



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-2k22

News Letter: July 2022 – December 2022

Founder:

(Late) Shri. D. SUDHARSSANAM

BOARD OF TRUSTEES:

CHIEF PATRONS:

1. Shri. D. DURAISWAMY

Chairman

2. Shri. D. PARANTHAMAN

Vice-Chairman

3. Shri. D. DASARATHAN

Secretary

4. Shri. S. AMARNAATH

Treasurer

5. Shri. S. GOPINATH

Joint Secretary

ADVISORY BOARD:

Shri. D. SABARINATH

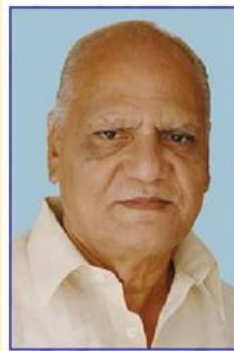
Director

Inside the issue:

Symposium	2
Seminar	2
Guest lecture	2
Value Added Courses	4
Industrial Visits	4
Students Participation in Extra Curricular Activities	5
Faculty Participation in Workshop/FDP/Guest Lecture	6
Publications by Faculty in National/International conference & Journal	7

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 Electronics and 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.

EVENTS ORGANISED BY ECE DEPARTMENT SYMPOSIUM



National Level Technical Symposium **NAKSHATRA'22** on **14.09.2022** by conducting various events such as Paper Presentation, Circuit Debugging, Master Mind etc.

WORKSHOP



The Department of ECE conducted a Two days National level workshop on **“IMPLICATION OF ARTIFICIAL INTELLIGENCE IN BIOMEDICAL IMAGING INTERNET OF THINGS-THE FUTURE TECHNOLOGY”** sponsored by **ICMR** on **15.12.2022 & 16.12.2022**. The students interacted well during the

session and their doubts were clarified by resource person.

NATIONAL SEMINAR



The Department of ECE conducted a Two days National level Seminar on **“TECHNOLOGICAL UP-GRADATION AND DIGITIZATION FOR SUSTAINABLE ENERGY”** sponsored by **SERB** on **22.12.2022 & 23.11.2022**.

GUEST LECTURE



The Department of ECE conducted a Expert Lecture on **“RECENT TRENDS IN ROBOTICS AND ITS APPLICATIONS”** On **18.08.2022** in association with **PUMO Technovation**, chief guest of the event **Mr.K.Baskaran**, Technical Lead, **PUMO Technovation**, Chennai started the

session with Robotic basics and other techniques.



session with VR basics and other techniques used in Augmented reality.



The Department of ECE conducted a Expert Lecture on **“APPLICATIONS OF CONTROL SYSTEMS IN REAL WORLD”** on 23.08.2022 in association with IETE, chief guest of the event Mr.P.Mathiyalagan Scientist E, GCS Division, CVRDE started the session with Control System basics and other techniques used in Real time applications.

The Department of ECE conducted a Guest Lecture on **“OBJECT ORIENTED PROGRAMMING IN JAVA”** On 12.09.2022 in association with IETE, chief guest of the event Mr.B.Thanasekar, **Department of Computer Tech, MIT, 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 Expert Lecture on **“UNDERSTANDING VIRTUAL REALITY AND AUGMENTED REALITY”** on 08.09.2022 association with IETE, chief guest of the event Mr.R.Vijayarajan, Project Manager, Hogarth Worldwide, Chennai started the

The Department of ECE conducted a Guest Lecture on **“SKILLS TO BECOME AND SUCCEED AS AN ENTREPRENEUR”** by Mr.Srinivasan Padavattan, Tech Lead, Capgemini, Chennai On 30.09.2022 in association with IETE.



The Department of ECE conducted a Guest Lecture on **“CHIP DESIGN AND DEVELOPMENT”** on 15.10.2022 in association with IETE, Resource Person Mr.Sainath, Design Verification Engineer, Tessolve, Chennai.



INDUSTRIAL VISITS

1. II year A , B & C Section Students went on an Industrial Visit to **“INTEGRAL COACH FACTORY”**, Chennai, on 06/09/2022, 09/09/2022 & 13/09/2022.

VALUE ADDED COURSES



1. The Department of ECE organized Ten days value added course on **“PROBLEM SOLVING BY USING C PROGRAMMING LANGUAGE”** by Silicon Software Services During 22.8.2022 to 04.11.2022 for III year ECE students.

2. Ten days value added course on **“PROBLEM SOLVING BY USING C PROGRAMMING LANGUAGE”** by Silicon Software Services during 17.8.2022 to 04.11.2022 for II year ECE students.



2. III year A & B Section Students went on an Industrial Visit to **“REGIONAL METEOROLOGICAL CENTRE”**, Chennai on 29/08/2022, 29/08/2022.



Final year ECE A & B Section students went on an industrial visit to **“PUMO TECHNOVATION”** on 11/10/2022, 13.10.2022



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. II Year ECE Students U.Devaki, K.Yadavarshini, P.Harini of II Year ECE Students Won second Prize in Table tennis held at S.A.Engineering College.



2. K.Avanthi from ECE II Year Won third place in Volleyball Women’s Tournament Held at AMS College.



3. A.Viswanathan, V.Sakthivelan, M.Ajay, R.LogaVignesh, S.Balaji, Pradeep of II Year ECE Students won Runner in Basket Ball Men’s Tournament held at AMS College.



4. R.Gopinath & EruguHemanth Kumar of IV year ECE won the first place in Hockey held at Velammal Engineering College.



5. R.Oviya from II ECE won the chess tournament held at Prathyusha Engineering College.



6. J.JamesEdwin,M.VincentRaj, Yuvan Balaji of final year ECE, Won the Chess Tournament held at Prathyusha engineering College.



7. M.Ajay from the II year of ECE won second place in Kho Kho competition held at the SA engineering College.



FACULTY PARTICIPATION IN WORKSHOP/FDTP/GUEST LECTURE

- Dr.S.B.Mohan,Associate Professor, attended Five days faculty development program on **“Recent trends in 5G Communication Networks”** at Sri Sai Ram Engineering College during 26.12.2022 to 30.12.2022.
- Dr.R.Radhika ,Professor, attended Five days faculty development program on **“Futuristic Digital Technologies”** at AMET University during 25.07.2022 to 29.07.2022.
- Mr.Maria Rubistan, Assistant Professor, attended five days faculty development program on **“Futuristic Digital Technologies”** at AMET University during 25.07.2022 to 29.07.2022.
- Mrs.Nithya Sundari, Assistant Professor, attended Five days faculty development program on **“Bio Medical Sensors in Signal Processing”** at Loyola Institute of Technology during 09.01.2023 to 13.01.2023.
- Dr.R.Vinothini, Assistant Professor, attended Five days faculty development program on **“Bio**

Medical Sensors in Signal Processing” at Loyola Institute of Technology during 09.01.2023 to 13.01.2023.

- Mrs.Madhini.M,Assistant Professor, attended Six days faculty development program on **“Communication and Computation”** at Dr.MGR Educational and Research Institute during 13.12.2022 to 19.12.2022.
- Mr.karunakaran.A,Assistant Professor, attended Six days faculty development program on **“Future Generation Communication and Networking”** at Jerusalem College of Engineering during 02.1.2023 to 07.1.2023.

PUBLICATIONS BY FACULTY IN NATIONAL/INTERNATIONAL CONFERENCE & JOURNALS

- Arunachala Perumal, Professor, **“Non-Invasive Vital Health Monitoring of Senior Citizen with Wearable-IoT Sensor Node”** in Proceedings of the Sixth International Conference on Intelligent Computing and Control Systems (ICICCS 2022) IEEE Explore Part Number: CFP22K74-ART;ISBN: 978-1-6654-1035-9,8/6/2022 .
- Priscilla M, Assistant Professor , **“A Novel Approach To Identify Dynamic Deficiency In Cell Using Gaussian Nb Classifier “** in Proceedings of the 7th international conference on communication and electronics systems ices 2022 ISBN -978-1-6654-9633-9 IEEEExplore,29.7.2022.
- J. R.Lourdu Jennifer, Assistant Professor , **” Integrated Health Care System Using Smart Wearable’s Based on Intelligent-Internet of Things ”**in 2022 8th International Conference on Smart Structures and Systems (ICSSS) IEEEExplore,1.06.2022.
- SreejaVijay., Associate Professor, **”An Automated Technology for IoT based Rail-Track Inspection to Locate Surface Flaws by Robotics and Neural Networks”**2022 International Conference on Inventive Computation Technologies (ICICT), SCOPUS INDEXED ,DOI:10.1109/ICICT54344.2022.9850453.
- B.R.Tapas Bapu, Professor, **“Electromagnetic interference shielding behaviour of flexible PVA composite of tunicate onion bulb biochar/Co/carbon fiber shielding composite:effects on X**

and Ku band frequencies”

,Springer Nature Switzerland Apart of Springer Nature, Biomass *Conversion and Biorefinery*(2022,SCIE/oi.org/10.1007/s13399-022-03489.

- B.R.Tapas Bapu, Professor, **“Role of carbonaceous fillers in electromagnetic interference shielding behaviour of polymeric composites-A review”**, Polymer Composites. 2022; 1–23. Wiley publications, SCIE DOI: 10.1002/pc.27009.
- B.R.Tapas Bapu, Professor, **“Myocardial Infarction Analysis Using Deep Learning Neural Network Based on Image Processing Approach”** Distributed Computing and Optimization Techniques pp 635–644, SCIE,DOI: 10.1007/978-981-19-2281-7.
- B.R.Tapas Bapu, Professor, **“A Deep-DrpXML and IAG-GWO based CHST fostered blockchain technology for secured dynamic optimal routing for wireless sensor networks”**Journal of Intelligent & Fuzzy Systems, vol. 43, no. 6, pp. 7525-7543, 2022,SCIE DOI: 10.3233/JIFS-212455.
- R. Tapas Bapu, Professor, **“GAMAN – Genetic Algorithm in Mobile**

Adhoc Networks for Creating Systematic QoS” ECS

Transactions, Volume 107, Number 1 ,IOPscience publisher, SCOPUS INDEXED DOI 10.1149/10701.3599ecst.

- ArunachalaPerumal, Professor, **”Smart building evacuation system with hybrid network based CNC-Carchitecture** “Journal of Ambient Intelligence and Smart Environments, vol. Pre-press,(https://content.iospress.com:443/journals/journal-of-ambient-intelligence-and-smart-environments) no. Pre-press, pp. 1-13, 2022, SCIE DOI: 10.3233/AIS-210427.
- SreejaVijay, Associate Professor, **”Customer Identification in Healthcare using an IoT based Multimedia Traffic Categorization Method”**2022 International Conference on Inventive Computation Technologies (ICICT) SCOPUS INDEXED DOI: 10.1109/ICICT54344.2022.9850504
- P. Sasireka, Assistant Professor, **” Design and Development of IoT based Reliable Healthcare Monitoring System”**2022 3rd International Conference on

Electronics and Sustainable Communication Systems (ICESC) IEEE Explore, SCOPUS INDEXED DOI:10.1109/ICESC54411.2022.9885646.

- Priscilla M, Assistant Professor, **"HDP-IoT: An IoT Framework for Cardiac Status Prediction System using Machine Learning"** 2022 International Conference on Inventive Computation Technologies (ICICT), Scopus indexed, DOI: 0.1109/ICICT54344.2022.9850897.
- G.BalaMurugan, Assistant Professor, **"An Investigation on Antenna Substrate Materials for the Design of 5X20 Massive MIMO Antennas"**, PERIODICO di MINERALOGIA Volume 91, No.4, 2022 ISSN:03698963, SCIE doi.org/10.37896/pd91.4/91428.
- M Ramya, Assistant Professor, **"An optimised wireless network performance for secure data transmission and quality of service"**, International Conference on advances in science, engineering & Technology , SCOPUS INDEXED doi.org/10.13052/rp-788770227896.
- R.Thirumurugan, Assistant Professor, **"Flow-rule integration for quality of service enhancement**

in software-defined vehicular Network", IntJ Communication System, 2022e5350, Wiley online Library.com/journal/dac, SCIE doi.org/10.1002/dac.5350.

- J. R. Lourdu Jennifer, Assistant Professor, **"Approximate Multipliers Design Using Approximate Adders for Image Processing Applications"**, Journal of Circuits, Systems, and Computers Vol. 31, No. 15 (2022) 2250256 (23 pages) World Scientific Publishing Company, SCOPUS INDEXED DOI: 10.1142/S0218126622502565

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. Mini Colloquium on” **Photonics and Optical Networks**” in association with IEEE photonics Society Madras Chapter on 28 February 2023 and 01 march 2023.
2. During the academic year 2022-2023, 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.
 - Value added courses on “**Core Industrial Placement Training on Factory and Automation Process PLC & SCADA**” by Iologix Automation Solutions for second year ECE in the month of February.
 - Value added courses on “**WEB TECHNOLOGY**” by Silicon Software Services for Third year ECE in the month of March.

EDITORIAL BOARD

DR.B.R. TAPAS BAPU	PROFESSOR & HEAD/ECE
DR.M. GOMATHI	ASSISTANT PROFESSOR/ECE
MR.P. GURUCHARAN	III Year ECE B
MR.G.SARATHY SIMMAN	IV YEAR ECE A
MS.M. PRIYADHARSHINI	III Year ECE A
MR.A.SRINATH	III Year ECE A