

NEWS LETTER

ODD SEM(2024-25)

DEPARTMENT OF
MECHANICAL ENGINEERING

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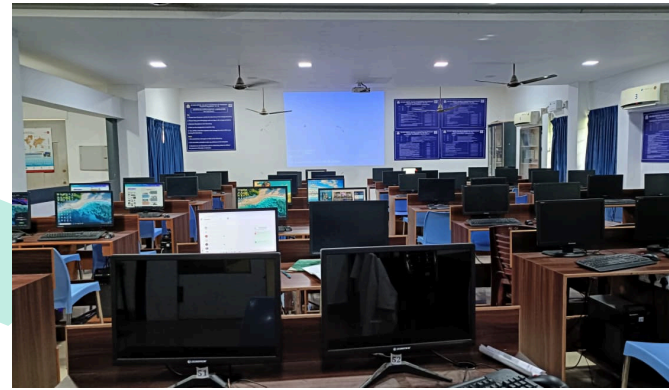
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ABOUT THE DEPARTMENT

The Department of Mechanical Engineering at Sir Isaac Newton College of Engineering and Technology has been offering a B.E. in Mechanical Engineering since 2010 and a M.E. in CAD/CAM Engineering since 2013. The undergraduate program currently admits 60 students annually and the postgraduate program admits 24 students annually.



The department is dedicated to providing a dynamic learning environment with cutting-edge laboratories and resources that foster both academic excellence and practical skills development. Recognized as a Research Department by Anna University, Chennai, the department continually strives to lead in both education and research within the field of Mechanical Engineering. Beyond traditional academic courses, the department offers various engineering design courses, technical training, and soft skills development programs aimed at preparing students for industry challenges and campus interviews. Additionally, motivational programs and career development initiatives are conducted regularly to help students refine their professional skills.

Through collaborations with renowned institutions, including an MOU with the Centre of Excellence at NIT, the department also provides opportunities for research and innovation. Our faculty and students are actively involved in presenting papers at conferences, publishing research in reputed journals, and filing patents for novel ideas.

MEGAMECHANICAL: Student Technical Association

Our department is home to a vibrant student technical association, "MEGAMECHANICAL", which organizes a variety of academic and co-curricular activities. This includes guest lectures, workshops, technical quizzes, and seminars, often led by eminent professionals from the industry. These activities encourage students to broaden their horizons and stay updated with the latest trends and developments in the field.

STUDENT'S ACHIEVEMENTS

SPORTS

Mr.M.Hariharan, Mr.S.Ariharan, Mr.K.Vijayakumar, Mr.A.Semmozhiselvan, Mr.M.Ganesamoorthi of III & IV year Mechanical students has secured district runner in cricket in the CM trophy held at Nagapattinam.



CHIEF MINISTER'S TROPHY 2024 AWARD

^G.Abinesh from Nagapattinam district represented his college in the Volley ball event at the 'StateLevel Competitions for The Chief Minister's TrophyNOTE, organized by the 'Sports Development Authority of Tamil Nadu ('ADAT). The event took place in October NOTE, and he actively participated in the prestigious tournament, showcasing his athletic talent and team spirit



NATIONAL LEVEL SYMPOSIUM

Mr.X.Samlssac, Mr.A.Bharath, Mr.R.Jayachandran, Mr.T.Rishikararn of 2nd year mechanical students has participated in the national-level symposium, including paper presentation and technical events, at Saveetha Engineering College, Chennai.



SWIMMING COMPETITION

Mr.R.Sakthiguna of IV year Mechanical has secured district winner in swimming competition 200m in the CM trophy held at Nagapattinam



SWIMMING COMPETITION

Mr.R.Sakthiguna of IV year Mechanical has secured district winner in swimming competition 100m in the CM trophy held at Nagapattinam.



DEPARTMENT EVENTS

INDUSTRIAL VISIT TO SOUTH INDIA TEXTILE RESEARCH ASSOCIATION (SITRA)

The visit began with a comprehensive introduction to SITRA's significant contributions to the textile industry. The association is at the forefront of research aimed at improving fabric quality, enhancing process efficiency, and promoting environmental sustainability within the sector. This foundation set the stage for the students to understand the intricacies of the various tests performed at SITRA. One of the main highlights of the visit was the opportunity for students to observe and participate in the water testing procedures conducted in SITRA's Mechanical Lab. Water testing plays a crucial role in the textile industry, particularly in processes like dyeing, where the quality of water directly affects the final product.

The students were introduced to several key water quality parameters, including:

- pH levels
- Hardness
- Turbidity
- Chemical contaminants such as chlorine and heavy metals

These tests ensure that the water used in textile production is free from impurities that could compromise fabric quality, affect color accuracy, or lead to machine wear and tear.

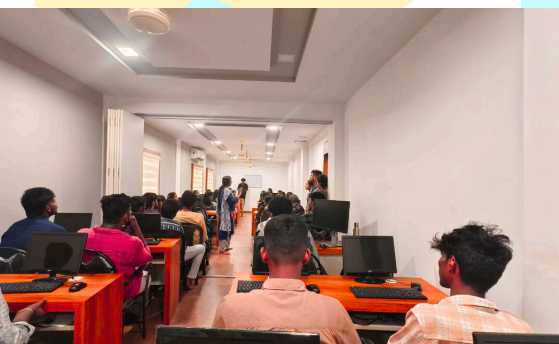


The industrial visit offered the students a deeper understanding of the intersection between water chemistry, mechanical engineering, and environmental sustainability. It highlighted the challenges the textile industry faces regarding resource management and environmental impact, particularly in maintaining the quality of water used in production processes. By observing the real-world applications of water testing and the efforts made to reduce environmental impact, the students gained valuable hands-on experience and a broader perspective on sustainability efforts in the textile sector.

This visit was an invaluable learning experience that enhanced the students' technical knowledge and raised their awareness of the important role mechanical engineering plays in sustainable industrial practices.

SOFT SKILL DEVELOPMENT PROGRAM

A Soft Skills Development & Placement Training Program was conducted at SINCET targeting pre-final and final-year students across various departments. The primary aim was to equip students with essential interpersonal skills and prepare them for upcoming placement opportunities in both technical and non-technical domains. This initiative plays a crucial role in bridging the gap between academic knowledge and industry expectations.



FACULTY DEVELOPMENT PROGRAM ACHIVEMENTS

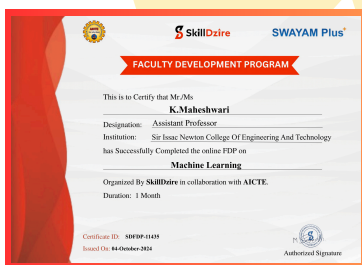
ARTIFICIAL INTELLIGENCE TOOLS CERTIFICATE

Mr.S.Vignesh attended FDP in the title of "AI tools" at Francis Xavier engineering college.



RECENT ADVANCES IN RENEWABLE ENERGY FOR SUSTAINABLE DEVELOPMENT

Mr.S.Vignesh attended FDP in the title of "Recent Advances in Renewable Energy for Sustainable Development" at AMET University



FINITE ELEMENT ANALYSIS CERTIFICATE

Mr.S.Vignesh attended FDP in the title of "Finite Element Analysis" at Sree Sakthi engineering college"



REVERSE ENGINEERING CERTIFICATE

Mr. S. Muralidharan attended FDP in the title of "Reverse Engineering" at Anna University



PAPER & PATENT PUBLICATIONS

JOURNAL PAPER IN SCI & SCOPUS

- Dr. B. Silambarasan published journal paper in the title of "Optimisation of coconut shell particles reinforced Al-7075 aluminum composites with B4C and ZrO2 using CRITIC-EDAS for tribological performance" in SCI.
- Dr. B. Silambarasan published journal paper in the title of "Design and computation of composite material patch antenna for 5G and X spectrum-based applications" in Scopus.
- Mr.S.Vignesh published journal paper in the title of "Implementing lean manufacturing principles to enhance efficiency and reduce waste in production processes" in Scopus
- Mr.S.Vignesh published journal paper in the title of "Microstructure and Immersion Corrosion study of stir-casted magnesium alloy AZ91 in 3.5 wt. % NaCl solution" in Scopus.

PATENT PUBLICATIONS

- Dr. B. Silambarasan published patent in the title of "Development of IoT-Enabled Adaptive Control Strategies for Aerodynamic Wind Turbine Blade Optimization".
- Dr. B. Silambarasan published patent in the title of "AI-Optimized PLA Composite Gearbox Design to Minimize Friction and Maximize Torque"

STAFF'S ACADEMIC RESULT



**Mr. R. Ramesh, M.E.,
Assistant Professor/MECH**

Mr. R. Ramesh deserves heartfelt appreciation for guiding students to a stunning 96% pass rate in Advanced Vehicle Engineering (CME393). His tireless efforts and ability to simplify complex automotive concepts have inspired exceptional performance.

- Mr. K. Santhoshkumar delivered a robust academic experience in Gas Dynamics and Jet Propulsion (CME386), earning an 80% pass percentage. His subject command and engaging sessions have significantly uplifted learning outcomes.



**Mr. K. Santhosh Kumar,
M.E., Assistant
Professor/MECH**



**Mr. S. Vignesh, M.E., Assistant
Professor/MECH**

- In Introduction to Non-Destructive Testing (OML351), Mr. S. Vignesh achieved a commendable 77% pass percentage. His hands-on approach and industry-linked teaching style brought real-world relevance into the classroom.

STAFF'S ACADEMIC ACHIVEMENT



**Mr.R. Gnanasekaran,
M.E, Assistant
Professor/MECH**

- Mr. R. Gnanasekaran, through his meticulous teaching in Production Planning and Control (OIM353), enabled a 72% pass rate, reflecting both clarity in instruction and alignment with industrial practices.

- Mr. S. Muralidharan deserves recognition for fostering core engineering knowledge in Engineering Materials and Metallurgy (ME3392), achieving a 71% pass percentage and laying a strong foundation for material science.



**Mr. S. Muralidharan,M.E., Assistant
Professor/MECH**

STUDENT ACADEMIC ACHIVEMENT



J.SAKTHIVEL
B.E MECH 4TH YEAR

J.Sakthivel successfully completed the 7th semester of the 4th year with an impressive CGPA of 9.1. This reflects consistent academic performance and a strong grasp of the subjects undertaken during the semester. The achievement highlights dedication, hard work, and a commitment to excellence in her studies.

V.Gokulakrishnan successfully completed the 5th semester of the 3rd year with a commendable CGPA of 8.70. This achievement showcases her consistent academic dedication and strong performance across all subjects during the semester. It reflects her hard work, focus, and commitment to academic excellence.



V.GOKULAKRISHNAN
B.E MECH 3RD YEAR



A.BHARATH
B.E MECH 3RD YEAR

A.Bharath. successfully completed the 3rd semester of the 2nd year with an outstanding CGPA of 8.5. This excellent result reflects her strong academic capabilities, dedication to her studies, and consistent pursuit of excellence throughout the semester.

EDITORIAL-BOARD

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Mr.M.Ganesan,M.E.,
Assistant Professor/Mech

Co-Editor

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Assistant Professor/Mech

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