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

(Approved research center by Anna Univesity)

CLUB ACTIVITIES

2024-2025

SAEINDIA™
SOUTHERN SECTION

STUDENTS IN ISHRAE

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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.

Institutions vision mission

Department vision

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

Department mission

- 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 clear instructions.
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 immense pleasure to present the souvenir highlighting the achievements and activities of the Department of Mechanical Engineering. The department has actively provided students with valuable platforms through association activities, technical symposiums, faculty development programmes and project competitions. Events such as MECDEZ and TECHFORGE 2K25 have encouraged students to showcase their technical knowledge, creativity, innovation and teamwork. The department's efforts to connect academic learning with industry exposure and professional development are highly appreciable. I congratulate the faculty members, coordinators and students for their dedicated efforts and wish the department continued success in its academic and professional endeavours.

Dr. M. Sekar
Principal

Message from the HoD...



It is my pleasure to share the activities and achievements of the Department of Mechanical Engineering through this souvenir. Our department continuously strives to provide students with opportunities to enhance their technical knowledge, creativity, practical skills and professional competencies. Through association activities, MECDEZ, TECHFORGE 2K25, faculty development programmes and industrial visits, students have gained valuable exposure to emerging technologies and real-world engineering practices. I sincerely appreciate the dedicated efforts of our faculty members and students in organizing and participating in these activities. I wish everyone continued success, innovation and excellence in the years ahead.

Dr. R. Selvabharathi

Professor & Head

Department of Mechanical Engineering

National Level Technical Symposium

A National Level Technical Symposium "MECDEZ" On October 25, 2024, at AAA College of Engineering and Technology in Sivakasi, was held on behalf of the Department of Mechanical Engineering. This National Level Technical Symposium had 101 participants from various engineering colleges and polytechnic colleges. As our college's alumnus and an engineer employed at Tata Electronics in Hosur, Mr. R.V. Gunaseelan is the event's chief guest. The event began with a prayer song at 10:00 AM, followed by the ceremonial lighting of the kuthuvilakku, symbolizing the start of an inspiring day.

The welcoming address was delivered by second-year student R.Santha Kumar at the inaugural ceremony. The inauguration address was given by Dr. R. Selvabharathi., Head of the Department / Mechanical Engineering.The Head of the Department Dr. R. Selvabharathi, and Department Association Coordinator Professor Dr. M. Kaliraj presented the memento as a token of appreciation to the chief guest.



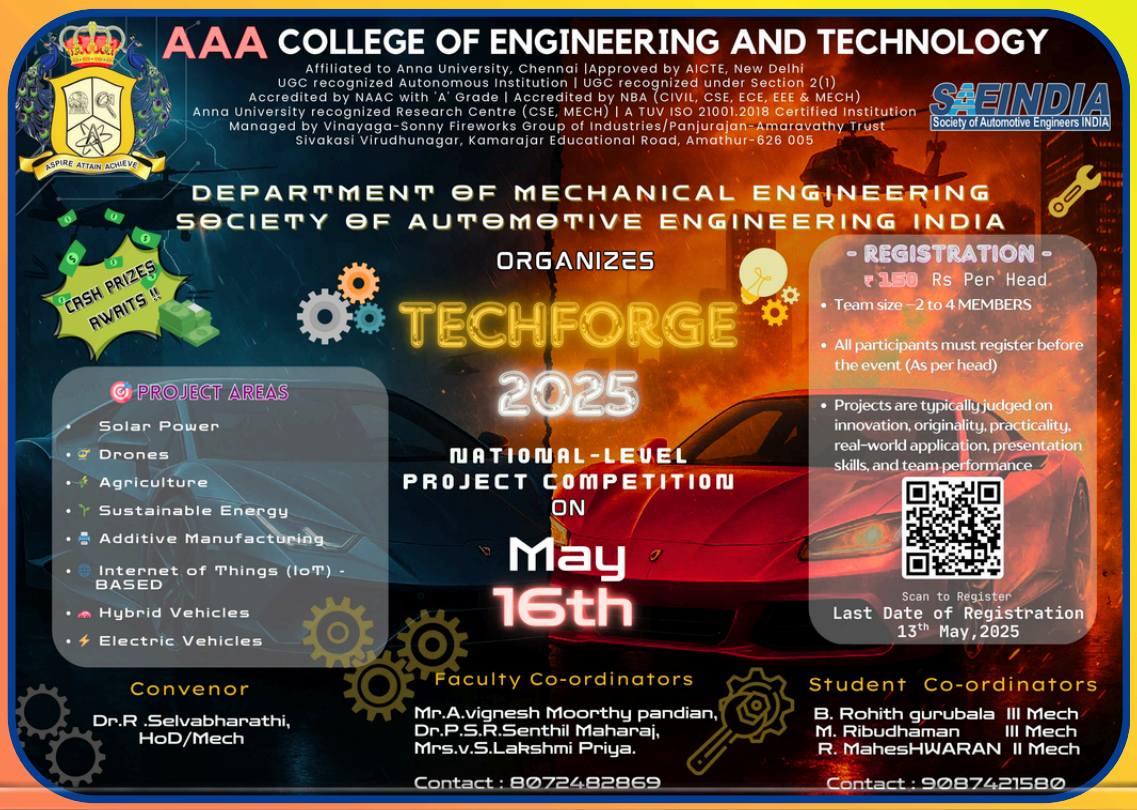
Innovative Synergies in Thermal Systems, Refrigeration Technologies, and Advanced Materials for Enhanced Efficiency

Department of Mechanical Engineering Had Inaugurated Association of Mechanical engineers & organized a Three Day's Faculty Development Program on "Innovative Synergies in Thermal Systems, Refrigeration Technologies, and Advanced Materials for Enhanced Efficiency" from 26.09.2024 to 28.09.2024 hybrid mode by the resource person from various Engineering colleges & Industrial side people. From this workshop all the students got the clear idea about the thermal & refrigeration systems as well as usage of material system in thermal field for Enhanced Efficiency. Totally 80 students and faculty participated.



TECHFORGE 2025

On 16 May 2025, the Department of Mechanical Engineering, AAA College of Engineering and Technology, in association with the SAE India College Club, organized TECHFORGE 2K25, a National Level Technical Project Competition aimed at enhancing students' technical, innovative, and problem-solving skills. The event attracted 60 participants from reputed institutions such as K.L.N. College of Engineering and Technology, Hindustan College of Engineering and Technology, Saveetha Engineering College (Chennai), and Sankara Polytechnic College (Coimbatore). Students showcased innovative projects in areas including advanced manufacturing, automation, renewable energy, and product design. The program was inaugurated by Dr. R. Selvabharathi, Professor and Head of the Department of Mechanical Engineering. Mr. B. Gopalakrishnan, M.Tech., Business Head, MS Fire & Safety Institution, Rajapalayam, served as the Chief Guest and highlighted the importance of research, innovation, and intellectual property rights. thereby significantly enhancing their employability and professional competence.



TECHFORGE 2025







Students present idea @IIT-Bhubaneswar

STUDENTS' PARTICIPATED IN IIT

A team comprising Vighnesh Moorthy Pandian A, Assistant Professor, and students Manokumar M, Vickram R, Sujitha K, Hariharan S, and Devadharshini S from the Mechanical Engineering Department participated in the Smart India Hackathon (SIH) 2024, held at IIT Bhubaneswar on December 11-12, 2024. The event witnessed the participation of more than 100 teams from various institutions across the country, competing to develop innovative solutions for real-world challenges. The team showcased their technical expertise, problem-solving skills, and teamwork while tackling industry-relevant problems. Their participation in this prestigious event provided them with valuable exposure, hands-on experience, and an opportunity to interact with experts, further enhancing their knowledge and professional growth in the field of engineering and technology.





Industrial visit@kerala



The Department of Mechanical Engineering organized an industrial visit for II-year students to Anna Aluminium Company, located at Kizhakkambalam (P.O), Aluva, Ernakulam, Kerala, on 20th March 2025. This visit was aimed at providing practical exposure to modern manufacturing processes, specifically die casting technology, and understanding the integrated quality systems adopted in aluminum product manufacturing.



Industrial visit@keral



Masco Tea Factory, established in 2000 by the Malanad Service Co-operative Bank Ltd., is a tea production facility in Vagamon, Kerala. The factory produces organic teas, including Hotel Blend Strong, Home Taste, and Premium varieties. The tea manufacturing process involves several key steps, including plucking, withering, rolling, oxidation, drying, and sorting. Tender tea leaves are handpicked, withered, rolled, oxidized, dried, and sorted based on size and quality before packaging. Our students witness these processes through their supervisor which provide insights into traditional tea production methods.



Industrial visit



As part of our curriculum to bridge the gap between theoretical knowledge and industrial practices, an industrial visit was organized on 4th April 2025 to two well-established industries in Virudhunagar —Idhayam Oil Mill and Sega Plastic Company. The visit was highly insightful and provided students with a better understanding of industrial workflows, modern machinery, and production techniques. This visit significantly enhanced our understanding of industrial manufacturing processes, operational safety, and the role of automation and quality control. We sincerely thank Idhayam Oil Mill and Sega Plastic Company for their warm welcome, detailed explanation, and continuous efforts in supporting student learning.



Editorial Board



Faculty members	Dr.R.SELVABHARATHI Professor/HoD/Mech Mr.M.NAGENDRAN AP/Mech
Students members	Mr.Vetrivel VII Sem/ IV Year Mr. A.Antony Raja V Sem /III Year Mr. K.Pandi III Sem / II Year

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