

S.A. ENGINEERING COLLEGE

(AUTONOMOUS)

Chennai – 77

25th ANNUAL DAY

ON

06.05.2023

ANNUAL REPORT 2021-2022

BY

Dr. S. RAMACHANDRAN
PRINCIPAL

25th ANNUAL DAY CELEBRATION

On

06/05/2023

**ANNUAL REPORT BY PRINCIPAL
Dr. S. RAMACHANDRAN**

Dignified Chief Guest	: ‘Kaappiya Kavignar’ Dr. Paagai R. Kannadhasan
Honorable President of the function	: Thiru. D. Duraiswamy , Chairman S. A. Engineering College
Respected Vice Chairman	: Thiru.D.Paranthaman S. A. Engineering College
Estimable Secretary	: Thiru. D.Dasarathan, S. A. Engineering College
Beloved Correspondent & Treasurer	: Thiru. S.Amarnaath S. A. Engineering College
Respected Director	: Thiru. D. Sabarinath S. A. Engineering College
Respected Joint Secretary	: Thiru. S. Gopinath, S. A. Engineering College
Respected Director, Sudharsanam Vidyaashram	: Thirumathi. D. Saraswathi
Respected Correspondent Of S.A. College of Arts & Science	: Thiru. P. Venkatesh Raja

Renowned Guest, HODs, Staff, Parents and my dear Students, my hearty greetings to you all during this grand Celebration of 25th Annual Day of our Institution.

With the blessings of our founder chairman Thiru. D. Sudharssanam I stand before you to present the Annual Report for the year 2022-23.

ABOUT FOUNDER

Founder Chairman Thiru. D. Sudharssanam, man of simplicity, held the post of Member of Legislative Assembly for more than 4 times. He developed the constituency and helped the poor in many ways. He was not only renowned as a politician but also as a humanitarian. He helped the economically backward people and minority community people to get educated, mainly, higher education.

He also held the post of syndicate member of Anna University. With his dedications, institution has enriched and developed in all aspects and has become one of the best autonomous institutions under premier Anna University.

ABOUT THE MANAGEMENT

The performance chart of S.A. Engineering College is getting expanded day by day and the reputation of the institution is in the higher side among the public. The management has amazingly envisioned the institution as the knowledge park and the personality striker of the staff and students and has grown along with them.

PREAMBLE:

S. A. Engineering College was established by Dharma Naidu Educational and Charitable Trust in the Academic Year 1998-99 with the approval of the AICTE and affiliation with the University of Madras. The College was affiliated to Anna University, Chennai since 2002.

Our college offers 9 UG programmes and 6 PG programmes.

Currently 2477 students are pursuing their studies in our college.

- We are very proud to inform that we have received permanent affiliation from Anna University for the departments ECE, CSE, MECH, EEE, IT and MBA. This is truly one of the hallmarks in our service.

Our College was approved by AICTE, New Delhi. In recognition of quality system of high caliber being implemented in the administration of the institution and achievement of its goals, M/s.TUV Nord has awarded ISO 9001:2015 Certification to the college. Periodically our UG programmes are accredited by NBA and NAAC has placed us at “A” grade.

Now I would like to highlight our uniqueness.

OUR UNIQUENESS:

We have a streamlined mission for all the departments to create challenging Engineers, Managers and Entrepreneurs with professional competency, outstanding leadership qualities, personal integrity, compassion to ethical issues and empathy for the weak and the less privileged.

The Uniqueness of the institution is as follows:

- Aesthetic Infrastructure
- Exceptionally Proficient Faculty
- Internship in Renowned Companies
- Peerless Program Structure
- Industry Institute Interaction
- Training by Industries
- Emancipation of thoughts and action
- Pragmatism in Learning
- Real-time and Live Projects
- Challenging Career Excellence
- Identifying & Instigating the Real talents of the staff and students
- ISO/NBA Designed Modules
- Encouraging staff and students to update the knowledge through online courses like MOOC, NPTEL, COURSERA etc.
- Motivation for staff and students to ensure quality teaching and education
- Research Ecosystem
- Centers for Excellence
- Institute Innovation Council
- Anna University recognized Research Centre in Mechanical, ECE, EEE CSE Departments.
- Pursuit of Higher Studies by Staff
- Industry running Laboratories
- Striking sportsmanship

CREDENTIALS OF THE INSTITUTION

I am excited that the institution is celebrating its Silver Jubilee this year. Our College has secured Ranks & Recognitions from various reputed Magazines like The Week, Times of India, India Today, Outlook, IIRF, ARIIA, Deccan Chronicle and so on.

CONFERENCES / WORKSHOPS/ GUEST LECTURES /INDUSTRIAL VISITS ORGANIZED

The conferences, workshops, guest lectures and industrial visits are being conducted in all departments to motivate the staff and students in Engineering and develop their skills and strengthen the staff in latest trends and technologies

- 6 Guest lectures are conducted by every department during the academic year.
- Industrial visits and in plant trainings are being arranged to the students with a policy to visit at least one industry every semester for each class to enhance the practical knowledge and industrial exposure to the students.
- Around 12 industrial visits have been arranged in this academic year.
- Value added Courses are conducted to bridge the gap between curriculum and industry expectations, 13 VAC were conducted during the academic year.
- CSE & MCA Departments in association with CSI Jointly organized AICTE Sponsored International Conference on Machine Learning and Cyber Security in Industry 4.0
- CSE Department organized AICTE(SPICES) sponsored HACKATHON for all department students
- CSE department organized Faculty Development Programme on “Machine Learning” Mr. Asraf Ali Khan Design Tech System Pvt. Ltd.
- CSE Department Conducted training on “Artificial Intelligence with MATLAB” to all Faculty.
- CSE Department has organized IIC sponsored National Technology Day for CSE & IT students on 7/5/22

- IT department conducted ICMR sponsored Workshop on “Artificial Intelligence and Deep Learning Approaches for Intelligent Clinical Decision Support Systems in Healthcare”.
- MCA Department conducted an inter collegiate technical symposium LETECH'2e
- ECE Department conducted an Entrepreneurship initiative Design and Innovation Opportunities for Start Ups and MSME, Guest Speaker: Mr.Jayakumar, Manager MaDeit.
- EEE department has organized distinguished guest lectures during this academic year.
- Mechanical department conducted Online National Workshop on “Research Scopes in Additive Manufacturing”.
- Mechanical Dept. conducted 6 days workshop on “Research scopes in Advanced Manufacturing Processes”
- Mechanical Department conducted workshop 4.3.22 & 5.3.22 -(DST SERB Sponsored) – “Artificial Intelligence and Machine learning approach in Renewable energy systems”
- H& S Department organised a Seminar on "Applications of Mathematics in Engineering (Commemorating the Birth Anniversary of Srinivasa Ramanujan)
- MBA Department conducted Panel Discussion on Union Budget 2023. Mr. Sivakumar CEO and Merchant Banker, Capital Market Services, Mr. Glenn Roger Carr Founder, Finmark Trainers Pvt. Ltd and Mr. Shine Jacob, Editor, Business Standard were the resource persons.
- MBA Department organizes an IDEATION DAY every academic year as an exposure for the students towards sales and marketing.

PROFESSIONAL SOCIETY ACTIVITIES FOR 2021-22 Academic Year

CSI

- Departments of CSE conducted 17 GUEST Lecture under CSI Student Chapter for this academic year.
- Department of CSE students participated in 2 ACM online expert talk
- CSE Department organized a 4 workshop in association with CSI Student Chapter
- CSE organized with 2 FDP in association with ACM and CSI
- Departments of CSE, IT & MCA jointly conducted CSI Foundation Day and organized In house events for MCA ,IT& CSE students.
- Departments of CSE, IT & MCA jointly conducted project expo for MCA ,IT& CSE students.
- Department of CSE, IT & MCA jointly conducted hackathon for CSE students
- MCA Department organized 10 GL ,1 Workshop and 1 national level technical symposium.
- IT department conducted 12 GL

IEEE

- IEEE Student branch of SAEC has received Rs.60,000 for conduction of “**Mini colloquium**”.(ECE)
- IEEE Photonics Society Madras Chapter sanctioned the amount of Rs. 25,000/- for the conduct of a workshop on “Solar Plant Design and Energy Estimation with PVsyst”, which has been completed in the month of March.
- Organised twelve activity series every weekend through the IEEE Student Branch for the academic year 2022-2023.

ISTE

- Department of ECE organized “**Inter Department Paper Presentation**” for second and third years of ECE,EEE,CIVIL during this academic year

- Department of ECE organized “**Inter Department Project Presentation**” for Final year ECE, EEE, CIVIL during this academic year.
- Department of ECE organized “**Inter Department Quiz Competition**” for Ist year during this academic year.
- Department of H&S organized 4 Guest lectures in association with ISTE Student Chapter.

IETE

- Department of ECE organized 6 “**Guest lectures**” in association with IETE Madras section.
- Department of ECE organized “**Mini project Contest**” for second and third years ECE students during this academic year. (**IETE Spornsered**)
- Department of ECE organized ‘**Project Contest**’ for ECE final years ECE students during this academic year. (**IETE Spornsered**)

IEI

- Mechaninal engineering Department organized 6 Guest Lectures in association with IEI Professional Body.

ICI

- Department of Civil Engineering organized 12 guest lectures in association with ICI Student Chapter for this academic year.
- Department Of Civil Engineering organized an Awareness Program on Indian Concrete Institute given by Er.Muralidharan , Chairman, ICI, Chennai.
- Students attended the lectures on “Concrete” organized by Indian Concrete Institute, Chennai.

MMA – MADRAS MANAGEMENT ASSOCIATION

- Department of MBA organized 1 workshop and 4 GL in association with MMA
- Students attended and participated in 15 events (lectures, conclave, conventions) organized by MMA outside the campus and Faculty of MBA Department participated in 5 events organized by MMA
- Faculty of MBA Department participated in 2 Workshops organized by MMA
- VAC on HR analytics for II years and Business Analytics for I years were organized in association with MMA

NIPM

- MBA Department Organized NIPM student chapter inauguration with 120 students in our Campus.

WOMEN EMPOWERMENT CENTRE

- The Centre for Women Empowerment organized an Awareness program on Sexual Harassment at Workplace: Prevention & Protection of Women Rights Act during the academic year. The Chief Guest was Ms.Adhilakshmi Logamurthy, Advocate Madras High Court, Member Secretary Women Lawyers Association.
- Organised an event “TRISAKTHI” – A start up initiative, in association with Anna University & Velli Ventures in November 2022. It provided a platform for budding Women entrepreneurs of SAEC group.
- International Women’s Day Programme was celebrated on 8/3/2023, SAKTHI’23 e-magazine was released on this day to commemorate Women empowerment.
- Health care is functioning under **Dr.D.Gnanam M.B.B.S.,C.C.Dia.,** from 9:00 AM to 05:00 PM on all the working days. There is also a Full time trained nurse in the campus.
- The College has entered an MOU with Sudarsanam Hospital for providing Health care to students

RESEARCH CENTRE AND ITS ACTIVITIES (R&D)

Good quality education is the foundation of new discoveries, new knowledge and innovation. The above statement was made true at SAEC through the Research and Development cell, a vibrant wing in SAEC that has seen another successful year.

I'm very happy to say that the fraternity of SAEC has received nearly an amount of Rs. 9.2 crores of funding from various national agencies and laboratories to carry out research work and to organize seminars, workshops, faculty development Training programme, and conferences for the faculty to enrich their knowledge on recent trends.

Overall Research and Event Grants from the inception are

Research grant count=34

Research grant amount=9,24,80,464

Funding count= 60

Funding amount =55,55,198

Research Publication Count

SCI PAPERS PUBLICATION- 50

SCOPUS PAPERS PUBLICATION-90

PATENT PUBLISHED-70

**Major funding received and ongoing projects at SAEC includes,
Received in 2022-2023**

- **Dr.P.Sevvel (PI) & Dr.R.Geetha (Co–PI), sanctioned a fund of Rs.33,70,020 lakhs from DST/TDT/SHRI Department of Science & Technology, New Delhi for the research project titled, An ontology based 3D digital documentation of Masilamaniswara temple integrating techniques of terrestrial laser scanning and unmanned aerial vehicle digital photogrammetry**
- **Dr.Hemanand (PI) & Dr.Anuradha (Co–PI), sanctioned a fund of Rs.8,00,000 lakhs from MeitY Quantum Computing Application Lab for the research project titled, Quantum machine learning algorithms for traffic management in big cities**

2021-2022 sanctioned , ongoing and completed

- **Dr. Ahmed Mudassar Ali IT, Received a fund of Rs.9,74,314 lakh from AICTE to carry sponsored research entitled “Artificial Intelligence Based IoT Product Development Lab”**
- **Grant of Rs.80,000 sanctioned from ICMR for Two Days workshop on Implications of Artificial Intelligence in Biomedical Imaging and Diagnostic Therapeutic systems Coordinated by Dr. R. Radhika, Ms.Sreeja Vijay & Mr. Maria Rubiston, ECE**

- Grant of Rs.1,00,000 sanctioned from SERB for Two days national level seminar on Technological upgradation and digitization for sustainable energy Coordinated by Dr.B.R.Tapas Babu, Dr. R.Vinodhini & Dr.R.Radhika,ECE
- Grant of Rs.50,000 sanctioned from SERB for Two days virtual Workshop on “Artificial Intelligence and Machine Learning Approach in Renewable Energy Systems Coordinated by Dr.S.Baskar, Mr.S.Praveen Kumar, MECH
- Grant of Rs.50,000 sanctioned from GOVT for UBA Coordinated by Dr. M.Thanikachalam, CIVIL

Completed in 2021-2022

- Grant of Rs.334667 sanctioned from AICTE for SHORT TERM TRAINING PROGRAMME on Demystifying Block Chain Technology & Cyber Security Threats : Issues and Challenges Coordinated by Dr.R.Geetha,CSE & Ms.V.Sujatha,MCA
- Grant of Rs.417425 sanctioned from AICTE for FDP on “High power Conversion electronics for Green Energy Based Smart Grid” Coordinated by Ms.S.Bharathi, EEE
- Grant of Rs.50000 sanctioned from AICTE for International Conference on MLCSI-21 (ONLINE MODE) Coordinated by Dr.R.Geetha,CSE
- Grant of Rs.1,00,000 sanctioned from AICTE for Scheme for Promoting Interests, Creativity and Ethics among Students(SPICES) Coordinated by Dr.R.Geetha,CSE & Ms.V.Sujatha,MCA
- Grant of Rs.50000 sanctioned from ICMR for Artificial Intelligence and Deep Learning Approaches for Intelligent Clinical Decision Support Systems in Healthcare Coordinated by Dr.Ahmed Mudassar Ali,IT

Ongoing Projects

- Dr. G. Kavya, Professor, ECE, Received a fund of Rs.27,44,000 lakh from ISRO to carry sponsored research entitled “Design of 0.18 μ m CMOS Dual Band Low Noise Amplifier (LNA) for IRNSS Applications”
- A Fund of Rs.40 Lakhs from DST FIST under the scheme “ Improvement of Infrastructure in Universities and Higher Educational Institutions Program – 2014” for Developing new Labs and Support for PG Depts. of our college (ECE, EEE, MECHANICAL, CSE and IT) Coordinated by Dr.M.Subramaniam, Prof/Dept. of IT.
- Dr.P.Sevvel (PI) & Dr.S.Mahadevan (Co-PI), Department of Mechanical Engineering sanctioned a fund of Rs.27,81,778 lakhs from TIDE, Department of Science & Technology, New Delhi for the research project titled, Design & development of

cognition based intelligent mobility device for physically challenged & for elderly people.

- Dr.P.Sevvel (PI), Department of Mechanical Engineering sanctioned a fund of Rs.14,95,339 lakhs from DST, Department of Science & Technology, New Delhi for the research project titled, GSM-GPS Based Intelligent Safety & Navigational Aid for Women Security and smooth travel to unfamiliar destinations
- Dr.C.Arunachalaperumal (PI), Department of ECE sanctioned a fund of Rs.7,61,373 lakhs from AICTE for the research project titled, Novel Suspended Nodes – Communication Network using Wi-Fi Disaster Prone Areas

Design Patent Grant

- **Mr. A. Sivaramakrishnan and Dr. P. Sevvel received Design Patent Grant entitled “SOLAR PARABOLIC WATER HEATER”**

PhD Produced

- **Dr. Sevvel /Professor -Mech produced 2 doctorates**
- **Dr. Senthil kumar/Professor- EEE produced 2 doctorates**

TNSCST Student Project Scheme

- **Dr.Rohini/HoD-EEE, Dr.Dinakaran/HoD-AI&DS, Dr.Radhika/Prof-ECE,**
- **Dr.Tamilselvi/Prof-Civil received fund from Tamil Nadu State Council for Science and Technology (TNSCST) under student project scheme.**

Books Published

- **Dr. Sevvel Mech /Professor-Mech, Dr. Kerina Binu HoD/MBA ,Dr. Anuradha Prof/CSE, Dr. Nalini /Assoc Prof/CSE produced book chapters and text books**
- **Department of ECE, CSE, and Mechanical Engineering have been recognized by Anna University as research centre to pursue M.S (By Research) / Ph. D along with Mathematics and EEE departments**

Nearly 15 of our faculty are recognized supervisors in Anna University and other University and nearly 99 scholars have registered for Ph.D in our research centre and I'm proud to say that our professors have produced 38 doctorates so far.

TRAINING AND PLACEMENT CELL

I am very happy to share with you that the Training and Placement cell of our college has achieved **539**

I am very happy to share with you that the Training and Placement cell of our college has achieved **90 % of Students got placed** till now recruited by **120+ companies** and many more top companies are lined up to conduct campus drive this month. Some of our **top recruiters** are,

GOX	CSS CORP	WEBILESK
INFOSYS	ASPIRE SYSTEMS	SIDHARTH FOUNDATIONS
TEVATEL	CELCOM	SKILLSORT

PHYSICAL EDUCATION DEPARTMENT

Happiness is nothing more than a good health, for good physical fitness and strength sports is an integral part of life. Sports make our life interesting, teaches to work hard and push the limits to reach New Heights.

Our college is the Anna University Zone – 1 sports co-ordinating centre for 2022 to 2023 and we have conducted all the events successfully within the tenure.

Our Physical Education Department organised a state level Inter-school Tournament in the month of August 2022 and around 60 schools participated in various sports.

1. Our college Tennis Men's Team secured Winner position in Anna University zone - 1 Tennis Tournament which was conducted by our college on 11.11.2022.
2. Our college Table Tennis Men's Team secured Winner position in Anna University zone - 1 Tournament which was conducted by our college on 22.11.2022.
3. Our college Badminton Men's Team secured Winner position in Anna University zone - 1 Tournament held at Velammal Engineering College, Surapet on 17.11.2022.
4. Our college Table Tennis Women's Team secured Runner position in Anna University zone - 1 Tournament which was conducted by our college on 23.11.2022.
5. Our college Hockey Men's Team secured Winner position in Anna University zone 1 Tournament which was held at Velammal Engineering College, Surapet on 02.12.2023.
6. Our college Volleyball Women's Team secured 3rd place in Anna University zone - 1 Tournament which was held at AMS Engineering College on 16.11.2022.
7. Our college Basketball Men's Team secured Runner position in Anna University zone - 1 Tournament which was held at AMS Engineering College on 15.12.2022.

8. Our college Athletic Men's Team secured Overall 3rd place in Anna University zone - 1 Athletic meet which was held at GRT Engineering College, Thiruthani on 8.12.2022.
9. Our college Handball Men's Team secured 3rd place in Anna University zone - 1 Tournament which was held at ST. Peter's Engineering College on 12.12.2022.
10. Our college Chess Women's Team secured Winner position in Anna University zone - 1 Tournament which was held at Prathyusha Engineering College on 15.11.2022.
11. Our college Chess Men's Team secured 3rd place in Anna University zone - 1 Tournament which was held at Prathyusha Engineering College on 15.11.2022.
12. Our college Ball Badminton Men and Women Team competed with 16 college Teams and secured Winner position in Anna University zone - 1 Tournament which was conducted by our college from 14.11.2022 to 15.11.2022. This is one of the PRIDE moment.
13. Our college Kho-Kho Men's Team secured Runner position in Anna University zone - 1 Tournament which was conducted by our college on 14.12.2022.
14. Our college organised Anna University Inter-Zone Archery Tournament in the month of December 2022 various Engineering College Teams participated from all over Tamil Nadu.
15. Our college organised Anna University Inter-Zone Soft Tennis Tournament in January 2023

Here, I would like to take the privilege to announce,

Mr. Karnesh of CSE I year student was selected to Anna University Soft Tennis Team and he participated in All India Inter University Soft Tennis Tournament held at Ranchi, in the month of December 2022 and he secured 3rd place.

16. Our college Table Tennis Men and Women Team participated in CM Trophy which was held at SDAT stadium Thiruvallur in the month of January and secured Winner position.
17. Our college Badminton Men's Team participated in the CM Trophy and secured Winner position.
18. Our college Basketball Men's Team participated in CM Trophy and secured Runner position.

19. Our college Hockey Men's Team participated in CM Trophy which was held at Nazareth College and secured 3rd place.

I proudly announce that we have secured the Overall Championship among the Anna University Zone – 1.

LIBRARY FACILITY

- Our college has Central Library and Department Libraries. Our Central Library is fully Air-conditioned. Library area is 880 Sq.M. with 250 seating capacity available and separate Stack room is also available.
- Our Management has to spend Rs.1724416.00 for printed Journals, online Journals, Magazines, books and other expenditure for this academic year 2022-2023.
- Our central library contains more than 57405 volumes of textbooks on different titles, 13420 E-Books, 3047 Reference books like GRE, GMAT, TOFEL, GATE, Quantitative Aptitude, TNPSC, UGC, NET/JRF/SET, CAT Online, objective verbal and non-verbal reasoning, General Awareness tests on Current events and General Studies for students to get the job in the campus interview and outside.
- Not only that. 8765 Cds., 4710 Question Bank 114 magazines, 126 printed journals, 08 Tamil, English, Telugu News Papers, 1934 National and International online Journals are also available.
- Our Central Library has Institution Membership from different Organizations, like DELNET (Developing Library Network), SCIENCE DIRECT Elsevier Journals, IEEE - ASPP, NDLI (National Digital Library of India, and NPTEL ACTIVE SPOC in IIT Madras.
- Students gain more information and knowledge with IIT standards through NPTEL Video Courses (National Programme on Technology Enhanced Learning)
- Audio Visual Room is available for students to enrich their knowledge and updated
- Digital Library has E-resources collection. Open access system is followed in our college Library.
- OPAC (Online Public Access Catalogue) is Available. E-mail facility and SMS facility are also available (Android Mobile). Students and Staff members can renew the books through online.

TRANSPORT FACILITY:

- Our college buses are plying to different routes and cars are always engaged for Guest for various programmes.

INTERNET FACILITY

Our college provides 24 hours internet facility with an improvement of 1000 **MBPS (1:1)** RF leased line connection for the benefit of the staff and students.

- Also open Wi-Fi facility is made available throughout the campus.

BANK FACILITY

- S.A. Engineering College branch of Allahabad Bank is present in the campus and the management, staff and students are utilizing its services. This branch also serves the local people.

SCHOLARSHIP

- Scholarship is provided for the students by both Government & Management

The students are given an awareness of various scholarships for their financial support and they are guided by the office personnel to get benefited. In this academic year,

- ✓ 487 BC/MBC students
- ✓ 217 SC/ST/SCA students are benefited.
- ✓ The students are also guided to utilize MINORITY , POSTMETRIC, PRIME MINISTER and PRAGATI scholarships
- ✓ Under The Government's 7.5 scheme 42 students are benefited.

NSS,YRC ACTIVITIES

Social responsibility is inculcated among students through various activities

- ✓ Every year, 21st of June International Yoga Day is observed.
- ✓ Programmes were organised on the awareness of "No Plastic", "Drug Abuse", "Fire Safety", "Monsoon Awareness" and "Consumer Rights".
- ✓ Apart from these every year Blood Donation Camp and Medical Camp are also being organised.

ALUMNI MEET

Our college Celebrates Alumni meet on 26th January every year.

This year the 19th alumni Meet was conducted in online. President, Secretary and office Bearers were elected during the programme.

CONCLUSION:

Before I conclude my Annual report, I wish to **place on record** my respectful and sincere prayers to our founder Chairman **Thiru. D. Sudharssanam M.L.A.** once again, who is the architect of this institution.

I thank all the management trustees for their continuous encouragement to enable me to discharge my duties.

I am pleased to acknowledge our teaching faculty, administrative staff, non-teaching and technical staff for their untiring efforts in their work that makes this institution to reach its heights of standard.

I wish all the students a bright and a prosperous future.

I thank the almighty for the constant presence in and with us in our strenuous efforts.

Thank you one and all.