

Ashokrao Mane Polytechnic Vathar



Auto-Buzz...



A Newsletter From Department of **AUTOMOBILE ENGINEERING**

VOL - 5 : ISSUE-I,
JULY 2023
TO
DECEMBER 2023

**Theme
E-Vehicle**

Inside...

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Chief Editor : Prof. P. T. Hasabe .

Editorial Committee : 1. Mr. B. Y. Ghatge.
2. Mr. S. S. Patil.
3. Mr. R. M. Kamble.
4. Mr. S. N. Chougule.
5. Miss. G. K. Chougule.

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 impart 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.

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, aerospace 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 odd 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



The industry visit is arranged at "S. M. Ghatge and Sons" Kolhapur on 12th Oct.2023, and Shriram Foundry MIDC Shirola on 12th Oct.2023. The various concepts regarding Materials and Manufacturing Processes, Automobile Engines, Automobile Transmission System, Automobile Body Engineering and Safety, Transport Management and Motor Vehicle act are made familiar to students through this industrial visit.

Expert Lectures



The expert lecture is conducted by industrial expert Mr. Ajinkya Uday Kesarkar, on 10th Aug. 2023, on the topic "Career development opportunities for an Automobile Engineer", as a part of mandatory expert lecture in MSBTE curriculum.

Basics of Manufacturing Processes, 6-Sigma, 5 'S' Techniques, Kaizen, Route cause Analysis etc. are discussed in this lecture.

Soft Skill Training..



Three days career guidance training program is conducted from 20th Sept. 2023 to 22th Sept. 2023 for the third year students of all department under career guidance educational training program at Ashokrao Mane Polytechnic, Vathar Tarf Vadgaon. This training is organized by Training & Placement Cell of Ashokrao Mane Polytechnic and the resource person was Mrs. Tanushrer Ghosh-Shinde from Rubicon Skill Development Pvt. Ltd Bardays-NASSCOM.

In the first session, students were introduced to organizational structure, Goal Setting and SWOT analysis along with ice breaking. The students got the idea about how organizations works in different sectors as well as the information about different Job/ educational opportunities in govt. and private sectors of India as well as abroad.

In second session, student were introduced to public speaking, corporate jargons along with English communication. Resource person explained the different methods and techniques to prepare power point presentation and tips of presentation skills, email writing and telephonic communication.

In the third session, students played different group activities to know importance of team work, the qualities of good leadership, personal interview techniques through Mock interviews and hody as well as resume/CV writing.

Technical Events Organised on Engineers Day



On 15th Sept. 2023, on the occasion of Engineers day. Various Technical & Non Technical Events are organized by Dept. of Automobile Engineering. Under the guidance of HOD Prof. P. T. Hasabe.

Social Activity



Under NSS Activity on 4th Dec.2023, the college donated Blankets & Sweaters to poor and needy workers families in which the faculties and students of Automobile department participated actively.

This program arrange especially to celebrate the birthday of our president Hon. Shree. Vijaysinh Mane.

Go Green Activity



Green Club committee of Ashokrao Mane Polytechnic, Vathar has arranged the “Nirmalya Collection” as a part of “Youth Engagement and Water Stewardship Program”. The event is arranged by cooperation of the entire Green club committee member, staff and students on 29th Sept. 2023 as per the guidelines of Maharashtra state board of technical education, Mumbai.

The “Nirmalya Collection” event was inaugurated by Hon. Principal Prof. Y. R. Gurav, all HOD’s and Green club committee member.

In this event, nearby 40 students and staff participated spontaneously. This event gave complete satisfaction and immense pleasure to all participants.

By organizing such event Ashokrao Mane Polytechnic, Vathar has made great contribution towards its social commitment and pollution free environment.

Fire Safety Report



On 13th Oct. 2023, NSS committee of Ashokrao Mane Polytechnic, Vathar has arranged the “Fire Safety training i.e. Demo on awareness and handling of fire extinguishers” for faculty and students

This event is inaugurated by Hon. Principal Prof. Y. R. Gurav, all HOD’s and NSS coordinator Mr. M. S. Patil and departmental coordinator.

In this event nearby 150 students and staff participated spontaneously. The event gave a first hand knowledge of how to operate fire extinguishers and how to do Risk Management. Such events develop Situational Intelligence Quotient i.e. SQ of students.



Current Scenario of E-Vehicle

High cost is one of the reasons that divert the customers from purchasing the EVs. To work upon this government has pushed a wider EV adoption by

offering various subsidies to commercial vehicles. But electric cars are still remained costlier by at least 30%, mainly due to imported batteries. The Centre's Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) scheme of 2015 rolled out subsidies for electric commercial vehicles. Experts say the main challenges facing the EV industry are inadequate charging infrastructure and reliance on imported components and batteries. But 2020 could change all that. Cost of battery imports will surely come down due to the discovery of lithium reserves in Bangalore. Over the last quarter, manufacturers have announced several new EV models that promise a higher range some substantially more than the 80-90 km an EV gives now.

Another major challenge faced by EVs in India is inadequate charging infrastructure. The charging infrastructure needs urgent focus as India has only 2,636 charging stations. There is no shortage of electricity generation capacity in India to fuel these cars, says Rishabh Jain, manager, CEEW, Centre for Energy Finance, a public policy think tank. Analysis suggests that four-wheeler passenger and commercial vehicles consumed 45 million tones of petrol and diesel in 2022-23. If the distance travelled by these vehicles are covered by equivalent EV-km, it is estimated that nearly 50 billion units of electricity would have been required to charge the EVs. This translates to 3.2% of the electricity that was generated in the same financial year. India's installed solar power generation capacity is 31 GW, according to the Central Electricity Authority. This means there is sufficient electricity available for EVs.

Mr. B. Y. Ghatge

TPO

Ashokrao Mane Polytechnic Vathar tarf Vadgaon



Research Areas in E-Vehicle :

As we witness the rapid evolution of transportation, it becomes evident that the journey towards a sustainable and efficient future requires continuous exploration and innovation. Let us explore some key research domains that are shaping the trajectory of electric vehicles.

Battery Technology:

At the heart of electric vehicles lies the battery, and research in this area is paramount. Scientists and engineers are tirelessly working to enhance energy density, reduce charging times, and improve overall battery performance.

Range Optimization:

Increasing the driving range of electric vehicles is a persistent goal. Researchers are investigating ways to optimize energy consumption, develop advanced regenerative braking systems, and enhance the overall efficiency of electric drive trains.

Charging Infrastructure:

The expansion and improvement of charging infrastructure represent a key focus of research. Scientists are exploring fast-charging technologies, wireless charging solutions, and smart grid integration to make charging more convenient and accessible.

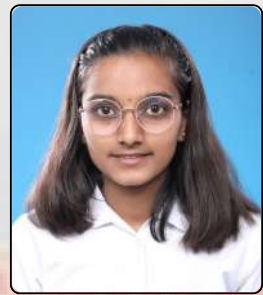
Vehicle-to-Grid (V2G) Technology:

Research is focused on leveraging electric vehicles not only as consumers but also as contributors to the energy grid. Vehicle-to-Grid (V2G) technology explores how electric vehicles can store and supply energy back to the grid during peak demand, creating a more flexible and resilient energy infrastructure.

Mr. S. B. Akiwate

Lecturer

Automobile Engg. Department



Future Scope :

The future scope of electric vehicles extends far beyond mere transportation. It encompasses a paradigm shift in our energy landscape, promoting the integration

of renewable sources and reducing our dependence on fossil fuels. This transition not only mitigates environmental concerns but also enhances energy security, paving the way for a more resilient and sustainable global economy.

In the realm of technology, the evolution of electric vehicles is driving innovation at an unprecedented pace. Advances in battery technology, range optimization, and charging infrastructure are accelerating, making EVs more accessible and practical for a broader audience.

Snehal Vijay Chavan
(T. Y. Automobile)



Current Opportunities :

First and foremost, the manufacturing sector is experiencing a surge in demand for skilled labor and technological expertise. Building electric vehicles

requires a diverse range of talents, from engineers designing cutting-edge batteries to technicians assembling intricate components. This surge in job opportunities not only revitalises existing industries but also lays the groundwork for a skilled workforce ready to tackle the challenges of the future.

The growth of electric vehicles extends beyond the automotive sector, offering opportunities in the energy landscape. Smart grids, renewable energy integration, and energy storage solutions become critical components in supporting the widespread adoption of EVs.

Sarthak Durgadas Jadhav
(S. Y. Automobile)

Alumni view...



As I stand on the beginning of a new chapter in my life, I find myself looking back on the transformative journey that the Diploma in Automobile Engineering brought in me . It is with a mix of nostalgia and excitement that I bid farewell to this cherished phase of my academic and personal growth.

The knowledge and skills acquired during my time in the Automobile Department have been instrumental in shaping my understanding of automotive technology. From dissecting engines in the lab to collaborating on real-world projects, the experiences have been both challenging and rewarding.

I am excited about the possibilities that lie ahead, and I am confident that the skills honed here will prove valuable in the professional world. Thank you, Automobile Department, for the memories, the challenges, and the growth.

DHANRAJ NILESH DALVI
(Alumni 2022-23 batch)

Summer 2023 Results

T. Y. AUTO



1st



2nd



3rd

Rank	Name of Student	Percentage
1st	DALVI DHANRAJ NILESH	78.81
2nd	GHATAGE PRAJYOT RAVINDRA	73.51
3rd	NIUNGARE SAMARTH SANJAY	71.68

S. Y. AUTO



1st



2nd



3rd

Rank	Name of Student	Percentage
1st	CHAVAN SNEHAL VIJAY	80.40
2nd	BHILAVADE SANJIVANI ANIL	79.67
3rd	HANKARE DIPTI DASHARATH	79.56

Extra Co-curricular Achievement



On 11/10/2023 our Second year Automobile Engineering Student Mr. Pawan Sarjerao Babar has Participated in WEBWIZARDS in TECHNOSPHERE event at RIT(Sakharale)



On 16/07/2023 our Second year Automobile Engineering student Mr. Rohit Balu Gunjave secured 2nd rank in Satara District Yogasana Sports Championship.



On 10/12/2023, the State level Roller-skate basketball and State level Exercise competition were held in Nagpur. In this our second year student Mr. Samarjeet Sunil Patil won first prize in the under-19 boys category in both sports at state level competition and is selected for the National Competition.



Our Second year Automobile Engineering students Mr. Arjun Jadhav, Mr. Rutik Dhanavade, Mr. Akash Mali participated in Technical Poster Presentation event at SGI.



Campus Placement 2022-23



Sr. No.	Name of Student	Company Name
1	MORE DHARMAGUPTA	JOHN DHEERE, PUNE
2	GHATGE PRAJYOT	JOHN DHEERE, PUNE
3	DALAVI DHANRAJ	JOHN DHEERE, PUNE
4	INAMDAR SOHAIL	YAZAKI INDIA, PUNE
5	FEGADE PRATHMESH	YAZAKI INDIA PUNE
6	SHINDE PRANAV	YAZAKI INDIA PUNE
7	CHODHARI GUFAN	YAZAKI INDIA PUNE
8	KHOT AKASH	YAZAKI INDIA PUNE
9	GAIKWAD ANIKET	YAZAKI INDIA PUNE
10	LANGOTE NIKHIL	YAZAKI INDIA PUNE
11	CHORAGE ARYAN	YAZAKI INDIA PUNE
12	MAGDUM ADITYA	YAZAKI INDIA PUNE
13	POL ADITYA	YAZAKI INDIA PUNE
14	KUMBHAR MAYURI	YAZAKI INDIA PUNE
15	MOHITE PRATHMESH	PIAGGIO VEHICLES BARAMATI

16	PATIL VIVEK	PIAGGIO VEHICLES BARAMATI
17	HONKAMBLE PRASHANT	PIAGGIO VEHICLES BARAMATI
18	KAMBALE SUMEDH	PIAGGIO VEHICLES BARAMATI
19	DALAIT AFTAB	PIAGGIO VEHICLES BARAMATI
20	MALI YASH	PIAGGIO VEHICLES BARAMATI
21	MOHITE SANKET	PIAGGIO VEHICLES BARAMATI

In academic year 2022-23 total 21 students placed in campus placement in MNCs like John Deere, Yazaki India, Piaggio Vehicles. While many others were opted for higher studies.



Mr. P. T. Hasabe is awarded for best performance in academic year 2022-23



Mr. S. B. Akiwate received recognition for conducting direct second year FC with zero error in academic year 2022-23



Mr. V. S. Nandanwar is awarded for best performance in academic year 2022-23



Mr. G. D. Mane is awarded for best performance in academic year 2022-23



Mr. R. G. Katkar is awarded for best performance in academic year 2022-23



TPO of Ashokrao Mane Polytechnic Vathar tarf Vadgaon and faculty of Automobile Engineering Department Mr. B. Y. Ghatge was felicitated with “लोकराजा शाहू राज्यस्तरीय आदर्श शिक्षक” on 22/12/2023 for his outstanding educational and social work.

Faculty Attended Training



Our faculty members participated in a comprehensive training programs designed to enhance their teaching methodologies, keep them abreast of the latest advancements in Research Advancement and Scholarly Excellence and further develop their skills in fostering an engaging learning environment.

The sessions covered advanced research methodologies, publication strategies, and ways to enhance scholarly impact. This training aimed to empower faculty members with the tools and knowledge needed to contribute significantly to academic research and elevate the overall scholarly profile of the institution.

Faculty members received in-depth updates on the latest developments in Research Advancement and Scholarly Excellence, ensuring that our curriculum remains current and aligned with industry standards.

As a capstone to the training, faculty members had the opportunity to develop and present their research proposals. This hands-on experience allowed them to apply the knowledge gained during the program to their specific research interests. Peer feedback and constructive critique were integral components, fostering a collaborative environment where faculty could refine and strengthen their research projects.

In conclusion, the faculty's participation in the Research Advancement and Scholarly Excellence training program reflects our dedication to fostering a vibrant intellectual community. By equipping faculty with advanced research skills, promoting interdisciplinary collaboration, and emphasizing ethical practices, we are poised to make enduring contributions to the academic landscape and position our institution as a hub of research excellence.

School Connecting Program



In case a student wishes to take admission at a 'Polytechnic' after 10th standard, he or she generally wants the information about: Which are the different programs or branches available under Polytechnic?

Which are the best courses in it? What is the admission process of Polytechnic? How to apply for online admission process and when it starts? What are the opportunities in higher education are diploma? What is the nature of placements or jobs or entrepreneurship avenues available after completing diploma? To provide answers for all above questions, difficulties and confusions, a project or initiative has been taken by MSBTE for the state of Maharashtra called 'School Connect'. The program involves a face-to-face interactive session with students of class 10th.

Faculties from Automobile Department actively participate in this initiative, and visit schools near to them. In this visit our faculty members provide brief information and introduction to Technical Education various opportunities after completing polytechnic, etc.

Success Story



Mr. Vijay D. Misal
Alumni
(2014-15 batch)

Mr. Vijay D. Misal our alumni from 2014-15 pass out batch currently working in “Hinduja Tech” company, Pune as a Senior Engineer.

Vijay's journey began when he enrolled in the automobile engineering department in Ashokaro Mane Polytechnic college. From day one, he immersed himself in every aspect of his coursework. His days were filled with lectures on engine dynamics, vehicle design, and the latest advancements in automotive technology. Rather than viewing assignments as chores, Vijay saw them as opportunities to deepen his understanding and showcase his skills.

During his diploma program, Vijay actively sought opportunities to gain practical experience. She joined a student project team focused on designing and building a fuel-efficient prototype vehicle. This hands-on experience not only enhanced his technical skills but also showcased her commitment to practical problem-solving.

Today, Vijay stands as a symbol of success in the world of automobile engineering. His journey from an ambitious student to a trailblazer in the industry serves as an inspiration to aspiring engineers. Vijay's story is a testament to the power of passion, hard work, and the unwavering pursuit of one's dreams in the ever-evolving landscape of automotive technology.

Conclusion

We trust that this edition of our Automobile Department newsletter has fueled your passion for all things automotive. From the latest advancements in technology to insightful features on classic cars, we've aimed to provide a comprehensive and engaging experience. As we journey through the fast-paced world of automobiles, we invite you to stay connected with us. Your enthusiasm and interest drive our commitment to delivering content that resonates with you.

The road ahead promises exciting developments in the automotive industry, and we're thrilled to have you along for the ride. Thank you for being a valued part of our Automobile Department community. Keep your engines revving and stay tuned for more exhilarating content in our future newsletters.

**Theme for next issue : Hyperloop
Transportation**



Automobile Engineering Students Association

Sr. No.	Name	Post
1	Satej Narayan Chougule	President (Boys)
2	Dipti Dasharath Hankare	President (Girls)
3	Rutik Milind Kamble	Vice-President
4	Abhishek Bassappa Kalmodi	Treasurer
5	Gayatri Kiran Chougule	Event Coordinator
6	Rutik Anil Dhanvade	Sports Coordinator
7	Rohit Balu Gunjawate	Sports Coordinator
8	Arjun Chandrakant Jadhav	NSS Coordinator
9	Vishwajit Sarjerao Dhokale	NSS Coordinator
10	Snehal Vijay Chavan	Class Coordinator(T.Y.)
11	Sarthak Durgadas Jadhav	Class Coordinator(S.Y.)

2024
HAPPY NEW YEAR

The responsibility of the authenticity of the information in this Newsletter lies with the author. Views expressed by the authors are solely theirs, they are neither the views of Automobile Engineering Department nor are they endorsed by Automobile Engineering Department. Queries, comments, feedbacks and information may be sent to ampvautodept@gmail.com. Edited, Printed and Published by Mr. P. T. Hasabe, H. O. D.- Automobile Engineering, Ashokrao Mane Polytechnic, Vathar Tarf Vadgaon, 416112, Website - www.amietv.org