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MECHAZINE

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Department of Mechanical Engineering



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Hope Foundation's
Finolex Academy of Management and Technology, Ratnagiri
(Approved by AICTE, Recognized by DTE, Affiliated to University of Mumbai)


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*One child, one
teacher, one
book, one pen
can change the
world.*

Malala Yousafzai

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VISION

- To become a center of quality education by developing competent engineers who can address 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 mechanical and allied industries.

Programs Organized by Department

Webinar on Evaporative Emission Control Technology

The Department of Mechanical Engineering at Finolex Academy of Management and Technology, Ratnagiri, in association with SAEINDIA, organised a Webinar on Evaporative Emission Control Technology on Monday, 14th July 2025. The session was specifically arranged for third-year Mechanical Engineering students as part of the subject "Thermal Engineering".

The webinar provided valuable insights into various evaporative emission control technologies that help prevent fuel vapours from escaping into the atmosphere. These vapours are captured in a charcoal canister and later burned in the engine, playing a key role in reducing hydrocarbon emissions from vehicles. Prof. V. S. Bagade and Prof. A. S. Yekane coordinated the event

Guest lecture by Mr. Ajinkya Bapat

The Department of Mechanical Engineering at Finolex Academy of Management and Technology, Ratnagiri, organised a guest lecture by Mr. Ajinkya Bapat, Senior Manager and Energy Auditor at Johnson Controls Building Technologies & Solutions (BT&S) India, West, on Friday, 25th July 2025.

During the session, Mr. Ajinkya Bapat provided insights into the fundamentals of heating, ventilation, air conditioning, and refrigeration (HVACR). He also elaborated on the functioning of chillers and the importance of conducting energy audits for chillers used in various air conditioning plants.



Mr. Ajinkya Bapat delivering a guest lecture

The session was specifically conducted for final-year Mechanical Engineering students in connection with their major project, which focused on chiller energy

and the application of machine learning in air conditioning systems. Johnson Controls BT&S India, West, a part of the global leader in smart building solutions, specializes in delivering energy-efficient, sustainable and intelligent building technologies that promote healthier and more productive environments. A total of 17 students participated in the session. Prof. V. S. Bagade and Prof. G. M. Kirkire coordinated the event.

Educational Visit to Robotics and Automation Expo 2025

On Thursday, 12th August 2025, the Mechanical Engineering Department of Finolex Academy of Management and Technology, Ratnagiri, organized an Educational Visit to the Robotics & Automation Exhibition – Automation Expo 2025 at Goregaon, Mumbai



SE Mechanical Engineering students at AutoExpo 2025

The primary objective of the visit was to expose students to real-world applications of robotics and automation, bridge the gap between classroom learning and industrial practices, and inspire them to apply these concepts in their academic projects and future careers.

The exhibition gave students a great opportunity to witness the latest developments in industrial automation, such as robotic arms, programmable logic controllers, SCADA systems, advanced sensors, AI-based robots, and smart manufacturing systems using IoT. They also watched live demonstrations on how these technologies are used in industries like manufacturing, packaging, and process control.

Programs Organized by Department

Career Opportunities in Piping Design

A seminar on Career Opportunities in Piping Design was organized on 15th September 2025 for the third year and final-year Mechanical Engineering students. The event was conducted in collaboration with Asian Academy of Professional Training India Pvt. Ltd., Pune, and was delivered by Mr. M. R. Joshi, Director, along with his expert team.

The session highlighted the importance of piping design in industries such as oil and gas, petrochemicals, and power plants. Topics such as industry codes and standards, software tools like PDMS, CAESAR II, and AutoCAD, as well as global career opportunities in Piping Engineering, were discussed.



Mr. M. R. Joshi delivering the seminar

Students actively participated in the interactive session and gained valuable insights into skill development and specialized training pathways.

Career Guidance Program for Joining the Merchant Navy

On 17th September 2025, the Mechanical Engineering Students Association (MESA) organized a Career Guidance Program for Joining the Merchant Navy for the students of the Department of Mechanical Engineering in the Seminar Hall and witnessed the participation of 103 students from the Mechanical Engineering Department.

The seminar featured Captain Makarand Sardesai, Faculty in BSc Nautical Science, Mrs. Ashwini Deshmukh, from the Computer Science Department, Mr. T. Pramod

Mhatre, our Placement Officer, and Miss Niya Patil, a cadet student of B.Sc. Nautical Science. Captain Makarand Sardesai delivered an insightful session that explained the details of a career in the Merchant Navy. The seminar also aimed to equip students with the admission process for the course of Merchant Navy at the training ship Rahaman. Captain Makarand Sardesai also discussed the career of women in the Merchant Navy



Dr. Milind S Kirkire welcomes Capt. Makarand Sardesai

Field Visit to Suzlon Wind Turbine Power Plant

On Saturday, 4th October 2025, the Mechanical Engineering Students Association (MESA) organized a field visit to the Suzlon Wind Turbine Power Plant, Devgad.



Students at Suzlon Wind Turbine Power Plant

The visit was part of the Mumbai University syllabus for the subject Renewable Energy Sources, VII Semester, Mechanical Engineering. 16 students, along with Prof Hemant V Chavan, took part in the field visit.

Programs Organized by Department

Session on Innovations in Solar Energy and Awareness of PM Surya Ghar Yojana

On Thursday, 13th October 2025, a technical session and field visit were organized to enhance students' knowledge of solar energy technologies and government support for renewable energy. The focus was on Innovations in Solar Energy and Awareness of the PM Surya Ghar Yojana, a central government scheme aimed at promoting solar energy in households.

of the subject Renewable Energy Sources for the VII Semester. A total of 16 students participated.



Mr. Rhishikesh Kondekar explains the PM Surya Ghar Yojana

Mr. Rhishikesh Kondekar shared insights on the latest advancements, including high efficiency photovoltaic cells, solar water heaters and explained the government initiative, including subsidies and incentives for homeowners who wish to install rooftop solar panels, along with the eligibility criteria and application process.



Field Visit to Solar Plant

After the session, a field visit was conducted to observe practical applications of solar technology. This visit was an additional effort to cover the syllabus content

Faculty Achievements

- ***Dr. Milind S. Yadav***

- Completed FDP on “Next-Gen Mechanical Systems: Leveraging AI/ML for Energy Efficiency & Sustainability”, organized by the Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, from 18th August to 22nd August 2025.

- ***Dr. Milind S. Kirkire***

- Served as the Chairperson for the course Industrial Automation and Robotics and Automation Lab under University of Mumbai syllabus design committee of NEP 2020 curriculum for Semester VI.
- Published a paper "Analysis of Barriers to Implement Reconfigurable Supply Chain in Healthcare: SAW Approach" in International Conference -AI-driven Industrial Engineering for Sustainability by IIIE Trivandrum on 8th August, 2025.
- Published a paper "Maintenance 4.0 implementation barriers in manufacturing industries: SEM-BN approach "in "WoS/SCOPUS/SCI " in International Journal of Quality & Reliability Management by Emerald Publishers on 13th Nov, 2025.
- Published a paper "Maintenance 4.0 implementation in manufacturing industries: an analysis of enablers "in "WoS/SCOPUS/SCI " International Journal of Quality in Maintenance Engineering by Emerald Publishers on 30th Dec, 2025.
- Completed ATAL FDP “Shaping the Future of Manufacturing with 3D Printing Techniques”, organized by Sardar Patel College of Engineering, from 1st December 2025 to 6th December 2025.

- ***Dr. Shashikant S. Goilkar***

- Served as the Chairperson for the course Vibration Analysis and Control and Vibration and Machinery Diagnostics Lab University of Mumbai syllabus design committee of NEP 2020 curriculum for Semester V.
- Completed FDP on “Next-Gen Mechanical Systems: Leveraging AI/ML for Energy Efficiency & Sustainability”, organized by the Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, from 18th August to 22nd August 2025.

- ***Prof. Sachin S Mestry***

- Served as a Member for the course Dynamics of Machinery under University of Mumbai syllabus design committee of NEP 2020 curriculum for Semester V.
- Completed FDP on “Next-Gen Mechanical Systems: Leveraging AI/ML for Energy Efficiency & Sustainability”, organized by the Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, from 18th August to 22nd August 2025.
- Conducted Hands-on Training session “Data Analytics using Advanced Excel Tools”, supported by the DBT-Star College Scheme, New Delhi, and organized by New Education Society’s Arts, Commerce and Science College, Lanja, on 20th September 2025.

Faculty Achievements

- ***Prof. Vidyasheel S. Bagade***

- Served as a Chairperson for the course Fluid Mechanics and Machinery under University of Mumbai syllabus design committee of NEP 2020 curriculum for Semester VI.
- Attended National level Webinar on “Evaporative Emission Control Technology” organized by SAEINDIA Western Section, Wakad, Pune, on 14th July 2025.
- Completed FDP “Technological Advancement in HVAC&R, Research and Innovation in Space & Automobile Air Conditioning Systems”, organized by ISHRAE in association with Meghnad Saha Institute of Technology and Parala Maharaja Engineering College, from 22nd July 2025 to 26th July 2025.

- ***Prof. Gayatri M. Kirkire***

- Completed ATAL FDP “Shaping the Future of Manufacturing with 3D Printing Techniques”, organized by Sardar Patel College of Engineering, from 1st December 2025 to 6th December 2025.

- ***Prof. Sumit S. Malusare***

- Served as a Member for the course Internet of Things under University of Mumbai syllabus design committee of NEP 2020 curriculum for Semester VI.

- ***Prof. Harshal R. Salvi***

- Published a paper entitled "Analysis of Barriers to Implement Reconfigurable Supply Chain in Healthcare: SAW Approach" in International Conference -AI-driven Industrial Engineering for Sustainability by IIIE Trivandrum on 8th August, 2025.
- Completed FDP on “Next-Gen Mechanical Systems: Leveraging AI/ML for Energy Efficiency & Sustainability”, organized by the Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, from 18th August to 22nd August 2025.

- ***Prof. Amar S. Yekane***

- Served as a Member for the theory and lab course of Measurement and Control under University of Mumbai syllabus design committee of NEP 2020 curriculum Semester VI.
- National level Webinar on “Evaporative Emission Control Technology” organized by SAEINDIA Western Section, Wakad, Pune, on 14th July 2025.
- Completed ATAL FDP “Shaping the Future of Manufacturing with 3D Printing Techniques”, organized by Sardar Patel College of Engineering, from 1st December 2025 to 6th December 2025.

- ***Prof. Jayesh S. Anavkar***

- Completed FDP on “Next-Gen Mechanical Systems: Leveraging AI/ML for Energy Efficiency & Sustainability”, organized by the Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, from 18th August to 22nd August 2025.

Faculty Achievements

- ***Prof. Mahadev L. Naik***

- Published a paper "Analysis of Barriers to Implement Reconfigurable Supply Chain in Healthcare: SAW Approach" in International Conference -AI-driven Industrial Engineering for Sustainability by IIIE Trivandrum on 8th August, 2025.
- Published a paper "Maintenance 4.0 implementation barriers in manufacturing industries: SEM-BN approach "in "WoS/SCOPUS/SCI " in International Journal of Quality & Reliability Management by Emerald Publishers on 13th Nov, 2025.
- Published a paper "Maintenance 4.0 implementation in manufacturing industries: an analysis of enablers "in "WoS/SCOPUS/SCI " International Journal of Quality in Maintenance Engineering by Emerald Publishers on 30th Dec, 2025.
- Attended webinar on "Geometric Dimensioning and Tolerancing Foundation Training", organized by IFS Academy on 28th June 2025.
- Completed FDP on "Next-Gen Mechanical Systems: Leveraging AI/ML for Energy Efficiency & Sustainability", organized by the Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, from 18th August to 22nd August 2025.

- ***Prof. Shodhan U. Mayekar***

- Completed FDP on "Next-Gen Mechanical Systems: Leveraging AI/ML for Energy Efficiency & Sustainability", organized by the Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, from 18th August to 22nd August 2025.

- ***Prof. Prabodh B. Horambe***

- Completed FDP on "AI for Sustainable Development Goals", organized by Vishwakarma Institute of Technology, Pune, from 1st December 2025 to 5th December 2025.

- ***Prof. Pratik R. Kamble***

- Delivered a Session on Personality Development organized by Mukul Madhav Vidyalaya and Junior College, Ratnagiri, on 25th September 2025.

- ***Prof. Priyanka A. Date***

- Completed FDP on "Next-Gen Mechanical Systems: Leveraging AI/ML for Energy Efficiency & Sustainability", organized by the Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, from 18th August to 22nd August 2025.
- Completed FDP on "A Systematic Way of Research Paper Writing", organized by Research Foundation of India in collaboration with Parul University, from 3rd November 2025 to 8th November 2025.