## S.A.ENGINEERING COLLEGE (AUTONOMOUS)

ACCREDITED BY NAAC WITH 'A' GRADE & ISO 9001:2015 CERTIFIED INSTITUTION POONAMALLEE AVADI MAIN ROAD, CHENNAI-77



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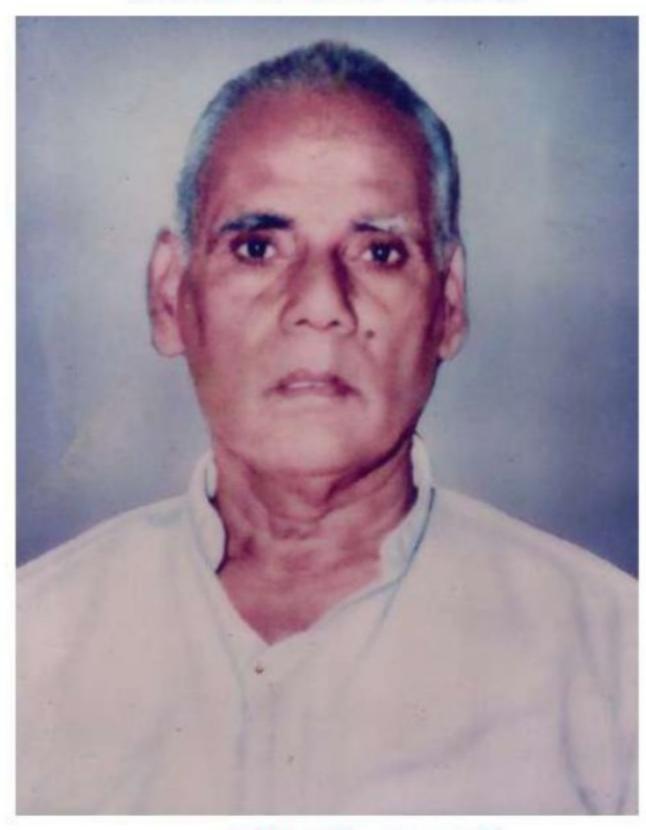
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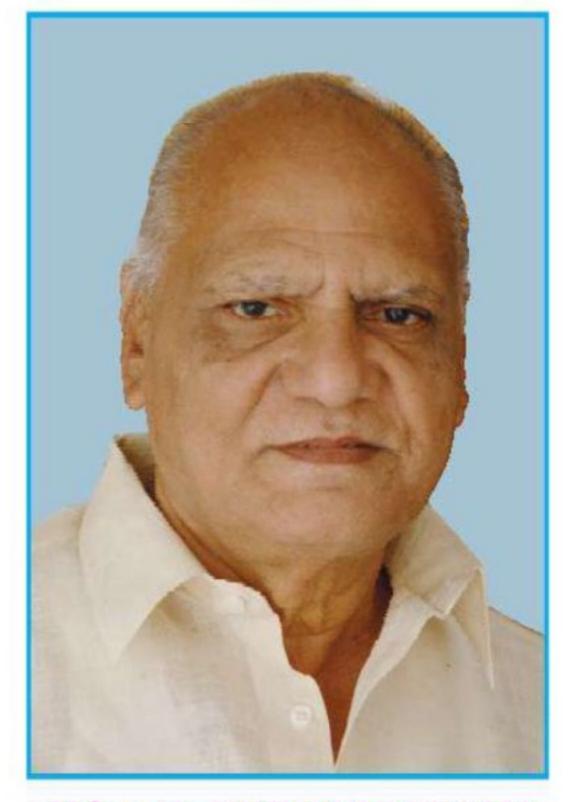
## Thirumathi. SAKUNTHALA AMMAL



தருமத். சகுந்தலா அம்மாள்

## திரு. D. சுதர்சனம்

நிறுவனர்



Thiru. D. SUDHARSSANAM

Founder





#### CHAIRMAN MESSAGE

"The education and empowerment of women throughout the world cannot fail to result in a more caring, tolerant, just and peaceful life for all."

Aung San Suu Kyi

Education and wisdom empowers a person. This institution beleinves in empowering women by providing quality education which enhances creativity and knowledge. This would make them independepent and contribute to the development of self, family, society and country.

The institution believes in giving an opportunity for the girl student community to identify one's flair and to pursue with the prolific knowledge in the long run of competency without gender bias. The management and faculty believe in making sure that a comfortable ambience is created for the girl students giving the strength to fight the atrocities of the life with absolute savoir-faire.

I appreciate the effort of the entire team to bring out the contributions of the students and faculty and attempt in potraying empowerment through the display of creativity and knowledge.





#### MESSAGE

#### SECRETARY MESSAGE

"Women are the real architects of the society"

Harriet Beecher Stowe

S.A. Engineering College is in the drive of serving the mankind supplying the innovative minds that work to transfer the world to a technological warehouse. Women who are empowered contribute to creating a beautiful family, a good society and a great country. The institution treats the girl students on par with male students to sharpen their ideals to be in par with the advancement of the world and the technology as well.

Indeed, I am happy that SAKTHI'17 is another milestone in the progress of the institution. Through this column I wish the minds that worked for bringing out and encouraging the talents of the girls and women and I also appreciate the students who have contributed their best utilizing the opportunity.





#### CORRESPONDENT MESSAGE

"A woman with a voice is, by definition, a strong woman."

—Melinda Gates

This is a time when, the drive for power has a value in itself has become the principal indicator of social approval. And the winning of power has become the measure of social merit. All things in the world are subject to function for power. It is in the hands women how much credit she gives her power with the knowledge and character. Both these qualities are indispensable for any individual. This paves way to win the authority over the people who respect and obey the words of the authoritative. The reputation by the power is winning the hearts of the people and be a benchmark in an individual's life.

This gives me an honour to congratulate the efforts of the team to bring out the first edition of SAKTHI' 17 which hallmarks of the power of 'knowledge'.



Thiru P. VENKATESH RAJA, B.E.M.S.



#### MESSAGE

#### DIRECTOR MESSAGE

"One of the most courageous things you can do is identify yourself, know who you are, what you believe in and where you want to go."

- Sheila Murray Bethel

Courage is the pathway to the achievement in our lives. Women have to identify themselves and create a means of challenge and succeed in their endeavors. Women should first identify what they want and must have the courage to pursue that with perseverance. She must be aware of the hazards and make the failures that she faces as challenges to be demanded. For success, gender is irrelevant. What matters is the determination to overcome all obstacles to reach the goal,

SAKTHI '17 is the fruit of the endeavour of staff and students. It gives me pleasure to view the successful compilation of views put forth and leading the path towards empowering women. I congratulate the women empowerment team who are involved with their hearts and minds to bring out this successful compilation.





Dr.S.RAMACHANDRAN PRINCIPAL

#### PRINCIPAL MESSAGE

"Feminism is not about making women strong. Women are already strong. It's about changing the way the world perceives the strength."

- G.D. Anderson

Women are gifted with qualities like self-awareness, individual will, intuition and creativity which decides the individual liberty. Through determination and perseverance they can change the way the world looks at them. They can show the world that they are strong and can achieve and the gender does not really matter though insight and focused attention...

Through this message column I express my happiness about the work on SAKTHI'17. I congratulate the effort shared by the entire women empowerment team for the eliciting, identifying and encouraging talents. The contribution of the staff and students for the successful publication of the e- magazine is indeed appreciable.

#### From the Department of EEE

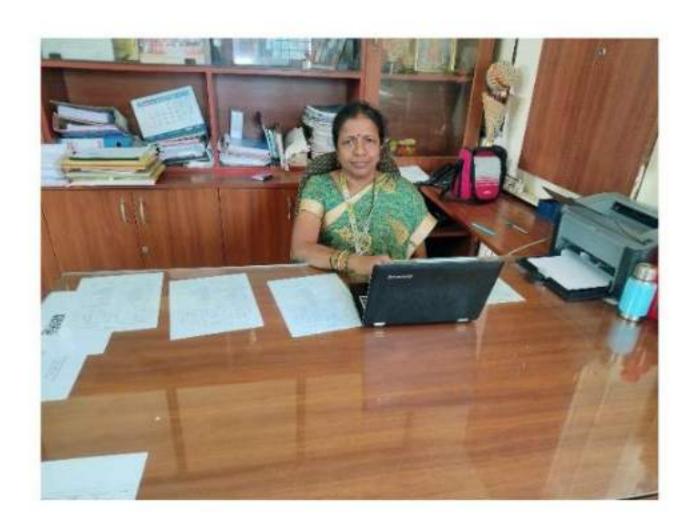
Dr. G.ROHINI

HOD - EEE

I am happy to note that the magazine brought out in our college is of good quality and taste. Hearty con-gratulations to the editorial team.

It is a matter of great pleasure for me to go through the wonderful contributions made by the students. This magazine is intended to bring out the hidden literary talents in the students and the teachers and to inculcate leadership skills among them.

The outside world will come to know about the caliber of the students and the faculty through this magazine. I extend my thanks to all the contributors for their articles, poems and drawings.



#### DEAR READERS

- It gives us great pleasure to bring you the first issue of the college magazine of SAEC.
- The name and fame of an institute depends on the caliber and achievements of the students and teachers.
- The role of a teacher is to be a facilitator in nurturing the skills and talents of students.
- This magazine is a platform to exhibit the literary skills and innovative ideas of teachers and students.
- Magazine presents the achievements of students and contributions of teachers.
- We would like to place on record our gratitude and heartfelt thanks to all those who have contributed to make this effort a success. We profusely thank the management for giving support and encouragement and a free hand in this endeavor. Last but not the least.
- We are thankful to all the authors who have sent their articles. We truly hope that the pages that follow will make an interesting read.

#### ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering was established in the year 2001-02. The department is accredited by National Board of Accreditation and was recognised as a research centre, approved by Anna University. Through our research centre, 11 research scholars completed their Ph.D programme and more than 24 candidates pursuing their research programme.

Career guidance programmes and entrepreneurship awareness programmes were carried out through the association of EEE. The department offers one Post Graduate programme viz. M.E. – Power Electronics and Drives. Looking back to the past, we recall the pride and satisfaction that the Department of Electrical and Electronics Engineering own the best department award and got the appreciation as the best team from CII. The Department is facilitated with highly qualified and committed faculty members.

Our placement records has always being very impressive, with the large number of students being placed year after year in highly reputed core companies and public sector units. Our alumni hold senior positions in industries as well as in academic institutions, both in India and abroad.

The high quality research work being pursued by the faculty and students is very evident from the large number of research papers being published in referred journals. In recognition of expertise and commitment in development of the department in developing renewable energy resources, proposal for the funded projects has been submitted.

As part of the institution academic plan and student's welfare development the department is making several plans to conduct International conference, National conference FDP, Guest lectures, seminars, Inplant training, Industrial visit and Internship training.

#### VISION AND MISSION

#### Vision of the department

Conferring Excellent Technical Education with Greater Emphasis on Quality Systems, Moulding Persons for the National Development

#### Mission of the department

- Ø To Enhance Quality Education by Providing State- of -Art Infrastructure with Committed Faculty.
- Ø To Provide Prerequisite Skills for the Needs of Industries, Higher Education and Research Establishments.
- Ø To Handle Socio Economic Challenges of Society by Instilling Human Values and Ethical Responsibilities.

#### PROGRAMME EDUCATIONAL OBJECTIVES

- To practice the students to have fruitful career in Electrical and Electronics, Allied fields and stimulate them for Higher Education and Research.
- To provide strong foundation in Basic Science, Mathematics, Circuit Theory, Field Theory, Control Theory, Signals and Systems, Power System in Electrical Power Gadgets and Basic Electronics to Power Electronics - necessary to formulate, solve and analyze Electrical and Electronics problems.
- To foster student cognizance for all-time learning and instill professional ethics.
- To adapt evolving technologies and stay contemporary with their profession.

#### PROGRAMME OUTCOMES

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Life-long learning: Recognize the need for, and have the preparation and ability to

## S.A.ENGINEERING COLLEGE, CHENNAI – 77 (An Autonomous Institution, Affiliated to Anna University) DEPARTMENT OF Electrical and Electronics Engineering

#### 2022-2023

		SEPTEMBE	R 2023	
5l.No	Date	Event Name & Title	II/III/IV	Company Name
1	11.09.2023	VAC - ETAP & PSCAD	3 <sup>rd</sup> year	Power Projects
2	11.09.2023	VAC – Arduino & IOT	2 <sup>nd</sup> year	IOLOGIX
3	26.09.2023	Industrial Visit	2 <sup>nd</sup> year EEE A	North Chennal Thermal Power Station
4	27.09.2023	Industrial visit	2 <sup>nd</sup> year EEE B	North Chennai Thermal Power Station
		AUGUST	2023	100000000000000000000000000000000000000
5.	16.08.2023 to 23.08.2023	VAC – Battery Manage- ment System	Final year	Dynamic CAD
6.	24.08.2023	industrial Visit	3rd year EEE A	ECI System Pvt Ltd., Thirumudivakkam
7.	26.08.2023	Industrial visit	3rd year EEE B	ECI System Pvt Ltd., Thirumudivakkam
	u.	JULY 2	023	7
8.	20.07.2023	Guest Lecture – Load flow Analysis	3 <sup>rd</sup> year	Power Projects
	3	78		OCTOBER 2023
9.	17/10/2023	Guest Lecture – Electro- magnetic theory	2 <sup>nd</sup> year EEE A&B	Dear- electrical science Rajalaksh mi engineering college
	18/10/2023	Guest Lecture – Chal- lenges and opportuni- ties in smart grid tech- nologies	4 <sup>™</sup> γear	IITOM Kanchipuram

#### Arduino & IOT

## 2<sup>nd</sup> year



#### Arduino & IOT

## 2<sup>nd</sup> year





### **NCTPS Industrial Visit**

#### 2nd year EEE A





#### **NCTPS Industrial Visit**

#### 2nd year EEE B





#### PAPER PRESENTATION



### PAPER PRESENTATION



#### STUDENTS PARTICIPATION



QUIZ WINNERS DHANUSH, YEGNESWARAN EEE 4<sup>TH</sup> YEAR





NATION SCIENCE DAY
PAPER PRESENTATION
RUNNER UP:
MARIA FRANCIS J
EEE B 3<sup>RD</sup> YEAR



NATION SCIENCE DAY PAPER PRESENTATION WINNER:

JANANIS EEE A 3RD YEAR













VELAMMAL EXGINEERING COLLEGE, PROJECT EXPO. THIRD PRIZEWIYNERS: SARAVANANA, SKIRAAMAY, VINOTH KUMAR, L.S.





VELAMMAL ENGINEERING COLLEGE CIRCUIT DEBUGGING WINNERS:

FROM EEE B 3<sup>RD</sup> YEAR MUKKUL, SARATH KUMAR, SYED AHMED WAJID.

FROM EEE 4<sup>TH</sup> YEAR SIVA SANTHOSH, MASILAMANI, SAKTHI.



## WORKSHOP INAUGURATION FUNCTION

A Workshop is a method of teaching which is a mix between studio practice and a lecture. Workshops typically take place with a small group of students.

Workshops are designed to enhance the students practical skills, and to teach them about the theory and context behind such practice.



Department of Electrical and Electronics Engineering organized
"A Workshop on SOLAR PLANT DESIGN AND ENERGY ESTIMATION" on
1st March 2023".

Resource Person:

Dr. S. Kavaskar Head-Power System Studies, KNR Engineers (INDIA) Pvt. Ltd, Chennai.



## WORKSHOP VALEDICTORY FUNCTION



The Valedictory Function for the IEEE Photonics Sponsored Workshop on "Solar Plant Design and Energy Estimation" was conducted on 2nd March 2023



#### GUEST LECTURE ON SOLAR PLANT DESIGN AND ENERGY ESTIMATION

Guest Lecture is a concept that helps the students in gaining additional knowledge.



Department of Electrical and Electronics Engineering and IEEE students branch
jointly organized

"A Guest Lecture on SOLAR PLANT DESIGN AND ENERGY ESTIMATION" on 2nd March 2023.

> Resource Person: Mr.Sivakumar Sivalingam Cheif Technical Officer Evolve Energy Group, Chennai



## ORBIT AMENDING

The Act of Analyizing a Circuit and Detecting and Correcting any errors is called Circuit Debugging.

Circuit Debugging helps us to get rid of problems associated with the circuit.

By Circuit debugging, Any Circuit Malfunction is Corrected and the Circuit can give the desired performance.





Department of Electrical and Electronics Engineering and IEEE students branch jointly organized "ORBIT AMENDING - A Circuit Debugging Event" on 3rd March 2023.



#### GUEST LECTURE ON INTELLECTUAL PROPERTY RIGHTS (IPR)

Guest Lecture is a concept that helps the students in gaining additional knowledge.



Department of Electrical and Electronics Engineering organized

A Guest Lecture on "Intellectual Property Rights (IPR) under NIPAM

on 10th March 2023.

GUEST SPEAKER:
Dr.G.Geetha
Women Scientist under wosc kiran IPR
Qualified Patent Agent
Dean(Innovation) & Professor (CSE)
Rajalakshmi Engineering College



#### **IEEE ACTIVITY-2**

## SEED YOUR FOUNDATION

idea is a concept that can be used for financial gain that is usually centered on a product or service that can be offered for money.

An idea is the first milestone in the process of building a successful business.

The characteristics of a promising business idea are:

- Innovative
- Unique
- · Problem solving
- Profitable
- Understandable





Department of Electrical and Electronics Engineering and IEEE students branch jointly organized "Seed Your Foundation- An individual idea event" on 2<sup>nd</sup> March 2023.



#### **IEEE ACTIVITY - 3**

# QUIZBUZZ

QuizBuzz is a live virtual event that can help bond, motivate and improve students productivity through unique and creative quizzes, puzzles and other various activities.





Department of Electrical and Electronics Engineering and IEEE students branch jointly organized "Quizbuzz - An Virtual Event" on 27th March 2023.



AdZaP is a competition for participants to showcase their creativity in marketing products and services.

The main objective is to adjudge the participant's promotional strategies in marketing by way of advertisements.





Department of Electrical and Electronics Engineering and IEEE students branch jointly organized "Adzap - An Marketing Event" on 31st March 2023.



### WORKSHOP



"CAD Technologies in Electrical Applications" on 6th Apr 2023, between 10:00am and 12:00 noon.



### **GUESS THE WORD**





Department of Electrical and Electronics Engineering and IEEE students branch jointly organized IEEE Activity series #10 – "Guess the Word" on 13th Apr 2023, between 1:25pm and 2:15pm.

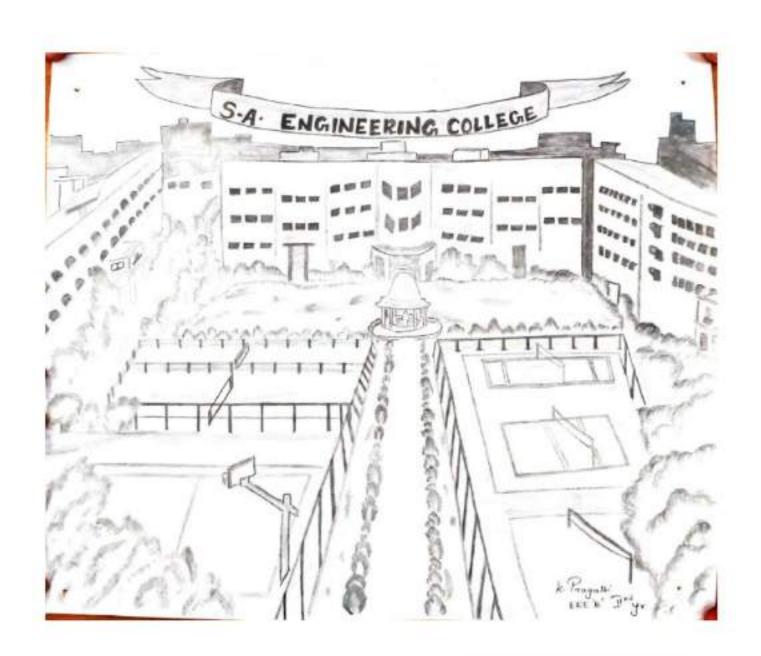


### SCIENTIFIC DISCOURSE



Department of Electrical and Electronics Engineering and IEEE students branch jointly organized IEEE Activity series #11 - "Scientific Discourse" on 21st Apr 2023 between 3:15pm and 4:05pm.

#### STUDENTS DRAWING

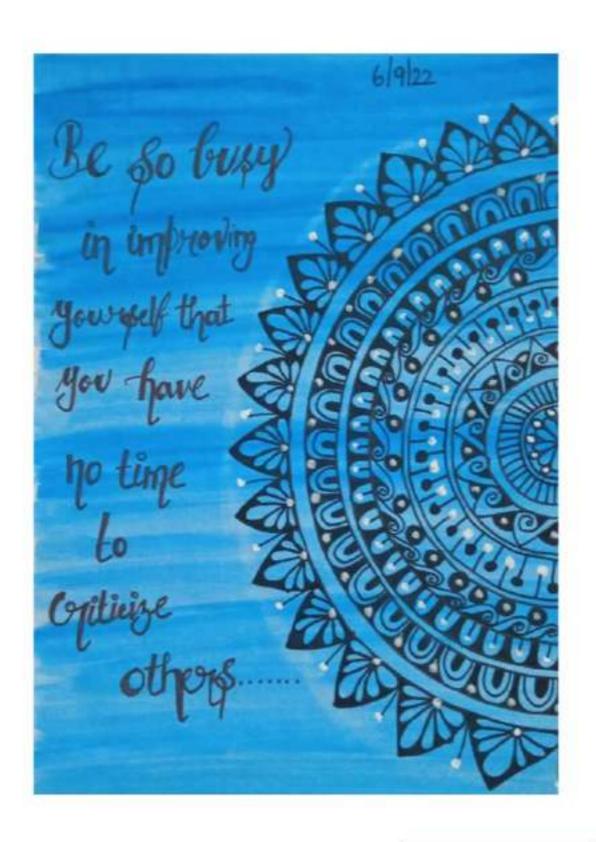


PRAGATHI.K 2ND YEAR - B



Pen the Lindows to See the bould

CHITTU. Y 2ND YEAR - A



CHITTU. Y 2ND YEAR - A



PRAKESH.V 2ND YEAR - B