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 2025-2026

Volume 04

SAE INDIA™
SOUTHERN SECTION

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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
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

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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 Newsletter of the Department of Mechanical Engineering, AAA College of Engineering and Technology, highlighting its academic, technical, and co-curricular achievements. The department provides students with opportunities to develop their technical knowledge, practical skills, creativity, and professional competencies through hands-on training, value-added courses, workshops, industrial visits, and student-centred activities. Programmes such as PC ESSENTIAL, IoT training, Mechatronics and IoT, and PISTONX 2K25 have provided valuable exposure to emerging technologies and industry practices. I appreciate the dedicated efforts of the faculty members and students and wish the Department of Mechanical Engineering continued success and excellence in all its future endeavours.

Dr. M. Sekar

Principal

MESSAGE FROM THE HOD...



It is my pleasure to present the Newsletter of the Department of Mechanical Engineering, highlighting our efforts towards academic excellence, innovation, skill development, and industry-oriented learning. Through hands-on training, technical workshops, value-added courses, industrial visits, and PISTONX 2K25, our students have gained practical knowledge and valuable industry exposure. I appreciate the dedicated efforts of our faculty members and students and encourage them to continue learning, developing their skills, and striving for excellence.

Dr. S. S. Saravanakumar
Professor & Head
Department of Mechanical Engineering

Hands-on Training Program on Car AC & Wheel Balancer

The Department of Mechanical Engineering, AAA College of Engineering and Technology, in association with the SAE INDIA Collegiate Club, organized a three-day Hands-on Training Program on Car AC and Wheel Balancer from 27.02.2026 to 02.03.2026 at Thomas Alva Edison Hall. The training provided students with practical knowledge of automobile air-conditioning systems and wheel balancing techniques. The sessions covered the basic components and working principles of car AC systems, wheel balancing, and common types of wheel imbalance. Mr. Karthick from MR. Black Automotive, VNR, shared valuable industry knowledge on automobile AC servicing and maintenance. The program provided students with useful hands-on experience and industry exposure and was coordinated by Mr. A. Vignesh Moorthy Pandian and Mr. M. Nagendran, Assistant Professors, Department of Mechanical Engineering.







INDUSTRIAL VISITS

ARAS KIA Motors

The Department of Mechanical Engineering organized an Industrial Visit to ARAS KIA Motors, Virudhunagar, to provide students with practical exposure to automobile servicing and maintenance. The visit was conducted under the guidance of Mr. Parameswaran, Manager, and coordinated by Mr. M. Nagendran and Mr. A. Vignesh Moorthy Pandian, Assistant Professors of Mechanical Engineering. Around 50 students participated in the visit and observed various automobile servicing activities, including the use of hydraulic lifts, wheel alignment machines, and engine diagnostic tools. They also learned about vehicle maintenance, quality control, safety practices, customer handling, and after-sales service. The visit helped students understand real-time automobile industry practices and career opportunities while connecting their theoretical knowledge with practical applications.







INDUSTRIAL VISITS

ISRO Power Propulsion (ISRO)

The Department of Mechanical Engineering, AAA College of Engineering and Technology, organized an Industrial Visit to the ISRO Propulsion Complex on 09th April 2026 for II and III Year Mechanical Engineering students. A total of 90 students and 6 faculty members participated in the visit. The visit provided students with practical exposure to rocket propulsion systems, testing facilities, and aerospace engineering applications. The students attended an orientation on liquid, cryogenic, and solid propulsion technologies and learned about their working principles and applications in launch vehicles. They also observed various testing facilities and gained insights into engine testing, thrust measurement, thermal stresses, instrumentation, control systems, and safety practices. The visit helped students connect their theoretical knowledge with real-world aerospace engineering practices and enhanced their understanding of advanced propulsion technologies.





PC ESSENTIAL

The Department of Mechanical Engineering, AAACET successfully conducted a five-day value added course titled “PC ESSENTIAL” from 21st July 2025 to 25th July 2025. This event was held in association with I Tech Academy, Tirunelveli and was attended by 42 students from the 2nd year of the Mechanical Engineering program.







Hands on Training in IoT

A Hands-on Training in IoT was organized by the Department of Mechanical Engineering, AAA College of Engineering and Technology, Amathur, Sivakasi, from 01.09.2025 to 03.09.2025, under the guidance of Dr. R. Selvabharathi, Head of the Department, and Course Coordinators Mr. A. Vignesh Moorthy Pandian and Mr. M. Nagendran. The session was conducted by Mr. M. S. Kalyana Sundaram, M.E., (Ph.D.), Assistant Professor, Department of EEE, and Coordinator – Centre of IIoT, AAACET, who served as the resource person. The training aimed to bridge theoretical knowledge with practical industrial applications in the field of the Internet of Things (IoT). During the three-day program, students gained valuable insights into IoT architecture, sensor integration, Arduino and Node MCU platforms, and IoT cloud services such as ThingSpeak and Blynk. Participants also developed 16 IoT-based mini projects, demonstrating their innovation and technical skills. A total of 56 students and 4 faculty members participated in the event, which concluded with a valedictory session appreciating the participants' enthusiasm and the resource person's expert guidance.





Fusion Software

The Department of Mechanical Engineering conducted a Three Days Faculty Development Programme (FDP) on “Fusion Software” from 27th to 29th October 2025 at the CAD/CAM Laboratory, with sessions running from 9:00 AM to 5:00 PM; Mr. Harish M, Application Engineer from USAM CADSOFT, Coimbatore, served as the trainer, and the programme was organized by Mr. P. C. Rajarajan, Assistant Professor of Mechanical Engineering. The FDP, held in association with Anna University, Autodesk, and USAM CADSOFT, aimed to provide participating faculty members with enhanced knowledge and hands-on experience in Autodesk Fusion 360, focusing on 3D modeling, simulation, and manufacturing integration, and successfully invited active participation from all interested faculty members.





INDUSTRIAL VISITS

Kaka Indian Foundry &

Devendra Plastic Company,

Mechanical Engineering Department of II Year visited Kaka Indian Foundry, Sivakasi and Devendra Plastic Company, Sivakasi as part of their one-day industrial visit. A total of 45 students and 3 faculty members participated in this event. The visit provided an opportunity to explore real-world applications of casting operations, mould preparation, finishing processes, plastic moulding techniques, material handling, and quality control. The sessions at the two industries covered various aspects of industrial workflow, safety measures, and productivity improvement methods. Experts demonstrated metal casting procedures, moulding techniques, quality inspection processes, and safety protocols, offering valuable insights into manufacturing best practices. The exposure also motivated students to consider entrepreneurship opportunities in the manufacturing sector.





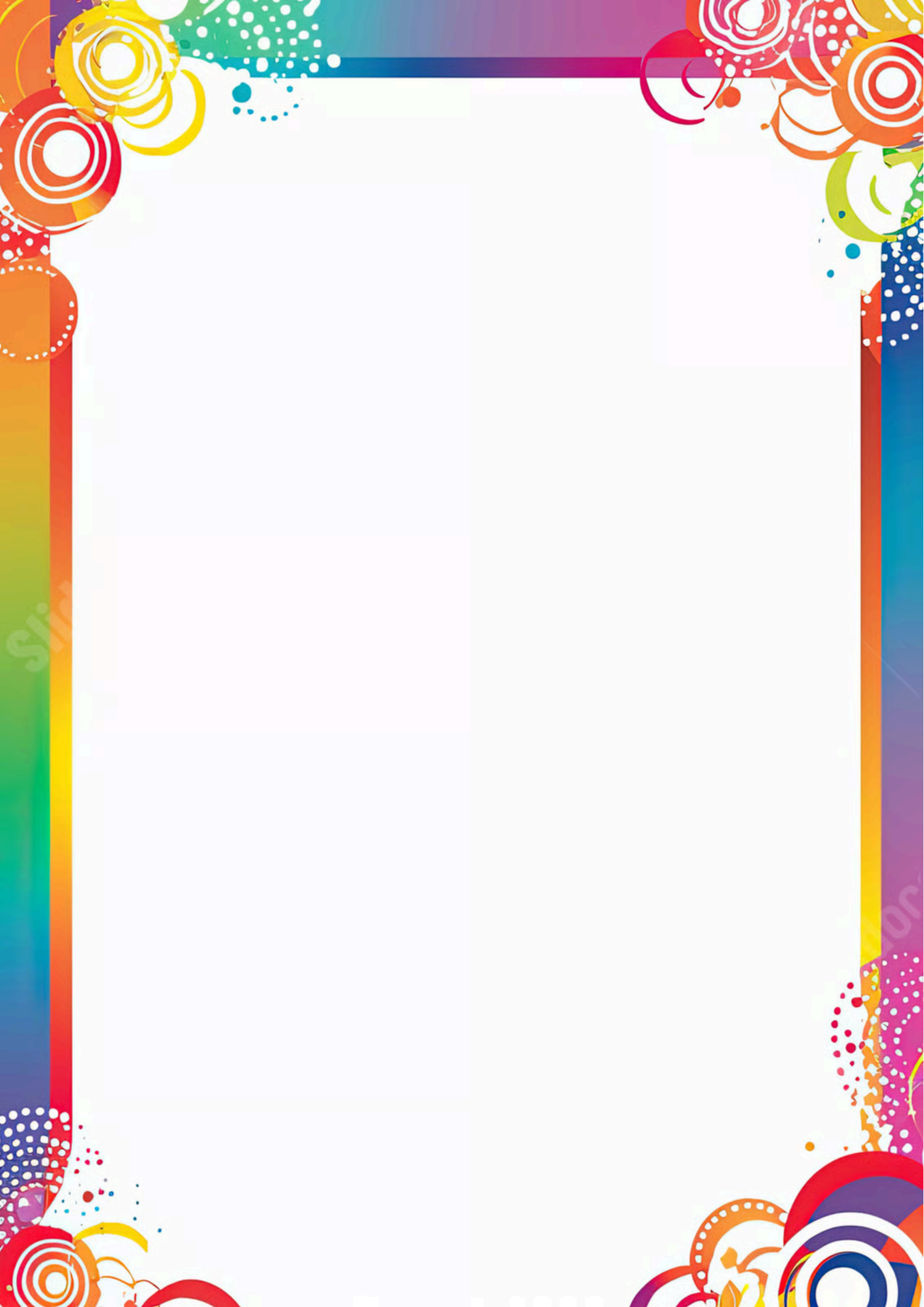
INDUSTRIAL VISITS

Kudankulam Nuclear Power Project (KKNPP)

The Department of Mechanical Engineering, AAA College of Engineering and Technology, Amathur, organized an Industrial Visit to the Kudankulam Nuclear Power Project (KKNPP), Tirunelveli, on 23rd October 2025 for the III Year Mechanical Engineering students (Batch 2023–2027) under the guidance of Dr. R. Selvabharathi, Head of the Department, and accompanied by Mr. A. Vignesh Moorthy Pandian, Mr. M. Balamurugan, and Mr. M. Nagendran, Assistant Professors of Mechanical Engineering. A total of 56 students participated in the visit, gaining practical exposure to nuclear power generation, reactor operations, and safety systems. The visit provided valuable insights into advanced power plant technologies and real-time industrial practices, bridging the gap between theoretical learning and industry application.







Editorial memebrs

Role	Name	Designation
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Associate Editors	Mr.M.Nagendran	AP/Mechanical
	Mr.A.Vignesh Moorthy Pandian	AP/Mechanical
Student Members	G. Kamalesh	IV - Mech
	S. Saravanakumar	III-Mech
	C. Thirupathi	II- Mech

WITH THE BLESSINGS OF
Shri. P. Panjurajan
Founder, AAA Group of Institutions

IN THE PRESENCE OF

Dr. P. Karvannan
Chairman & Secretary

Dr. P. Ganesan
Correspondent

Dr. M. Sekar
Principal

Dr. K. Vignesh Kumar
Joint Secretary

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