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MECH MOMENTUM
2024–2025 | ANNUAL MAGAZINE
M.I.E.T. ENGINEERING COLLEGE·
Department of Mechanical Engineering



Academic Year 2024-2025
DEPARTMENT OF MECHANICAL ENGINEERING

MECH MOMENTUM

About Us

Department of Mechanical Engineering was started in the year 1998 offering an Undergraduate program (B.E) with the current intake of 60. The department was upgraded as a Post Graduate department with the commencement of M.E. in Manufacturing Engineering in the year 2007 with a sanctioned intake of 18.

Based on the academic and infrastructure quality of the department, Anna University has recognized the department as a research department in the year 2015. The department was accredited by the National Board of Accreditation (NBA), New Delhi in the year 2019, certifying the quality performance of the Department.



Department Vision and Mission

Vision

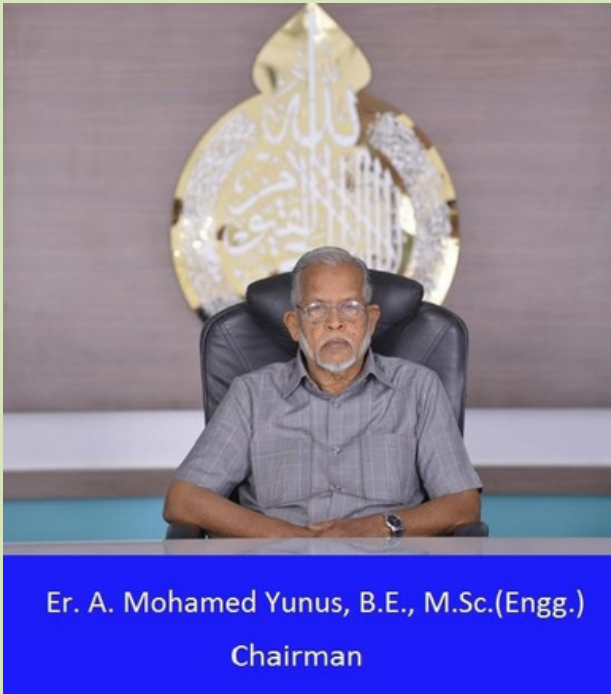
- Establish a globally recognized school of Excellence in the field of Mechanical Engineering.

Mission

- Impart quality education in Mechanical Engineering through effective teaching-learning techniques.
- Provide necessary infrastructure and facilities for the student's personal and professional growth.
- Expose to specialized Mechanical Engineering domains to harness evolving technologies.
- Create awareness in ethical practices followed internationally.

MESSAGESES

Chairman's Message



Being the current world not a hasty track, the responsibility of creating a high-quality educational institution is challenging and embellished with a host of initiatives, which validate them over an extended time span. We at M.I.E.T. motivate and empower our students to be enduring learners, critical thinkers and prolific members of an ever-changing global society. The students are encouraged to channelize their potential in the pursuit of fineness in a holistic and student-centered environment. I am confident that M.I.E.T. will always guide the fate of its students, while blistering kindness and compassion in its pursuit of academic excellence and the accomplishment of our motto “Humanize, Equalize, Spiritualize”

Principal's Message



M.I.E.T. strives to make a better world through education, Research and innovation, functioning with a motto of accelerating the nation's industrial development through highly skilled and qualified technocrats.

I extend a warm welcome to all students and scholars who choose M.I.E.T. as a preferred destination for higher education and research — a territory of happy learning with great fun and joy, offering ample opportunities for curricular, co- curricular and extra-curricular growth.

The college has modern infrastructure, state-of-the- art laboratories, and well-qualified, dedicated faculty members committed to the complete satisfaction of the student community, and to developing and motivating young talent to meet the challenges they will face after graduation.

STUDENT'S PARTICIPATION

Internships & Industry Training

- P. Arun Third year student has attended in the “Workshop” at K. Ramakrishnan College of Technology, Samayapuram held on 04.10.2024 organized by department of Mechanical Engineering.
- V.Sanjay Kumar Third year student has attended in the “Workshop” at K. Ramakrishnan College of Technology, Samayapuram held on 04.10.2024 organized by department of Mechanical Engineering.
- M.Abdullah Third year student has attended in the “Workshop” at K. Ramakrishnan College of Technology, Samayapuram held on 04.10.2024 organized by department of Mechanical Engineering.
- S.M.Abdullah Aashik Third year student has attended in the “Workshop” at K. Ramakrishnan College of Technology, Samayapuram held on 04.10.2024 organized by department of Mechanical Engineering.
- S.Dhanush kumar of second year student has participated in the event “Workshop” at the National level Technical Symposium “TRIDENT’25” held on 28th February 2025 organized by department of Mechanical Engineering at Velammal Insitute of Technology, Chennai.
- S.Ganesh of second year student has got First prize in the event “CAD Modeling” at the National level Technical Symposium “TECXPLO’25” held on 23rd April 2025 organized by department of Mechanical Engineering at Mookambigai college of Engineering, Trichy.
- R.Ashif Mohamed of second year student has participated in the event “Workshop” at the National level Technical Symposium “TRIDENT’25” held on 28th February 2025 organized by department of Mechanical Engineering at Velammal Insitute of Technology, Chennai.
- R.Yasar Arafath of second year student has participated in the event “Master Mechanic and Design Guru” at the National level Technical Symposium “Vahana V8” held on 04th March 2025 organized by department of Automobile Engineering at Hindusthan college of Engineering and Technology, Coimbatore.
- S.Younis Kabeer of second year student has participated in the event “Master Mechanic and Design Guru” at the National level Technical Symposium “Vahana V8” held on 04th March 2025 organized by department of Automobile Engineering at Hindusthan college of Engineering and Technology, Coimbatore.

- T.Fayazdeen of second year student has participated in the event “Paper Presentation” at the National level Technical Symposium “TRIDENT’25” held on 28th February 2025 organized by department of Mechanical Engineering at Velammal Insitute of Technology, Chennai.
- S.Ganesh of second year student has participated in the event “CAD Modeling” at the National level Technical Symposium “Yuvasakthi 2K25” held on 20th February 2025 organized by department of Mechanical Engineering at NPR college of Engineering and Technology, Natham.
- B.Vigneshwaran of second year student has participated in the event “Workshop” at the National level Technical Symposium “Yuvasakthi 2K25” held on 20th February 2025 organized by department of Mechanical Engineering at NPR college of Engineering and Technology, Natham.
- R.Yasar Arafath of second year student has participated in the event “Workshop” at the National level Technical Symposium “Yuvasakthi 2K25” held on 20th February 2025 organized by department of Mechanical Engineering at NPR college of Engineering and Technology, Natham.
- S.Ganesh of second year student has participated in the event “Treasure Hunt” at the National level Technical Symposium “Yuvasakthi 2K25” held on 20th February 2025 organized by department of Mechanical Engineering at NPR college of Engineering and Technology, Natham.
- S.Ganesh of second year student has participated in the event “Just a minute” at the National level Technical Symposium “Yuvasakthi 2K25” held on 20th February 2025 organized by department of Mechanical Engineering at NPR college of Engineering and Technology, Natham.
- M.Sabeek of second year student has participated in the event “Paper presentation” at the National level Technical Symposium “Sanscinco 2K25” held on 23th April 2025 organized by department of Mechanical Engineering at Chendhuran college of Engineering and Technology, Pudukkottai.
- S.Younis Kabeer of second year student has participated in the event “Paper presentation” at the National level Technical Symposium “Sanscinco 2K25” held on 23th April 2025 organized by department of Mechanical Engineering at Chendhuran college of Engineering and Technology, Pudukkottai.
- S.Younis Kabeer of third year student has participated in the event “Paper presentation” at the National level Technical Symposium “TECXPLO 24” held on 26th April 2024 organized by department of Mechanical Engineering at Mookambigai College of Engineering, Pudukkottai.

- The Third-Year students, B.New Winson Received Rs. 29 Lakhs under MSME Incubation Component for Student Entrepreneurship development.
- T.Fayazdeen of second year student has participated in the event “Paper Presentation” at the National level Technical Symposium “INNOVISTA'25” held on 06th March 2025 organized by department of Mechanical Engineering at Arunai Engineering College, Thiruvannamalai.

FACULTY PARTICIPATIONS

- Mr. S. Sathish Kumar and Mr. M.Hariprasath Assistant professor has participated in Faculty Development program on the title of “Advancements and Applications in 3D printing and additive Manufacturing” held in Government College of Engineering, Srirangam from 02/12/2024 to 07/12/2024.
- Dr. G. Pranesh, et.al., Assistant professor has published a journal on the title “Experimental investigation on co-gasification characteristics of coconut shell and medical plastic waste in fluidized bed gasifier in the journal of Biomass Conversion and Bio refinery.
- Mr. S. Sathish Kumar & Dr. G. Pranesh, Assistant professors have published a journal on the title “Performance investigation on a downdraft gasifier using corn waste as a solid biomass and co-feeding with hand gloves and used facemask waste in the journal of International Journal of Hydrogen Energy.
- Dr. K. Panneer Selvam, et.al. Associate professor has presented a paper on the title “Optimization of wear parameters of aluminium 7075 hybrid composites using Taguchi technique” in the conference of ICMET at MIET Engineering college and published it in Journal of Physics: Conference Series.
- Dr. K. Panneer Selvam, et.al. Associate professor has presented a paper on the title “Optimization on EDM process parameters of AA8011 based Hybrid Metal Matrix Composites” in the conference of ICMET at MIET Engineering college and published it in Journal of Physics: Conference Series.
- Dr.K.P.Vasanth Kumar, et.al, Assistant professor has filed patent on title “Experimental and analytical investigation on friction welding dissimilar joint for aerospace application” in 2024.
- Dr.K.P.Vasanth Kumar, et.al, Assistant professor has filed patent on title “Optimization of welding parameters of AISI431 and AISI1020 joints joined by friction welding using Taguchi method” in 2024.

- Dr.K.P.Vasantha Kumar, et.al, Assistant professor has filed patent on title “Friction stir welding and processing of magnesium-based alloy: enhancing mechanical properties and microstructural evolution for industrial applications” in 2024.

FUNDED PROJECT

- The final-year students, Enoch Daniel R., Dominic Dovato D., Harish S., and Dhinakaran Akash Raj M., have completed a TNSCST (Tamil Nadu State Council for Science and Technology)-funded project titled "Design and Fabrication of a Solar-Powered Tomato Seed-Removing Machine", under the guidance of Dr. G. Pranesh.
- The final-year students, S.Abdul Afsar Ahamed, R.V.Amarnath S.Vikram and S.Thiruvarelsan., have completed a TNSCST (Tamil Nadu State Council for Science and Technology)-funded project titled “Development and integration of a hybrid vertical axis wind turbine and solar powered charging station for electric vehicles and smart street lighting systems”, under the guidance of Dr. K Panneer Selvam.
- Dr.K.P.Vasantha Kumar, Assistant Professor has published a book on the title “Design of Machine Elements” in Quill Tech Publication, May 13, 2025, ISBN: 978-93-6786-895-9.

FACULTY PUBLICATIONS / PATENT

- Dr.K.P.Vasantha Kumar, Assistant Professor has attended NPTEL online workshop on “Surface Engineering of Nano Material” organized by Indian Institute of Technology, Madras on 07.06.2025 to 08.06.2025.
- Mr.K. Baskar, Assistant Professor has attended Faculty Development program on “smart and sustainable solutions in mobility: clean combustion, waste to energy & Quality system” organized by Department of Automobile Engineering at Easwari Engineering college, Chennai on 23.06.2025 to 28.06.2025.
- Dr. K. Panneerselvam, Associate professor has filed patent on title “Universal deflection tester for beams” in 2025.
- Dr.K.P.Vasantha Kumar, Assistant professor has filed patent on title “Enhancing mechanical properties of aluminium matrix composites with high entropy alloy reinforcement via Friction Stir Processing.” in 2025.
- Dr. K. Panneer Selvam, Associate Professor has published a book on the title “Introduction to Intellectual Property Rights and Patent Drafting, JBR TRY SEA Publishers, ISBN: 978-81-967199-3-7.

- Dr. K. Panneerselvam, Associate professor has filed patent on title “Integrated Spoon-Fork Utensil (ISFU)” in 2025.
- Dr. K. Panneerselvam, Associate professor has filed patent on title “Linear Adjustable Cradle Stick (LACS)” in 2025.

CONSULTANCY WORK CARRIED OUT

- Dr. K. Paneer Selvam of the Department of Mechanical Engineering undertook a six-month consultancy project titled “**CAD/CAE Design of Hybrid Conversion Kits**” for **Unique MEP Engineering Academy Private Limited, Chennai**. The project had a consultancy value of **₹2.00 lakh**.
- Dr. G. Pranesh of the Department of Mechanical Engineering undertook a six-month consultancy project titled “**Design of Smart Assembly Jigs**” for **Ashok Leyland Limited, Hosur**. The project had a consultancy value of **₹1.00 lakh**.
- Dr. G. Pranesh of the Department of Mechanical Engineering also undertook a six-month consultancy project titled “**Optimization of Suspension Geometry for Improved Ride Comfort in Ashok Leyland Buses**” for **Ashok Leyland Limited, Hosur**. The project had a consultancy value of **₹1.50 lakh**.

SEED MONEY WORK CARRIED OUT

- Mr. S. Sathish Kumar carried out a six-month research project titled “Design and Development of a Downdraft Gasifier for Syngas Production Using the Co-feeding of Bagasse and Face Mask Waste.” The project received a sanctioned amount of ₹50,000, with an expenditure of ₹49,000. As an outcome of the project, a syngas production setup was successfully developed.
- Dr. K. Paneer Selvam carried out a six-month research project titled “Design and Development of a Heating System for Decapod Shell Drying.” The project received a sanctioned amount of ₹50,000, with an expenditure of ₹45,000. As an outcome, a miniature model was fabricated and successfully tested.
- Mr. K. Basker carried out a six-month research project titled “Characterization of Syngas Produced from Biomass Feedstock in a Circulating Fluidized Bed Gasifier.” The project received a sanctioned amount of ₹50,000, with an expenditure of ₹48,000. The major outcome of the project was the development of a syngas production setup.

- Dr. K. P. Vasantha Kumar carried out a six-month research project titled “Design and Fabrication of a Hybrid Wind and Solar-Powered Charging Station for Electric Vehicles and Smart Street Lighting.” The project received a sanctioned amount of ₹10,000, and the entire sanctioned amount was utilized. As an outcome, a miniature model was fabricated and successfully tested.

EVENTS ORGANIZED - GUEST LECTURES

- Guest lecture was conducted on the topic “Artificial Intelligence and Machine Learning Fundamentals” for final year students on 08.10.2024. Mr.A.V.Abinanthan and Mr.K.Muthu Karuppan, BIG LEARN, Trichy was the Resource persons.



Guest lecture delivered by Mr.K.Muthu Karuppan, Resource Person, BIG LEARN, Tiruchirappalli

- A Guest lecture was conducted on the topic “**Industrial Engineering and Lean Manufacturing**” for Third year students on 17.10.2024. Er. G. Nadimuthu, Team Leader R&D - Mechanical Engineering, Zentron Labs Pvt Ltd., Tiruchy was Resource person.
- A Guest lecture was conducted on the topic “Artificial Intelligence and Machine Learning Fundamentals” for final year students on 08.10.2024. Mr.A.V.Abinanthan and Mr.K.Muthu Karuppan, BIG LEARN, Trichy was the Resource persons.



Guest Lecture delivered by Er. G. Nadimuthu, Team Leader R&D - Mechanical Engineering, Zentron Labs Pvt Ltd., Tiruchirappalli.

- A Guest lecture was conducted on the topic “State of Art - Non-Destructive Testing Techniques and the Future” for Third year students on 05.11.2024. Er. Arunan Radhakrishnan, Deputy Manager, Non-Destructive Testing Laboratory (NDTL), Bharat Heavy Electricals Limited, Tiruchirappalli was the Resource person.



Guest lecture delivered by Er. Arunan Radhakrishnan, Deputy Manager, Non Destructive Testing Laboratory (NDTL), Bharat Heavy Electricals Limited, Tiruchirappalli.

- A Guest lecture was conducted on the topic “Role of Wire Arc Additive Manufacturing in Industries” for second year students on 18.11.2024. Dr. N. Siva Shanmugam, Professor,

- Department of Mechanical Engineering, National Institute of Technology, Tiruchirappalli was the Resource person.



Guest lecture delivered by Dr. N. Siva Shanmugam, Professor, Department of Mechanical Engineering, National Institute of Technology, Tiruchirappalli

- A Guest lecture was conducted on the topic “Heat Transfer and Its Applications” for final year students on 08.04.2025. Dr. S. Venkatachalapathy, Professor, Department of Mechanical Engineering, National Institute of Technology, Tiruchirappalli was the Resource person



Guest lecture delivered by Dr. S. Venkatachalapathy, Professor, Department of Mechanical Engineering, National Institute of Technology, Tiruchirappalli

VALUE ADDED COURSES

- Second and Third-year students have attended Value added course on “Non-Destructive Testing (NDT)” at CAD/CAM Lab, Department of Mechanical Engineering on 15.05.2025 to 20.05.2025.
- Mr. Harihara Subramani, ASNT Level III, Director, Mr. Neelamegam, NDT & ANDT Tutor, Mr.Aashiq Mohamed, NDT Tutor,Unique TNDT Training & Inspection Services, Trichy were the resource persons. Mr. R. Manickam, Assistant Professor were the course Coordinators.



Resource persons Mr. Neelamegam, NDT & ANDT Tutor, Unique TNDT Training & Inspection Services, Trichy handled the classes



Students actively participating in the Valur added courses



Dr. A. Naveen Sait, Principal, M.I.E.T. Engineering college, Trichy issuing the course completion certificates to the students

INDUSTRIAL VISIT

- Second year students have gone for One day “Industrial visit” at Sea Blue Shipyard Limited, Kochi, Kerala on 15.11.2024. Mr.K.Baskar, and Mr.M.Hariprasath, Assistant Professor has accompanied the students.



Students Industrial visit at Sea Blue Shipyard Limited, Kochi, Kerala

- Second year and third year students have gone for One day “Industrial visit” at M.M Forging Limited,Viralimalalai, Pudukottai on 15.10.2024. Mr.K.Baskar, and Mr.S.Sathish kumar, Assistant Professor has accompanied the students.



Students Industrial visit at M.M Forging Limited,Viralimalalai, Pudukottai

PARENT’S TEACHER MEETING

- The Parents-Teacher meeting for second year and third students was conducted on 28.11.2024 at B-Block seminar hall. Mr.K.Baskar, Dr. G. Pranesh, Assistant Professor, class coordinator and other faculty members interacted with the parents and discussed about the student academic performance.



Dr. M. Selvam, HoD/Mech, M.I.E.T. Engineering college, Trichy delivering the Presidential address



Parent, student and faculty members interaction during Parents Teachers meeting

- The Parents-Teacher meeting for Second and Third-year students was conducted on 21.05.2025 at B-Block seminar hall. Mr.C.Manikandan and Dr G.Pranesh, Assistant Professor, class coordinators and other faculty members interacted with the parents and discussed about the student academic performance.



Dr. B. Selvam, Professor & Head, Department of Mechanical Engineering Addressing the gathering



Parent, student and faculty members interaction during Parents Teachers meetin

EDITORIAL BOARD

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