



MECHAZINE

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Students Journal Publications

Department of
Mechanical
Engineering

Editor:

The Head,
Department of
Mechanical Engineering

Team Members:

1. K. S. Naveen, Final Year, B. E. (Mechanical Engineering)
2. S. Mugesh, Third Year, B. E. (Mechanical Engineering)
3. S. Jayakumar, Second Year, B. E. (Mechanical Engineering)

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Volume 14, Issue 4, April 2025

[DOI: 10.15680/IJIRSET.2025.1404179]

Single and Four Sloped Solar Still- A Comparative Study

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[DOI: 10.15680/IJIRSET.2025.1405135]

Design and Aerodynamic Analysis of a Hybrid Modular Drone with Multi-Mode Flight Capabilities

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Efficient use of Exhaust Gas Recirculation

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Volume 14, Issue 3, March 2025

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CFD Analysis of NACA2412 Airfoil

S.V. Sheno Shallen^{aa}, P. Logesh^a, V. Ranjith^a, R. Ranjith^a, V. Sanjay^a, P. Velmurugan^b, S.

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[DOI: 10.15680/IJIRSET.2025.1403319]

IOT-based Fire Prevention and Multi- Detection System for Electric Vehicles Smart Battery Management

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Design of AI based Robotic Life Safety System

N. Sivarajapandi^a, M. Ganapathi^a, D. Suheal^a, K. Sivamanikandan^a, S. Sai Prasath^a, S. Vimal^a,

R.K. Sivabalan^a, P. Sivaraj^a, S. Balamurugan^a, S. Vaidyanathan^b

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PhD Viva-Voce

Congratulations on successfully defending theses! The dedication and hard work displayed have led to this achievement, marking an important milestone in their academic journeys.

Ph.D., No.	Date	Name of the scholar	Title	Name of the supervisor
146	19.02.2025	Purushottam karthik J	Optimization and Evaluation of Overall Heat Transfer Coefficient and pH Value of Coal Water Slurry with Different Impellers Using Agitation Vessel	Dr.C.M.Raguraman

Conference Presentations

Few of our students participated and presented a technical paper in the International Conferences.

S. No.	Name of the Student	Title	Year	Conference
1	Mugesh S	Power Production from Exhaust	Second Year	9th International Conference on Global Practice of Multidisciplinary scientific Studies, Havana, Cuba.
2	Avinash B			

SWAYAM Participations

The following students enrolled and cleared a technical paper in the SWAYAM - NPTEL.

SI.NO	NAME	Enroll.no	Course Title	Institution	score	Year
1	AKASH S	2232010036	product design and manufacturing	IIT Kanpur	60	Jan-Apr 2025
2	AVINASH B	2232010039	Introduction to Industry 4.0 and Internet of things	IIT Kharagpur	76	Jan-Apr 2025
			product design and manufacturing	IIT Kanpur	67	Jan-Apr 2025
3	KUMARAN A	2232010031	Applied Ergonomics	IIT Kanpur	55	Jan-Apr 2025
			product design and manufacturing	IIT Kanpur	75	Jan-Apr 2025
4	MANIMARAN A	2232010008	product design and manufacturing	IIT Kanpur	63	Jan-Apr 2025
5	MANITHARAN N	2232010048	Introduction to Industry 4.0 and Internet of things	IIT Kharagpur	66	Jan-Apr 2025
			product design and manufacturing	IIT Kanpur	57	Jan-Apr 2025
6	MOHAMED THARICK MP	2232010018	product design and manufacturing	IIT Kanpur	67	Jan-Apr 2025
7	MUGESH S	2232010025	Introduction to Industry 4.0 and Internet of things	IIT Kharagpur	73	Jan-Apr 2025
			product design and manufacturing	IIT Kanpur	77	Jan-Apr 2025
8	NAVANEETHAKRISHNAN S	2232010013	product design and manufacturing	IIT Kanpur	60	Jan-Apr 2025
9	PRIYADHARSHAN A	2232010045	product design and manufacturing	IIT Kanpur	65	Jan-Apr 2025
10	RAGUL S	2232010004	product design and manufacturing	IIT Kanpur	68	Jan-Apr 2025
11	RAGHULDHARANI A	2232010002	product design and manufacturing	IIT Kanpur	55	Jan-Apr 2025
12	RAVIVARMA S	2232010012	product design and manufacturing	IIT Kanpur	67	Jan-Apr 2025
12	SANTHOSHKUMAR R	2232010051	product design and manufacturing	IIT Kanpur	64	Jan-Apr 2025
13	SIVALINGAM J	2232010010	product design and manufacturing	IIT Kanpur	54	Jan-Apr 2025
14	SIVARAMAN C	2232010043	product design and manufacturing	IIT Kanpur	52	Jan-Apr 2025
15	SUBRAMANIAN N	2232010042	Social Network	IIT Madras	54	Jan-Apr 2025
16	SUGANTHAN N	223201004	Introduction to Industry 4.0 and Internet of things	IIT Kharagpur	72	Jan-Apr 2025
			product design and manufacturing	IIT Kanpur	66	Jan-Apr 2025
18	THIRUMALAIRAJAN M	2232010009	product design and manufacturing	IIT Kanpur	66	Jan-Apr 2025
19	VIDHYASAGAR A	2232010011	product design and manufacturing	IIT Kanpur	71	Jan-Apr 2025

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[HTTPS://WWW.ANNAMALAIUNIVERSITY.AC.IN/E09_INFO.PHP?DC=E09](https://www.annamalaiuniversity.ac.in/E09_INFO.PHP?DC=E09)



VISION:

Mechanical Engineering Department aims for global recognition through world-class education and pioneering research, nurturing engineers adept in leveraging cutting-edge technology for innovative and sustainable solutions to make impactful contributions to society.

MISSION:

1. Prepare the graduates to pursue life-long learning, serve the profession and meet the intellectual, ethical and career challenges.
2. Extend a vital, state-of-the-art infrastructure to the students and faculty with opportunities to create, interpret, apply and disseminate knowledge.
3. Develop the student community with wider knowledge in the emerging fields of Mechanical Engineering.
4. Provide set of skills, knowledge and attitude that will permit the graduates to succeed and thrive as engineers and leaders.
5. Create a conducive and supportive environment for all round of growth of the students, faculty and staff.

PROGRAM EDUCATIONAL OBJECTIVES:

1. Prepare the graduates with a solid foundation in Engineering, Science and Technology for a successful career in Mechanical Engineering.
2. Train the students to solve problems in Mechanical Engineering and related areas by engineering analysis, computation and experimentation, including understanding basic mathematical and scientific principles.
3. Inculcate students with professional and ethical attitude, effective communication skills, team work skills and multidisciplinary approach.
4. Provide opportunity to the students to expand their horizon beyond mechanical engineering.
5. Develop the students to adapt to the rapidly changing environment in the areas of mechanical engineering and scale new heights in their profession through lifelong learning.

A Grateful Tribute to Our Retired Professors



As we look back on the legacy of the Mechanical Engineering Department, we extend our heartfelt thanks and deepest appreciation to three esteemed faculty members who recently retired: **Prof. B. Sivaraman**, **Prof. B. Karthikeyan**, and **Asso. Prof. A. Pannirselvam**. Their decades of dedication, scholarship, and mentorship have shaped countless students and contributed immensely to the growth and reputation of our department. From the lecture halls and labs to the drawing boards and research projects, their influence is indelible and enduring. On behalf of alumni, students, and colleagues, we thank you for your service, inspiration, and the passion with which you taught and guided us. We wish you a joyful and fulfilling retirement ahead.