Sairam RAISE | Sairam EOMS | Sairam SDG ACTION PROGRAM

Sairam INSTITUTIONS

NBA NATIONAL BOARD OF ACCREDITATION | NAAC A+ | nirf NATIONAL INSTITUTIONAL RANKING FRAMEWORK | ISO 9001 : 2015 BUREAU VERITAS Certification | I-GAUGE | INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiative)

Sairam

NEWSLETTER EEE

VOLUME 25| ISSUE NO 2

Sri SAI RAM ENGINEERING COLLEGE

An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi

Accredited by NBA and NAAC "A+" | An ISO 9001:2015 Certified and MHRD NIRF ranked institution

Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in

Sri
SAI RAM ENGINEERING COLLEGE
An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi
Accredited by NBA and NAAC "A+" | An ISO 9001:2015 Certified and MHRD NIRF ranked institution
Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VISION

To inculcate discipline, good quality education, research and training, wide knowledge to meet the global standards, opportunities to gain practical knowledge in the laboratories, awareness in emerging technologies in students to render their services for the betterment of the society with ethics.

MISSION

To provide a platform in acquiring knowledge in the field of Electrical and Electronics Engineering with highest quality in technical education and services to the society. To fulfill the needs:
TEACHING AND MENTORING - To provide best teaching and mentoring through ethical and moral values.
PROFESSIONAL GROWTH- To provide quality education for Electrical and Electronics Engineers that prepares them for exemplary life-long career and professional growth.
CUTTING-EDGE TECHNOLOGIES- To develop cutting edge technologies through research that meets the needs of industry, government and the scientific community.
HIGHER STUDIES- To guide our graduates to pursue their formal education further, including PG and PhD programmes.
SOLUTION PROVIDERS- To excel in student learning activities, to produce them as problem solvers as a team or individual by active interaction and effective communication with peers and stakeholders.

Sri
SAI RAM ENGINEERING COLLEGE
An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi
Accredited by NBA and NAAC "A+" | An ISO 9001:2015 Certified and MHRD NIRF ranked institution
Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES

PEO I: Graduate will apply the principles of basic science, mathematics and engineering fundamentals necessary to formulate, solve and analyze engineering problems.

PEO II: Graduate will expertise in the field of Electrical and Electronics Engineering.

PEO III: Graduate will acquire the knowledge for pursuing advanced degrees in Engineering, Science, Management, Research and Development.

PEO IV: Graduate will achieve professionalism, leadership qualities, self and continuous learning.

PEO V: Graduate will fulfill the needs of the society by working as Engineers, Entrepreneurs in core as well as inter-disciplinary areas in an ethical and responsible manner.

PROGRAM SPECIFIC OUTCOMES

PSO1. Analyze, Design and simulate diverse problems associated in the field of Electrical, Electronics and computer based system.

PSO2. Ability to apply technological developments in field of Electrical & Electronics Engineering in Societal and environmental Context and Communicate effectively both individually and in multidisciplinary teams.

From the HoD's desk...

Dr. R. Azhagumurugan M.E., Ph. D
Head of the Department
Electrical and Electronics Engineering

We are pleased to present the key initiatives and accomplishments of the **Department of Electrical and Electronics Engineering** from **January to May 2023**. During this period, the department actively organized a range of events, workshops, and seminars, providing students with valuable opportunities to develop their technical expertise, gain industry exposure, and engage in hands-on learning experiences. These initiatives were designed to bridge the gap between theoretical concepts and practical applications, equipping students with the necessary skills to excel in their careers. By fostering a culture of research, innovation, and professional development, the department aims to prepare students for emerging challenges in the field of electrical and electronics engineering.

Among the key events, the **Hands-on Training in AI and IoT** provided students with practical insights into emerging technologies, helping them explore AI-IoT integration for smart solutions across industries. The department also organized a **Boot Camp on Embedded Systems**, enhancing students' understanding of hardware-software integration. This intensive training equipped them with essential skills for developing embedded applications in automation, consumer electronics, and industrial control systems.

To further enhance students' expertise, Value-Added Courses on Skill Domains were introduced, focusing on key areas of electrical and electronics engineering to strengthen their technical foundation and improve their employability. A **Workshop on Electric Vehicles with Simulation** was also organized, allowing students to gain hands-on experience in EV technology, understand battery management systems, and explore advancements in vehicle design. Additionally, the **National Seminar on Opportunities & Challenges in Electric Vehicles with Smart Grids** provided a platform for discussions on sustainable energy solutions.

Through these initiatives, the department continues to empower students with industry-relevant skills, promote interdisciplinary learning, and encourage them to contribute to technological advancements. By providing exposure to real-world applications and emerging technologies, the department strives to nurture a spirit of innovation and excellence in Electrical and Electronics Engineering. Moving forward, we are committed to organizing more impactful events and creating new opportunities for students to excel in both academic and professional domains.

Dr. R. Azhagumurugan
Head of the Department
hod.eee@sairam.edu.in

"The future belongs to those who believe in the beauty of their dreams."

GUEST LECTURE/SEMINAR /WORKSHOP

Hands-on Training in AI and IoT – February 20, 2023

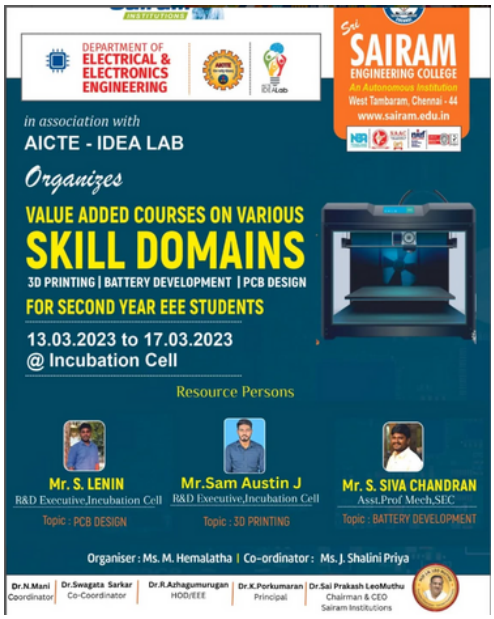
The Department of EEE at Sri Sairam Engineering College, in association with SEC IEEE WIE, organized a Hands-on Training in AI and IoT. Experts Aouthithiye Barathwaj SR Y and Haaritharan N C from Genik Technologies led the session. The event provided practical insights into AI and IoT applications. Interactive activities were conducted, with cash prizes for winners. It was an enriching experience for students.

Boot Camp on Embedded Systems – March 13-14, 2023

The Department of EEE at Sri Sairam Engineering College organized a Two-Day Boot Camp on Embedded Systems. Experts Mr. Saghar Abbas and Mr. Vignesh Subramanian from Hi-Tech, LTIMindtree led the sessions. The camp provided hands-on training in embedded systems concepts. It was an enriching experience for students to enhance their technical skills.

GUEST LECTURE/SEMINAR /WORKSHOP

Value Added Courses on Skill Domains – March 13-17, 2023



The Department of EEE at Sri Sairam Engineering College, in association with AICTE IDEA Lab, conducted Value Added Courses for second-year EEE students. Sessions on PCB Design, 3D Printing, and Battery Development were led by Mr. S. Lenin, Mr. Sam Austin J, and Mr. S. Siva Chandran. The training enhanced students' practical skills in emerging technologies. It was an insightful learning experience.

Workshop on Electric Vehicle with Simulation – April 3, 2023

The Department of EEE at Sri Sairam Engineering College, in association with IEEE Solid State Circuits Society, conducted a Workshop on Electric Vehicle with Simulation. Dr. T. Porselvi, Professor in the EEE department, led the session. The workshop covered EV technology and simulation techniques. It was an informative session for students to enhance their knowledge.

GUEST LECTURE/SEMINAR /WORKSHOP

Skill Training on PLC & SCADA – April 19, 2023

The Department of EEE at Sri Sairam Engineering College, in association with IEEE PES Day 2023, organized a Skill Training on PLC & SCADA. The session focused on automation and control systems, featuring industry experts Gobinth R, Narayanaswamy S, and Elangovan A from Kasa Anlagen India Pvt Ltd. It provided hands-on experience for students to enhance their technical skills.

National Seminar on Opportunities & Challenges in Electric Vehicle with Smart Grid - May 8 - May 12, 2023 (Hybrid Mode)

The Department of Electrical and Electronics Engineering at Sri Sairam Engineering College, in association with IEEE PES, conducted this seminar focusing on EV technology, smart grids, and sustainable energy solutions. Distinguished speakers from academia and industry shared insights on EV battery management, powertrain characteristics, and smart grid integration. Experts from Jadavpur University, PSG Tech, Anna University, and Cognizant addressed key challenges in the EV sector.

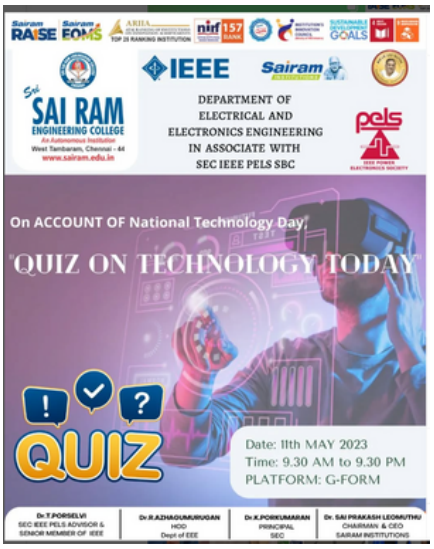
GUEST LECTURE/SEMINAR /WORKSHOP

IEEE PES India Chapter Leaders Meet – April 21 - April 22, 2023 (Gwalior)

The event, organized by the R10 PES Student Chapter Committee, took place at ABV-Indian Institute of Information Technology and Management, Gwalior. Jessica Bian (President IEEE PES), Ramakrishna K (Regional Representative R10), and Prof. S.N. Singh (IEEE R10 PES Coordinator) were the distinguished speakers. The training agenda included face-to-face meetings with PES leaders and keynote speaker sessions.

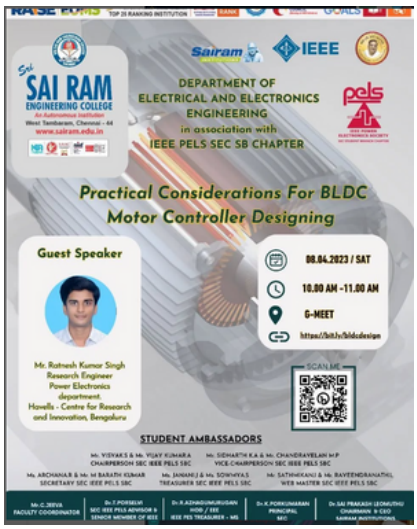
Quiz on Technology Today – May 11, 2023 (National Technology Day)

Organized by the Department of Electrical and Electronics Engineering in association with SEC IEEE PELS SBC, this quiz was conducted on National Technology Day. The event was held on the G-Form platform from 9:30 AM to 9:30 PM. Dr. T. Porselvi, Dr. R. Azhagumurugan, Dr. K. Porkumaran, and Dr. Sai Prakash Lemuoth played key roles in the event.



GUEST LECTURE/SEMINAR /WORKSHOP

Practical Considerations for BLDC Motor Controller Designing - April 8, 2023



Organized by the Department of Electrical and Electronics Engineering in association with IEEE PELS SEC SB Chapter, this session focused on BLDC motor controller design. The event was conducted on G-Meet from 10:00 AM to 11:00 AM. Mr. Ratnesh Kumar Singh, Research Engineer at Havells – Centre for Research and Innovation, Bengaluru, served as the guest speaker.

Hands-on Training in Origin software - February 7, 2023

Organized by the Department of Electrical and Electronics Engineering in association with SEC IEEE WIE Affinity Group, this training session focused on the Origin software. The event took place from 2:00 PM to 3:30 PM at C-105. Dr. A. Thamil Bhuvaneswari and Dr. K. Ramesh, Professors at Sri Sairam Engineering College, served as resource persons. Student ambassadors and faculty coordinators contributed to the successful execution of the event.

FACULTY PUBLICATIONS

(January-May 2023)

Faculty Name : SURESH.K
Journal :
1. AI-based Messaging System to the Hospital about Patient's Health Conditions(03-06-2023)

Title :
1. Journal of Instrumentation and Innovation Sciences,vol. 8(2),P.No.19-25(03-06-2023)

Faculty Name : VENKATESAN.G
Journal :
1. Smart Garbage Monitoring and Vigilant System(July 6-8 2023)
2. Advancing Cybersecurity with Explainable Artificial Intelligence: A Review of the Latest Research(August 3-5 2023)

Title :
1. International conference on electronics and sustainable communication systems, Hindusthan Institute of Technology, Coimbatore(July 6-8 2023)
2. International Conference on Inventive Research in Computing Applications (ICIRCA 2023) (August 3-5 2023)

Faculty Name : PORSELVI T
Journal :
1. Enhancing Crop Yield Prediction In Precision Agriculture Through Sustainable Big Data Analytics And Deep Learning Techniques (04-July-2023)

Title
1. Carpathian Journal Of Food Science And Technology (04-July-2023).

Faculty Name : KURINJIMALAR.L
Journal :
1. IoT Based Ignition System By Insertion And Verification of Driving License(14-15 December 2023)

Title :
1. 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)(14-15 December 2023)

Faculty Name : KURINJIMALAR.L
Journal :
1. An Electric Vehicle Solar PV Case Studies Based Demand Response Modernization((14-15 December 2023)

Title :
1. 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)(14-15 December 2023)

FACULTY PUBLICATIONS

(January-May 2023)

Faculty Name :SHARMILA.P

Journal:

1. Power Generation from rotational motion of a motor

Title :

1. GRENZE International Journal of Engineering and Technology

STUDENT ACHEIVEMENTS
(2022-2023)

DESIGN AND INNOVATION CLINIC 2023 – APRIL 13, 2023

The third-year EEE students of Sri Sairam Engineering College participated in the Design and Innovation Clinic 2023 held at Central Manufacturing Technology Institute (CMTI), Bangalore. The team, consisting of Akshaya A., Aishwarya S., and Janani J. (III Year, EEE-A), secured the 3rd Runner-up position and received a cash prize of ₹5000 for their innovative contribution.

Hacktonix – Phoenix 2023 – Future Institute of Engineering and Management, Kolkata

The third-year students of Sri Sairam Engineering College achieved first place in the Hacktonix event at Phoenix 2023, a 24-hour Hackathon held at Future Institute of Engineering and Management, Kolkata. Team VISION presented their project, "Disaster Management System Using Drone and UI/UX," and won a cash prize of ₹15,000. The team comprised Hari Pradosh S M (EEE), Karthick A (EEE), Ragul D (CSE), and Tharunkumar P (EEE).

STUDENT ACHEIVEMENTS

(2022-2023)

Exhibition of Biogas Power Plant Project | Sri Sairam Engineering College

The Department of Electrical and Electronics Engineering proudly presented the student project "Biogas Power Plant" as part of the institution's commitment to UN SDG Goal 7: Affordable and Clean Energy. Developed by students Parthiban D, Haripradosh S M, Karthick A, Sanjay R, Shrikanth S, Sundaranarayanan A, and Tharunkumar P, under the guidance of Mr. Balamurugan, the project highlights innovative approaches to sustainable energy solutions.

STUDENT ACHEIVEMENTS
(2022-2023)

SOLVEATHON 2.0

2 teams have won in the event SOLVEATHON 2.0 held at Sri Sairam Engineering College-Chennai on 20th and 21st April 2023.

Team1:
SDG no: 16 - Fog penetration radar
Team members:
1. Sri vidhya B
2. Dhaarani K
3.Prisha L
Team supervisor: Ms.P.Sharmila(Prof/EEE)

Secured 1st prize and Cash award of RS.1,000/-

Team2:
SDG no: 7 - Mobile charging Port for Electric vehicle

Team members:
Ms.Abhinaya.R
Ms.Narmadha.M
Ms.Shanmuga Priya.M
Team Supervisor: Mr.C.Jeeva(Prof/EEE)

Secured 2nd prize and Cash award of RS.750/-

FACULTY PATENT DETAILS

Faculty Name	:	Dr. R. Azhagumurugan
Tittle	:	CUTTING-EDGE SENSOR LESS SPEED REGULATION IN INDUCTION MOTOR
Application Number	:	2.02441E+11
Date of Filing	:	1/20/2024
Status	:	Published
Date of Publication	:	2/9/2024

Faculty Name	:	P. Shanmugapriya
Tittle	:	ENERGETIQ:AI'S IMPACT ON INDUSTRIAL ENERGY RESILIENCE
Application Number	:	2.02441E+11
Date of Filing	:	1/12/2024
Status	:	Published
Date of Publication	:	2/2/2024

FACULTY PATENT DETAILS

Faculty Name	:	Dr T Porselvi
Tittle	:	AN AUTOMATIC WET GRINDING APPARATUS
Application Number	:	2.02241E+11
Date of Filing	:	12/26/2022
Status	:	Granted
Date of Publication	:	7/11/2024

Faculty Name	:	Dr.K.Prathibanandhi
Tittle	:	A SMART MIRROR WITH EMOTIONAL AWARENESS
Application Number	:	2.02441E+11
Date of Filing	:	7/21/2024
Status	:	Published
Date of Publication	:	7/26/2024

FACULTY PATENT DETAILS

Faculty Name	:	Dr. Saswati Kumari Behera
Tittle	:	1. BUILDING STRUCTURAL MATERIAL FOR BUILDING- STANDARD STEEL-FRAMED STEEL MATERIAL AND ITS MANUFACTURING METHOD 2. THE IOT ENABLED SMART HEALTH MONITORING SYSTEM IS REVOLUTIONIZING HEALTH CARE WITH CONNECTED DEVICES AND DATA ANALYSIS
Application Number	:	1. 415307-001 2. 2.02441E+11
Date of Filing	:	1. 4/29/2024 2. 3/14/2024
Status	:	Published
Date of Publication	:	2. 2/2/2024

Faculty Name	:	Dr. A. Sanjeevi Gandhi
Tittle	:	INTELLIGENT INSPECTION SYSTEM FOR INDUSTRIAL GOODS UTILIZING MACHINE LEARNING ALGORITHM
Application Number	:	2.02441E+11
Date of Filing	:	4/1/2024
Status	:	Published
Date of Publication	:	4/12/2024

FACULTY PATENT DETAILS

Faculty Name	:	Dr B Meenakshi
Tittle	:	ANALYZING THE IMPACT ON THE TRANSMISSION MEDIUM BY BROADCAST PACKETS
Application Number	:	202421031598A
Date of Filing	:	4/20/2024
Status	:	Published
Date of Publication	:	5/17/2024

Sri
SAI RAM ENGINEERING COLLEGE
An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi
Accredited by NBA and NAAC "A+" | An ISO 9001:2015 Certified and MHRD NIRF ranked institution
Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

EDITOR TEAM

Dr.R.AZHAGUMURUGAN
Head of the Department
Electrical and Electronics Engineering

STUDENT EDITOR TEAM

DHILIPKUMAR S
III Year
Electrical and Electronics Engineering

AJITHA SRI
III Year
Electrical and Electronics Engineering

SURIYAN N
III Year
Electrical and Electronics Engineering

SELVAPRIYA V
III Year
Electrical and Electronics Engineering

Sri SAI RAM ENGINEERING COLLEGE

An Autonomous Institution

West Tambaram, Chennai - 44

www.sairam.edu.in

Campus: Sai Leo Nagar, West Tambaram, Chennai - 600 044.
www.sairam.edu.in

Administrative Office: "Sai Bhavan",
31B, Madley Road, T.Nagar,
Chennai - 17.
Ph: 044-4226 7777.
www.sairamgroup.in

Sairam RAISE — *Inspiring* PEOPLE

Sairam EOMS — *Improving* PROCESS

Sairam SDG ACTION PROGRAM — *Instilling* PURPOSE