S.A. ENGINEERING COLLEGE

(An Autonomous Institution Affiliated to Anna University Chennai)

Accredited by NAAC 'A' Grade & ISO 9001:2015 Certified Institution

Poonamallee - Avadi Main Road, Thiruverkadu, Chennai - 600 077
Sponsored by Dharma Naidu Educational &Charitable Trust

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Swaraksha-2k23

News Letter: January - June 2023

Inside the issue:

OUR VISION

To achieve overall excellence in education by continuously upgrading the teaching learning process and incorporating latest technological advancements happening worldwide with ethical responsibilities.

OUR MISSION

To impart sound diversified technical competency and quality education for students to enhance the employability and ethical values.

To provide conducive environment for faculty and students with excellent facilities to improve research activity.

PROGRAM EDUCATIONAL OBJECTIVES

1. Our graduate Engineers will have diversified professional competency in Electronicsand Communication Engineering and allied technologies with good foundation in Mathematics and basic sciences.

2. Our graduates will possess lifelong learning process and augment their engineering skills for new challenges with sustainability.

3. Our graduates will have effective communication skills and work in Multidisciplinary team with critical thinking.

4. Our graduates will practice the profession with ethics, integrity,leadership and social responsibility.

PROGRAM OUTCOMES

1. To apply knowledge of mathematics, science and engineering appropriate to ECE discipline.

2. To formulate and analyze the complex engineering problems by using the principles of mathematics and engineering fundamentals.

3. To design and develop system (or) process to meet the desired needs within the realistic constraints of the societal and environmental considerations.

4. To investigate complex problems By conducting experiments, analyze Interpret and synthesize the Information to provide conclusions.

5. To select and use appropriate modern Tools for solving complex engineering Problems.

6. To apply reasoning knowledge For providing engineering solutions To societal needs with professional Engineering practice.

7. To demonstrate the knowledge of engineering for providing environmental solutions and sustainable development.

8. To understand the ethical principles and professional responsibilities.

9. To function effectively as a member (or) a leader in multidisciplinary activity.

10. To deliver effective presentations and communicate at ease with the society.

11. To be successful member (or) leader in diverse teams with enhanced administrative skills and financial management.

12. To realize the need for lifelong learning and adopt themselves to technological changes.

ECE - SAEC

EVENTS ORGANISED BY ECE DEPARTMENT

NATIONAL SEMINAR

The Department of ECE conducted a Two days National level Seminar on **"IEEE Sponsored Mini Colloquium On Photonics and Optical Networks"** sponsored by IEEE Madras Chapter on 28.02.2023 & 01.03.2023

GUEST LECTURE

The Department of ECE conducted a Expert Lecture on **"Understanding Network Security Applications Using Digital Technology"** On 11.02.2023 for III Year ECE students in association with IETE, chief guest of the event Mr.S.Prabhu, Tech. Consulting Engr.,

CISCO, Bangalore started the session with Network basics and other techniques.

The Department of ECE conducted a Expert Lecture on **"Challenges and Opportunities as Entrepreneurs"** on 21.02.2023 for II Year ECE students in association with IETE, chief guest of the event Dr.Kamaludeen, Founder & CEO, B-Accuracy Infotech, Chennai.

The Department of ECE conducted a Expert Lecture on **"Planning for Career Development"** on 27.02.2023 for III Year ECE students in association with IETE, chief guest of the event Mr. Shiva

Kumar, Sr.Business Development Associate, BYJUS, Chennai.

The Department of ECE conducted a Guest Lecture on **"Data Structures and Algorithms"** On 03.03.2023 for II Year ECE students in association with IETE, chief guest of the event Mr. Murugappan, Agile Project Manager, Virtusa, Chennai. who started the session with C++ Basics. The students interacted well during the session and their doubts were clarified by resource person.

The Department of ECE conducted a Guest Lecture on **"Challenges in Network Security"** On 18.04.2023 for IV Year ECE students in association with IETE, by Mr.Tyson Immanuel J, IT Analyst, TCS, Chennai.

The Department of ECE conducted a Guest Lecture on **"5G - New Radio RU System "** on 24.04.23 for II AND III Year ECE students in association with IETE, Resource Person Mr. RAHUL, Sr.Hardware Engineer., Capgemini, Chennai.

VALUE ADDED COURSES

The Department of ECE organized Five days' value added course on **"Core Industrial Placement Training on Factory and Automation Process PLC & SCADA"** by Iologix Automation Solutions During 11-2-23 to 17-2-23 for II year ECE students.

Six days value added course on **"WEB TECHNOLOGY"** by Silicon Software Services during 23.03.2023 to 30.03.2023 for III year ECE students.

Two days value added course on **"INDUSTRIAL AUTOMATION"** by SPARK AUTOMATION, LETFIX Technologies during 23-3-23 & 24-3-23 for II year ECE students.

INDUSTRIAL VISITS

1.III year A Section Students went on an Industrial Visit to **"Hatsun Agro Products (Hap), Redhills, Chennai"** on 07.02.2023.

1. III year B Section Students went on an Industrial Visit to **"Hatsun Agro Products (Hap), Redhills, Chennai"**, on 08.02.2023.

STUDENT PARTICIPATION IN EXTRA - CURRICULAR ACTIVITIES

The Students of S.A. Engineering College brought laurels in the sports activities during the academic year 2022-23 under the active guidance of PED.

1. III Year ECE Students Priyadharshini, Oviya , Vincent Raj , Yuvan balaji., Won second Prize in Chess Tournament held at Sriram Engineering College.

2. III Year ECE Students Sakthivelan , M.Ajay , R.Logavignesh , Pradeep, S.Balaji Won first place in Anna University Zone – 1 Basket Ball Tournament Held at S.A.Engineering College.

FACULTY PARTICIPATION IN WORKSHOP/FDTP/GUEST LECTURE

- Dr.S.B.Mohan., Associate Professor, attended Five days faculty development program on **"Inculcating Universal Human values in technical education"** - online from 20.02.23 – 24.02.23.

- Ms.K.M.Dhanalakshmi., Associate Professor, attended Five days faculty development program **on " Cyber security and Block Chaining"** at Panimalar Engineering College on 02.01.23 – 06.01.23

- Ms.Sreeja Vijay., Associate Professor, attended Five days faculty development program on **"Silicon Photonics for High speed Communication"** at SRM Engineering College on 23.01.23-28.01.23

- Ms.M.Ramya., Assistant Professor, attended Five days faculty development program on **"Silicon Photonics for High speed Communication"** at SRM Engineering College on 23.01.23-28.01.23

- Ms.R.Aswini.,Assistant Professor, attended Five days faculty development program on **"Innovative teaching and learning pedagogy "** at Loyola Institute of Technology on 09.01.23 – 13.01.23.

- Ms.P.Sasireka., Assistant Professor, attended Five days faculty development program on **" Cyber security and Block Chaining"** at Panimalar Engineering College on 02.01.23 – 06.01.23.

- Mr.D.Prakash., Assistant Professor, attended Five days faculty development program on **"Bio- Medical Sensors and signal processing"** at Loyola Institute of Technology on 09.01.23 – 13.01.23

- Mr.R.Thirumurugan., Assistant Professor, attended Five days faculty development program on **"Bio- Medical Sensors and signal processing"** at Loyola Institute of Technology on 09.01.23 – 13.01.23.

- Mr.M.Bharaneedharan., Assistant Professor, attended Five days faculty development program on **"Bio- Medical Sensors and signal processing"** at Loyola Institute of Technology on 09.01.23 – 13.01.23

- Mr.D.Balakumaran., ., Assistant Professor, attended Five days faculty development program on **"Bio- Medical Sensors and signal**

- **processing"** at Loyola Institute of Technology on 09.01.23 – 13.01.23.

- Ms.M.Priscilla., Assistant Professor, attended Six days faculty development program on **"Silicon Photonics for High speed Communication"** Annant Gyan Knowledge and Skills Private Limited from 23.01.23 to 28.01.23.

- Ms.R.S.Vijayashanthi., Assistant Professor, attended Five days faculty development program on **"Bio- Medical Sensors and signal processing"** at Loyola Institute of Technology on 09.01.23 – 13.01.23.

- Ms.L.Chitra., Assistant Professor, attended Five days faculty development program on **"Integrated (AI) in data science and its applications"** at Prathyusha engineering college from 06.03.23 to 10.03.23.

- Mr.A.Karunakaran., Assistant Professor, attended Five days faculty development program on **" Future Generation communication and Networking"** at Jerusalem college of engineering from 02.01.23 – 07.01.23.

- Dr.T.Annalakshmi .,Associate Professor, attended Five days faculty development program on **"Cyber security"** at Saveetha Engineering College from 01.02.23 to 11.02.23

- Dr.T.Annalakshmi .,Associate Professor, attended Five days faculty development program on **"Advancement in Wearable Electronics "** at VIT Chennai from 13.03.23 – 15.03.23.
  Dr.M.Gomathi., Assistant Professor, attended Five days

faculty development program on **"Cyber security"** at Saveetha Engineering College from 01.02.23 to 11.02.23

PUBLICATIONS BY FACULTY IN NATIONAL/INTERNATIONAL CONFERENCE & JOURNALS

- Dr B. R. Tapas Bapu,Professor, **"Modified Adhoc On-Demand Distance Vector for Trust Evaluation and Attack Detection"** Journal of Intelligent Automation & Soft Computing, Tech Science Press., January2023, DOI: 10.32604/iasc.2023.025752.

- Dr G.Kavya, Professor ,"**Dysgraphia disorder forecasting and classification technique using intelligent deep learning approaches"** Prog Psychopharmacology Biol Psychiatry ,Elsevier Publications on 23/01/23., DOI: 10.1016/j.pnpbp.2022.110647**.**

- R. Radhika**.,**Professor**, " Design of all pass make over based capricious digital filter using eminent speed dual carry select adder and truncation and rounding approximate multiplier for image processing application ".**, 2.01.2023January

2023; John Wiley & Sons Ltd DOI: 10.1002/cpe 7575.

- R. Radhika., Professor, **" Design of all pass make over based capricious digital filter using eminent speed dual carry select adder and truncation and rounding approximate multiplier for image processing application "**., 2.01.2023January 2023; John Wiley & Sons Ltd DOI: 10.1002/cpe.7575

- S.Suvitha.,Associate Professor, **"Lung disease detection using Self-Attention Generative Adversarial Capsule network optimized with sun flower Optimization Algorithm"** in the journal of Biomedical Signal Processing and Control., Volume 79, Part 2, January 2023, 104241.,Science Direct.,doi.org/10.1016/j.bspc.2022.104241

- Dhanalakshmi.K.M.,Associate Professor, **"A monopole polarisation diversity antenna for high density packaging MIMO applications"**., Microelectronics International,27/01/23,https://doi.org/10.1108/MI-07-2022-0127

PROGRAMME SPECIFIC OUTCOMES (PSO)

- To inculcate the ability to design quality products and to develop solutions which suits the real time societal needs by applying modern tools and the best universal practices.

- To define and adhere the communication standards leading towards green communication.

- To adapt to emerging Information and Communication Technologies (ICT) and to innovate ideas and solutions for the existing/novel problems

Forthcoming International Conferences/Seminars, Events at SAEC

1. National level hands-on workshop on Research Perspective On Full Custom and Semi-Custom Design Using Cadence EDA in the month of August 2024.

2. National Level Seminar entitled "Clinical Advancements of Bio-Inspired Nanoparticles in cancer theranostics" in the Month of November 2024.

3. National Level Seminar entitled "Technological upgradation for Improved Efficiency in Broadband Wireless Systems" in the Month of December 2024.

4. Five days International online workshop on "Smart Antenna- The design perspective" in the month of October 2024.

5. During the academic year 2024, the following special training were offered for the II and III year ECE students.

   • Six Phrase - Trained the students keeping Aptitude as the center of focus. Students were given online tests and written tests to compete with better skills.

   • STEP Placement Training - Trained the students mainly in the technical areas with a view to increasing their confidence levels, HR techniques with which they would excel in HR rounds. Soft skills training was also offered with mock interviews.