AAA COLLEGE OF ENGINEERING & TECHNOLOGY

Accredited by NAAC with "A" Grade, Accredited by NBA (CIVIL, CSE, ECE, EEE, MECH) (An ISO 21001: 2018 Certified Institution) (Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai) Amathur, Sivakasi - 626 005.

Department of Mechanical Engineering

News Letter 2022-2023



Innovative Activites

- The department organized activities on reverse engineering, design thinking, and 3D printing.
- Students gained practical experience through workshops on mechatronics, hydraulic systems, and HVAC technology.
- Seminars on waste recycling and business opportunities encouraged students to explore entrepreneurship.

Volume 6

NEWSLETTER INDEX

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INSTITUTIONS VISION MISSION

VISION OF AAACET

Emerge as a Premier Institute for Quality Technical Education and Research with social responsibilities.

MISSION OF AAACET

To offer state of the art infrastructure for under graduate, postgraduate and doctoral programs.
To provide holistic learning ambience blended with professional ethics, leadership qualities and social responsibilities.
To disseminate knowledge and undertake research in field of Engineering and technology.
To inculcate innovation and creativity among student community to become successful entrepreneurs.
To undertake collaborative projects with academic, research centres and industries to provide cost–effective solutions.



DEPARTMENT VISION MISSION

VISION OF MECHANICAL

Emerge as an eminent center of excellence in Mechanical Engineering for quality technical education and scientific research leading to social development.

MISSION OF MECHANICAL

To impart quality education to create efficient Mechanical Engineers through eminent faculty.
To provide the state-of-the art infrastructure to facilitate the cutting edge research in emerging field of Mechanical Engineering.
To undertake multidisciplinary and collaborative projects with industries and research organizations.
To serve the society by developing competent engineers and entrepreneurs with outstanding leadership qualities and moral values.



Program Outcome

PO-1	*Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and Engineering to the solution of complex engineering problems.*
PO-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.*
PO-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.*
PO-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.*
PO-5	*Modern tool usage – Create, select, and apply appropriate techniques, resources, and modern engineering and computer aided tools including prediction and modeling to complex engineering activities with an understanding of the limitations.*
PO-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.*
PO-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.*
PO-8	*Ethics- Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.*
PO-9	*Individual and team work – Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.*
PO-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*
PO-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.*
PO-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 technological change.*



Program specified Outcome
&
Program Educational Outcome



Program Educational Objectives (PEOs)	
PEO 01	*The graduates will possess in-depth knowledge in the field of Mechanical Engineering and have a successful professional career in industry or by becoming an entrepreneur or by pursuing higher education and research.*
PEO 02	*The graduates will demonstrate profound problem solving skills and improved ability to design, develop economic and environment friendly Mechanical systems for multi-disciplinary societal needs.*
PEO 03	*The graduates will have ethical attitude and leadership quality to work efficiently with diverse teams, adapt to recent technologies by lifelong learning to solve real life problems.*

PROGRAM SPECIFIC OUTCOMES (PSOs) :	
PSO 01	*Ability to apply the basic knowledge to identify, formulate and solve problems in the domains of thermal, machine design, manufacturing and industrial engineering.*
PSO 02	*Ability to provide solutions to complex Mechanical Engineering problems by acquiring technological inputs and managerial skills and utilizing advanced technology with the help of modern CAD/CAM/CAE tools*
PSO 03	*Ability to develop mechanical and allied products with socio-economic concern by applying innovative ideas under ethical and professional constraints leading to a successful career.*







Sustainable Development Goal

SDG No.	*SDG Goal*
SDG 1	*No Poverty*
SDG 2	*Zero Hunger*
SDG 3	*Good Health and Well-being*
SDG 4	*Quality Education*
SDG 5	*Gender Equality*
SDG 6	*Clean Water and Sanitation*
SDG 7	*Affordable and Clean Energy*
SDG 8	*Decent Work and Economic Growth*
SDG 9	*Industry, Innovation and Infrastructure*
SDG 10	*Reduced Inequalities*
SDG 11	*Sustainable Cities and Communities*
SDG 12	*Responsible Consumption and Production*
SDG 13	*Climate Action*
SDG 14	*Life Below Water*
SDG 15	*Life on Land*
SDG 16	*Peace, Justice and Strong Institutions*
SDG 17	*Partnerships for the Goals*







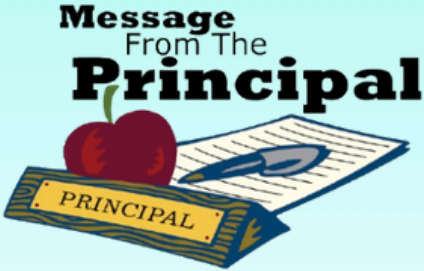
MESSAGE FROM THE PRINCIPAL...



It gives me great pleasure to present the Department of Mechanical Engineering newsletter for the academic year 2022–2023. Our college encourages students to improve their knowledge, skills, creativity, and practical abilities through various academic and extracurricular activities. I appreciate the efforts of the faculty members and students in organizing workshops, seminars, technical events, and innovative projects. These activities help students gain technical knowledge and prepare for future challenges. I congratulate the department on its achievements and wish all the faculty members and students continued success in their future endeavours.

Dr. M. Sekar

Principal



MESSAGE FROM THE HOD...



It gives me great pleasure to present the Department of Mechanical Engineering newsletter for the academic year 2022–2023. Our department focuses on providing quality education and practical knowledge to students through various academic activities, workshops, seminars, and technical events. We encourage students to develop their technical skills, creativity, and innovative thinking. I appreciate the hard work and dedication of our faculty members and students in organizing and participating in various activities and achieving success. I wish all our students and faculty members continued success in their future endeavours.

Dr. R.Selva Bharathi
Professor & Head
Department of Mechanical Engineering

Faculty Achievements 2022-2023

- Dr. R. Meby Selvaraj completed his Ph.D. in Mechanical Engineering at Anna University in December 2022.
- Mr. P.S.R. Senthil Maharaj received 100% result awards for Professional Ethics in Engineering and Engineering Graphics.
- Mr. A. Vignesh Moorthy Pandian received support under the TNSCST Student Project Scheme in March 2023.
- Faculty members published research papers in national and international journals.
- Faculty members presented research papers at the International Conference on Recent Innovations in Computer, Communication and Manufacturing (ICRICCM-23).
- Faculty members participated in faculty development programmes and workshops on electric vehicles, product design, advanced manufacturing, and IoT.
- Faculty members attended training programmes on finite element simulation and other emerging technologies.



CONGRATS



Faculty Puplications

- Dr. R. B. Jeen Robert published “Calcium Phosphate Conversion Technique: A Versatile Route to Develop Corrosion Resistant Hydroxyapatite Coating over Mg/Mg Alloys-Based Implants” in the Journal of Magnesium and Alloys, Vol. 10, Issue 7, 2022, pp. 1821–1845.
- Dr. R. B. Jeen Robert published “Testing the Performance of Bat-Algorithm for Permutation Flow Shop Scheduling Problems with Makespan Minimization” in Brazilian Archives of Biology and Technology, Vol. 65, 2022.
- Mr. P. S. R. Senthil Maharaj published “Testing the Performance of Bat-Algorithm for Permutation Flow Shop Scheduling Problems with Makespan Minimization” in Brazilian Archives of Biology and Technology, Vol. 65, 2022.
- Mr. P. S. R. Senthil Maharaj published “In Situ Bio Printing of Carbon Fiber Reinforced PEEK Hip Implant Stem” in AIP Conference Proceedings, Vol. 2653, 2022.
- Mr. G. Manikandaraja published “Novel Ternary Epoxy Resin Composites Obtained by Blending Graphene Oxide and Polypropylene Fillers: An Avenue for the Enhancement of Mechanical Characteristics” in the Journal of Inorganic and Organometallic Polymers and Materials, Vol. 33, Issue 2, 2023, pp. 383–397.
- R. Selvabharathi and M. Sekar published “Enhancement on the Low-Pressure Shot Peened Process of Monotonic Plastic Deformation Behaviors of Ni–4Cu–3Mo Alloy/Super Austenite Stainless Steel Dissimilar Joints Using Laser Beam Welding” in the Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2023.
- R. Selvabharathi published “Mechanical and Free Vibrational Analysis of Silane Functionalized Aluminum Stacked Glass Fiber/Epoxy Laminates” in The Journal of Adhesion, 2023.

Faculty Publications

Faculty Puplications

- Mr. P. S. R. Senthil Maharaj published “An Insight into the Mechanical and Tribological Behavior of Carbon-Flax Reinforced Bioepoxy Hybrid Composite Bone Plates for Orthopedic Applications” in Polymers and Polymer Composites, Vol. 31, 2023.
- Mr. P. S. R. Senthil Maharaj published “Bio-Printing of Femur Model: A Bone Substitute for Biomedical Research” in Materials and Technology, Vol. 57, Issue 3, 2023, pp. 283–289.
- Mr. G. Manikandaraja published “Effect of One-Step Dipping Coating Process on Microstructure and Tribology of Polypropylene/Graphene Oxide/Carbon Nanotube Nanocomposites” in the Journal of Polymer Research, published online on 8 March 2023.
- Dr. P. Seeni Kannan and Mr. P. S. R. Senthil Maharaj published “An Investigation on Mechanical Properties of 3D Pen Fused Zones for Additive Manufactured Parts” in Engineering Solid Mechanics, Vol. 11, Issue 3, 2023, pp. 263–270.
- Mr. M. Kaliraj published “Study of Mechanical Property of Treated Teak Wood and Tamarind Seed Particles in the Applications of Reinforced Composites” in Materials Today: Proceedings, 2023.
- Dr. R. Meby Selvaraj published “A Review of Process Parameters in Friction Drilling on Joining of Steels” in Archives of Materials Science and Engineering, Vol. 119, Issue 1, 2023, pp. 12–20.





Faculty publications in Conference

Mr. M. Kaliraj, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Study of Mechanical Property of Treated Teak Wood and Tamarind Seed Particles in the Applications of Reinforced Composites” at the Fourth International Conference on Recent Advances in Materials and Manufacturing (ICRAMM 2022), held at Velalar College of Engineering and Technology, Erode, on 08.12.2022 and 09.12.2022.

Dr. P. Seeni Kannan, Professor and Head, Department of Mechanical Engineering, presented a paper titled “Green Technology Study of Performance, Emission, and Combustion Characteristics of Charcoal Briquettes Blended with Artocarpus Heterophyllus Powder” at the International Conference on Recent Innovations in Computer, Communication and Manufacturing (ICRICCM-23), organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Dr. G. Vairamuthu, Associate Professor, Department of Mechanical Engineering, presented a paper titled “Investigation on Mechanical Properties of Seashell Powder Reinforced Matrix Composites” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Dr. G. Vairamuthu, Associate Professor, Department of Mechanical Engineering, presented a paper titled “Experimental and Numerical Investigation of the Effect of Fuel Injection Pressure on the Performance and Emission of a Direct Injection (DI) Diesel Engine” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Dr. R. Meby Selvaraj, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Current Trends on Improving the Effectiveness of Welding Process of Polymers” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Dr. R. Meby Selvaraj, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Madhuca Longifolia Seed as a Filler Reinforced Bio Material Tribology Analysis” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. M. Kaliraj, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Development of Automotive Interior Door Panel Using Coir-Polyester Composites” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. M. Kaliraj, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Preparation of Characterization of Green Biofilm Using Polyvinyl Alcohol & Coccinia Grandis Peel Powder” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. G. Manikandaraja, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Feasibility Study of Solar Wind Hybrid Power System for North Al Batinah Government in Sultanate of Oman” at ICRICCM-23, held at AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Faculty publications in Conference

Mr. G. Manikandaraja, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Addressing the Mechanical Strength and Synergistic Effect of Aluminum Foil Sheet with Different Micron Counts for a Variety of Incorporates” at ICRICCM-23, held at AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. G. Manikandaraja, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “A Polypropylene Mesh Based Polymer Composite with Surface Adaption” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. P. S. R. Senthil Maharaj, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Design and Finite Element Analysis of Composite Bicycle Frame” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. P. S. R. Senthil Maharaj, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Design and Finite Element Analysis and Fabrication of Bone Scaffold” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. P. S. R. Senthil Maharaj, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Finite Element Analysis and Fabrication of Intramedullary Rod for Femur Fracture” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. S. Balamurugan, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Analysis and Optimization of Electrical Discharge Machining in Monel Material” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. S. Balamurugan, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Efficient Water Repellent Behaviour of Silver Nano Particle/Polymer Coated Aluminum Substrate and Its Anticorrosive Behaviour” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. S. Balamurugan, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Analysis and Optimization of Car Door with Different Materials” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

Mr. P. C. Rajarajan, Assistant Professor, Department of Mechanical Engineering, presented a paper titled “Experimental Investigation on Wire Arc Additive Manufacturing (WAAM) Process with Cold Metal Transfer (CMT)” at ICRICCM-23, organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.

GUEST LECTURE DELIVERED BY FACULTY

- Dr. R. Meby Selvaraj, Assistant Professor, Department of Mechanical Engineering, delivered a lecture-cum-hands-on training session on “3D Printing” for AGP Polytechnic College at the CAD/CAM Laboratory, AAA College of Engineering and Technology, Sivakasi, on 23.02.2023.
- Mr. G. Manikandaraja, Assistant Professor, Department of Mechanical Engineering, delivered a lecture-cum-hands-on training session on “Wheel Balancing” for AGP Polytechnic College at the Bosch Laboratory, AAA College of Engineering and Technology, Sivakasi, on 23.02.2023.
- Mr. A. Vignesh Moorthy Pandian, Assistant Professor, Department of Mechanical Engineering, delivered a lecture-cum-hands-on training session on “A/C Refilling” for AGP Polytechnic College at the Bosch Laboratory, AAA College of Engineering and Technology, Sivakasi, on 23.02.2023.
- Mr. M. Kaliraj, Assistant Professor, Department of Mechanical Engineering, delivered a lecture-cum-hands-on training session on “Tyre Changer Mechanism” for AGP Polytechnic College at the Bosch Laboratory, AAA College of Engineering and Technology, Sivakasi, on 23.02.2023.
- Mr. M. Nagendran, Assistant Professor, Department of Mechanical Engineering, delivered a lecture-cum-hands-on training session on “Fuel Cell Technology” for AGP Polytechnic College at the Bosch Laboratory, AAA College of Engineering and Technology, Sivakasi, on 23.02.2023.
- Mr. S. Balamurugan, Assistant Professor, Department of Mechanical Engineering, delivered a lecture-cum-hands-on training session on “3D Modelling using Fusion 360” for AGP Polytechnic College at the CAD/CAM Laboratory, AAA College of Engineering and Technology, Sivakasi, on 23.02.2023.
- Mr. P. C. Rajarajan, Assistant Professor, Department of Mechanical Engineering, delivered a lecture-cum-hands-on training session on “CNC Milling and Turning” for AGP Polytechnic College at the CAD/CAM Laboratory, AAA College of Engineering and Technology, Sivakasi, on 23.02.2023.



COURSE COMPLETED BY FACULTY



Mr.G.Manikandaraja, Assistant Professor, Department of Mechanical Engineering Successfully completed One year (2021 - 2022) PG. Diploma in Intellectual Property Rights at Annamalai University Distance Education Cleared first class with Distinction dated 07-09-2022.

Mr.S.Balamurugan, Assistant Professor/Mechanical has completed, NPTEL certification course 'Manufacturing Guidelines for Product Design' conducted by IIT-Roorkee.



FDP / SEMINARS / WORKSHOPS ATTENDED BY FACULTY

Dr. R. Meby Selvaraj

- *International FDP – "Futuristic Research in Mechanical Engineering" — SRM Institute of Science and Technology, Chennai, from 08.08.2022 to 13.08.2022.*
- *NAAC-Sponsored Seminar – "The Importance of Outcome-Based Education in a Modern Educational Setup" — Hindusthan Institute of Technology, Coimbatore, from 21.09.2022 to 22.09.2022.*
- *Workshop – "3D Printing for Mass Customization" — ACIC Mepco Innovation Foundation, from 17.10.2022 to 21.10.2022.*
- *Webinar – "Recent Trends in Shape Memory Alloys" — IIT Madras, from 09.02.2023 to 10.02.2023.*
- *FDP – "Internet of Things (IoT)" — ICT Academy and AAACET, from 27.03.2023 to 31.03.2023.*
- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

Mr. M. Kaliraj

- *International FDP – "Futuristic Research in Mechanical Engineering" — SRM Institute of Science and Technology, Chennai, from 08.08.2022 to 13.08.2022.*
- *FDP – "Advanced Material Processing and Characterization Method" — NIT Puducherry, from 26.12.2022 to 30.12.2022.*
- *Webinar – "Recent Trends in Shape Memory Alloys" — IIT Madras, from 09.02.2023 to 10.02.2023.*
- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023*

Mr. P. C. Rajarajan

- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

FDP / SEMINARS / WORKSHOPS ATTENDED BY FACULTY

Mr. P. S. R. Senthil Maharaj

- *International FDP – "Futuristic Research in Mechanical Engineering" — SRM Institute of Science and Technology, Chennai, from 08.08.2022 to 13.08.2022.*
- *Workshop – "Finite Element Simulation using ANSYS" — Mepco Schlenk Engineering College, Sivakasi, from 21.02.2023 to 23.02.2023.*
- *FDP – "Internet of Things (IoT)" — ICT Academy and AAACET, from 27.03.2023 to 31.03.2023.*
- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

Mr. S. Balamurugan

- *Faculty Training Programme – "Autodesk Fusion 360" — Thiagarajar College of Engineering, Madurai, from 28.09.2022 to 29.09.2022.*
- *Programme – "Smart and Advanced Manufacturing Design & Simulation using PlantSim" — KLN College of Engineering, Madurai, from 13.02.2023 to 17.02.2023.*
- *FDP – "Internet of Things (IoT)" — ICT Academy and AAACET, from 27.03.2023 to 31.03.2023.*
- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

Mr. G. Manikandaraja

- *FDP – "Advanced Material Processing and Characterization Method" — NIT Puducherry, from 26.12.2022 to 30.12.2022.*
- *FDP – "Product Design Engineering and Modelling" — Alagappa Chettiar College of Engineering and Technology, Karaikudi, from 13.02.2023 to 17.02.2023.*
- *FDP – "Bloom's Taxonomy in Teaching and Learning" — Sansnow's Nobel Professional Foundation, on 16.02.2023.*
- *Intellectual Property Awareness Programme — National Intellectual Property Awareness Mission (NIPAM), on 22.02.2023.*
- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

FDP / SEMINARS / WORKSHOPS ATTENDED BY FACULTY

Mr. M. Nagendran

- *Faculty Advisor Programme — SAE India Southern Section, Guindy, Chennai, on 18.03.2023.*
- *FDP – "Internet of Things (IoT)" — ICT Academy and AAACET, from 27.03.2023 to 31.03.2023.*
- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

Mr. A. Vignesh Moorthy Pandian

- *FDP – "Electric Vehicle Design" — Skill-Lync, Thiagarajar College of Engineering, Madurai, from 13.02.2023 to 17.02.2023.*
- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

Dr. G. Vairamuthu

- *Intellectual Property Awareness Programme — National Intellectual Property Awareness Mission (NIPAM), on 22.02.2023.*
- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

Dr. P. Seeni Kannan

- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*

Mr. M. S. Zakir Hussain

- *National-Level Technical Workshop – "MEP: Heating, Ventilation and Air Conditioning" — AAACET, from 04.04.2023 to 06.04.2023.*



KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

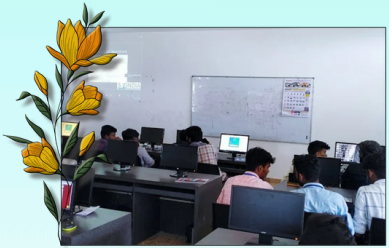
National Level Competition on Reverse Engineering

Department of Mechanical Engineering & The SAE India Southern section was conducting "National Level Competition on Reverse Engineering" for student's online webinar on 07.06.2022 at CAD/CAM Laboratory, Cambridge Block. The Chief Guest Mr.S.Shanmugam, SAE Southern section , Students activities section secretary, delivered importance of this competition and give detail about reverse engineering and scope of reverse engineering in industry, Totally 58 students of SAE members attended this event.



Dr.P.Seenikannan HOD/Mechanical delivered important features reverse engineering and scope in Mechanical Engineering

Students Attending Online Workshop on 07.06.2022 at CAD/CAM Laboratory



KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

UG/NX CAD Modeling and drafting

Department of Mechanical Engineering & The SAE India Southern section was conducting "UG/NX CAD Modeling and drafting" for student's online webinar on 23.08.2022 at CAD/CAM Laboratory, Cambridge Block. The Chief Guest Mr.R.A.Armstrong , SAE Southern section , Chairman, Chennaigiven awareness about the program of UG/NX CAD Modeling and drafting , unique feature about UG/NX CAD, and also given briefly this software application in industry and their mobility concept in design. Totally 66 students of SAE members attended this event.



Online webinar - UG/NX CAD Modeling and drafting

SIEMENS NX

KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

Reverse Engineering

Department of Mechanical Engineering & SAE India always-encouraging fresh ideas from ambitious youngsters of the student community. Reverse engineering is the National Level Competition held at MIT Campus, Chennai, it has been scheduled from 01.08.2022 to 06.08.2022 It puts forth a common platform where students irrespective of their branches, seniority and experiences unit be together to display their skills. It is included multitude of events lined up in unique categories of precisely select component, measuring various parameters and develops drawing their skills project. We ensure that you come out reincarnated with an experience of unique talents, which unfold themselves as they engrave your minds more than ever. Students wholeheartedly present their skills in this competition along their innovation.







students active Participation

KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

Design Thinking

Department of Mechanical Engineering had Inaugurated Association of Mechanical engineers & organized a Workshop on "Design Thinking – a Structure Approach to Innovation by the resource person Mr. C. Arun Suddarshan Chief Design Officer, Dot 2 Dot Business Designers, Madurai. on 07-09-2022. From this workshop all the students got the clear idea about the various learning process & scope of startup opportunities in mechanical field. Totally 70 students and faculty participated.



Inaugural function of Association of Mechanical Engineers



KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

National Level Competition on embedded system

Department of Mechanical Engineering & The SAE India Southern section was conducting "National Level Competition on embedded system" for student's online webinar on 21.09.2022 at Digital signal processing Laboratory, Cambridge Block. The Chief Guest Mr.T.Kasiraja, SAE India Southern section, secretary, delivered importance of this competition and give detail about reverse engineering and scope of reverse engineering in industry, Mr.M.Nagendran AP/Mech was giving introduction about embedded system application in mechanical field and 42 students attended this event.



Students attending online section in Digital signal processing Laboratory

Mr.M.Nagendran AP/Mech was giving introduction about embedded system application in mechanical field



KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

Hands on training – Mechatronics workshop

Department of Mechanical Engineering & SAE India Collegiate Club of AAACET was conduct one day " Hands on training – Mechatronics workshop" to final year Mechanical Engineering students of AAA college of engineering and Technology on 01.10.2022 in Mechanical Department, the chief Guest of Mr.A.Arunkumar M.E, Assistant Professor/ Mechatronics Department, Kamarajar College of Engineering and Technology, Madurai., giving training on Hydraulic system, Pneumatic system and also give brief introduction about Fluidsim software and 40 students attended this event.



Dr.P.Seeni kannan
HOD/Mechanical honoring Chief Guest Mr.A.Arunkumar

Chief Guest Mr.A.Arunkumar addressing about Mechatronics application in real life



KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

MEP-Heating, Ventilation and Air Conditioning

Department of Mechanical Engineering and Association of Mechanical engineers had conducted a three-day National Level Technical Workshop on "MEP-Heating, Ventilation and Air Conditioning" by the resource person Mr.V.Muthu Prakash from Innovative Engineering Solutions, Chennai, from 04.04.2023 to 06.04.2023. From this workshop all the students got the clear idea about the main purposes of a Heating, Ventilation and Air-Conditioning (HVAC) system are to help maintain good indoor air quality (IAQ) through adequate ventilation with filtration and provide thermal comfort.Totally 120 students and Faculty from various engineering and Polytechnic colleges participated in this workshop



Principal and HOD/Mechanical
honoring Chief Guest
Mr.V.Muthu Prakash

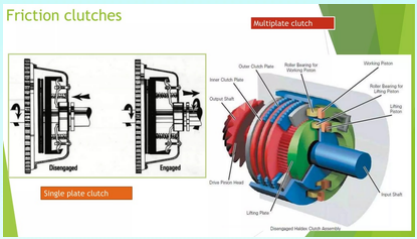
KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

Impact of Friction in Belt, Clutch and Brake

Department of Mechanical Engineering and Association of Mechanical engineers had conducted a one day technical seminar on Impact of Friction in Belt, Clutch and Brake by the resource person Mr.C.Bala Manikandan Asst Prof (Sr.Grade) from Mepco Schlenk Engineering, Sivakasi on 26.04.2023. From these seminar students are understood the topic of Impact of Friction in Belt, Clutch and Brake. A total of 39 students in second-year mechanical engineering attended this seminar.



Dr.A.Vairamuthu honoring Chief Guest Mr.C.Bala Manikandan



KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

Inaugurated the SAEINDIA collegiate club of AAACET

Department of Mechanical Engineering & The SAE India Southern section was inaugurated the SAEINDIA collegiate club of AAACET on April 27, 2023, at Thomas Alva Edison Hall, Cambridge Block. The Chief Guest is Mr. Kasiraja Thangapandian, Senior Manager, Visteon, Chennai. delivered important features and job opportunities available in SAE., Totally 63 students of SAE members attended this event.



The SAE India Southern section was inaugurated the SAEINDIA collegiate club of AAACET

Club organization certification



STUDENTS' ACHIEVEMENTS

- M. Selvakumar (III Year) completed the Mechanical Design certification at the Associate level, awarded by Dassault Systèmes on 16.10.2022.
- T. Vetrivel Mani (III Year) won First Prize in the Iquid event at the National-Level Symposium GENESIS 23, organized by the Department of Electronics and Communication Engineering, Kamaraj College of Engineering and Technology, on 15.02.2023.
- S. Veerakumar (III Year) won Second Prize in the Iquid event at the National-Level Symposium GENESIS 23, organized by the Department of Electronics and Communication Engineering, Kamaraj College of Engineering and Technology, on 15.02.2023.
- M. Selvakumar (III Year) won First Prize in the CAD Modelling event at the National-Level Technical Symposium organized by Kamaraj College of Engineering and Technology on 27.02.2023.
- M. Muthaiya (II Year) won First Prize in the Water Rocketry event at the National-Level Technical Symposium organized by Kamaraj College of Engineering and Technology on 27.02.2023.
- T. Vetrivel Mani and S. Veerakumar (III Year) won Second Prize in the Paper Presentation event at the National-Level Technical Symposium organized by Kamaraj College of Engineering and Technology on 27.02.2023.
- M. Selvakumar, Manoj Kumar, and Amarnath (III Year) secured the Winner position in the CAD-O-MANIA event at the National-Level Technical Symposium ENXENEIRO-23, organized by Kamaraj College of Engineering and Technology on 27.02.2023.
- Vikram (IV Year) secured the Winner position in the CAD-O-MANIA event at the National-Level Technical Symposium ENXENEIRO-23, organized by Kamaraj College of Engineering and Technology on 27.02.2023.
- Vigneshwaran M (IV Year) was awarded Best Outgoing Student for the 2019–2023 batch.
- Mariselvam (IV Year) received recognition for securing a GPA above 9 in the Anna University Examination 2021–2022.
- Azhagu K, Sarathi Kannan S, and Gopalakrishnan M (III Year) were recognized as Academic Toppers for 2021–2022.
- Mariselvam I, Anantharaman N, and Mathivanan T. A. (IV Year) were recognized as Academic Toppers for 2021–2022.
- S. A. Parthiba Narayan and S. Arunpandian (IV Year) won the Best Paper Award at the International Conference on Recent Innovations in Computer, Communication and Manufacturing (ICRICCM-23), organized by AAA College of Engineering and Technology, Sivakasi, on 12.04.2023 and 13.04.2023.



STUDENTS' ACHIEVEMENTS

- Satheshkumar G, Amarnath K, and Mohammad Usman A (III Year) secured First Place in Sheet Metal at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Nataraja CSK, Athish Yuaraj KT, and Hariharan K (III Year) secured First Place in Welding at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Hariharan P, Gopalakrishnan M, and Sarathi Kannan S (III Year) secured First Place in Material Identification at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Nataraja CSK, Kishore Pandiarajan K, and Kaviyarasan V (III Year) secured First Place in Group Discussion at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Dineshraj, Sarathi Kannan S, and Kaviyarasan V (III Year) secured First Place in Python Programming at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- T. Vetrivel Mani, S. Veerakumar, and K. Prabhakaran (III Year) secured First Place in Entrepreneurship at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Satheeshkumar G, Ajith Kumar V, and Sudhakar P (III Year) secured First Place in Engineering Drawing at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Jeyarajasekar K, Ayyanar P, and Balasubrmanian P (III Year) secured First Place in Bridge Building at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Selvakumar M, Satheeskumar P, and Dineshraj (III Year) secured First Place in Auto Quiz at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- T. Vetrivel Mani, K. Kishore Pandiarajan, and S. Veerakumar (III Year) secured First Place in Technical Paper Presentation at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Ajith Kumar V, Prabhakaran M, and Muneeswaran R (III Year) secured First Place in Business Plan Competition at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.
- Anandharaman M, Abimanyu T, and Sanjay N (III Year) secured First Place in Computer-Aided Manufacturing at the SAE India Collegiate Club of AAACET Tier-1 event, held from 04.02.2023 to 10.02.2023.



Participation in Symposium /Workshop / Quiz / NPTEL

- J Bhuvaneshwarar of II-year Department of Mechanical Engineering has Participated in "Constituional Day Quiz-2022" Organized by Noorul Islam Center for Higher Education on 26-11-2022
- M.Selvakumar, M.Sridharan, M.Prabhakaran of III-year Department of Mechanical Engineering has Participated in the short term training program on "Research insights and innovations in natural fiber composites" Organized by Mepco schlenk engineering college, during 27-11-2022 to 28-11-2022.
- J.Naveenkumar, K.Amarnath, M.Mariselvam, T.Vetrivelmani of II-year Department of Mechanical Engineering has Participated in the seminar on "Entrepreneurship opportunity in waste recycling" jointly organized by IIC & EDC in AAACET, on 17.05.2022
- R.Muneeswaran, G.Satheeshkumar, P.Hariharan, N.Anantharaman of II-year Department of Mechanical Engineering has Participated in the seminar on "Entrepreneurship opportunity in waste recycling" jointly organized by IIC & EDC in AAACET, on 17.05.2022
- K.Prabhakaran, M.Selvakumar, M.Selvakumar, V.Ajithkumar of II-year Department of Mechanical Engineering has Participated in the seminar on "Entrepreneurship opportunity in waste recycling" jointly organized by IIC & EDC in AAACET, on 17.05.2022
- S.Sarathikannan, M.Sridharan, K.Hariharan, A.Mohammed usman of II-year Department of Mechanical Engineering has Participated in the seminar on "Entrepreneurship opportunity in waste recycling" jointly organized by IIC & EDC in AAACET, on 17.05.2022
- M.Ganesh, E.Kamalutheen, M.Gobalakrishnan of II-year Department of Mechanical Engineering has Participated in the seminar on "Entrepreneurship opportunity in waste recycling" jointly organized by IIC & EDC in AAACET, on 17.05.2022
- L.SaravanaAkash, M.Muneeswaran, A.Subhas, M.Rajeshwaran of II-year Department of Mechanical Engineering has Participated in the seminar on "Entrepreneurship opportunity in waste recycling" jointly organized by IIC & EDC in AAACET, on 17.05.2022
- R.Rajadurai, M.Vishnu, C.Arunpandi, M.Muthaiya, V.Naveenkumar of II-year Department of Mechanical Engineering has Participated in the event of WELD WAR on "National level symposium organized by Mechanical engineering association and SAE at the National engineering college , on 14-10-2022
- S.Hariharan, P.Anbuselvan, M.Manojkumar, K.Madhubala, P.Premkumar of II-year Department of Mechanical Engineering has Participated in the event of WELD WAR on "National level symposium organized by Mechanical engineering association and SAE at the National engineering college , on 14-10-2022
- M.Rajkumar, A.Isaac Renihard, R.Rajadurai of II-year Department of Mechanical Engineering has Participated in the event of 3D PRINTING WORKSHOP on "National level symposium organized by Mechanical engineering association and SAE at the National engineering college , on 14-10-2022
- R.Rajadurai, M.Rajkumar of II-year Department of Mechanical Engineering has Participated in the event of WATER ROCKETRY on "National level symposium organized by Mechanical engineering association and SAE at the National engineering college , on 14-10-2022

Participation in Symposium /Workshop / Quiz / NPTEL

- M.Vishnu, C.Arunpandi, V.Naveenkumar, T.Prakash, K.Madhubala of II-year Department of Mechanical Engineering has Participated in the event of FANTOM QUIZ on “National level symposium organized by Mechanical engineering association and SAE at the National engineering college , on 14-10-2022
- R.Vikram, P.Anbuselvam, M.Manojkumar, P.Premkumar, K.Muneesbabu, A.Isaac reinhard, S.Hariharan of II-year Department of Mechanical Engineering has Participated in the event of on “National level symposium organized by Mechanical engineering association and SAE at the National engineering college , on 14-10-2022
- M Selvakumar, Naveenkumar, K.Amarnath & M.Manojkumar III Year Mechanical engineering has Participated in three days’ workshop on “Finite Element Simulation using ANSYS” at Mepco Schlenk Engineering College from 21-02-2023 to 23-02-2023
- Anbuselvan, K Hariharan, M.Manoj Kumar, V Naveen kumar, S Hariharan, S Seenivasan, V Sethumathavan, M Vairavan and J Bhuvaneshwarar II-year Department of Mechanical Engineering has Participated in “3D Printing for Drone applications” event during National level Technical Symposium “ENXENEIRO-23” organized by Kamaraj College of Engineering and Technology held on 27/02/2023
- M.Avinith , AS Thilip Kumar, S Sathis Kanna IV-year Department of Mechanical Engineering has Participated in 2 days workshop on “Laser applicaions in various technologies” at Mepco Schlenk Engineering College from 24-01-2023 to 25-01-2023.
- Veeramanikandan M, Bhuvaneshwarar J, Gurusamy V, Manmathan R, Nishanth P,
- Rajadurai R, Raj Kumar M and Bhuvanesh A of II Year Mechanical engineering has participated in INFRAZEST’23 ordanized by Department of Civil Engineering, Kamaraj College of Engineering and Technology, Madurai on 02/03/2023
- IV year mechanical engineering students are participated in the International Conference on Recent innovations in Computer, Communication and Manufacturing (ICRICCM-23) organized by AAA College of Engineering and Technology, Sivakasi on 12.04.2023 and 13.04.2023.
- Muneeswaran of III Mechanical participated in the Online Webinar on “Student awareness program” on SWAYAM –NPTEL online certification courses on 23.04.2023 organized by SRM Madurai College of Engineering and Technology.
- I.Mari Selvam, P.Vikram of IV year mechanical engineering students has Participated in the event “SAE TREK- PONMALAI HILL THIRPARAPPU WATER FALLS”Organized by SAEINDIA Southern Section at St. Xavier's Catholic College of Engineering, Nagercoil, Tamil Nadu on 29-04-2023 to 30-04-2023
- T.Vetrivelmani, K.Kishore Pandiarajan of III year mechanical engineering students has Participatedin the event “SAE TREK- PONMALAI HILL THIRPARAPPU WATER FALLS” Organized by SAEINDIA Southern Section at St. Xavier's Catholic College of Engineering, Nagercoil, Tamil Nadu on 29-04-2023 to 30-04-2023



INDUSTRIAL VISITS

SUN Pressing Pvt Ltd.

The Department of Mechanical Engineering, organized one-day Industrial visit to Sun Pressing Pvt Ltd, Madurai on 18.08.2022 for IV year Mechanical Engineering students. During the industrial visit students are Engaged in manufacturing various types of sheet metal products like Metallic Shells, Flanges, Mounting Brackets, Front engine support bracket, Cross members anti vibration parts & other Metal components for Automotive and non-automotive Industry.





One-day Industrial visit to Sun Pressing Pvt Ltd, Madurai

INDUSTRIAL VISITS

Ramco Cements Limited

The Department of Mechanical Engineering, organized one-day Industrial visit to The Ramco Cements Limited, RR Nagar on 09.09.2022 for III-year Mechanical Engineering students. During the industrial visit students are learned how the machines are controlled through control system, mechanical process involved in the manufacturing of cements and 5S principles followed in the factory.



Raw mill Ball mill unit at Ramco cements





INDUSTRIAL VISITS

Tuticorin Thermal Power Station

The Department of Mechanical Engineering, organized one-day Industrial visit to Tuticorin Thermal Power Station, Thoothukudi on 21.09.2022 for III-year Mechanical Engineering students. During the industrial visit students are learned how the machines are controlled through control system, mechanical process involved in the generation of electricity and the safety systems followed in the power plant.



One-day Industrial visit to Tuticorin Thermal Power Station, Thoothukudi



INDUSTRIAL VISITS

VVV & Sons Edible Oils Ltd

The Department of Mechanical Engineering, organized one-day Industrial visit to VVV & Sons Edible Oils Ltd, Virudhunagar on 04.11.2022 for II-year Mechanical Engineering students. During the industrial visit students are learned Filtering process, Heating Process, Separation work, Storage Yard (Raw Material Storage & Finished Good Storage) & Fully automatic Packing process.





VVV & Sons Edible Oils Ltd

INDUSTRIAL VISITS

Anaamalais Toyota

The Department of Mechanical Engineering has organized a one-day Industrial visit to Anaamalais Toyota, Sivakasi, on 25.04.2023 for B.E. IV year Mechanical Engineering students. The HR of Anaamalais Toyota explained the processes involved in general service, waterwash, spare parts, tools room, painting section, engine room etc. The workers were doing their work with more concentration. Everyone inside the industry was wearing masks, safety shoes and gloves.

Anaamalais Toyota







INPLANT TRAINING ATTENDED BY STUDENT



- S.Hariharan M Manoj Kumar of II-year Department of Mechanical Engineering has undergone In-Plant Training at SJ Industries Chennai from 02/02/2023 to 11/02/2023
- P.Nishanth and Munees Babu of II-year Department of Mechanical Engineering has undergone In-Plant Training in MS Industries Chennai from 02/02/2023 to 11/02/2023
- Selvakumar M, Sridharan M, Ajith Kumar V, Ramkumar C, Suresh G, Kishore Pandiarajan K, Muneeswaran R & Prabhakaran M ofIII-year Mechanical Engineering has undergone Inplant training from 22/12/2022 to 05/01/2023 at MJ Motors, Sivakasi
- Azhagu K, Dineshraj S, Gopalakrishnan M, Hariharan P, Sarathikannan S & Saravanakumar S of III-year Mechanical Engineering has undergone Inplant training from 4/01/2023 to 11/01/2023 at Siva Motors, Virudhunagar
- Anandharaman M, Kaleeswaran S & Satheeskumar P of III-year Mechanical Engineering has undergone Inplant training from 10/01/2023 to 14/01/2023 at RK Motors, Sivakasi
- Manojkumar M, Amarnath K & Naveen kumar J ofIII-year Mechanical Engineering has undergone Inplant training from 31/01/2023 to 04/02/2023 at Mahalakshmi Motors & Rewinding Works, Srivilliputhur.
- Sujitha K of II-year Mechanical Engineering has undergone Inplant training from 01/02/2023 to 5/02/2023 at Indle Split Technologies. Chennai
- Anbuselvan P & Naveenkumar V of II-year Mechanical Engineering has undergone Inplant training from 02/02/2023 to 11/02/2023 at A.E Industries, Chennai
- Hariharan S & Manojkumar M of II-year Mechanical Engineering has undergone Inplant training from 02/02/2023 to 11/02/2023 at S.J Engineering , Chennai
- Muneeshbabu K & Nishanth P of II-year Mechanical Engineering has undergone Inplant training from 02/02/2023 to 11/02/2023 at M.S Engineering , Chennai





SPORTS ACTIVITIES



- K Hariharan of II year Mechanical participated in State level Silambam Championship-2023 anmd secured Ist Prize in Double Stick Rotation held at Fatima College, Indoor Stadium Madurai on 12-03-2023 under 19 age category.
- K Hariharan of II year Mechanical participated in State level Silambam Championship-2023 anmd secured Ist Prize in Single Stick Rotation held at Fatima College, Indoor Stadium Madurai on 12-03-2023 under 19 age category.











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