

Ashokrao Mane Polytechnic Vathar



Auto-Buzz...

A Newsletter

From

Department of

AUTOMOBILE ENGINEERING

VOL - 6 : ISSUE-I, JANUARY 2023 TO MAY 2023



Theme Hyperloop Transportation

Inside...

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- Faculty Achievement.
- School Connecting Program.
- Success Story.
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Vision Mission of The Department

Vision :

- Lead in a technical and social education to create competent engineers to meet the transforming needs of the global automotive industry and society.

Mission :

- To imparts technical knowledge and problem solving skills in automobile engineers.
- To empower the students with use of appropriate engineering tools and emerging technology by considering impact on environment and society.
- To develop professionally competent and ethically strong engineers to work as an individual or in team.
- To provide supportive and diverse environment that enables students for higher education, employability and entrepreneurship.

Chief Editor : Prof. P. T. Hasabe.

Editorial Committee : 1. Mr. S. S. Patil.
2. Mr. R. P. Bagewadi.
3. Sarthak Jadhav.
4. Satej Chougale.
5. Gayatri Chougule.

Message From Principal Desk



I am very happy to note that the Department of Automobile Engineering of Ashokrao Mane Polytechnic Vathar tarf Vadgaon is releasing its Newsletter enumerating the various activities including the

achievements of their faculty and students. Automobile Engineering is a versatile and evergreen branch of engineering. Automobile engineer can work in various fields like automotive system, airspace engineering, design engineering, dynamic system and control, advance automobile engine, etc. and most importantly in software field also. The students and faculties of department are always proactive in taking initiatives in technical, cultural and social events. I hope that this newsletter will serve the purpose of reflecting all activities of department and it will inspire others to do their best. I congratulate all the students who have put their efforts in bringing this newsletter issue and also appreciate HOD and all faculty members for motivating their students towards this fulfilment.

Dear Students, if you are determined to work hard to achieve your goal, nothing in this world can deter you from achieving your goal. However, if at the outset you fail to achieve your goal, figure out if any change is needed in your goal setting as per your potential, work with great vigor. Don't stop to strive hard until you succeed, do smart work and see success will be yours. Telling reasons are easy equally easy is finding reasons but achieving success and sharpening your career is more important isn't it?

I wish best luck in all your endeavors.

Prof. Y. R. Gurav

Principal

Ashokrao Mane Polytechnic Vathar tarf Vadgaon

Message From HOD Desk



It's my pleasure to introduce department newsletter 'Auto-Buzz' for the Even Semester of A.Y. 2023-24. To begin with I would like to congratulate to our Departmental Editorial Board

for taking such great efforts in publishing these excellent articles and organizing it in a systematic way. Automobile Engineering department is striving towards the goal of providing innovative and quality education with high standard to achieve academic excellence.

Department has well equipped laboratories and excellent computational facilities. For overall development of the students, Guest Lectures from eminent persons in the field are arranged, Industrial Tours, Technical Workshops, Soft Skill training programs are arranged on regular basis. Automobile Engineering Students Association (AESA) helps the students to arrange the various programs in the Department. It leads to develop the leadership and managerial qualities of the students.

I would like to advice all my students to first think 'inside the box' to be able to pursue their 'out of the box' goals. They should look for small improvements in their current setup and execute everything with perfection. Make full use of the educational facilities to ignite the spark within them so that they can fulfil their dreams in future.

Prof. P. T. Hasabe

Head of Automobile Engineering
Department.

About Department

Established in the year 2009, our department offers three years diploma in Automobile Engineering with an intake of 60. Automobile Engineer needs a solid understanding of key concepts in Automobile so that it can be best utilized in this sector. The program prepares students for technological careers and works as a launching pad for their professional careers in industry, business or public services.

The aim of the department is to achieve excellence in the field of automobile and educate students in area of automobile engineering so that they will meet the need of industry. Department has Qualified, Sincere and Dedicated Teaching & Non Teaching faculty members. Faculties are continuously trying to upgrade their knowledge and skills by attending various Workshops, Seminars, and STTP, FDP, etc.

Key points of the Department



- 100% Placement.
- Excellent Results.
- Highly qualified and well experienced Faculties.
- In-plant Training & Industrial Training organization.
- Well-developed Laboratories.
- Strong MOU's with Industries.

Major Events Conducted at Department

Industrial Visits



S. S. Mirje & Sons Ltd. Ambap Phata, Vathar.



Parag Industries, Plot No. W71, MIDC Golkul Shirgaon, Kolhapur



Swami E Wheels A/p Gadmodshingi, Tal-Karveer, Dist- Kolhapur



Industrial Visit at S. M. Ghatge & Sons Auto, Kolhapur.



Industrial Visit at Rajesh Motors Commercial Vehicles Expo, Dasara Chowk, Kolhapur.



Industrial Visit at Shriram Foundry Pvt. Ltd., MIDC Shirol.

For practical Exposure and Career Guidance our department arranged industrial visits at several Industries

1. S. S. Mirje & Sons Ltd. Ambap Phata, Vathar.
2. Parag Industries, Plot No. W71, MIDC Golkul Shirgaon, Kolhapur
3. Swami E Wheels A/p Gadmudshingi, Tal- Karveer, Dist- Kolhapur
4. Industrial Visit at S. M. Ghatge & Sons Auto, Kolhapur.
5. Industrial Visit at Rajesh Motors Commercial Vehicles Expo, Dasara Chowk, Kolhapur.
6. Industrial Visit at Shriram Foundry Pvt. Ltd., MIDC Shirol.

Expert Lectures



The expert lecture is conducted by **Mr. S. R. Koli Assistant Professor, S.K.N.S.COE Pandharpur**, on 17th Feb. 2024, on the topic “**Electric Vehicles (E-Vehicles)**”, as a part of mandatory expert lecture in MSBTE curriculum.

The expert lecture on electric vehicles (E-Vehicles) was organized with the primary objective of educating students and participants about the advancements, challenges, and future prospects of electric vehicles in the automotive industry.



The expert lecture is conducted by Industrial Expert **Mr. Kiran Jadhav**, on 23th Jan. 2024, on the topic “**Vehicle System and Maintenance**”, as a part of mandatory expert lecture in MSBTE curriculum.

The primary goal was to provide insights into how academic institutions and aspiring professionals can align their skills and knowledge with these demands.

Technical Events - Reflex 2K24

Poster Presentation

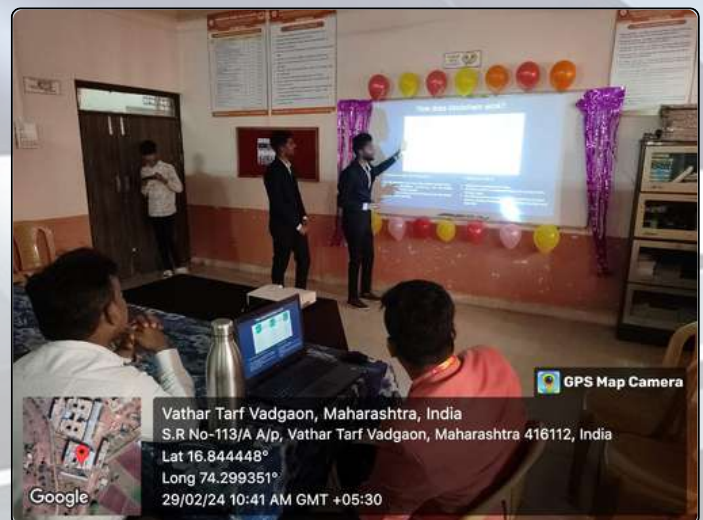


We arranged poster presentation on the subject “Air Pollution”. Event was arranged and successfully conducted by Automobile Engineering Department of Ashokrao Mane Polytechnic, Vathar. The Event was conducted on 29th February 2024.

It gives us immense pleasure to declare that Total 50 + participants from all over Maharashtra including various institutes gave the huge response and registered them for this event. The event was coordinate by Mr. S. B. Akiwate and Mr. R. P. Bagiwadi.

Additionally, every participant conveyed their gratitude and positive feedback for the event effective execution. Mr. P. T. Hasabe thanked everyone as the event came to an end.

Paper Presentation



The Automobile engineering Department had proudly organized Reflex 2K24 a State level Technical Symposium on Monday 29th February 2024. Under the event Paper Presentation competition was conducted successfully. This competition was conducted by the students of Automobile engineering Department under the guidance of Competition Coordinators Mr. N. H. Mujawar and Mr. J. A. Basugade.

The Paper Presentation Topics are:

1. Green Manufacturing Practices.
2. Modern Trends in Automobile.
3. E-vehicle future Scenario.
4. Future Fuels and fuel Technology.
5. Advanced Safety in Automobile

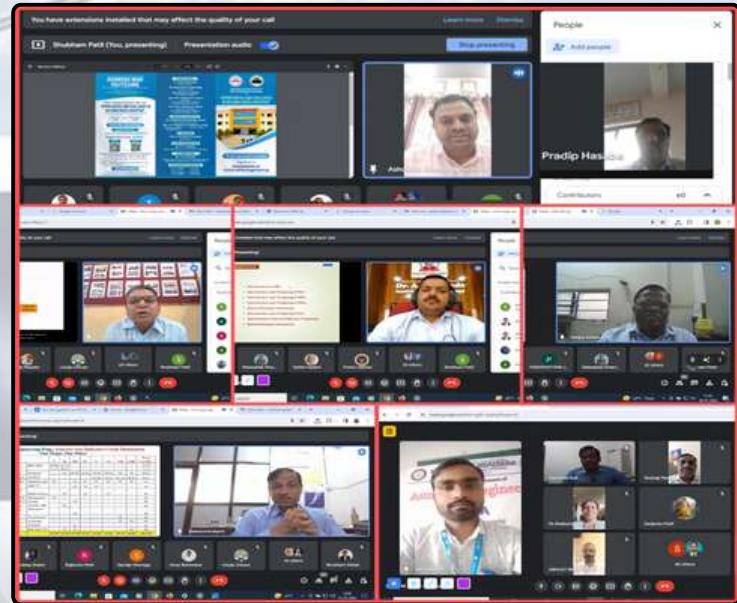
Road Safety Week



On the occasion of successful completion of 16 years in educational excellence, Ashokrao Mane Polytechnic, Vathar. Inaugurated Road Safety week as a part of Social Responsibility to promote road safety awareness among the youth of the Vathar, Vadgaon, and Kolhapur region. The inaugural ceremony held at Ashokrao Mane Polytechnic, Vathar Campus on 01st February 2024 between 10.00 am to 01.00 pm.

The aim of this campaign is to emphasize and highlight students about the need of Road Safety by implementing various Programs. To give a big start to Ashokrao Mane Polytechnic, Vathar Road Safety week 2024 is inaugurated by special personalities from Kolhapur Government RTO Department like Mr. Rohit Rathod, Assistant Inspector of Motor Vehicle and Mr. Tejas Dol, Assistant Inspector of Motor Vehicle.

Faculty Development Program



One week online faculty development program on "Opportunities and Challenges in Outcome Based Education" conducted from 29th January to 02nd February 2024 by Automobile Engineering Department of Ashokrao Mane Polytechnic, Vathar tarf Vadgaon, Tal-Hatkanangle, Dist- Kolhapur, Maharashtra. The eminent Doctorates from renowned institutions like Govt. Polytechnics-Nagpur, Awasari, SKNSCOE, RIT etc. were invited as resource persons in this FDP. It gives us immense pleasure to declare that **total 155+ participants** from all over Maharashtra including variety of designations like Principals, Professors, HODs, TPOs, lecturers, registered themselves for this FDP. The convener Principal Prof. Y. R. Gurav, chief coordinator Mr. P. T. Hasabe, Head, Automobile Engineering Department and coordinator Mr. S. B. Akiwate were present.

NSS Activity

Blood Donation Camp



On the Occasion of "Birthday of Hon. Sou. Manisha Mane Vhinisaheb ",Member ,ZP Kolhapur , NSS committee of Ashokrao Mane Polytechnic, Vathar has arranged the "Blood Donation Camp" on 29/1/2024 with cooperation of Sanjeevan Blood Center Kolhapur.

Alumni Meet

ASHOKRAO MANE POLYTECHNIC poster for Alumni Meet-2024, featuring the college name, date (6th January, 2024), and the slogan 'COME & RECONNECT'.

पुढारी (Pudhari) article about the Alumni Meet, mentioning the gathering of graduates and the presence of faculty members.



Our institute hosted a vibrant Alumni Meet on 06/01/2024 that brought together graduates from various batches, fostering a day filled with reminiscence, networking, and shared experiences.

In this event more than 50 alumni's from Automobile Department was present. We are thrilled to see such a strong turnout and enthusiasm among our alumni. Events like these not only strengthen our alumni network but also reinforce the bond between our graduates and the institute.

Annual Sports



Winners of Girls Cricket



Winners of Boys Football



Boys Kabbadi

Cultural Events

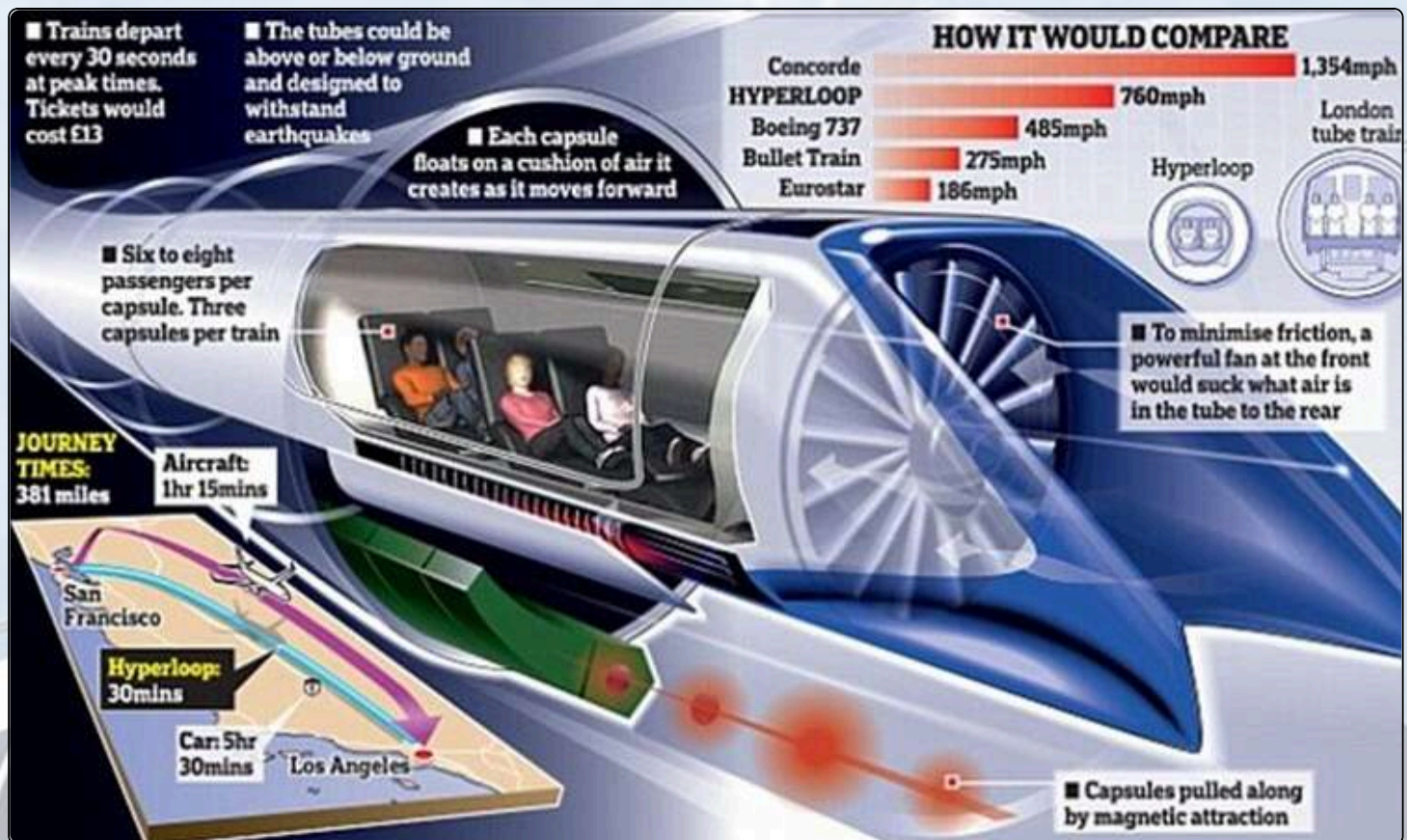


Traditional Day



Kalavishkar 2k24

About Theme: Hyperloop Transportation



Hyperloop transportation represents a revolutionary concept in modern transit, poised to redefine the way we envision high-speed travel. Conceived by Elon Musk in 2013, this innovative mode of transportation promises to combine the speed of air travel with the efficiency of trains, all within a low-pressure tube system. Its potential to drastically reduce travel times between cities, mitigate environmental impacts, and revolutionize urban mobility has captured the imagination of engineers, policymakers, and the public alike. As ongoing research and development bring this technology closer to reality, the promise of Hyperloop is not just about faster travel, but about reshaping the future of transportation on a global scale.

As of now, Hyperloop technology remains in the experimental and development stages. Prototype tests have demonstrated the feasibility of the concept, showcasing promising results in terms of speed, efficiency, and safety. Ongoing research and development efforts continue to refine the technology, improve safety measures, and address regulatory concerns.

The future outlook for Hyperloop technology hinges on overcoming these challenges and demonstrating its economic viability through successful pilot projects and eventual commercial deployments. If successfully implemented, Hyperloop has the potential to revolutionize transportation by offering ultra-fast, energy-efficient, and environmentally friendly travel options on a global scale.

In conclusion, while Hyperloop technology remains a futuristic concept, its potential to transform transportation is significant. With continued innovation, investment, and collaboration among stakeholders, Hyperloop could one day become a cornerstone of 21st-century infrastructure, ushering in a new era of fast, sustainable, and interconnected global mobility.



As we stand on the brink of a new era in transportation, Hyper loop technology represents a paradigm shift a vision of high-speed, sustainable travel that of mobility. Originating as a

concept for ultra-fast transportation in tubes, Hyper loop has transcended boundaries and captured imaginations worldwide. While its primary application has been envisioned for intercity and transcontinental travel, its principles hold profound implications for the future of automobiles as well.

At its core, Hyper loop Technology leverages magnetic levitation, low-pressure tubes, and advanced propulsion systems to propel vehicles at speeds exceeding traditional modes of transport. This not only promises to reduce travel times significantly but also offers a vision of sustainable transport through its potential for minimal energy consumption and environmental impact.

In the realm of automotive engineering, the integration of Hyper loop principles opens doors to innovation on multiple fronts. Imagine a future where vehicles are equipped with Hyper loop- inspired propulsion systems, enabling them to travel swiftly and efficiently across urban landscapes and beyond. Picture cars that seamlessly transition between conventional roads and dedicated Hyper loop tracks, offering commuters unprecedented speed and convenience.

In conclusion, the integration of Hyper loop Technology into automotive engineering represents more than just a technological advancement—it represents a vision of a future where speed, efficiency, and sustainability converge. Together, let us continue to push the boundaries of what is possible, inspire innovation, and shape a future where transportation is as limitless as our imagination.

Mr. S. L. Gidde

Lecturer

Automobile Engg. Department



Hyperloop technology represents a revolutionary approach to transportation, aiming to propel passengers and cargo through low-pressure tubes at extremely high speeds.

Conceived by Elon Musk in 2013, this concept has garnered significant attention and investment from various companies and innovators worldwide, each striving to realize its potential as a next-generation transportation solution.

Concept and Design:

The fundamental principle of Hyperloop involves pods or capsules traveling at near-supersonic speeds within tubes maintained at low air pressure. This low-pressure environment minimizes air resistance, enabling the pods to move with minimal friction. Magnetic levitation (maglev) technology, similar to that used in some high-speed trains, suspends the pods above the track and propels them forward using linear induction motors. This method eliminates the need for wheels and direct physical contact with the track, reducing friction and allowing for smoother, quieter travel.

Development and Challenges:

Several companies and research organizations are actively developing Hyperloop prototypes and conducting feasibility studies. Among the leading companies are Virgin Hyperloop, founded by Richard Branson's Virgin Group, and Elon Musk's own company, SpaceX, which hosts the annual Hyperloop Pod Competition to encourage innovation in pod design and technology. However, numerous technical and practical challenges remain before Hyperloop can become a commercially viable reality. These include ensuring passenger safety at high speeds, managing the complex infrastructure required for tube networks, addressing regulatory and legal considerations, and securing sufficient funding for large-scale deployment. Moreover, integrating Hyperloop networks with existing transportation infrastructure presents logistical and planning challenges that require careful coordination and investment.

Mr. S. S. Patil

Lecturer

Automobile Engg. Department



Current Opportunities :

Hyperloop transportation represents a cutting-edge innovation in the field of transportation, offering the potential to revolutionize how people and goods are moved over long distances.

Developed by companies like Virgin Hyperloop, SpaceX, and others, this technology aims to propel pods through low-pressure tubes at speed exceeding 600 miles per hour using magnetic levitation and vacuum technology. As of 2024, several opportunities and challenges define the current landscape of hyperloop transportation.

Technological Advancements:

One of the primary opportunities in hyperloop transportation lies in technological advancements. Companies are continually refining the design of hyperloop pods, improving the efficiency of magnetic levitation (maglev) systems, and enhancing the vacuum pumps that create the low-pressure environment within the tubes. These advancements are crucial for achieving the high speeds and energy efficiency that define hyperloop technology.

Infrastructure Development:

Another significant opportunity is in infrastructure development. Building a hyperloop network requires substantial investment in constructing tubes, stations, and maintenance facilities. This presents opportunities for construction firms, civil engineers, and architects to collaborate on innovative infrastructure projects that could transform regional and international transportation networks.

Economic Impact:

Hyperloop transportation has the potential to stimulate economic growth by reducing travel times between major cities and regions. This could lead to increased productivity, job creation in sectors related to hyperloop technology, and enhanced competitiveness for regions that invest in hyperloop infrastructure.

In conclusion, hyperloop transportation presents exciting opportunities for technological innovation, infrastructure development, economic growth, environmental sustainability, and global connectivity.

Pavan Sarjerao Babar
(T. Y. Automobile)



Future Scope:

Looking into the future, hyperloop transportation holds immense promise as a transformative mode of travel that could revolutionize the way people and goods move across

long distances. As technology advances and investment grows, several key areas define the future scope of hyperloop transportation:

Expansion of Networks:

One of the primary future scopes for hyperloop transportation is the expansion of networks on a regional, national, and international scale. Companies like Virgin Hyperloop and other emerging players are actively planning and developing routes that connect major cities and economic hubs. As these networks expand, hyperloop technology could offer rapid, efficient, and sustainable transportation options across continents, reducing travel times significantly compared to conventional methods.

Integration with Existing Infrastructure:

Hyperloop systems have the potential to integrate with existing transportation infrastructure, complementing modes such as high-speed rail, airports, and urban transit systems. This integration could create seamless multimodal transportation networks, offering passengers and cargo flexible and efficient travel options that combine different modes of transportation for optimal connectivity.

Economic Growth and Job Creation:

The expansion of hyperloop networks and infrastructure development will stimulate economic growth and job creation in related industries. Construction, manufacturing, engineering, and technology sectors will benefit from increased investment in hyperloop projects, creating opportunities for skilled workers and fostering innovation in transportation technologies.

In conclusion, the future scope of hyperloop transportation is promising, with potential applications ranging from regional networks to urban mobility solutions and international travel.

Ayush Liladhar Amarapurkar
(S. Y. Automobile)

Winter 2023 Results

T. Y. AUTO



1st



2nd



3rd

Rank	Name of Student	Percentage
1st	BABAR PAVAN SARJERAO	85.68
2nd	HANKARE DIPTI DASHARATH	81.73
3rd	CHAVAN SNEHAL VIJAY	78.59

S. Y. AUTO



1st



2nd



3rd

Rank	Name of Student	Percentage
1st	JADHAV SARTHAK DURGADAS	88.55
2nd	AMARAPURKAR AYUSH LILADHAR	81.93
3rd	MOHITE DNYARAJ KRUSHNAT	80.88

Extra curricular Achievement



Third year Automobile Engineering Student **Mr. Pawan Sarjerao Babar** has Participated in SMART MANAGER Competition at MBA Dept. RIT Islampur.



Our Second year Automobile Engineering student **Miss. Kalyani Vitthal Patil** participated in Paper Presentation Competition at Dr. Bapuji Salunkhe Institute of Engineering & Technology.



Campus Placement 2023-24



In academic year 2023-24 total 18 students placed in campus placement in MNCs like John Deere, Piaggio Vehicles, Belrise Industries Pvt. Ltd. While many others were opted for higher studies.

Sr. No.	Name of Student	Company Name
1	BABAR PAVAN	CUMMINS INDIA LTD, FALTAN / PIAGGIO VEHICLES PVT.LTD, BARAMATI
2	CHAVAN SNEHAL	CUMMINS INDIA LTD, FALTAN / JOHN DEERE INDIA PVT. LTD, PUNE
3	HANKARE DIPTI	CUMMINS INDIA LTD, FALTAN / JOHN DEERE INDIA PVT. LTD, PUNE
4	JADHAV ARJUN	CUMMINS INDIA LTD, FALTAN / JOHN DEERE INDIA PVT. LTD, PUNE
5	PATIL SHRUTIKA	CUMMINS INDIA LTD, FALTAN
6	CHOUGALE SATEJ	BELRISE INDUSTRIES PVT. LTD.
7	DHANAWADE RUTIK	BELRISE INDUSTRIES PVT. LTD.
8	KALMODI ABHISHEK	BELRISE INDUSTRIES PVT. LTD.

9	JADHAV PATIL RAJNANDINI	BELRISE INDUSTRIES PVT. LTD.
10	HONKAMBLE PRASHANT	PIAGIO VEHICLES BARAMATI
11	KAMBALE SUMEDH	PIAGIO VEHICLES BARAMATI
12	DALAIT AFTAB	PIAGIO VEHICLES BARAMATI
13	MALI YASH	PIAGIO VEHICLES BARAMATI
14	MOHITE SANKET	PIAGIO VEHICLES BARAMATI
15	LOHAR PRACHI	BELRISE INDUSTRIES PVT. LTD.
16	MALI AKASH	BELRISE INDUSTRIES PVT. LTD.
17	PATIL SHIVRAJ	BELRISE INDUSTRIES PVT. LTD.
18	POWAR BHAGYASHRI	BELRISE INDUSTRIES PVT. LTD.



Prof. B. Y. Ghatge have successfully represented research paper in 2nd International Conference on Recent Trends in Civil Engineering, Science and Management and paper got publish in International Journal of Advance Research in Science and Engineering.



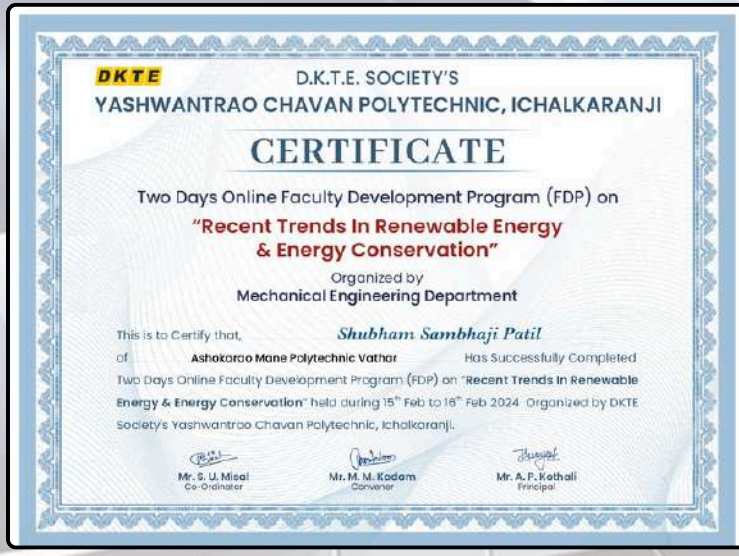
Our Automobile Engineering Department Staff

1) Prof. B. Y. Ghatge 2) Prof. P. T. Hasabe 3) Prof. N. H. Mujawar
 have Successfully Presented Research Paper Titled "Lean Manufacturing: A Genuine need of Industry"
 at International Conference on Recent Advances in Science, Engineering, Technology and Management (ICRASETm - 2024).



Our Automobile Engineering Department Staff Prof. R. G. Katkar
 has published a paper titled "Development of Asbestos Free Composite For Friction Lining and Estimation of its Tribological Properties" in International Research Journal of Modernization in Engineering Technology and Science.

Faculty Attended Training



Faculty of the Automobile Engineering Department attended a Faculty Development Program (FDP) focused on "Recent Trends in Renewable Energy and Energy Conservation." The program likely aimed to update educators on advancements and practices in the field of renewable energy and strategies for energy conservation. Such FDPs are crucial for faculty to stay abreast of current industry standards, technological innovations, and sustainable practices, which they can then impart to their students. Topics covered might include solar power, wind energy, biofuels, energy-efficient vehicles, and smart grid technologies, among others. These programs not only enhance faculty knowledge but also contribute to the overall quality of education provided to students in the department.

By attending this FDP, faculty members enhanced their expertise in sustainable practices and gained valuable perspectives that can enrich their teaching methodologies. They are now better equipped to educate future automotive engineers on the importance of renewable energy and energy conservation in shaping the future of the automotive industry. This initiative not only strengthens the department's academic offerings but also underscores its commitment to staying at the forefront of technological advancements and environmental stewardship in automotive engineering.

Success Story

Miss. Supriya Randive our alumni from 2014-15 pass out batch currently working as “Assistant Workshop Superintendent” at Malkapur.

Supriya's success story is a testament to the transformative power of passion, perseverance, and dedication in the pursuit of excellence. Her journey from a driven student to a respected leader in the automotive industry exemplifies how a strong foundation in education, coupled with practical experience and a relentless drive to succeed, can pave the way for a fulfilling and impactful career. During her academic years, Supriya distinguished herself not only through top academic performance but also through her practical skills and leadership in various engineering projects. As Supriya continues to drive innovation and uphold standards in her role as Assistant Workshop Superintendent, her story serves as an inspiration to aspiring engineers striving to make their mark in the dynamic world of automobiles.



Miss. Supriya Randive
Alumni

Theme for next issue : AI in
Automobile Industry.



**Welcome to
Academic Year
2024-25**



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