

Official Newsletter

Department of Mechanical Engineering

Volume 4, Issue 2, August 2024

अविन्या= वृद्धि

Insight to innovative growth

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Dr. Vaibhav Jain

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Ms. Surabhi Lata

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Vasu Kumar

Piyush

Prisha Sagar

Maharaja Agrasen Institute of Technology



VISION

To be a global leader in Mechanical Engineering education, research & innovation with ethics and values.

MISSION

M1: To deliver industry relevant and skill oriented education in Mechanical Engineering, encompassing production, design, thermal, and emerging areas to address diverse global challenges.

M2: To foster ethical values with professional skills for the benefit of industry and society.

M3: To enhance the teaching-learning process through modern pedagogical tools.

M4: To promote research, innovation and entrepreneurship using sustainable technologies and continuous learning.

M5: To strengthen engagement with alumni, industry and other stakeholders for collaborative growth and capacity building.

PROGRAM EDUCATIONAL OBJECTIVES

The objectives of the department of Mechanical Engineering are to produce graduates who will have:

PEO1: Employability, entrepreneurship, leadership skills, and the ability to pursue higher education for the enhancement of knowledge.

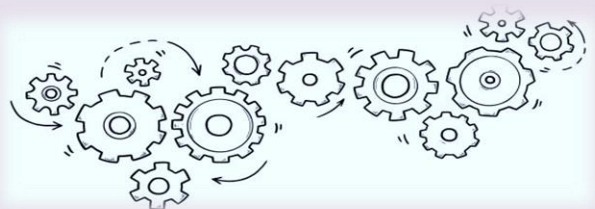
PEO2: Ability to lead through research and innovation in the field of Mechanical Engineering.

PEO3: Engineering competence with good communication skills, professionalism, moral values as well as foundation for lifelong learning.

PEO4: Technical capabilities pertinent to Mechanical and allied engineering and to provide innovative and sustainable solutions for industrial and societal problems.

WHAT'S INSIDE?

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WORD FROM THE HEAD

Dear Avinya-Vrddhim Readers,

Greetings to the esteemed members of our Mechanical Engineering community! It is with great pleasure and enthusiasm that I address you through the pages of our biannual newsletter, providing a snapshot of the latest developments and accomplishments within our department.

In the fast-paced world of mechanical engineering, staying informed is key to staying ahead. This newsletter serves as a bridge between our department and its stakeholders, offering insights into the noteworthy activities, achievements, and innovations that have unfolded over the past months.

As we navigate the ever-evolving landscape of mechanical engineering, it is heartening to witness the dedication and passion displayed by our faculty, researchers, students, and support staff. Together, we have achieved significant milestones and made strides in research, education, and industry collaboration.

This edition showcases a diverse range of articles, spotlights on research projects, and highlights of our students' accomplishments. From groundbreaking research initiatives to collaborative endeavours with industry partners, the content reflects the depth and breadth of our department's contributions to the field.

I extend my heartfelt appreciation to the contributors, editorial team, and everyone involved in the creation of this newsletter. Your commitment to excellence has made this publication a valuable resource for our community, fostering a sense of unity and shared purpose.

As we look to the future, let us continue to embrace innovation, collaboration, and a commitment to excellence. I encourage each member of our community to actively participate, contribute, and engage in the ongoing dialogue that shapes the trajectory of our department.

Thank you for your continued support, and I eagerly anticipate witnessing the continued success and growth of our Mechanical Engineering Department.

Warm regards,

Dr Vaibhav Jain

Head of Department



Faculty Pursuing PhD

1. Mr. Naveen Solanki
2. Ms. Surabhi Lata

Department Intake:

60

List of Faculty

Dr. Vaibhav Jain

Mr. Anil Gupta

Dr. Vipin Kr. Sharma

Ms. Surabhi Lata

Mr. Rakesh C. Saini

Ms. Surbhi Upadhyay

Prof. V.N. Mathur

Dr. Kanchan Mudgil

Dr. Naveen Solanki

Dr. Sumit Joshi

Dr. Sachin Gupta

Dr. Anil K. Dahiya

Dr. Sidharth

Dr. Deshdeep Gambhir

Dr. Piu Jain

Dr. Ramakant Rana

GGSIPO RESULTS (2023-2024)

4th Year Students Result till 6th SEM (2023-2024)

S. No.	Enrollment No.	Student Name	Percentage
1	0314811121	Dhruv Aggarwal	81.604%
2	01514811121	Shashank Joshi	81.299%
3	00514811121	Ansh Gupta	81.195%
4	04214811121	Viral Pandey	81.058%
5	03414811121	Sharmishta Menon	80.669%
6	00514808222	Ashish Raj	80.510%
7	04914811121	Sachin Kumar Jha	78.097%
8	02114811121	Lakshya Aswal	76.708%
9	50114811121	Nitesh	75.065%
10	01314808222	Kavi Bhushan	75.038%

3rd Year Students Result till 4th SEM (2023-2024)

S. No.	Enrollment No.	Student Name	Percentage
1	01714811122	B Jayant	79.680%
2	01414811122	Prabhat Shankar Dubey	78.049%
3	00514811122	Gokul Chawla	77.699%
4	00114811122	Mayank Jatley	76.340%
5	01314808223	Md Taufique Umar	75.453%
6	00214811122	Mayank Agarwal	72.981%
7	01214808223	Keshav Nandan	70.132%

2nd Year Students Result till 2nd SEM (2023-2024)

S. No.	Enrollment No.	Student Name	Percentage
1	01314811123	Arnav Gupta	83.940%
2	01514811123	Karan Diwan	80.340%
3	03214811123	Priyanshu Bhuria	79.680%
4	03414811123	Manan Lamba	79.020%
5	01814811123	Tanmay Chadha	78.260%
6	03514811123	Vedant Roy	77.800%
7	00514811123	Kunwar Anmol Singh	75.620%

PLACEMENTS (2020-2024)

S. No.	Organization Name	Student Name (Enrollment No.)	Package (LPA)
1	Talbro Automotive Components Ltd.	1. Anshul Mathur (00514811120) 2. Chirag Gupta (00814811120) 3. Ajay Kumar (00914808221) 4. Harsh Goel (01414811120) 5. Kavya Taneja (01814811120) 6. Neelesh Gore (02614811120)	3
2	Daikin Airconditioning	1. Tushar Aneja (00214808221) 2. Prakhar Jain (02914811120) 3. Shobhit Tyagi (03514811120) 4. Tamanna Singh (04114811120)	5
3	Larsen & Toubro Limited	1. Himanshu Yadav (01714811120) 2. Sparsh Jindal (03914811120) 3. Tanmay Agrawal (04314811120)	6-6.57
4	Advance Valves	1. Abhinav Rana (20214811120) 2. Dheeraj Joshi (20414811120) 3. Diptanshu Chowdhury (35514811120)	4.36
5	Rinex Technologies Pvt Ltd	1. Laksh Aggarwal (02014811120) 2. Vansh Sahni (04914811120)	5.2
6	Indigo Airlines	1. Aryan Girdhar (00614811120) 2. Mrihnal Mahajan (02514811120)	5
7	Maxop Engineering Co. Pvt. Ltd.	1. Shreya (03714811120) 2. Raushan Kumar (20614811120)	4
8	Aircon Engineers Pvt. Ltd.	1. Ehsas Srivastava (01214811120) 2. Taniya (04214811120)	3.6
9	Ralson Tyres	1. Ashish (00714811120) 2. Saquib Khan (03214811120)	3.25

STAR PERFORMERS

S. No.	Organization Name	Student Name (Enrollment No.)	Package (LPA)
1	Longshort Labs Pvt. Ltd.	Shubham Goel (03814811120)	10-12
2	Escorts Kubota	Harsh Bhatt (01314811120)	5-8
3	Sagacious IP	Harsh Gupta (01514811120)	5.5
4	Viraj Realty- Realty Assistant Pvt. Ltd.	Adarsh Kumar Pandey (20514811120)	5.5
5	Sanmar Group	Laksh Dua (35114811120)	4.8
6	Trydant Tech	Uday Kalia (04414811120)	4.5
7	Igowise mobility pvt. Ltd.	Uday Kalia (04414811120)	4.5
8	Luis N Vaya (Off Campus)	Satyam (03314811120)	4.2
9	Saikrishna and Associates	Sagar Rawat (03114811120)	4
10	Deltic-EV	Shrey Jain (03614811120)	4
11	Motherson Technologies Services Ltd. (MTSL)	Ajay Kumar (00914808221)	3.5
12	Effisense Consulting	Kevin Devgan (01914811120)	3.34
13	Fleet Management Pvt. Ltd.	Mohd Rashid Kausar (02314811120)	\$ 900 (Monthly)

ASHRAE, Student Chapter MAIT

Membership Number: 8370536

The ASHRAE Student Chapter MAIT was started in Feb 2019. Since its inception the ASHRAE Student Chapter MAIT has witnessed exponential growth. The society was started with 15 members under the guidance of Dr. Vaibhav Jain and its strength has been gradually increasing. The students of this chapter have shown extreme compassion and exuberance in discharging all the tasks taken up by them with utmost dedication and hard work. The Chapter has grown to be stronger, compassionate, tech savvy and slated to give the better engineers of tomorrow. They are continued to indulge in new, green and sustainable technological research and generated more practical experience in our society and with that work smart towards developing new models in the field of HVAC&R. Even, the COVID-19 couldn't stop them from doing their best and making the best use of the time at home and keep on expanding the chapter and its activities. ASHRAE is a world-renowned organization and they only want to uphold that name by constantly trying hard to be better than before.

Dr. Vaibhav Jain

3D SPACE: Additive Manufacturing Society of MAIT

3D Space: Additive manufacturing society of MAIT, started with a team of 20 students to explore the upcoming innovative spectrum of manufacturing. The society has inquisitive minds and their passion to transform the theoretical concepts of additive manufacturing into realization through practical applications. The society targets:

1. Understanding and learning the basics of design for additive manufacturing (DFAM).
2. Designing and manufacturing of a dedicated 3D printer.
3. Exchange of ideas and defining of new opportunities in 3D printing sector.
4. Creating functional parts of engineering grade to enhance quality functionality and practicality of any product.
5. Achieving excellence in the research area of additive manufacturing.

Ms. Surabhi Lata

1st International Conference on Green Technology and Sustainability (ICGTS-2024)

Maharaja Agrasen Institute of Technology

1st International Conference on Green Technology and Sustainability 2024 (ICGTS-2024)
30th - 31st January 2024
 Organised by
 Department of Mechanical Engineering, Department of Mechanical & Automation Engineering

Welcome Participants

Sponsored by: DRDO, Govt. of India

Industry Partner: SHALIMAR PARTS

In collaboration with: University of Veracruz Mexico, NIT Durgam, IGDTUW Delhi

Publication Partners:

Dr. Nand Kishor Garg, Founder & Chief Advisor, MATES, Prof. (Dr.) Anand Sharma, Director, MAIT
 Shri Vivek Kumar Lohia, Chairman, MATES, Prof. (Dr.) J.S. Dossal, Dean, MAIT
 Shri S.P. Aggarwal, IAS, Executive Chairman, MATES
 Er. T.R. Garg, General Secretary, MATES, Dr. V.N. Mathur, HOD, MAE, MAIT
 Shri Mohan Kumar Garg, Joint General Secretary, MATES, Dr. Vaibhav Jain, HOD, ML, MAIT
 Shri Anand Gupta, Treasurer, MATES

Department of Mechanical Engineering & Department of Mechanical and Automation Engineering Announces

1st International Conference on Green Technologies and Sustainability (ICGTS-2024)
30-31 January, 2024
 Maharaja Agrasen Institute of Technology, Agrasen Chok, Sector-22, Mayapuri, New Delhi-110086

Tracks and Themes:

- Energy & Sustainability: Environment and Energy, Electrotechnology and engineering, Engineering applications of surface coatings and films, Alternative and renewable energy sources and technology, Engines and power transmission, Fuel converter processes, Carbon capture, utilization, and storage, Engine Thermal Management, Catalytic (POT) and lubrication, Environmental friendly energy systems, Sustainable Nanomaterials including 2D materials, Hydrogen Development, Hydrogen and sustainability, Advanced Functional Materials and Manufacturing, Robotics, Digitalization and Cognitive Machines, Materials science, materials synthesis and characterization, Precision engineering and manufacturing, Advanced Structural Materials and Bio-inspired, Advanced machining processes, Advanced metal forming, welding, joining & casting, Additive manufacturing, Intellectual Attribution, Software, hardware and Bio Print, Heat Treatment, Non-destructive Examination, Operation Technology.

Follow: <https://www.mait.ac.in/icgts2024/>

Registration Fee: INR 4,000/-
INR 10,000/- (Includes: Registration, Hotel, Breakfast, Lunch, Dinner)
INR 15,000/- (Includes: Registration, Hotel, Breakfast, Lunch, Dinner, Airport Transfer)
***Additional APC will be levied for the Remote-attended and peer-reviewed journals.**

ACADEMIC & INDUSTRY PARTNERS:
 DRDO, NIT Durgam, IGDTUW, University of Veracruz, Mexico

Department of Mechanical Engineering organized 1st International Conference on Green Technology and Sustainability (ICGTS-2024) on 30th - 31st January 2024 in academic collaboration with the University of Veracruz, Mexico, Indira Gandhi Delhi Technological University for Women (IGDTUW), Delhi and National Institute of Technology Delhi. The conference was sponsored by Defence Research and Development Organization. Students and research persons from across nations participated in this event transforming it into a grand success.



SOCIETIES DEMO DAY

In collaboration with

Institute Innovation Cell MAIT

Department of Mechanical Engineering organized a Demo Day in collaboration with IIC MAIT on 30th January 2024.

SAEINDIA Collegiate Club of MAIT, Team Jatayu and Team Endhan showcased their BAJA Buggy and go-kart vehicles respectively. Students of Team Jatayu and Team Endhan explained the manufacturing technology and innovation in the field of Automobile Steering, Suspension, Wheel Hub, Cutting Breaks and etc.

The members of the Drone club explained the manufacturing and assembly of different parts along with the process to build a Drone.

The 3D Club students demonstrated the working of 3D printer and different materials used in the manufacturing of various parts, process sequence. The exciting that was the way the students explained how to build a self 3D printer.



Talent at display in various sectors

2024 ASHRAE Winter Conference, Chicago

MAIT being part of 2024 ASHRAE Winter Conference at Chicago, 20-24 January 2024. During the conference, Dr Vaibhav Jain was given SBA award and recognized for the Project along with Mr. Prakhar Jain, which was selected among top two grants for presentation in the conference.

The scholarship recipients of 2023-24, Mr. Saquib Khan and Mr. Kamran Ali were recognized during student activity event. Mr. Saquib Khan also received travel grant to attend the conference.



Department of Mechanical Engineering received two funded projects under the guidance of Dr. Vaibhav Jain from American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), USA for the academic session 2024-2025.

PROJECT TITLE	FUND AMOUNT
Design and Development of Solar thermal Adsorptive Refrigeration (STAR) System	\$4,990
Design and Development of Multi Heat Exchanger System as a Training and Demonstration Unit	\$4,980

ASHRAE SCHOLARSHIPS (2024-2025)

Mr. Keshav and Mr. Aman Vats (ASHRAE Student Branch MAIT) received the Henry Adam and Alwin B. Newton Scholarship of \$3000 and \$5000 respectively for the academic year 2024-2025 under the guidance of Dr. Vaibhav Jain, ASHRAE Student Branch Advisor.



Mr Aman Vats



Mr Keshav



Workshop on Design, Thinking and Innovation in the field of Adhesive Technology

Department of Mechanical Engineering organized a Workshop in association with SAEINDIA Collegiate club of MAIT and IIC MAIT on 7th Feb 2024 on Design, Thinking and Innovation in the field of Adhesive Technology.

Mr. Abhishank Jain from Henkal India and Indeed foundation demonstrated the "Daksh Loctite Expert Training" on application of Loctite adhesive as Bolt lock, Thread Lock, Sealant, and gasket. The session was very interactive as a lot of discussion was held between the students and speaker. The students learnt about various applications of several different kind of adhesive. The workshop finally ended with a promise to hold more such interactive beneficial workshops in future.



ACREX 2024



MAIT students as volunteer to shadow ASHRAE President Ms. Ginger Scoggins during ACREX 2024

CONVOCAATION 2024

Congratulations to Mr. Prince (ME Branch), BTech 2023 batch for getting Gold Medal. The Degree was presented by LG, Delhi Sh. Vinai Kumar Saxena, and VC Dr. Mahesh Verma.

MAIT @ SHARK TANK INDIA

Distinguished alumni of Department of Mechanical & Automation Engineering received an opportunity to showcase their idea at Shark Tank India, Season 3 on 14th March 2024.



Workshop on Problem Solving Approach Based Psychological Assessment Tool

A Workshop on "Problem Solving Approach Based Psychological Assessment Tool" was organized by the Department of Mechanical Engineering in collaboration with DRDO, Govt. of India on 18th March 2024.



Workshop on Problem Solving Approach Based Psychological Assessment Tool

Date : 18th March 2024
Time : 11:00 AM
Venue: 2nd Block (205)

Experts
Dr. Nity Sharma Scientist E
Dr. Sandhya Verma Scientist E



Forum on Energy Efficiency and Decarbonisation (FEED 2024)

Students of ME department, MAIT participated in the fourth edition of 'Forum on Energy Efficiency and Decarbonisation 2024 (FEED 2024)' presented by Alliance for an Energy Efficient Economy (AEEE), 28-29 Feb 2024, Hotel Eros, Delhi under the guidance of Dr Vaibhav Jain. FEED placed a robust emphasis on decarbonisation and smart energy management, which is crucial for achieving a net-zero economy and encourages vital knowledge transfer in technology adoption across the value chain. As a convergence point for stakeholders within India's energy ecosystem, FEED facilitated interactions and opportunities for enhanced business competitiveness through energy efficiency and decarbonisation.



CAD Contest 1.0

The CAD Contest 1.0 took place on April 25th, 2024, at Maharaja Agrasen Institute of Technology during the college fest Techsurge and Mirdang. Organized by the SAEINDIA Club of MAIT, the event attracted 27 diploma- pursuing students from different colleges. Participants competed to showcase their skills in 3D modelling.

Machinist: A Contest for Perfectionists

The Robotics Society of the MAIT, under the Department of Mechanical Engineering, hosted "Machinist: A Contest for Perfectionists" on April 24, 2024. This event showcased the skills and precision of budding engineers in fabricating components using lathe machine tools. Additionally, a stimulating quiz was organized to challenge participants' theoretical knowledge in machining.



CAD Contest 1.0



Machinist: A Contest for Perfectionists

Mock Group Discussion (GD)

Department of Mechanical Engineering, in association with Career Development Cell, MAIT organized a Mock Group Discussion (GD) for 3rd year students of both the departments. The GD was organized with the primary objective of preparing students for upcoming placements, higher studies, and other career-related opportunities. The session aimed to enhance students' communication skills, teamwork abilities, and overall confidence in participating in group discussions, a common aspect of various selection processes. The GD session was conducted by staff members from AECC Study Abroad Consultants, who brought expertise in assessing participants based on various criteria essential for success in group discussions. A total of 43 students enthusiastically participated in the Mock GD, with 16 students from the Department of Mechanical Engineering and 27 students from the Department of Mechanical & Automation Engineering. The active involvement of students from both departments showcased their eagerness to enhance their employability skills and readiness for future career prospects.



Workshop on "Robotics and Automation: Simulation of Arm Robots

A Workshop on "Robotics and Automation: Simulation of Arm Robots" was organized by Robotics Society of MAIT under Department of Mechanical Engineering in collaboration with Nextup Robotics Private Limited on 23rd April 2024. It was a significant event aimed at exploring the latest advancements in robotics technology.



Industrial Visit to PPCL Bawana

Departments of Mechanical Engineering organized an industrial visit to PPCL Bawana on May 4, 2024. The power plant is one of the gas-based power plants with the capacity of 1500 MW. The visit is attended by 40 students accompanied by 4 faculty members.



Industrial Visit to Yakult Danone India Pvt. Ltd

Maharaja Agrasen Institute of Technology arranged an industrial visit for ME students to Yakult Danone India Pvt. Ltd., Sonipat, Haryana, on 9th May 2024. A batch of 37 students along with 5 faculty members visited the factory.



Internship Fair

The Department of Mechanical Engineering of Maharaja Agrasen Institute of Technology, Delhi hosted a one-day internship fair for undergraduate students. Over a hundred students registered for the event. Six of the seven core companies who attended the event were offline, and one was online. The occasion provided the students a chance to meet professionals in the field and discover their own potential.



Final Year Students (2024)

Glimpses of Farewell 2024

