

MAHARAJA AGRASEN INSTITUTE OF TECHNOLOGY

अविन्या=वृद्धिं

Insight to innovative growth





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
Department of Mechanical Engineering

FACULTY CORNER

Mr. Deshdeep Gambhir completed his PhD in “*Thermodynamic analysis of CCHP Cycle*” from Jamia Millia Islamia, in March 2023.

Faculty Pursuing PhD

✚ Mr. Naveen Solanki

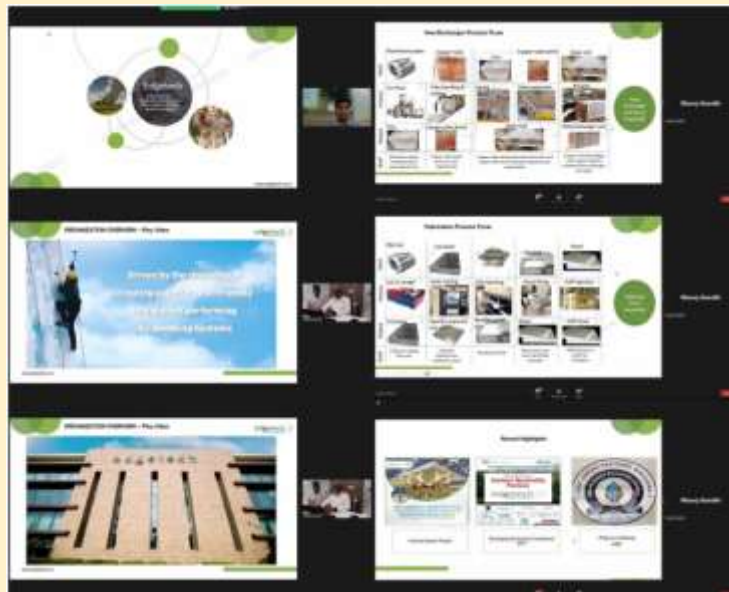
✚ Mr. Ashwni

✚ Ms. Surabhi Lata

INDUSTRY-INSTITUTE INTERACTIONS

Virtual Visit to EDGETECH Air Systems

The Students of MAE and ME Deptts, Maharaja Agrasen Institute of Technology joined the Virtual Industrial visit of EDGETECH Air Systems (a leading manufacturer of Air Handling Units) organized by ASHRAE India Chapter 6 May 2023.



Shriram Pistons and Rings Pvt. Ltd.

Department of MAE and ME, MAIT organized an industrial visit at Shriram Pistons and Rings Pvt Ltd, Ghaziabad on 2 June 2023. 40 students of MAE and ME participated in the same.

Shriram Pistons & Rings Limited is an India-based company, which is engaged in the manufacturing of pistons and piston pins, piston rings, and engine valves. The company caters to both domestic and international markets. The principal business of the company is Automobile Piston Assemblies.



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

ASHRAE Scholarships 2023-24

1. Mr. Saquib (3rd Year ME) received the scholarship of \$10000 by ASHRAE, USA.
2. Mr. Kavya Taneja (3rd Year ME) received the scholarship of \$5000 by ASHRAE, USA.
3. Mr. Kamran Ali (3rd Year MAE) received the scholarship of \$5000 by ASHRAE, USA.

ASHRAE STUDENT CHAPTER MAIT

Annual Conference AIC Tech 2023

The students of ASHRAE Student Branch MAIT along with their mentor Dr Vaibhav Jain were felicitated for their active participation and work in the field of HVAC&R by ASHRAE India Chapter during their Annual conference AIC Tech 2023 organized at Hotel Pride Plaza, Aerocity, Delhi on 28 April 2023.

The conference was highly informative and focused on net zero educational campuses, and the discussions were centered around how we can reduce carbon footprint of educational institutions while maintaining a comfortable learning environment.

Apart from net zero educational campuses, the conference also focused on topics such as thermal comfort, energy efficiency, and building automation systems. The speakers at the conference were highly experienced and provided valuable insights into the latest technologies and best practices for achieving sustainability in the built environment.



PLACEMENTS 2023

A placement is a period of work experience which is an integrated and assessed part of a student's degree. It is important to remember that the placement process is not a reflection of your worth as a person or as a developer. It is just one part of your journey, and it does not define your future.

Students of Mechanical Engineering Department have been placed in various prestigious organisations.

COGNIZANT



Purushotam Kumar

00614808220

CAF



Biswa Narayan Sahoo

03814811119



Inderpreet Singh
Roprai

03614811119



Daksh Gandotra

04614811119

DAIKIN



Sumit Tiwari

00814808220



Aabhas Bhatia

04114811119



Jatin Singh

00314808220



Nitin Yadav

20214811119

POLESTAR



Nitish Singh

01614811119

Ace Micromatic Group



Vaibhav Mudgal

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E-MUG Engg Services



Amit Singh Bisht

00114808220

NewGen Software Technologies Ltd.



Aryan Bisht

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PLACEMENTS 2023

EXCELR



Aabhas Bhatia
04114811119



Dhrish Sharma
04314811119



Prince
01514811119



Somnath Jha
00714808220

Vista Consoles

ETA Engineering



J. Keshav
02114811119



Sumit Dixit
009114811119



Aman Dogra
02914811119



Rohan Pandey
35614811119

ITC Limited

Hike Education



Rishabh Jain
20114811119

Varun Beverages



Vinay
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PLACEMENTS 2023

Students of Mechanical Engineering Department have been selected in various prestigious institutes across the globe. They aim at fulfilling their academic and professional passions creating innovative connections with students and faculties. Students accelerate their progress in the fields of science and engineering.

DURHAM UNIVERSITY



Aman Pandey
35414811119

UNIVERSITY OF MANCHESTER



Prince
01514811119

MCMASTER UNIVERSITY

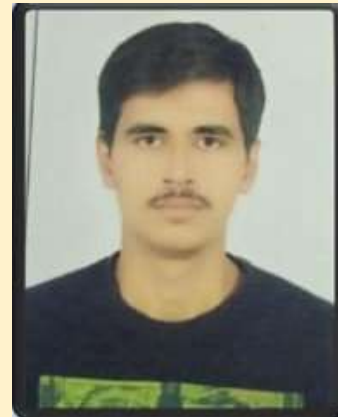


Ikroop Singh Grover
35514811119

LOUGHBOROUGH UNIVERSITY



Chirag Gahlot
04814811119



Abhinav
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Workshop on “Hands-on Training on 3D Printing Technology”

A 3 Days Workshop on “Hands-on Training on 3D Printing Technology” was held from 15th -17th March 2023, by the Department of Mechanical and Automation Engineering and Department of Mechanical Engineering in association with 3D Space Club at Maharaja Agrasen Institute of Technology. The primary objective of the workshop was to provide exposure to the students about the 3D printing technology and its application and ongoing research in today’ modern world. An interactive session was conducted to deliver the latest research opportunities in this field.

The workshop was designed to provide the hands-on training and let the participants transform their own ideas into real objects. The ideas were printed according to the participants choices. The session started with a brief discussion about 3D printing technology, its need, application, and research in this field which was followed by basic steps to transform the idea to real world. The speakers Bhavey Goel and Saquib delivered this session through a series of informative talks and interactive sessions.

The second was completely dedicated to the designing of ideas on software such as Fusion 360, SolidWorks etc and slicing the design in Ultimaker Cura. This session was headed by Anish Kumar who designed items like keychain with name, logo of society, society’s badge which were later considered for printing. The students were asked to design their ideas and were assisted by the team members to develop error free designs. The next day all the ideas were printed after giving the details about how to set up the printer. During the setting up of printer, bed levelling was the most significant step which was taught to the participants before the printing process. The students were assisted by A. Pratyush, Bhavey Goel, Saquib and Anish Kumar and team.



Workshop on “Unmanned Aerial Vehicles (UAV) and Drone Technology”

The Workshop on Unmanned Aerial Vehicles (UAV) and drone technology was held between 15th March 2023 to 17th March 2023 by the Department of Mechanical and Automation Engineering and Mechanical Engineering in association with Team AEROSTARS, MAIT. The primary objective of the program was to provide participants with a basic understanding of the Drones, its anatomy and its flying techniques and opportunities to fly a drone.

The program was designed to cater the interest of students from various academic branches, who showed a keen interest in exploring the latest trends and technologies in the field of UAVs. The program consisted of a series of informative lectures, soldering and simulation session, drone building, assembly and flying session, with society members serving as the primary speakers.



Technoxian World Robotics Championship

Team Aerostars under MAE and ME Deptt, MAIT participated in Technoxian World Robotics Championship that was held in Noida Indoor Stadium from July 25th to July 27th, 2023. The Robotics Championship attracted a crowd from all around the world and got more than 32 countries visited this prestigious competition. Team Aerostars took part in the Drone championship with 172 other teams including teams from Iran, Bangladesh, Israel, Sri Lanka, Russia, Brazil etc. The team managed to secure a position in the top 5 by the piloting skills shown by team Aerostar and came out in 5th position.



Alumni Talk on Placement Opportunity in Refrigeration Sector

An alumni talk was organized by Department of Mechanical and Automation Engineering and Mechanical Engineering on 7th March 2023 at Maharaja Agrasen Institute of Technology. Dhruv Malhotra is working with Daikin Airconditioning India Pvt. Ltd. as Graduate Engineer Trainee. He is working in the sales department of the VRV Business. He completed his B.Tech in MAE from Maharaja Agrasen Institute of Technology in 2022. During his college years, he was an Active member of ASHRAE MAIT Student Chapter and was the president of the same from 2021-2022. His team scored Rising star position in Setty Family Foundation Applied Engineering Challenge 2021. His research project was selected for publication in ASHRAE Journal and he was invited to present the same at ASHRAE Winter Conference 2023.



6th Research Excellence Awards Function

Ms. Piu Jain, faculty of Department of Mechanical and Automation Engineering received research excellence award at a 6th Research Excellence Awards function organized at Delhi Technological University on 6th April 2023 for her commendable performance.

Department of Mechanical Department

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