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 CENTRE BY ANNA UNIVERSITY)

2024-2025

Volume 04

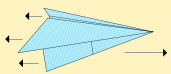


Souvenir for Symposium

PISTONX 2K25

Ignite Minds. Accelerate Innovation.







NEWSLETTER INDEX

Ignite Minds. Accelerate Innovation.

- **Vision & Mission of the Institution and Department.....03**
- **Program Outcome, PSO, PEO.....05**
- **Sustainable Development Goal.....07**
- **Message from Principal.....08**
- **Message from Head of the Department.....09**
- **About PISTONX 2K25.....10**
- **Symposium Objectives.....11**
- **Organizing Committee.....12**
- **Programme Schedule.....13**
- **Event Rules & Guidelines.....14**
- **Participants' Details.....16**
- **Prize Distribution.....17**
- **Symposium Highlights.....18**
- **PISTONX 2K25 – Photo Gallery.....19**
- **Editorial Board.....22**



Institutions vision mission

Ignite Minds. Accelerate Innovation.

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

Ignite Minds. Accelerate Innovation.

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.

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.

Program Outcome

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

Ignite Minds. Accelerate Innovation.

SUSTAINABLE DEVELOPMENT GOAL

SDG No.	SDG Goal
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

Ignite Minds. Accelerate Innovation.

MESSAGE FROM THE PRINCIPAL...



Ignite Minds. Accelerate Innovation.

It gives me immense pleasure to present the souvenir of PISTONX 2K25 – National Level Technical Symposium, organized by the Department of Mechanical Engineering. The symposium provides an excellent platform for students to showcase their technical knowledge, creativity, innovation and competitive spirit through events such as Paper Presentation, Technical Quiz, CADOFIA and Water Rocket. The non-technical events including IPL Auction, Connection, Squad Game and Bike Expo add enthusiasm and encourage teamwork. I appreciate the dedicated efforts of the faculty and student coordinators and wish all participants a memorable and enriching experience.

Dr. M. Sekar

Principal

Principal's MESSAGE

MESSAGE FROM THE HOD...



Ignite Minds. Accelerate Innovation.

It is my pleasure to welcome all participants to PISTONX 2K25 – National Level Technical Symposium. The symposium brings together students to explore their talents through a diverse range of technical and non-technical events. Paper Presentation, Technical Quiz, CADOFIA and Water Rocket provide opportunities for technical learning and innovation, while IPL Auction, Connection, Squad Game and Bike Expo promote creativity, interaction and team spirit. I appreciate the sincere efforts of the faculty members and students in organizing this event and wish everyone a successful and enjoyable symposium.

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

About the Pistonx 2k25

PISTONX 2K25 is a National Level Technical Symposium organized by the Department of Mechanical Engineering, AAA College of Engineering and Technology on 24 October 2025. The symposium is designed to provide students with a vibrant platform to demonstrate their technical knowledge, creativity, innovation and competitive spirit.

The symposium features a diverse range of technical events, including Paper Presentation, Technical Quiz, CADOFIA and Water Rocket. These events encourage participants to apply their engineering knowledge, develop problem-solving abilities and showcase their innovative ideas in a competitive environment.

The symposium also includes exciting non-technical events such as IPL Auction, Connection, Squad Game and Bike Expo, providing opportunities for students to demonstrate their teamwork, creativity and entertainment skills. With a blend of technical excellence, innovation, competition and fun, PISTONX 2K25 aims to create an engaging and memorable experience for all participants.

Objectives of PISTONX 2K25

Ignite Minds. Accelerate Innovation.

- To provide a platform for students to showcase their technical knowledge, creativity and innovative ideas.
- To enhance problem-solving and engineering skills through technical competitions and challenges.
- To encourage innovation and practical thinking through events such as Paper Presentation, CADOFIA and Water Rocket.
- To develop teamwork, leadership and communication skills through technical and non-technical events.
- To promote interaction among students from different colleges and encourage knowledge sharing.
- To create awareness of emerging technologies and automotive concepts through technical activities and the Bike Expo.
- To provide a balanced learning experience by combining technical excellence with creativity, competition and entertainment.



Organizing Committee.....

Ignite Minds. Accelerate Innovation.

Role	Name of the faculty	Desingnation
Convener	**Dr.R.Selvabharathi**	**Professor/ HOD**
Faculty Incharge	Mr. M. Karthikeyan, Mr. S. Balamurugan, Mrs. V. S. Lakshmi Priya,	AP/Mech AP/Mech AP/Mech
Students	S. Ezhilarasan L. Sudhakar	IV Mech III Mech



Programme Schedule...

Ignite Minds. Accelerate Innovation.

Program	Time	Venue
Paper Presentation	**11.00 AM-02.30 PM**	**Seminar Hall**
CADOFIA	**11.00 AM-02.30 PM**	CAD Lab
Technical Quiz	**11.00 AM-02.30 PM**	2211
Water Rocket	**11.00 AM-02.30 PM**	Cambridge Bolck
IPL Auction	**11.00 AM-02.30 PM**	2212
Connection	10.00 AM - 4.00 PM	2223
Squad Game	01.00 PM -2.30 P,M	2221
Bike Expo	10.00 AM-3.30 P,M	Ground

PISTONX 2K25

Rules & Regulations

Ignite Minds. Accelerate Innovation.

Program	Event Rules & Guidelines
Paper Presentation	• The topic must be related to Mechanical Engineering or allied fields. • Participants must complete the presentation within the allotted time. • The judges' decision will be final.
Technical Quiz	• The quiz will be conducted in multiple rounds. • Participants must answer within the specified time. • The team with the highest score will be the winner.
CADOFIA	• Participants must complete the given CAD task within the allotted time. • Evaluation will be based on accuracy, creativity and completion. • Use of unfair means will lead to disqualification.
Water Rocket	• Participants must follow all safety instructions. • The rocket must be prepared using the materials permitted by the organizers. • The winner will be decided based on the event criteria.

Rules & Regulations

Ignite Minds. Accelerate Innovation.

Program	Event Rules & Guidelines
IPL Auction	• Each team must follow the allotted budget. • Players must be selected according to the auction rules. • The team formed within the rules will be evaluated for the final result.
Squad Game	• Participants must follow the instructions given by the coordinators. • Each challenge must be completed within the specified time. • The judges' decision will be final.
Connection	• Participants must follow the given connection rules. • Complete the maximum number of connections within the time limit. • Highest score wins.

Participartion Details

Ignite Minds. Accelerate Innovation.

PISTONX 2K25 – National Level Technical Symposium witnessed enthusiastic participation from 120 students from various engineering and technical institutions across Tamil Nadu. Students actively participated in the diverse range of technical and non-technical events, including Paper Presentation, Technical Quiz, CADOFIA, Water Rocket, IPL Auction, Connection, Squad Game and Bike Expo.

The participants demonstrated their technical knowledge, creativity, problem-solving abilities, teamwork and competitive spirit throughout the symposium. The active involvement of students from different institutions made the event highly interactive and vibrant, providing an excellent platform for knowledge sharing, innovation and healthy competition.

Overall, the participation of 120 students from across Tamil Nadu contributed significantly to the success and memorable experience of PISTONX 2K25.

Prize Distribution

Ignite Minds. Accelerate Innovation.

The Prize Distribution Ceremony of Pistonx 2k25 was conducted to honour the outstanding performances of the participants in various technical and non-technical events. Dr. R. Selvabharathi, Professor, Department of Mechanical Engineering, distributed the prizes and certificates to the winners and runners-up. He congratulated the students for their enthusiastic participation, creativity, technical skills, and competitive spirit, and appreciated their efforts in making Pistonx 2k25 a successful and memorable symposium.



Symposium Highlights

- 120 students from various institutions across Tamil Nadu actively participated in PISTONX 2K25.
- A vibrant blend of technical and non-technical events provided opportunities to showcase knowledge, creativity and talent.
- Technical events such as Paper Presentation, Technical Quiz, CADOFIA and Water Rocket encouraged innovation and engineering skills.
- Non-technical events including IPL Auction, Connection, Squad Game and Bike Expo added excitement, teamwork and competitive spirit.
- Students demonstrated excellent teamwork, leadership, communication and problem-solving skills throughout the symposium.
- The active participation of students and dedicated efforts of the organizing team contributed to the successful and memorable conduct of PISTONX 2K25.

Ignite Minds. Accelerate Innovation.

PISTONX 2K25- PHOTO GALLERY

Innaguration



Students and faculty



Hourning the chief guest



Hourning the chief guest



Ignite Minds, Accelerate Innovation.

PISTONX 2K25- PHOTO GALLERY

Ignite Minds. Accelerate Innovation.

Chief Guest Address



Technical Quiz



Faculty members



IPL Auction



Paper Presentation



PISTONX 2K25- PHOTO GALLERY

Ignite Minds. Accelerate Innovation.

Price Distribution









Faculty Members



Editorial Board

Role	Name	Desingnation
Chief Editor	Dr.R.Selvabharathi	Professor/ HOD
Editor	Mr.M.Nagendran	AP/Mech
Students Members	Mr.S.Sathishkumar Mr. S. Muneswaran Mr. A.Thirupathi	VII Sem/ IV Year V Sem /III Year III Sem / II Year

IN THE PRESENCE OF

Shri. P. Panjurajan
Founder, AAA Group of Institutions

Dr. P. Karvannan
Chairman & Secretary

Dr. P. Ganesan
Correspondent

Dr. M. Sekar
Principal

Dr. K. Vignesh Kumar
Joint Secretary

© AAACET. All Rights Reserved.