and powerful, it is also important to ensure that it is used in a responsible and ethical manner, respecting the values and rights of all stakeholders. Computer vision is not only a technology, but also a vision for a better future.

### References

- Computer Vision Meaning, Examples, Applications – Spiceworks | <https://www.spiceworks.com/tech/artificial-intelligence/articles/what-is-computer-vision>
- What is Computer Vision? - IBM | <https://www.ibm.com/topics/computer-vision>
- 3 Prediction for the future of Computer Vision – Shutterstock | [www.shutterstock.com/blog/computer-vision-predictions](https://www.shutterstock.com/blog/computer-vision-predictions)
- The present and future of AI - Harvard | [www.seas.harvard.edu/news/2021/10/present-and-future-ai](https://www.seas.harvard.edu/news/2021/10/present-and-future-ai)
- 7 computer vision trends in 2023 you cannot afford to miss | [www.softwebolutions.com/resources/computer-vision-trends-in-2023.html](https://www.softwebolutions.com/resources/computer-vision-trends-in-2023.html)
- The 100 Most Popular Computer Vision Applications in 2023 | <https://viso.ai/applications/computer-vision-applications>

Curated by Suhas M [15T20EC008]

1. Bhavana from IV sem submitted an article on skill india
2. Rahul from VI semester wrote an article vs dialogue on 3 simple rules of life.
3. Prajwal gowda from IV sem wrote on “What is an ART and why does it matter?”
4. Mahendar from IV semester submitted on “Artificial Intelligence”
5. Goura CM submitted on “Is university degree necessary for success”
6. Komala from IV semester submitted an article on “Augumented Reality ”

7. Likitha from IV semester submitted an article on How chatgpt helps in Bitcoin and crypto users

8. Prerena submitted on "COVID 19"

### THREE SIMPLE RULES OF LIFE

Once there was a rich man. His name was Gopi. He was very rich. Yet he wanted to be more rich. One day he was walking in a forest. He saw a strange small bird, which was sitting on the branch but it had very beautiful and colourful feathers. Its voice was also very sweet. He did not see such a bird in his life. He slowly went near it and caught it. Now the bird began to speak.

Bird: Why have you caught me?  
Gopi: I want to make money. I can sell you for big amount.  
Bird: Already you are a rich man. Why do you want to become richer?  
Gopi: I want to become the richest in the world.  
Bird: But you can't sell me. Because in imprisonment I will lose my sweet voice and beauty.  
Gopi: (Angry) Yeah! You are no more useful for me.  
 So Gopi threw the bird out on a tree.  
Bird: Now wait. I tell you three simple rules

### Skill India

To harness potential benefits of demographic dividend of India, Prime Minister Narendra Modi launched the Skill India Mission "Kaushal Bharat Kruskal Bharat" on 15th July 2015. This mission comprises of various initiatives like National Skill Development Mission, National Policy for Skill Development and Entrepreneurship, Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Skill Loan Scheme and rural India Skill.

Aim of Skill India Mission:  
 This campaign aims to converge and monitor all skill development across the country. It targets to train over 10 crore people in different skills. The main focus is to provide vocational training for all occupations like carpenters, tailors, weavers etc... More emphasis will be given in a new area like car repair, transport, banking etc... This campaign covers both rural and urban areas.

Advantages of Skill India Mission:  
 Major advantages of this mission are that it creates employment, improve entrepreneurship quality, develop skills in communication, management and personality development, make self-dependent and provide balanced growth in all the sectors. Several challenges come in the way of Skill India Mission are inefficient execution of the plan, red tapism, nepotism while providing jobs, a mismatch in skills provided, less awareness in rural areas and orthodox mindset of people.

Such a visionary initiative like Skill India mission is the need of the hour that will boost the overall economic condition of the country and create synergy between education, training and work in order to make India the skill capital of the world.

Bird: But these rules can profit you greatly.  
Gopi: Profit me! Really? Then tell me I can't resist myself.  
Bird: 1st rule - Never believe everything that others say.  
 2nd rule - Never be sad about what you have.  
 3rd rule - Never throw away what you have in your hand.  
Gopi: You silly bird. These rules are known to everyone. You have cheated me.  
Bird: Just sit down for a while. Think about today's actions. You had me in your hands. But you threw me away. You believed all that I said and you are sad about not having me. The rules are simple. But you never followed them. Now do you understand the value of rules? Then the bird flew away. Gopi understood the value of rules in his life.

Rahul S  
 6th Sem ECE Dept  
 SAIT



## ARTICLES BY STAFF MEMBERS

1. Prof. S.Sowndeswari wrote an article on "Let's Explore Chatgpt"
2. Prof. K.Nithiya wrote an article on "six sigma" also published articles on technical topics



### Deploy Zero Trust Data Protection-2023

Author- K.Nithiya, Assistant professor ECE

Published 3 months ago



### Best affordable tablets for entertainment in India [July 2023]

Author- K.Nithiya AP/ECE

Published 3 months ago



### AI certification by Microsoft launched -2023

Author- K.Nithiya , AP/ECE ,Banglore ,SaIT

Published 3 months ago

### Let's Explore ChatGPT

Article by Prof.S.Sowndeswari

ChatGPT is an AI – Powered chatbot that uses natural language processing and machine learning algorithms to interact with users which allows human-like conversations and much more with the chatbot.

The name chatGPT combines "Chat" which refers its functionality & "GPT" refers Generative Pre-Trained Transformer, a type of large language model (LLM). Transformer which means it generates responses, it is pretrained by humans and finally the transformer is the key neural network architecture that transforms an input into a meaningful output.

Unlike google, ChatGPT returns search results, a list of web pages and articles that usually provide information related to search queries. ChatGPT provides a response based on the context and intend behind a user's question. For example, ask google to write story or write a code, but you can ask that of chatGPT, and it will give you a reasonable response. The language model can answer questions and assist you with tasks, such as composing emails, essays, and code. Its seemingly super clever AI chatbot that seems to know everything. It can do everything from your homework, to writing a cover letter for a new job, to giving you advice, to programming code. While google's power is the ability to do enormous database lookups and provide a series of matches that might answer your queries. ChatGPT's power is the ability to interpret the context and meaning of a particular query and produce a relevant answer in grammatically correct and natural language, based on the information that it has been trained on.

## PLACED STUDENTS –VIII SEMESTER

1. Spurthi J Hiremath as a Trainee Engineer at Destination with a CTC of 4 LPA.



2. Danush A Nayaka holds the position of Trainee Engineer at Destination with a CTC of 4 LPA.



3. Sanjay T also works at Metronics Systemtech as an Engineer (design/testing/software) with a CTC of 3 LPA.



4. Harshitha S is employed at Metronics Systemtech as an Engineer (design/testing/software) with a CTC of 3 LPA.

5. Lakshmi R is also an Engineer (design/testing/software) at Metronics Systemtech with a CTC of 3 LPA.

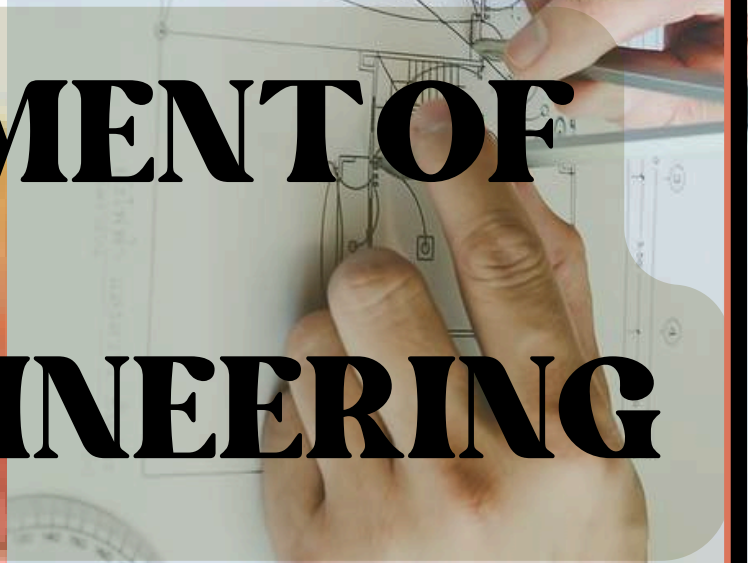
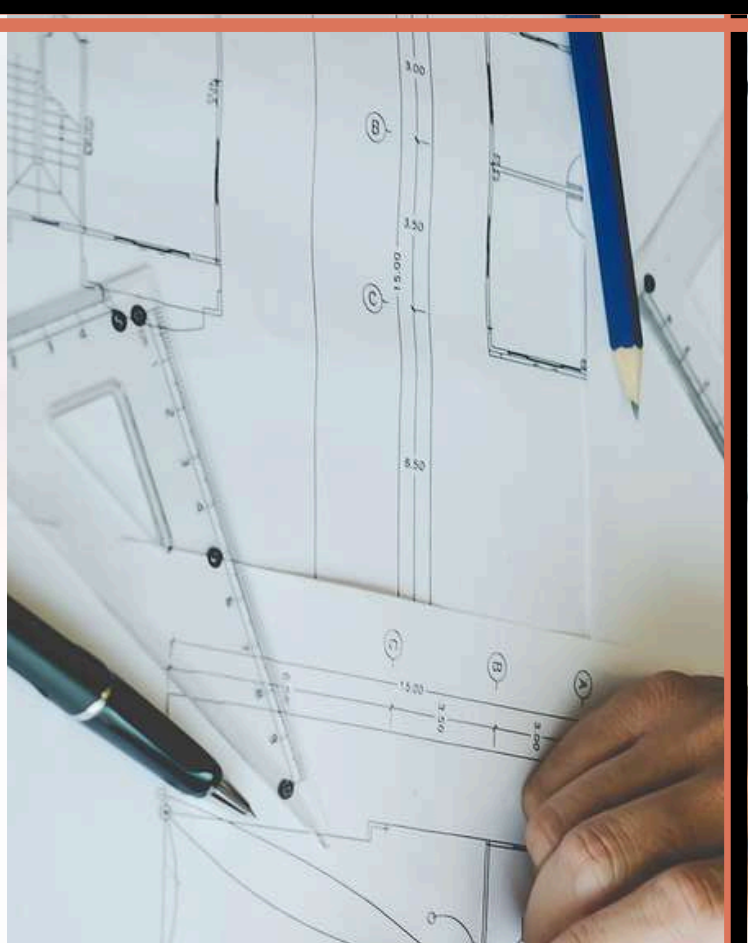


6. Dhanush B Gangatkar is a SAP Developer at Peol Technologies with a CTC of 3 LPA.

7. Pranav Rao J works at Property Pistol as an Assistant Sales Manager with a CTC of 8.16 LPA.

8. Christopher is a Trainee Software Engineer at Robosoft Technologies with a CTC of 4.5 LPA. 9. Sumeet Nayak is associated with Vintrus as a BDI with a CTC ranging from 3-5 LPA.





# DEPARTMENT OF CIVIL ENGINEERING



## From HOD's desk

Civil engineering is a field of engineering that plays a vital role in shaping and enhancing the world we live in. It involves the design, construction, and maintenance of infrastructure and structures, ranging from bridges, roads, and buildings to dams, airports, and water supply systems.

Civil engineering is of immense significance as it forms the backbone of modern society, providing the essential infrastructure that supports economic, social, and environmental development. It ensures the safety and functionality of structures, contributing to the well-being of communities and the efficient movement of people and goods.

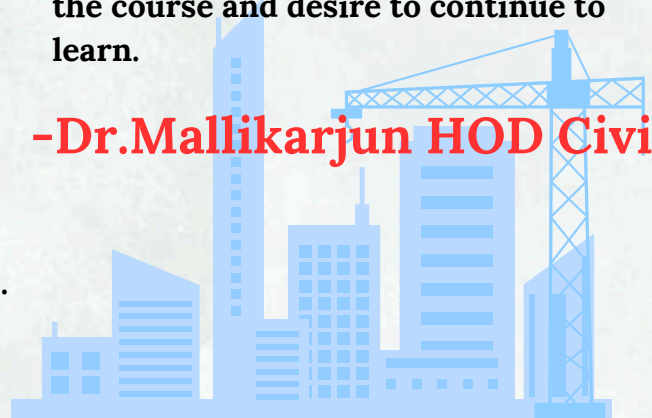
Additionally, civil engineers are at the forefront of addressing contemporary challenges, such as sustainable and environmentally friendly construction, disaster resilience, and urban planning to accommodate growing populations. With its multidisciplinary nature and continuous evolution, civil engineering remains a cornerstone of modern civilization, making it a field of great importance and impact.

Civil engineering is a dynamic field that continually adapts to the changing needs of society. Its significance extends to ensuring public safety, as civil engineers design structures to withstand various environmental and structural stresses. They also play a crucial role in addressing environmental concerns, focusing on sustainability and reducing the environmental impact of infrastructure projects.



The need for professionals with a background of Civil engineering is always on the rise. Those with problem solving skills are the ones in demand. Professionals with these skills are sure to land up with successful career in the years to come. The department of Civil Engineering of the SaIT is providing the opportunity for the students to develop a firm foundation in Science and Technology. I believe that the opportunities for the students in the campus should lead to an appreciation of the holistic development of an individual. And finally, the objective is to encourage our students for having passion towards the course and desire to continue to learn.

**-Dr. Mallikarjun HOD Civil**





## Message from Editorial Board



**FACULTY: Mrs. Ashwini  
(ASSISTANT PROFESSOR)**

**STUDENT: DEEKSHITA DEVARJ.  
REDDY NEETISHKUMAR**

As the Editor of a Civil Department newsletter, Please let me start by conveying my regard to the entire civil engineering faculty members who supported me for making this happen. This News-letter mirrors the vision and mission of Civil Engineering Department. It also highlights the events activities and achievements.

I do hope that this newsletter will

encourage many more students to come forward and express their talent and creativity.

I would like to thank (HOD, Civil) for the continuous Motivation, inputs and time to time Feedback for the final draft.

## Department Faculties Details / Ph.D updates



**1. Prof. Vsantha D  
(Completed course work)**



**2. Prof. Monica.  
M. S (Completed)**



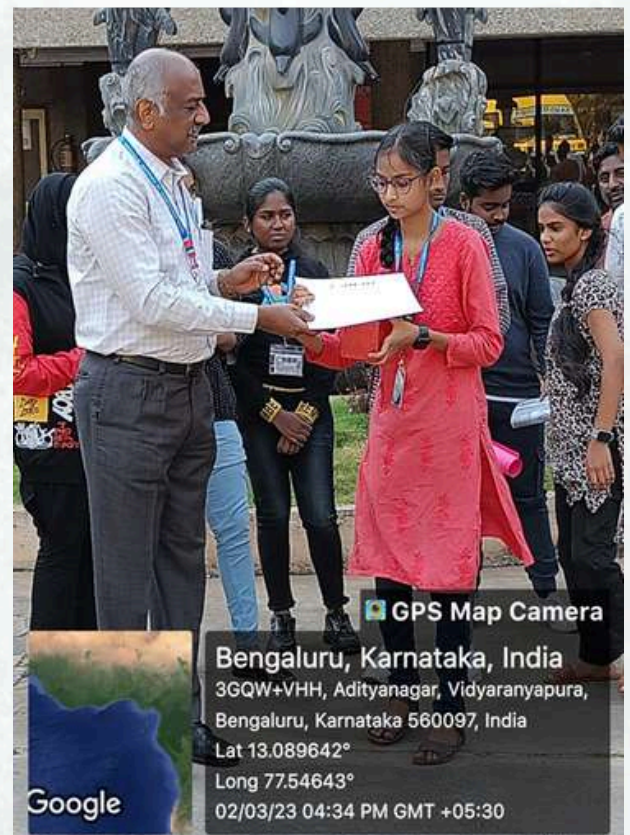
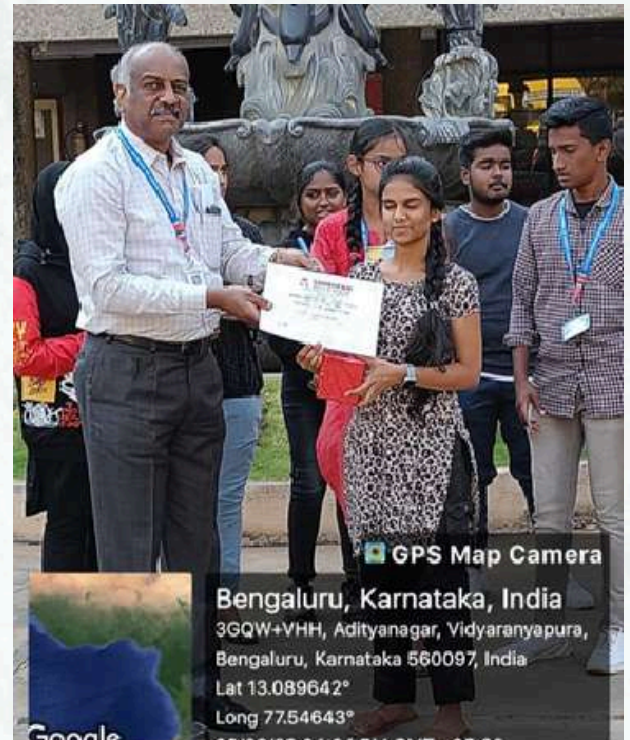
**4. Prof. Ashwini Ingale**



**3. Prof. Akshata. Mulgund  
(completed colloquium )**

## PARTICIPATION BY FACULTY & STUDENTS IN ACADEMIC /SPORTS/CULTURAL EVENTS

1. “sustainable energy week” celebrated from 27th Feb. to 3rd march. Department conducted competitions like drawing and best out of waste for sustainable energy consumption and gave certificates to the winners and took pledge to save energy as much as possible .





2. food walk conducted throughout the college on 10th march and civil engineering students participated in the event



3 Career Guidance drive Indian AIRFORCE is conducting career Guidance drive on 10th March 2023 at 9am in the Auditorium Our Student Abhinav Kashyap awarded with a Cap For Asking A Good Question.



4 Industrial visit to RMC plant on 28th April





### 3. Har Ghar dhyam



4 Technical talk on " Impact of Tribology on the society for suitable development a Over Review " on 6th may

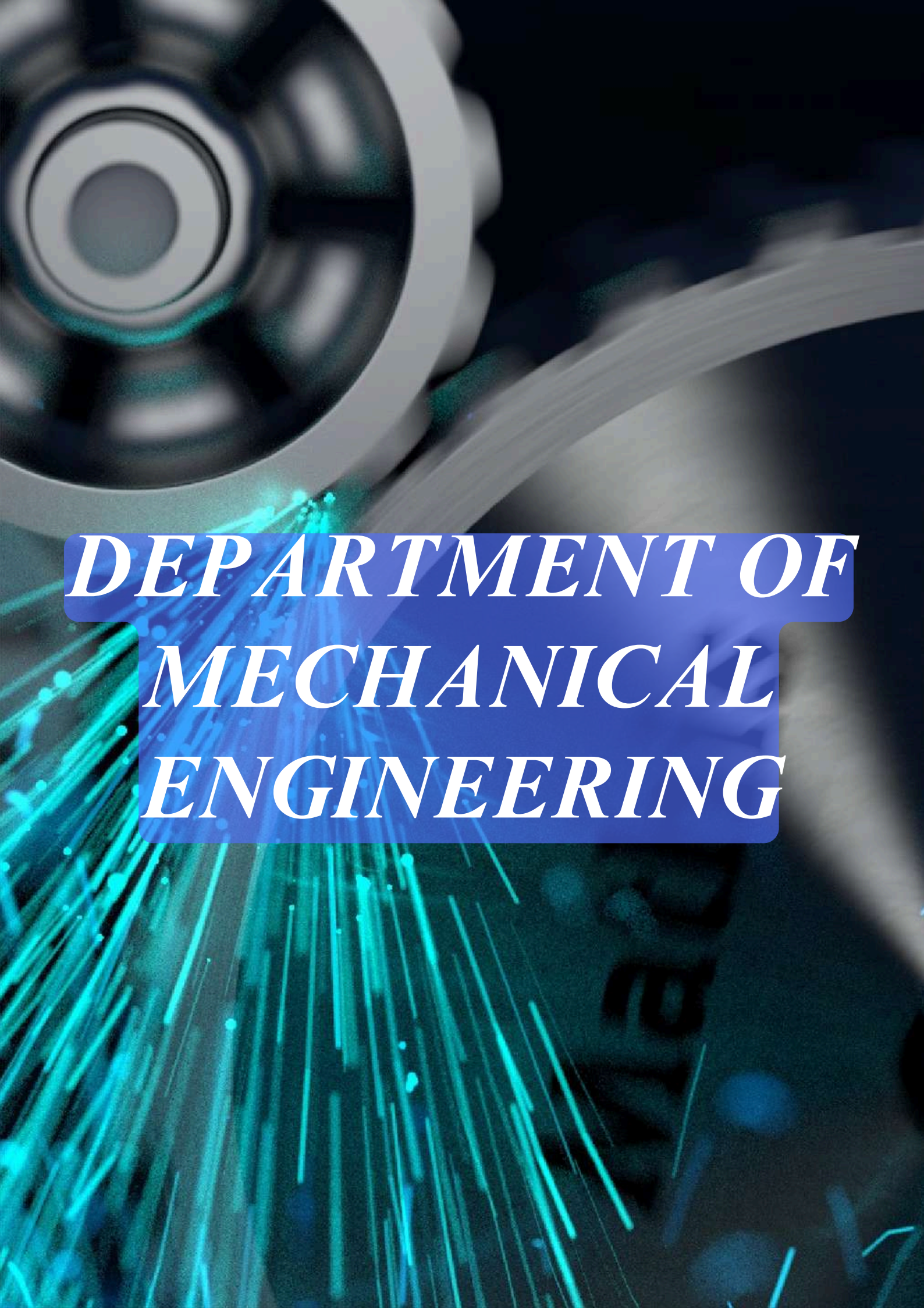
5. Extensive survey camp 2023 (june 19-21)





**6. TECHNICAL TALK on  
“Industrial awareness  
programme by ACE skill  
development in  
engineering technology  
society”.(on 23rd june 2023)**





***DEPARTMENT OF  
MECHANICAL  
ENGINEERING***

**FEB-2023 TO  
JULY-2023**

The Department of Mechanical Engineering was established on 2002 and has an intake of 60. A research and development center was started in the Department in 2008. The Department has conducted a good number of seminars and workshops on different topics to provide exposure to various domains of engineering and technology. The Department has provided industry academia interactions to the faculties and students. The Department has also signed MOUs with Peenya Industrial Association, National Design Research Forum, and The Energy Resources Institute [TERI] for taking up joint program including student project work and research activities. The Department is having good infrastructure facilities to pursue for R& D activities. The Department has got six doctoral degrees faculty members in teaching and good numbers of faculties are perusing research work leading to Ph.D. The Visvesvaraya Technological University has awarded eight PhDs from the Mechanical Research Center and another 10 scholars are pursuing for PhD from our center. The research activities being done in the Department is getting translated to publications in peer reviewed journals.

### **PhD REGISTERED FACULTY DETAILS:**

1. Prof. JAGADEESH H (Completed PhD, Open seminar II)  
on 18-04-2023





**FACULTIES EVENT'S ORGANIZED  
/ PIONEERED / PARTICIPATION HIGHLIGHTS**

Was The Main Coordinator In Conducting Women's Day Celebrations On 13/03/2023 By Inviting Dr.Shuba.Mrs.Nagachandrika Bhat And Dr.Sushellamma Of Sumangali Sevashrama, Bangalore



Dr. PADMINI B V

1 Main Coordinator For Conducting Food walk For 3rd Sem Students On 10-03-23

2 Participated in one week FDP on "polymers comprisal for engineering Applications PCEA from 2022-2026 May 2023,conducted by BMSCE, Bangalore

3 Published a research paper on "High temperature sliding wear behavior of cold sprayed in 738 coating" on 22 feb 2023 surface review and letters vol-30,no 2, 235006

4 Main coordinator for conducting a talk on 18-01-2023the womens cell on "womens nights and privileges at the workplace"



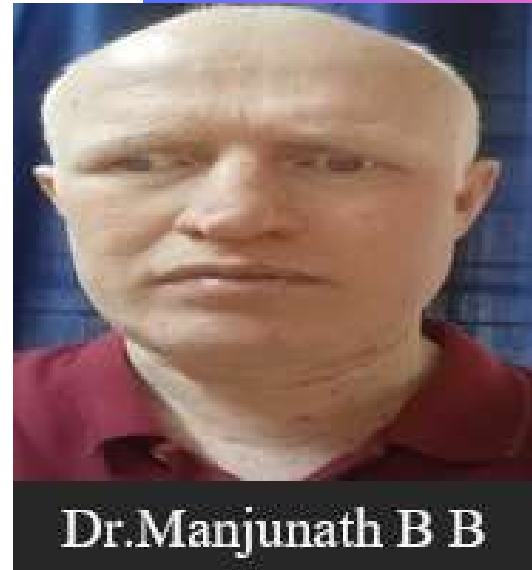
5 Main Coordinator For Conducting A Talk On 08-07-2023 By Dr. Rajeshwari "Opportunities And Challenges Of Entrepreneurs

6. Main Coordinator For Conducting A Savings Scheme Opportunity For All Inviting Post Office Postmaster-Mr. Gundama "Savings Scheme—Post Office" On 23-06-2023

7.Received The Best Faculty Award By Dr,Shubha , Nal Scitenst At Women's Day Celebration Om 13/03/2023

8.Influence of nano graphene addition on mechanical properties of Bi-directional carbon fabric based epoxy composite, Journal of Elastomers & plastics, Sage, 2023, Vol. 55, Issue 6, Pg.937-958.

9. Participated in one week One Week Online Teachers Training Program on “Introduction to Python Programming & its Applications” from 13th – 17th March 2023, conducted by VTU, CPGS, Muddenahalli.



Dr. Manjunath B B



Dr. Saravari  
Programme Coordinator & Associate  
Professor, Dept. of Aerospace Engg.  
VTU CPGS, Muddenahalli

Dr. N. Chikkanna  
TU Coordinator, Professor & Chairman  
Dept. of Aerospace Engineering  
VTU CPGS, Muddenahalli

Dr. Rangaswamy B E  
Registrar  
Viveksvaraya Technological University,  
Belgaum



Dr. Rangaswamy B E  
Programme Coordinator  
Introduction to Python Programming &  
its Applications

Dr. N. Chikkanna  
TU Coordinator, Professor & Chairman  
Dept. of Aerospace Engineering  
VTU CPGS, Muddenahalli

Dr. Rangaswamy B E  
Registrar  
Viveksvaraya Technological University,  
Belgaum



Research Article

JOURNAL OF  
ELASTOMERS & PLASTICS

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2023, Vol. 35(6) 917-938  
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### Influence of nano graphene addition on mechanical properties of Bi-directional carbon fabric based epoxy composites

H Jagadeesh<sup>1</sup>, Prashanth Banakar<sup>2</sup>, P Sampathkumar<sup>1</sup>, RRN Sailaja<sup>3</sup> and Jitendra Kumar Katiyar<sup>4</sup>

#### Abstract

The carbon bi-directional fabric as reinforcement in a polymer matrix has played an essential role in dynamically developing lightweight composites in various applications such as automotive, wind energy, aerospace, and sports sectors. Further, the interfacial bonding between the matrix and reinforcement/filler is the weakest point and the most crucial factor that influences the mechanical and tribological performance of the composites. Therefore, the hand lay-up technique fabricated a bi-directional carbon fabric epoxy composite with varying nanographene concentrations. The developed composites were tested and evaluated for their mechanical properties, viz., tensile, flexural and impact strengths. It is observed that these mechanical properties are mainly dependent on the reinforcement type and its concentration. Furthermore, composite with 0.8 wt% nanographene exhibits superior performance in terms of increased tensile (579 MPa), flexural (547 MPa) and impact (284 J/m) strengths in comparison with other composites.

#### Keywords

Epoxy, carbon fibres, graphene, tensile, flexural, impact

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<sup>2</sup>Jain College of Engineering and Technology, Hubballi, India

<sup>3</sup>The Energy and Resources Institute, Bangalore, India

<sup>4</sup>Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai, India

#### Corresponding author:

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Email: jitendrk@srmit.ac.in



***DEPARTMENT OF  
INFORMATION SCIENCE &  
ENGINEERING***

# Department of Information Science & Engineering

The Information Science & Engineering (ISE) department plays a pivotal role in shaping the digital landscape of tomorrow. With a focus on harnessing the power of data and technology, our department is committed to fostering innovation and excellence in education and research. From artificial intelligence to cybersecurity, our faculty and students are at the forefront of pioneering solutions to complex challenges in the digital age. Through interdisciplinary collaboration and industry partnerships, we strive to empower our graduates with the skills and knowledge needed to thrive in a rapidly evolving global economy. Join us as we continue to push the boundaries of what's possible in the exciting field of Information Science & Engineering.

SAMBHRAM INSTITUTE OF TECHNOLOGY SCHEDULE FOR FACULTY DEVELOPMENT PROGRAM ON R PROGRAMMING FROM 26TH JUNE TO 1ST JULY 2023		
<b>DAY 1 26-06-23</b> Session 1 Introduction to R History, arithmetic, Assignment, and Vectors Session 2 For Basic Math, Arithmetic, Variables, Functions Hands-on Session	<b>DAY 2 27-06-23</b> Session 3 Vectors, Expressions and assignment, logical expressions Variables and Arrays, Defining a Matrix, Sub-setting Matrix Session 4 Hands-on Session	<b>DAY 3 28-06-23</b> Session 5 Conditions and Looping of statements, Working with file, Working with online, vector based programming Session 6 Hands-on Session
<b>DAY 4 30-06-23</b> Session 7 Functions Calling functions, applying arguments, naming, writing functions The Amazon interview, algorithm, operations, functions Session 8 Hands-on Session	<b>DAY 5 01-07-23</b> Session 9 Packages, packages, format, debugging, Manipulation of code, compilation of the code Session 10 Hands-on Session Quiz/Exam	<b>RESOURCE PERSONS</b> ICT Academy, Bangalore

### Advisory Committee

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Principal, SAIIT

DR. M.R. SURESHKUMAR  
Dean Academic, SAIIT

DR. S.V. PRASAD  
Dean Research, SAIIT

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Vice-Chair, ISE

DR. SURESHKUMAR H.  
Vice-Chair, ISE

Prof. Sudeep B  
Vice-Chair, ISE

### Faculty Coordinators

Prof. Anika M.V. G.S.S.  
Prof. Sujatha Devi A. S.S.S.  
Prof. Subashree S.S.S.

### Student Coordinators

Subashree S.S.S.  
Prashant R.K. S.S.S.  
Anshika S.S.S.  
Vishalika S.S.S.

### Venue:

Sambhram Institute of Technology, M.S. Palva, Vidyanarayana Post, Bangalore-560097, India. (Adjacent to Sri Ramanya)

### Contact Details:

Prof. Anika M.V.: 9881711048  
Prof. Sujatha Devi A.: 9882204800  
Prof. Subashree H.: 702801772

### FDP Guidelines:

- Attendance is mandatory for all sessions to get the certificate.
- Registration fee for 500 participants.
- Working Lunch will be provided.
- Accommodation is provided based on request.
- Participants are requested to bring their laptop.

Registration link: <https://www.gre.in/2023/06/26/fdp/>

The five-day Faculty Development Program (FDP) titled "R Programming" was conducted in association with the Information Science & Engineering (ISE), Computer Science & Engineering (CSE), and Electronics & Communication Engineering (ECE) departments. The program featured Mrs. Valli E, a senior trainer from ICT Academy Chennai, as the resource person. The FDP took place on June 26, 2023, with two sessions scheduled for the day. The first session ran from 9:00 am to 1:00 pm, followed by the second session from 2:00 pm to 4:30 pm. A total of 40 faculty members participated in the program, engaging in comprehensive learning and skill development in R programming.

R is an open source programming language that is widely used as a statistical software and data analysis tool. R generally comes with the command line interface. R is available across widely used platform like windows Linux and Mac OS. Also, the R programming language is the latest cutting-edge tool

Dr. BN Nagaraj  
Vice-Chancellor, CEO, SGI

Mrs. Divyaja Nagaraj  
Director, SGI

Dr. Nagaraj V  
Chairman, SGI

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
AND  
INFORMATION SCIENCE & ENGINEERING

In association with

Organizes

Five Days  
Faculty Development Program  
on  
R Programming Language

From 26th June 2023 to 1st July 2023

### ABOUT DEPT. ISE

engineering education. VITU Research Centre Department of Computer Science & Engineering was established in the year 2009-10, with provision for Ph.D. (Full Time). Since then, the research facility is available for research scholars to carry out research in their specific areas of interest.

### ABOUT R PROGRAMMING

R Programming is a labor-oriented course under the category of enhancement course of the NEP 2020 syllabus. The time this course is being inducted into the UG program is for the benefit of the students.

R is a programming language for statistical computing and graphics supported by the R Core Team and the R Foundation for Statistical Computing. Designed by Ross Ihaka, Robert Gentleman.

R is free and open-source, making it accessible to a wide community of users and developers worldwide.

### OBJECTIVES

- Understand the different Data Types in R.
- Understand the different Data structure in R.
- Read Structured Data into R from various sources.
- Explore and understand how to use R Documentation.
- Master the use of the R and RStudio environment.
- Eminent Speakers and Experts from various fields through ICT Academy will deliver the sessions.

# GLIMPSES OF THE EVENT



Day 1, Session 1: The FDP commenced with an inaugural session followed by an introduction to R programming.

Participants delved into topics such as numeric data, arithmetic assignments, and vectors.

Day 1, Session 2: The focus shifted to R for basic mathematics, arithmetic variables, and functions. Hands-on sessions provided participants with practical experience in applying the learned concepts.

Day 2, Session 3: Vectors, expressions, assignments, logical expressions, matrices, and arrays were covered in depth. Participants learned to define matrices and perform operations on them.

Day 2, Session 4: A hands-on session allowed participants to reinforce their understanding through practical exercises.

Day 3, Session 5: Participants explored conditions and looping, including if statements, looping with for and while, and vectors-based programming. Additionally, they learned about lists and data framing, including data frames, lists, and special values within the applied family.

Day 3, Session 6: Another hands-on session provided participants with the opportunity to apply their knowledge and skills gained thus far.

Day 4, Session 7: The focus shifted to functions, covering topics such as calling functions, scoping, arguments matching, and writing functions. Participants also learned about function commands, arguments, and specialized functions.

Day 4, Session 8: Participants engaged in hands-on activities to further solidify their understanding and proficiency in using functions.

Day 5, Session 9: The final day of the FDP covered pointers, including packages, frames, debugging, and code manipulation. Participants also learned about the compilation of code.

Day 5, Session 10: The FDP concluded with a hands-on session where participants had the opportunity to apply their skills in a practical setting, consolidating their learning from the entire program.



# EDITORIAL TEAM

EDITOR IN - CHIEF : Dr. Ravishankar C V (ECE - HOD)

## FACULTY CO- ORDINATORS

- : Prof. Saranya (CSE)
- : Prof. Nithiya K (ECE)
- : Prof. Nayana H R (Basic Science)
- : Prof. Pankaja Manjunath (ISE)
- : Prof. Ashwini (Civil)
- : Dr. Yuvaraj (Mech)

## STUDENT CO- ORDINATORS

- : Ms. Soniya Kumari B. (6th Sem CSE)
- : Mr. Tejas P. M. (6th Sem CSE)
- : Ms. Ranga Kavya (4th Sem CSE)

