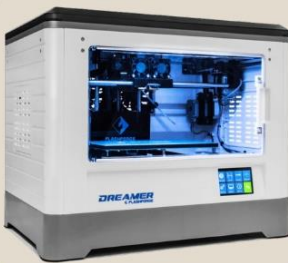


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MECHAZINE

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Editors:

Prof. Rushikesh M. Rasal
(Assistant Professor, Mechanical Engineering)

Prof. Mandar S. Padhye
(Assistant Professor, Mechanical Engineering)

Prof. Priyanka A. Date
(Assistant Professor, Mechanical Engineering)

Team Mechanical

Faculty Members

- Dr. Kaushal K. Prasad (Principal)
- Dr. Milind S. Kirkire (Professor, HoD and Dean Student Affairs)
- Dr. Shashikant S. Goilkar (Professor)
- Dr. Milind S. Yadav (Professor and Dean Academics)
- Mr. V. MuraliMohan (Associate Professor)
- Mr. Vikram S. Chougule (Associate Professor)
- Mr. Sachin S. Mestry (Assistant Professor)
- Mr. Vidyasheel S. Bagade (Assistant Professor)
- Mrs. Gayatri M. Kirkire (Assistant Professor)
- Mrs. Abhilasha S. Jadhav (Assistant Professor)
- Mr. Sumit S. Malusare (Assistant Professor)
- Mr. Harshal R. Salvi (Assistant Professor)
- Mr. Hemant V. Chavan (Assistant Professor)
- Mr. Amar S. Yekane (Assistant Professor)
- Mr. Jayesh S. Anavkar (Assistant Professor)
- Mr. Mahadev L. Naik (Assistant Professor)
- Mr. Shodhan U. Mayekar (Assistant Professor)
- Dr. Kedar G. Bhide (Assistant Professor)
- Mr. Sachin S. Gurav (Assistant Professor)
- Mr. Prabodh B. Horambe (Assistant Professor)
- Mr. Rushikesh M. Rasal (Assistant Professor)
- Mr. Pratik R. Kamble (Assistant Professor)
- Mr. Mandar S. Padhye (Assistant Professor)
- Mrs. Priyanka A. Date (Assistant Professor)

Staff Members

- Mr. R. V. Utekar
- Mr. A. V. Nhivekar
- Mr. A. A. Lingayat
- Mr. V. V. Lohar
- Mr. D. Y. Mestry
- Mr. M. V. Shetye
- Mr. P. S. Korgaonkar

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VISION

- **To become a center of quality education by developing competent engineers who can address global challenges in the field of mechanical engineering.**

MISION

- **To establish state of the art facilities in department enabling effective training of students and creating research environment**
- **Evolve competent technical professionals through effective delivery of curriculum and contents beyond, which fulfil the needs of industry and society.**
- **To inculcate sense of social responsibility and human values amongst the students.**

PROGRAM SPECIFIC OUTCOMES

- **Students will be able to investigate problems in the fields of design, thermal and manufacturing processes through application of statistical techniques**
- **Students will be able to provide computer-based automation solutions to manufacturing and process industries.**

PROGRAM EDUCATIONAL OBJECTIVES

- **To prepare the stakeholder to exhibit leadership qualities with demonstrable attributes in lifelong learning to contribute to the societal needs.**
- **To make ready the stake holder to pursue higher education for professional development.**
- **To help the stakeholder to acquire the analytical and technical skills, knowledge, analytical ability attitude and behavior through the program**
- **To prepare the stakeholders with a sound foundation in the mathematical, scientific and engineering fundamentals.**
- **To motivate the learner in the art of self-learning and to use modern tools for solving real life problems and also inculcate a professional and ethical attitude and good leadership qualities.**
- **To prepare the stakeholder to be able to design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.**

Programs Organized by Department

Three Days Value Added Workshop for Material Selection, Material Costing and Welding Cost Estimation

The Department of Mechanical Engineering organized the three-day workshop in association with MechaTol Product Engineering Solutions Pvt. Ltd. Pune, under the guidance of Dr. M.S. Kirkire (Head- Mechanical Engineering Department) from 9th to 11th August 2023 for B.E. Mechanical Engineering students.



Mr. Anand Bhise explaining the concept

The objective was to make the students understand how to apply the concepts of material selection, material costing and welding cost estimation in their project work. Mr. Anand Bhise (Director, MechaTol Product Engineering Solutions Pvt. Ltd, Pune) was the resource person for the workshop.

Mr. Anand Bhise discussed the concepts with practical examples. Prof. P. R. Kamble coordinated the workshop successfully. A total of 16 students participated in the workshop.

Two Days Workshop on Geometric Dimensioning and Tolerancing (GD&T)

The Department of Mechanical Engineering organized a two days certified

Workshop on Geometric Dimensioning and Tolerancing (GD&T) in association with MechaTol Product Engineering Solutions Pvt. Ltd. Pune, under the guidance of Dr. M.S. Kirkire (Head- Mechanical Engineering Department) on 12th and 13th August 2023 for B.E. Mechanical Engineering students.

The objective was to make the students understand how to apply the concepts of GD & T in design, manufacturing and inspection. Prof. P. R. Kamble gave an introductory speech on the importance of this workshop; Dr M. S. Kirkire felicitated Mr Anand Bhise (Director, MechaTol Product Engineering Solutions Pvt. Ltd., Pune) who was the resource person for the workshop.



Prof. P. R. Kamble introducing the expert Mr. Anand Bhise

Mr. Anand Bhise discussed different industrial case studies with the participants. Prof. M. S. Padhye coordinated the workshop successfully. A total of 25 students participated in the workshop.

Five Days (40 hours) Value Added Workshop on Process Equipment Design (PED)

The Department of Mechanical Engineering organized a five-day (40-hour) Certified Workshop on Process Equipment Design (PED) in collaboration with ThinkerStation Pvt. Ltd., Nashik. The workshop aimed to provide insights into the principles and practices in the field of

Programs Organized by Department

Process equipment design. The workshop was held from 11th to 15th August 2023.



Mr Jayendra Khurasia (COO, Scootoid E-Learning) delivering the session

Mr. Jayendra Khurasia, (COO, Scootoid E-Learning), the expert resource person from Thinker Station along with his team member Mr. Ritesh provided valuable real-world insights to the participants. A total of 20 students from final-year Mechanical Engineering participated in the workshop.

Prof. Pratik Kamble (Assistant Professor in Mechanical Engg.) coordinated the entire workshop under the guidance of Dr. Milind S Kirkire (Head of the Mechanical Engineering Department). This collaborative effort between academia and industry aimed to equip students with practical knowledge and skills that are highly relevant to career in process equipment design and related fields.

ASHRAE Student Branch Installation Ceremony for the Year 2023-24

The Department of Mechanical Engineering organized ASHRAE Student Branch Installation Ceremony on Monday 1st September 2023.

ASHRAE FAMT Student Branch

Advisor Prof. Hemant Chavan welcomed the guests. Past President of ASHRAE Mumbai Chapter Mrs. Nivedita Jadhav, Student Activities Chair Mr. Kunal Bhavsar and Mr. Om Mehata and Past President Mr. Shankar Sapaliga were present for the ceremony.



Special Guest Mrs. Anjali Jain lightening the lamp

Student Activities Chair Mr. Kunal Bhavsar installed the ASHRAE Student Chapter and Student members took oath for Student President, Secretary for the 2023-24 society year.

A total of 115 students of first year and higher semester of Mechanical Engg Department were present for the installation ceremony. The event was coordinated by Prof. Hemant V. Chavan and the student members under the guidance of Dr. Milind S Kirkire, the Head and Dr. Kaushal Prasad, the Principal.



ASHRAE FAMT student members with ASHRAE MUMBAI BOG and Prof. Hemant V Chavan

Programs Organized by Department

A Technical Session on Under Floor Air Distribution System

Department of Mechanical Engineering organized a technical session on Under Floor Air Distribution System on Friday 1st September 2023. Ms. Saloni Shetty for, Business Development Head for India, Air Fixture UFAD.

UFAD (underfloor air distribution) is an innovative air distribution approach that is growing in popularity amongst commercial architects and mechanical engineers. Because of its improved air quality, cost-effectiveness, design flexibility and energy efficiency, it is quickly becoming a preferred solution for heating and cooling office buildings.



Ms. Saloni Shetty delivering the session.

A total of 115 students attended the session. The event was coordinated by Prof. Hemant V. Chavan and Student members under the guidance of Dr. Milind S Kirkire, the Head and Dr. Kaushal Prasad, the Principal.

A Technical Session on HVAC Cleanroom Technology

The Department of Mechanical Engineering organized a technical session on HVAC Cleanroom Technology on Friday 1st September 2023. Mr. Pratik Panvalkar,

Head, Project at AirMiracle Cleanroom and HVAC Engineers Private Limited.



Prof. Hemant V Chavan welcomes Mr. Pratik Panvalakar

Cleanroom HVAC systems usually incorporate high-efficiency particulate (HEPA) filters, which are capable of removing extremely fine particles and microbes from the air. These filters are critical for maintaining a sterile, controlled environment in critical applications including research laboratories, medical facilities, and pharmaceutical manufacturing and testing operations.

A total of 115 students attended the session. The event was coordinated by Prof. Hemant V. Chavan and the student members under the guidance of Dr. Milind S Kirkire, the Head and Dr. Kaushal Prasad, the Principal.

Filed Visit to Solar PV power plant and Solar Water Heater Site

The Department of Mechanical Engineering organized a field visit to a Solar PV power plant and a Solar Water Heater site for the final year Mechanical engg students of the Departmental elective subject Renewable Energy System. The visit took place on October 22, 2023, and involved 13 student participants.

Programs Organized by Department

The field visit to the Solar PV power plant and Solar Water Heater site was an enriching experience for the 13 students who participated. It allowed them to witness practical applications of solar energy technologies and gain insights into the practical aspects of sustainable energy access models. This initiative underscores the commitment of the Department of Mechanical Engineering to prepare students for a future in renewable energy and sustainable engineering.



Mr. Rishikesh Kondekar is explaining how a solar water heater works

The field visit program was coordinated by Prof. Hemant V Chavan, who ensured its successful execution. Dr. M. S. Kirkire, the Head of the Mechanical Department, provided valuable guidance in arranging the visit.

Technical Talk on Solar Energy Application

Department of Mechanical Engg has organized technical talk on Solar Energy Application for the students of the Elective Subject Renewable Energy Sources of Semester VIII. This technical talk was delivered by Mr. Rushikesh Kondekar, Proprietor, Saurmandal on 23rd October 2023. Total 13 students participated in the event.

This technical talk was based on the topic solar energy and its application. The technical talk was the key activity as a part of the syllabus which is having objective of studying Solar PV Cell Panel and generation of electricity through solar energy conversion. The program was coordinated by Prof. Hemant V Chavan under the guidance of Dr M. S. Kirkire, Dean Academics and HoD Mechanical Department.



Mr. Rishikesh Kondekar delivering technical talk

Faculty Achievements

❖ Dr. Milind S. Kirkire

- Published A chapter titled " Medical Product Manufacturing Process Capability Improvement Using Six Sigma–DMAIC Methodology" in Lecture Notes in Mechanical Engineering. Springer, Singapore.
- Published A chapter titled " Optimization and Weight Reduction of Injection Moulding Machine Components for Beverage Filtering" in Lecture Notes in Mechanical Engineering. Springer, Singapore.
- Published a paper Modeling barriers to adoption of digitization in supply chains using FTOPSIS and its impact on sustainability TBL in Benchmarking: An International Journal Published by Emerald Publishing

❖ Dr. Shashikant S. Goilkar

- Published A chapter titled " An Overview of the Untapped Potential of Soft Robotic Arms with Integration of Machining Tools" in Lecture Notes in Mechanical Engineering. Springer, Singapore.
- Completed FDP on Mathematical Modelling and Computation in Engineering by Department of Science and Humanities at SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, U.P. on 24th to 30th July 2023.
- Completed One Week Faculty Development Program (Hybrid Mode) on Unlocking Innovation: Exploring Research, Innovation and Patents (UIERIP-2023) by Department of Mechanical Engineering College of Engineering, Pandharpur SVRI on 17th to 22nd July 2023.
- Completed FDP on Recent Advancements in Materials, Manufacturing and Technology by Swarnandhra College of Engineering and Technology, Seetharampuram, Andhra Pradesh from 30/10/2023 to 4/11/ 2023.

❖ Dr. Milind S. Yadav

- Completed FDP on Unlocking Innovation: Exploring Research, Innovation and Patents (UIERIP-2023) by Department of Mechanical Engineering College of Engineering, Pandharpur SVRI on 17th to 22nd July 2023.

❖ Prof. Vikram S. Chougule

- Completed FDP on Unlocking Innovation: Exploring Research, Innovation and Patents (UIERIP-2023) by Department of Mechanical Engineering College of Engineering, Pandharpur SVRI on 17th to 22nd July 2023.

Faculty Achievements

❖ Prof. Sachin S. Mestry

- Completed One Week Online FDP on Mathematical Modelling and Computation in Engineering by Department of Science and Humanities at SRM Institute of Science and Technology Ghaziabad, U.P. from 24th to 30th July, 2023.

❖ Prof. Vidyasheel S. Bagade

- Completed One Week Online FDP on Mathematical Modelling and Computation in Engineering by Department of Science and Humanities at SRM Institute of Science and Technology Ghaziabad, U.P. from 24th to 30th July, 2023.
- Completed FDP on Unlocking Innovation: Exploring Research, Innovation and Patents (UIERIP-2023) by Department of Mechanical Engineering College of Engineering, Pandharpur SVERI on 17th to 22nd July 2023.

❖ Prof. Gayatri M. Kirkire

- Published A chapter titled " Medical Product Manufacturing Process Capability Improvement Using Six Sigma–DMAIC Methodology" in Lecture Notes in Mechanical Engineering. Springer, Singapore.
- Published a paper Modeling barriers to adoption of digitization in supply chains using FTOPSIS and its impact on sustainability TBL in Benchmarking: An International Journal Published by Emerald Publishing
- Received a Patent on Eco friendly mango packaging solution through sustainable recycling of coconut shells.
- Completed STTP on Application of MCDM methods in Logistics and Transportation Engineering by NIT, Calicut from 10th to 15th July 2023.
- Completed STTP on Digital Supply Chain Management by NIT, Calicut from 17th to 21st July 2023.
- Completed One Week Online FDP on Mathematical Modelling and Computation in Engineering by Department of Science and Humanities at SRM Institute of Science and Technology Ghaziabad, U.P. from 24th to 30th July, 2023.

❖ Prof. Hemant V. Chavan

- Completed FDP on Unlocking Innovation: Exploring Research, Innovation and Patents (UIERIP-2023) by Department of Mechanical Engineering College of Engineering, Pandharpur SVERI on 17th to 22nd July 2023.

Faculty Achievements

❖ Prof. Amar S. Yekane

- Completed FDP on Unlocking Innovation: Exploring Research, Innovation and Patents (UIERIP-2023) by Department of Mechanical Engineering College of Engineering, Pandharpur SVERI on 17th to 22nd July 2023.
- Completed One Week Online FDP on Mathematical Modelling and Computation in Engineering by Department of Science and Humanities at SRM Institute of Science and Technology Ghaziabad, U.P. from 24th to 30th July, 2023.
- Published a paper Effective Ergonomic Practices in Manufacturing Systems at International Conference On Effective Ergonomic Practices in Manufacturing Systems on 14th December 2023.

❖ Prof. Jayesh S. Anavkar

- Published A chapter titled " Optimization and Weight Reduction of Injection Moulding Machine Components for Beverage Filtering" in Lecture Notes in Mechanical Engineering. Springer, Singapore.
- Completed NPTEL certificate course Python for Data science

❖ Prof. Mahadev L. Naik

- Completed STTP on Application of MCDM methods in Logistics and Transportation Engineering by NIT, Calicut from 10th to 15th July 2023.

❖ Dr. Kedar G. Bhide

- Completed NPTEL certificate Course German-III

❖ Prof. Mandar S. Padhye

- Published a paper Integration of Phase Change Materials (PCMs) in Freezer of a Domestic Refrigerator: A Comparative Study in Journal of Institution of Engineers (India) Series C

❖ Prof. Priyanka A. Date

- Completed STTP on Application of MCDM methods in Logistics and Transportation Engineering by NIT, Calicut from 10th to 15th July 2023.
- Completed FDP on International Advanced Faculty Development Program on Application of Research Software for Qualitative and Quantitative Research Design (FDP SRD 2023) by Eudoxia Research Centre and Eudoxia Research University – USA on 5th to 13rd September 2023.

Awards and Recognition

- ❖ Dr. Milind S. Kirkire appointed as Member, Board of Studies in Fisheries Engineering, College of Fisheries, Ratnagiri (Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli), A public Agricultural University in Maharashtra