

S.A. ENGINEERING COLLEGE

(An Autonomous Institution , Affiliated to Anna University , Chennai)

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

Approved by AICTE and Affiliated to Anna University, Chennai



DYNAMIX'23

Annual Technical Magazine 2023 - 2024

DEPARTMENT OF MECHANICAL ENGINEERING

VISION OF THE COLLEGE

Transform our institution into quality centre imparting updated technical education with character building.

MISSION OF THE COLLEGE

- To create an excellent teaching and learning environment for our staff and students to realize their full potential thus enabling them to contribute positively to the community.
- To significantly enhance the self-confidence level for developing creative skills of staff and students.

VISION OF THE DEPARTMENT

- **Academic Excellence:** To strive and attain a premier position in providing Quality Higher Education integrated with Research and Scholarly activities in the emerging areas and diversify in the emerging fields of Mechanical Engineering, thus serving to the needs of the society.
- **Inventory of Skill Development:** To make our graduates to be adept in handling real life complex problems through Modern Tools and Techniques and while doing so making them to imbibe ethical practices and confident enough to assume leadership position.

MISSION OF THE DEPARTMENT

- **Conducive Environment:** To provide conducive atmosphere for effective teaching-learning by disseminating the knowledge in breadth and depth.
- **Centre of Excellence:** To practice modern tools and techniques so as to make our department a Centre of Excellence and sustainable in their growth.
- **Critical and Clinical Thinking:** To transform our students to be open minded with critical thinking in their approach to real-life problem-solving situations keeping in mind the Professional, Ethical, Environmental and Societal aspects
- **Active Involvement in R&D:** To provide a perfect platform for our faculty and students to undertake research activities.
- **Collaboration and Integration:** To collaborate with the industries, premier Institutions in taking up consultancy projects, internship so that our students will acquire experience hands-on in current industrial practices and ethical standards.
- **Implementation of Students Quality Circle:** To make our students imbibe leadership qualities by fostering in them a good amount of soft skills, personality traits and by way of active participation in extra-curricular and co-curricular activities.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

I. Technical Learning : To develop the ability among students to synthesize and analyze data and technical concepts for application to engineering problems and to work as part of teams on multi disciplinary projects.

II. Expertise in Engineering : To provide students with a sound foundation in the basic sciences and mathematics enabling them to analyze and solve engineering problems and to prepare them for higher learning and research works.

III. Enhancement of Knowledge : To prepare students for successful careers in industry by catering to the needs of Indian and multinational companies through in- plant training and industrial real time projects which shall give more industrial exposure and practices inculcating professional ethics and codes of professional practice.

IV. Self Competence and Sustainability : To orient students with more Soft skills, personality development programmes enabling them a sustainable growth in their careers and to take up leadership positions.

PROGRAMME OUTCOMES (POs)

Engineering Graduates will be able to:

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. 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.

11. 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.

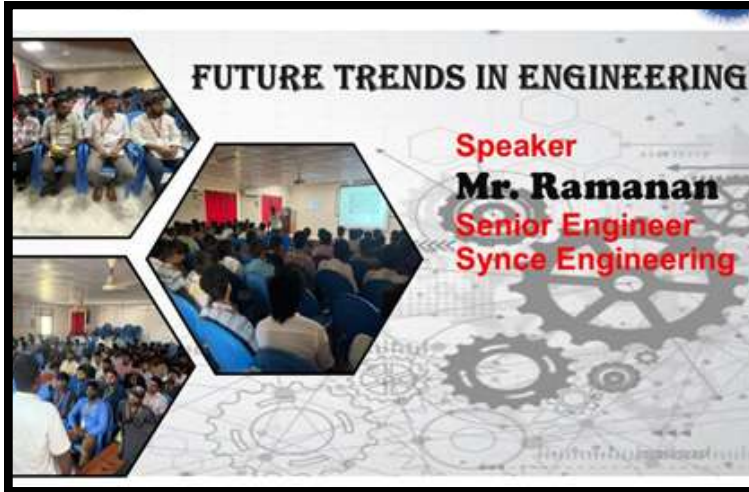
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technologic

PROGRAMME SPECIFIC OUTCOMES (PSOs)

1. Modernization/trends/automation: Graduates will be able to design, develop and operate or document newer mechanical systems or processes using emerging practices enhancing the productivity.

2. Optimization and refinement: Graduates will be able to find sustainable, Cost effective and environmental friendly measures to existing technology.

GUEST LECTURE



On 26.02.2024, The department of Mechanical Engineering has organized the Guest Lecture on “Future Trends in Engineering” for 4th year students by inviting the chief guest Mr.N.Ramanan, Senior Engineer, synce Engineering Pvt Ltd, Chennai.

On 14.03.2024, The department of Mechanical Engineering has organized the Guest Lecture on “Generative shape design using CATIA ” for 3rd year students by inviting the chief guest Mr.Suresh, Senior Design Engineer, Ashok Leyland, Chennai.



On 15.03.202, The department of Mechanical Engineering has organized the Guest Lecture on “Emerging trends in FEA” by inviting the chief guest Mr.Rajendra Prasad Nallur, Head - Business Support, Cloud Campus.



On 15.04.2024, The department of Mechanical Engineering has organized the Guest Lecture on “How to plan for start-up and Legal and Ethical Steps” for 2nd year students by inviting the chief guest Mr.K.Selvi Professor, Department of MBA, S.A.E.C

Mr. S. Jaffar Hussain, Head of Product Support at GMMCO Ltd., Chennai, discussed recent trends in IC engines, focusing on advancements in fuel efficiency and emission reduction technologies. He also highlighted the growing shift towards hybrid and alternative fuel engines to meet evolving environmental regulations. Date 08/09/2023

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Poonamallee - Avadi Main Road, Thiruverkadu, Chennai- 600 077.

DEPARTMENT OF MECHANICAL ENGINEERING
GUEST LECTURE
RECENT TRENDS IN IC ENGINES

Venue: MECH SEMINAR HALL
Date: 08.09.2023

Mr. R. Sudhahar, Director at CADD/CAMM Solutions, discussed the application of reverse and value engineering in fluid flow components. He emphasized the role of these techniques in optimizing design, reducing costs, and improving the performance and reliability of fluid systems. Date 16/10/2023



LECTURE



On 23.02.2024, The department of Mechanical Engineering has organized a Lecture on “Smart Interactive display for Innovative Teaching Methodology” for Mechanical staffs by Mr.N.Manimaran Assistant Professor S.A.E.C.

WORKSHOP

"Technology behind extraction of Coir and converting them into useful products for SC People"



23.02.2024



On 23.02.2024, The department of Mechanical Engineering and Computer Science Engineering has organized 2 days workshop on "Technology behind extraction of coir and converting them into useful products for SC students" which has sponsored by the Department of Science and Technology(DST), Govt. of India.



On 13.03.2024, The department of Mechanical Engineering has organized 2 days workshop on "Employees oppurtunities in coir Technology and coir products for SC students" by inviting the chief guest Dr.R.Kannan, Chief Executive Officer(CEO), TANCOIR-Tamil Nadu Coir Business Development Corporation Coimbatore.

On 07.05.2024, The department of Mechanical Engineering has organized workshop on "Model based Design approach for Mechanical and civil engineering" for 2nd year students by inviting the chief guest Mr.Gowtham and Mr.Afsal, Sr. Application Engineer-MATLAB, ARK Infosolutions Pvt Ltd.



VALUE ADDED COURSE



The CADD School Avadi conducted a course on SOLID WORKS for the Mechanical students of Third Year . The course lasted ten days, from 18.03.2024 to 22.03.2024, 25.03.2024, and 08.04.2024 to 13.04.2024.

The Heat Ventilation & Air Conditioning Dynamic Cad course was conducted for the Mechanical department 2nd year students.. The course lasted six days, from 01.04.2024 to 06.04.2024.



The Department of Mechanical Engineering has organized a Value Added course on the topic “Core Industrial Placement Training on Factory and Process Automation” for five days from 20/11/23 to 24/11/23.



The CADD School Avadi conducted a course on SOLID WORKS for the Mechanical students of Third Year . The course lasted ten days, from 18.03.2024 to 22.03.2024, 25.03.2024, and 08.04.2024 to 13.04.2024.

The Department of Mechanical Engineering has organized a Value Added course on the topic “Essentials in CATIA (CATIA V5” for six days from 25/9/23 to 4/10/23.



The Department of Mechanical Engineering has organized a Value Added course on the topic “Solid Works” for Ten days, a total of 60 hours of training.



The Department of Mechanical Engineering has organized a Value Added course on the topic “Problem solving using C” for Six days, from 21/8/23 to 28/8/23.

INDUSTRIAL VISIT

On 12th February 2024 the department of Mechanical Engineering organized a Industrial visit to Sakthi Engineering Industry, Thiruvallur for the 2nd year students



On 03rd May 2024 The department of Mechanical Engineering organized a Industrial visit to North Chennai Thermal Power Station Ennore, for the 3rd year students.



On 13th March 2024 the department of Mechanical Engineering organized a Industrial visit to U.R.Rao Satellite Centre, ,Bengalore for the 4th year students



STUDENTS TRAINING PROGRAM



The Department of Mechanical Engineering organized Vertical Milling Centre(VMC) one-day training program which has been conducted for 3rd-year Mechanical students on 08.04.2024.

The Department of Mechanical Engineering organized one-day Higher Education awareness program which has been conducted for S.A.Polytechnic college students on 06.04.2024.



CLUB ACTIVITIES



On 06.03.2024, The department of Mechanical Engineering has conducted Robotics club activity 2 on “Hands on Session in Pick and Place Robot ” for the club students.

On 03.04.2024, The department of Mechanical Engineering has conducted Robotics club activity 3 on “Dobotlab Hands on Training” for the club students.



The Department of Mechanical Engineering’s faculty and students participated in the untouchable pledge on 30 January 2024, at the Mechanical Engineering block.

FACULTY TRAINING PROGRAM



The ACE MICROMATIC Chennai Tech Centre organized Industrial training on “Working and operation of Vertical Milling Centre (VMC) for Mechanical department staffs from 21/03/24 to 23/03/24.

STUDENTS ACHIVEMENTS



The 3rd year students of Mechanical department participated in International project Expo VISAI and secured 2nd place in Vel Tech University. The participants are Mr.S.Pragadeesh, M.G.Y.Hari Vignesh, and S.Sarvanan.

The 3rd year students of Mechanical department participated in International project Expo VISAI and secured 2nd place in Vel Tech University. The participants are Mr.Srikhanth and his team .





The 3rd year students of Mechanical department participated in Project Expo and secured 1st place in Vel Tech High Tech Engineering college .The participants are Mr.S.Pragadeesh, M.G.Y.Hari Vignesh, A.S.Jagadeeshwar and S.Sarvanan.

The Mechanical department 2024 batch has been placed in various reputed organizations.



The 4th year students of Mechanical department participated in International Conference and project Expo and secured 1st place in SSN Engineering College.The participants are Mr. Agilash and his team



The 3rd year students of Mechanical department participated in International Conference and project Expo and secured 2nd place in SSN Engineering College. The participants are M.G.Y Hari Vignesh and A.S.Jagadeeshwar.

DETAILS OF PUBLICATIONS OF FACULTY

S.NO	NAME OF THE FACULTY	PAPERS PUBLISHED	
		Title of the paper	Name of the Journal/Conference with vol no, issue no, page no and impact factor.
1	Dr. P. Sevel, Mr.J.Vasanthe Roy and Mr.A.Sivaramakrishnan	Analysis of sensitivity and formulation of empirical relationship between parameters of FSW process and tensile strength of AZ80A Mg alloy joints	Materials Research Express, Vol 10, Issue 5
2	Mr.J.Vasanthe Roy, Dr. P. Sevel	An investigation on the influence of torque and R-ratio on the fatigue life of double-lap bolted joint using FEM	Materials Today Proceedings
3	Mr.Prabaharan G	Mechanical behaviour of Al6061 hybrid nanocomposites reinforced with nano alumina and molybdenum disulfide	Materials Today Proceedings
4	Dr. P. Sevel	Impact of tool rotational speed on the microstructural transitions and tensile properties of the dissimilar AZ80A-Mg – AA6061-Al joints fabricated by friction stir welding	Practical Metallography
5	Mr.Parthasarathy K	Evaluation of the mechanical strength of mortars with almond shell ash	Materials Today Proceedings

6	Mr. Srinivasan D Dr. Vishvanathperumal S	Effect of Modified Nanographene Oxide Loading on the Swelling and Compression Set Behavior of EPDM/SBR Nano-composites	Journal of Inorganic and Organometallic Polymers and Materials
7	Dr. Vishvanathperumal S	Effect of Modified Nanographene Oxide on the Mechanical and Swelling Properties of Silicone Rubber Nanocomposites	Polym. Korea, Vol. 47, No. 3, pp. 288-302 (2023)
8	Dr. Vishvanathperumal S	Effect of Modified Nanographene Oxide (mGO)/Carbon Nanotubes (CNTs) Hybrid Filler on the Cure, Mechanical and Swelling Properties of Silicone Rubber Composites	Journal of Inorganic and Organometallic Polymers and Materials
9	Dr. Vishvanathperumal S	Effect of Nanographene Oxide on the Mechanical Properties of EPDM/SBR Nano-composites	Polym. Korea, Vol. 47, No. 4, pp. 427-439 (2023)
10	Dr. Vishvanathperumal S	Influence of halloysite nanotubes on mechanical and swelling properties of silicone rubber compound	Journal of Polymer Research (2023) 30:310
11	Mr. Dhanasekar S, Dr. Vishvanathperumal S	Effects of Nanosilica on the Mechanical Properties and Swelling Resistance of EPDM/NBR Nanocomposites	Polym. Korea, Vol. 47, No. 5, pp. 1-16 (2023)

12	Mr. Dhanasekar S, Dr. Vishvanathperumal S	Cure characteristics, compression set, swelling behaviors, abrasion resistance and mechanical properties of nanoclay (Cloisite 15A, Cloisite 20A and Cloisite 30B) filler filled EPDM/NBR blend system	Journal of Polymer Research (2023) 30:375
13	Mr. Dhanasekar S, Dr. Vishvanathperumal S	Halloysite Nanotubes Effect on Cure and Mechanical Properties of EPDM/NBR Nanocomposites	Journal of Inorganic and Organometallic Polymers and Materials (2023)
14	Mr. Srinivasan D Dr. Vishvanathperumal S	Effect of HNTs and Modified HNTs Nanotubes on the Mechanical Properties and Swelling Resistance of EPDM/SBR Rubber Blend Nanocomposites	Silicon
15	Mr. Parthasarathy K Dr. Vishvanathperumal S	Effect of complex of resorcinol and hexamethylenetetramine modified halloysite nanotubes (RH-HNTs) on the mechanical and swelling characteristics of NR/EPDM nanocomposites	Journal of Polymer Research
16	Mr. S.J. Rajarajan	Study of Natural Language Processing for Sentiment Analysis	2023 3rd International Conference on Pervasive Computing and Social Networking (ICPCSN), Salem, India, 2023, pp. 1425-1432

17	Mr.K.N.Ramu	IoT-based Smart Home Automation Systems for Energy Conservation	2023 7th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Kirtipur, Nepal, 2023, pp. 12-16
18	Mr.K.N.Ramu	Evaluation of the Potential of Biomass Energy as a Sustainable Alternative Energy Source	2023 7th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Kirtipur, Nepal, 2023, pp. 952-958,
19	Dr.P.Sevel, Mr.J.Vasanthe Roy	Parametric based optimization of friction stir welded wrought AZ80A Mg alloy employing response surface methodology	Materials Research Express, Volume 10, Number 11
20	Dr. S. Vishvanathperumal, Mr. J. Vasanthe Roy, Mr. K. N. Ramu & Dr. S. Praveenkumar	An Investigation on the Effect of the Surface Modifications and HNTs Loading on the Cure behaviours, Abrasion Resistance, Mechanical and Morphological Properties of NR/EPDM Nanocomposites	Silicon (2023)

21	Mr.K.Manimaran	Integration of Solar Photovoltaics and Thermal Collectors for Hybrid Solar Energy Systems	2023 4th International Conference on Smart Electronics and Communication (ICOSEC)
22	Mr.D.Srinivasan	Perception Sensors Based Fusion System and Method for Controlling Vehicle	2023 3rd International Conference on Pervasive Computing and Social Networking (ICPCSN)
23	Mr.D.Srinivasan	Impact of process parameters on transitions in the microstructural characteristics and mechanical attributes of Ti-6Al-4V alloy joints during FSW	Practical Metallography
24	Mr.C.Krishnamurthy	Evaluation of Mechanical and Thermal Behaviour of Ferrous and Non-Ferrous Nano Fillers based GFRP Composites	International Journal of Vehicle Structures and Systems 2023, 15(5), pp. 662-665

25	Srinivasan D, Sevvel P, Dhanesh Babu SD, Vasanthe Roy, V	Optimization of parameters and formulation of numerical model employing GRA-PCA and RSM approach for friction stir welded Ti-6Al-4V alloy joints	Materials Research Express, 2024, Vol. 11, No. 5, 056511
26.	Srinivasan D, Sevvel P, Gunasekaran J	Impact of process parameters on transitions in the microstructural characteristics and mechanical attributes of Ti-6Al-4V alloy joints during FSW	Practical Metallography, 2024, Vol. 61, No. 1, pp. 28-58
27.	[3] John Solomon I, Sevvel P, Gunasekaran J and Vasanthe Roy J	Parametric based optimization of friction stir welded wrought AZ80A Mg alloy employing response surface methodology	Materials Research Express, 2024, Vol. 10, No.11, 116514

DETAILS OF PATENTS (FACULTY/STUDENTS)

S.N O	TITLE OF THE PATENT	NAME(s) OF THE FACULTY / STUDENT	DATE OF APPLICATION FILED	STATUS OF APPLICATION (PUBLISHED/ GRANTED)
1.	3D Printer	Dr.P.Sevel	11.10.2023	FILED (App No.: 397156-001)
2.	Solar Water Distillation System	Mr. A. Sivaramakrishnan Mr. J. Vasanthe Roy Dr. P. Sevel Mr. B. Pradap (Student) Mr. S. Aravind (Student) Mr. S. Jayabaskar (Student) Mr. K. Shree Visshnu (Student)	24.11.2023	FILED (App No.: 400588-001)
3	3D Printer	Dr.P.Sevel	19/02/2024	FILLED
4	Solar Water Distillation System	Mr.A.Sivaramakrishnan Mr.J.Vasanthe Roy Dr.P.Sevel Mr.B.Pradap Mr.S.Aravind Mr.S.Jayabaskar Mr.K.Shree visshnu	15/03/2024	FILLED

DETAILS OF AWARDS RECEIVED BY STUDENTS

S.NO	NAME OF THE STUDENT	AWARDS /INVITATION RECEIVED		
		DATE	NATURE OF AWARD/ INVITATION	GRANTING AUTHORITY /JOURNAL/ CONFERENCE/ SYMPOSIUM/HACA KATHON/ NPTEL/ OTHERS
1.	N.Agilash	29.08.2023	II Prize	Innovia - IIC & SAEC
2.	S.Srivatsan	26.09.2023	Participation Certificate	Mechgust-23 – Chennai Institute of Technology
3.	H.Devendran	26.09.2023	Participation Certificate	Mechgust-23 – Chennai Institute of Technology
4.	Vishnukumar	26.09.2023	Participation Certificate	Mechgust-23 – Chennai Institute of Technology

DETAILS OF BOOK PUBLICATIONS (FACULTY /STUDENTS)

S.NO	NAME OF THE FACULTY / STUDENT	BOOKS/MONOGRAPH PUBLISHED	
		Date of publication	Title of the Book
1.	Dr.Vishvanathperumal S	08.09.2023	Book Chapter: Polyester-Based Biocomposites for Tribological Applications Book: Tribological Properties, Performance and Applications of Biocomposites – Wiley
2	Dr.Vishvanathperumal S	04.12.2023	Book Chapter: Biodegradable Polymeric Nanofibers Prepared via Electrospinning, Book: Electrospun Nanofibres Materials, Methods, and Applications – CRC Press

DETAILS OF MOOC COURSES COMPLETED BY FACULTY

S.N O	NAME OF THE FACULTY	UHV/NPTEL/C OURSERA/UD EMY/MATLAB ETC.	TITLE OF THE MOOC COURSE	DATE / DURATION
1.	Mr.G.Prabaharan	NPTEL	Research Methodology	Aug-Oct 2023/ 8 Weeks
2	Mr.K.A.V.Roossv elt prabhu	NPTEL	Fundamentals of Artificial Intelligence	Jul-Oct 2023/12 Weeks
3	Mr.K.N.Ramu	NPTEL	Accreditation and Outcome Based Learning	Aug-Oct 2023/ 8 Weeks
4	Mr.J.Vasanthe Roy	NPTEL	Accreditation and Outcome Based Learning	Aug-Oct 2023/ 8 Weeks
5	Mr.K.Manimaran	NPTEL	Accreditation and Outcome Based Learning	Aug-Oct 2023/ 8 Weeks
6	Mr.K.Parthasarat hy	NPTEL	Product Design and Development	Jul-Aug 2023/4 Weeks
7	Mr.S.J.Rajarajan	NPTEL	Software Testing	Jul-Oct 2023/14 Weeks
8	Mr.C.Dhanesh	NPTEL	Conduction and Convection: Fundamentals and Applications	Jul-Oct 2023/12 Weeks
9	Mr.R.Jeeva	Coursera	Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading	30.10.2023/17 Hours

10	Mr.D.Srinivasan	Coursera	CFD Simulation Through a Centrifugal Pump	12.07.2023
11	Mr.D.Prakash	Coursera	CFD Simulation Through a Centrifugal Pump	12.07.2023
12	Mr.K.Manimaran	Coursera	CFD Simulation Through a Centrifugal Pump	06.10.2023
13	Mr.S.Dhanasekar	Coursera	CFD Simulation Through a Centrifugal Pump	12.07.2023
14	Mr.S.J.Rajarajan	Coursera	CFD Simulation Through a Centrifugal Pump	07.10.2023
15	Mr.K.N.Ramu	Coursera	CFD Simulation Through a Centrifugal Pump	06.10.2023
16	Mr.D.Prakash	Matlab	Machine Learning Onramp	06.10.2023
17	Mr.D.Prakash	Matlab	Statistics Onramp	08.10.2023

DETAILS OF SEMINAR, WORKSHOP, CONFERENCES, CEP, FDP, QIP PROGRAMS ORGANIZED THROUGH RESEARCH GRANTS

S.N O.	NATURE OF PROGRAM (SEMINAR, WORKSHOP, C ONFERENCES, CEP, FDP, QIP)	NAME OF THE PROGRAM	DETAILS OF THE GUEST(S) (NAME, DESIGNATION, ORGANIZATION, CONTACT DETAILS)	DETAILS OF THE PARTICIP ANTS	DATE & DURATIO N	VENUE
1.	Workshop	2 Days Hands on Training and Workshop on “3D Printing: Basics”	Shri. Rosu Reddy Director, Next Generation 3D Printers Kotturpuram, Chennai - 600085	65 Internal Participants	24.08.2023 & 25.08.2023 – 2 Days	SAEC
2.	Workshop	1 Day Hands on Training and Workshop on “Electric Vehicle: Assembling and Dismantling	Shri. Mohammed Samiuddin Deputy General Manager, TVS Training and Services Ambattur Industrial Estate, Chennai - 600058	61 Internal Participants	28/07/2023	SAEC

3.	Workshop	DST sponsored 2 Days Awareness Workshop and Hands on Training on “Fabrication of Coir based Products and Employment Opportunities in Coir related Products for SC Students	Shri. U.Venkatachalapathi Senior General Manager and Centre Head National Small Industries Corporation Limited – NSIC, (A Government of India Enterprise), Guindy Industrial Estate, Chennai - 600032	2nd Year SC Students	21st & 22nd September 2023	SAEC
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DETAILS OF GRANTS (RECEIVED /APPLIED)

S.NO	TITLE OF RESEARCH PROPOSAL	PI / RESEARCH COORDINATOR(S)	FUNDING ORGANIZATION	STATUS OF PROPOSAL	AMOUNT GRANTED Rs.	DURATION OF THE PROJECT
1.	An ontology-based 3D digital documentation of Masilamaniswara Temple integrating techniques of terrestrial laser scanning and unmanned aerial vehicle digital photogrammetry	Dr.P.Sevel (PI) Dr.R.Geetha (Co – PI)	SHRI (Science and Heritage Research Initiative) – DST	Granted	Rs. 33,70,020	3 Years
2	Science Technology and Innovation Hub for enhancing employability & livelihood of SC Community Population through technology development of Coir based Products for application in Construction & Manufacturing Sector	Dr.P.Sevel (PI) Dr.R.Geetha (Co – PI)	SEED Division – Department of Science & Technology (DST), Technology Bhavan, New Delhi– 110016	Granted	Rs. 48,29,934	3 Years

3	Application of Machine Learning in PEM Fuel cell Stack Technology to predict the performance Enhancement using Novel Flow Field Design Patterns	PI: Dr. Praveenkumar S Co-PI: Dr. Vishvanathperumal S	TNSCST	-	-	2 Years
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LIST OF MoUs SIGNED

S.NO	NAME OF THE ORGANIZATION / COMPANY / INSTITUTE	DATE OF MOU SIGNED	LINKAGE OF THE MoU	BENEFITS OF MoU
1.	Cadd Camm Solutions	07-09-2023	General agreement	<ul style="list-style-type: none"> To set up Center of Excellence inside SAEC to promote research & development activities. Training programs for the pupil of SAEC in the form of guest lectures, Seminars, Conferences, and Internships
2.	Skyrider Aerosolutions	07-09-2023	General agreement	<ul style="list-style-type: none"> To set up Center of Excellence inside SAEC to promote research & development activities. Training programs for the pupil of SAEC in the form of guest lectures, Seminars, Conferences, and Internships

DETAILS OF FACULTY INTERACTION WITH OUTSIDE WORLD

S.N O	NAME OF THE FACULTY	INTERACTION CATEGORY	DETAILS OF INTERACTION WITH OUTSIDE WORLD
1.	Mr.C.Dhan esh	2.RESOURCE PERSON	Session chair for a session in the 2nd International Conference on WATER, ENERGY & ENVIRONMENT [WEECON 2023] conducted on 29th & 30th December 2023, organized by ISET Research India in association with Maejo University Thailand & Saigon University Vietnam.
2.	Dr.P.Sevvel	5. JOURNAL REVIEWER	<ol style="list-style-type: none"> 1. Reviewed a paper submitted to the SCIE Journal “Scientific Reports” on 4th July 2023 2. Reviewed a paper submitted to the SCIE Journal “Journal of Nanomaterials, Nanoengineering and Nanosystems” on 4th July 2023 3. Reviewed a paper submitted to the SCIE Journal “Journal of Materials Engineering and Performance” on 19th July 2023 4. Reviewed a paper submitted to the SCIE Journal “Journal of Thermal Stresses” on 5th August 2023 5. Reviewed a paper submitted to the SCIE Journal “Welding International” on 16th August 2023 6. Reviewed a paper submitted to the SCIE Journal “Journal of Mechanical Engineering Science” on 5th October 2023 7. Reviewed a paper submitted to the SCIE Journal “Journal of Mechanical Engineering Science” on 26th October 2023 8. Reviewed a paper submitted to the SCIE Journal “Silicon” on 10th November 2023

FACULTY AWARD, RECOGNITION AND FELLOWSHIP

S.NO	Name of full time teachers receiving awards from state level, national level, international level	Name of the award, fellowship, received from Government or recognized bodies
1	Mr.J.Vasanthe Roy (National)	Received Elite Gold award (Topper-5%) from NPTEL for excelling in the 8 Weeks course titled Accreditation and Outcome Based Learning(Aug-Oct 2023)
2	Mr.K.N.Ramu (National)	Received Elite Silver award from NPTEL for excelling in the 8 Weeks course titled Accreditation and Outcome Based Learning(Aug-Oct 2023)
3	Mr.K.Manimaran (National)	Received Elite award from NPTEL for excelling in the 8 Weeks course titled Accreditation and Outcome Based Learning(Aug-Oct 2023)
4	Mr.K.A.V.Roosvelt prabhu (National)	Received Elite award from NPTEL for excelling in the 12 Weeks course titled Fundamentals of Artificial Intelligence(Jul-Oct 2023)

5	Mr.G.Prabaharan (National)	Received Elite award from NPTEL for excelling in the 8 Weeks course titled Research Methodology(Aug-Oct 2023)
6	Mr.K.Parthasarathy (National)	Received Elite award from NPTEL for excelling in the 4 Weeks course titled Product Design And Development (Jul-Aug 2023)

FACULTY RESEARCH PROPOSALS SUBMITTED

S.No	Name of the Investigators	Title of Project Proposal	Date of Submission	Name of the Funding Organization	Total Cost Proposal
1.	Dr.P.Sevvel Dr.K.Dinakaran	AI based Gaming Application for improving cognitive skills of children with autism spectrum disorders	03 – 05 – 2024	Cognitive Science Research Initiative (CSRI), Department of Science and Technology (DST), Technology Bhavan, New Delhi–110016	Rs. 52,29,816
2.	Dr.P.Sevvel Mr.C.Dhanesh	ATAL FDP Workshop on “Recent trends in AI empowered 3D Bio Printing technologies towards fabrication of smarter Bio medical implants”	13 – 5 – 2024	All India Council For Technical Education (AICTE), Nelson Mandela Marg, Vasant Kunj, New Delhi-110070	Rs. 5,00,000
3.	Dr.P.Sevvel Dr.K.Dinakaran	Experimental optimization of parameters using AI techniques for enhancing mechanical properties of friction stir welded Copper flat plates	06 – 06 – 2024	Department of Atomic Energy, OYC Building, C.S.M. Marg, Mumbai 400 001	Rs. 27,85,700
4.	Dr.P.Sevvel Dr.K.Dinakaran	Artificial Intelligence based optimization of the printability during selective laser melting of Ti6Al4V ELI flat plates	24 – 06 – 2024	Aeronautics Research & Development Board - DRDO, Indore, Khandwa Road, Simrol, Indore 453552, INDIA	Rs. 29,12,345

Ph.D. DEGREE COMPLETED FACULTY

S.No	Name of the Research Scholar	Name of the Guide	Branch	University	Status
1.	I. John Solomon	Dr.P.Sevvel	Mech	Anna University	Viva Voce Completed on 21/02/2024
2.	J.Gunasekaran	Dr.P.Sevvel	Mech	Anna University	Viva Voce Completed on 25/04/2024

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