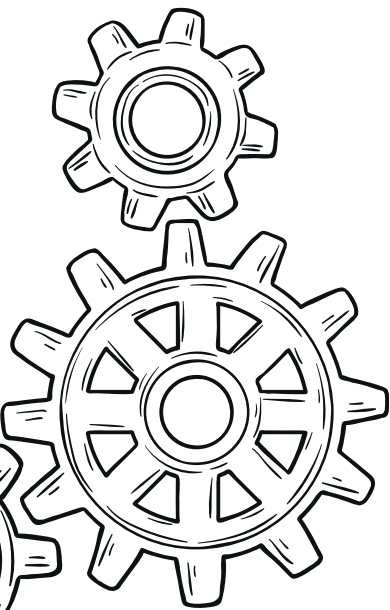
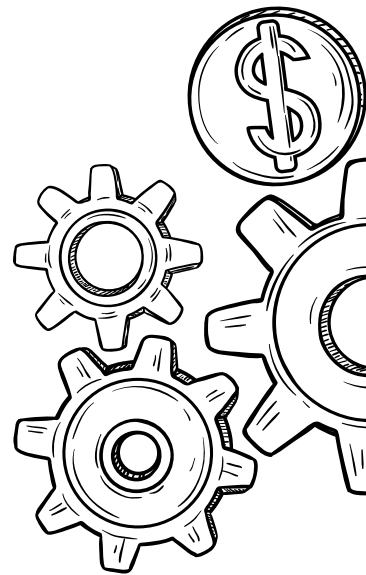




**BHARATI VIDYAPEETH
COLLEGE OF ENGINEERING, NAVI MUMBAI
DEPARTMENT OF MECHANICAL ENGINEERING**



MESA ANNUAL REPORT

2024-25

DIRECTOR'S MESSAGE



Dr. V. J. Kadam

Director

Bharati Vidyapeeth's Educational Complex, Navi Mumbai.

From Director's Desk

I am pleased to know that the Department of Mechanical Engineering is publishing the ninth edition of its technology journal “YANTRAM” for the 2024-25 academic year. “YANTRAM” is best known for inventing the inner fire of future technologists and enlightening students' minds about it. I applaud you for your efforts and efforts behind the team to raise the issue. I wish them all the best.



PRINCIPAL'S MESSAGE



Dr. Sandhya Jadhav

**Principal
Bharati Vidyapeeth College of Engineering Navi Mumbai.**

From Principal's Desk

It is indeed an exciting time for the Department of Mechanical Engineering as readers have successfully released the ninth edition of the technology magazine “YANTRAM” for 2024-25. The most important feature we can find in this amazing effort is that it highlights the various aspects of technology, analysis, literature and the art of emerging engineers. I wish them all the best for publishing more such magazines in future



HOD'S MESSAGE



Dr. S. N. Teli

HOD

(Department of Mechanical engineering)

Bharati Vidyapeeth College of Engineering Navi Mumbai

It is a great pleasure to know that our readers have successfully delivered the ninth edition of the Department's magazine "YANTRAM". The wide spectrum of content gives me a sense of pride in the fact that our readers have new energy and intelligent thinking. I am confident that this magazine will provide students with a platform to expand their technical knowledge and hone their hidden learning talent. The publication of this journal reminds us of the talent we have in our department and sends a message to newcomers about the expectations and responsibilities they will carry in the coming years. Thank you for the work done by the editorial team in presenting this article. I wish them all the best for their future endeavours and hope they bring more joy to the department.



FACULTY ADVISOR'S MESSAGE



Prof. JAYDEEP PATIL

**FACULTY ADVISOR
(Mechanical Engineering Student Association)
Bharati Vidyapeeth College of Engineering Navi Mumbai.**

It is my pleasure to address you today and share some thoughts on the importance of education in our lives. As a teacher, I have always believed that knowledge is the key to unlocking a world of opportunities, and I am constantly inspired by the passion and curiosity of my students. As we move forward in our academic journey, I want to take a moment to acknowledge the resilience and determination you have shown during these challenging times. The past year has been filled with unexpected obstacles, but you have adapted and persevered, and for that, we are immensely proud. I want to express my sincere appreciation for the opportunity to share my thoughts with you. Thank you for your time and attention, and I wish you all the best on your own educational journey.



PRESIDENT'S MESSAGE



ROHIT KALEKAR

PRESIDENT

(Mechanical Engineering Student Association)

Bharati Vidyapeeth College of Engineering Navi Mumbai.

As the President of our Mechanical Engineering Student Association, it is my pleasure to address the readers of our college magazine. Our committee is made up of dedicated and passionate individuals who are committed in making a positive impact on our campus and in our community. We work tirelessly to organize events, initiatives, and projects that align with our shared mission and values. Our goal is to create a culture of collaboration, inclusivity, and engagement, where every student has the opportunity to thrive and make a meaningful contribution. I would like to take a moment to express my gratitude and appreciation for all of the hard work and dedication that every one has put into our committee. It is because of your commitment and passion that we have been able to achieve so much and make a positive impact in our college.



EDITOR'S DESK – MESA ANNUAL REPORT 2024–25



PRATHAMESH GAIKWAD
(BE - MECHANICAL)



AVDHOOT MUNDHE
(SE - MECHANICAL)

We are proud to present the latest edition of the MESA Annual Report, capturing the spirit of innovation, technical growth, and teamwork within the Mechanical Engineering Department.

Under the editorial guidance of **Prathamesh Gaikwad (Technical Head, MESA)** and **Avdhoot Mundhe (Technical Team Member, MESA)**, this report highlights key events, workshops, achievements, and student initiatives from the academic year 2024–25.

We thank all contributors for their support and hope this edition reflects the vibrant and dynamic technical culture we continue to build at MESA.

– **Editors**

Prathamesh Gaikwad

Avdhoot Mundhe



FACULTIES OF MECHANICAL DEPARTMENT



The mechanical faculty team is a group of dedicated, knowledgeable, and hardworking professionals. They are always ready to guide students with practical skills and strong technical knowledge. Their teamwork and commitment help create a strong learning environment for future engineers.



MECHANICAL BE-A BATCH (2024-25)



The BE A batch students have been a vibrant and hardworking group. Their journey was filled with learning, growth, and great memories. As they step into the next chapter, we wish them all the success and happiness in life. Keep shining and make us proud



MECHANICAL BE-B BATCH (2024-25)



The BE B batch students have been a vibrant and hardworking group. Their journey was filled with learning, growth, and great memories. As they step into the next chapter, we wish them all the success and happiness in life. Keep shining and make us proud



MESA (2024-25)



The MESA Committee has been the heart of this year's activities leading with enthusiasm, creativity, and dedication. Their teamwork turned ideas into impactful events and brought the student community together like never before. As they move ahead into new journeys, we appreciate their efforts and wish them continued success and happiness in all they pursue.



TRIUMPHANT RACERS (2024-25)



Triumphant Racers, the Formula SAE team of Bharati Vidyapeeth College of Engineering, Navi Mumbai, has been showcasing engineering excellence and passion since 2011. With over a decade of international competition, their journey reflects teamwork, innovation, and relentless dedication. Wishing them continued success ahead



INTERNSHIP COMMITTEE (2024-25)



The Internship Committee at Bharati Vidyapeeth College of Engineering, led by Prof. Dilip B. Radkar, is dedicated to connecting students with valuable industry opportunities. With the support of experienced faculty and professionals, the committee ensures every internship aligns with academic standards and promotes real-world learning.



PLACEMENT & TRAINING (2024-25)



The Placement and Training Committee at Bharati Vidyapeeth College of Engineering is dedicated to enhancing student employability through industry aligned training, career guidance, and corporate interface. Their relentless efforts ensure students are well-prepared to meet industry expectations and secure opportunities in top-tier companies.





Summary of MESA

Purpose of Annual Report Preparation: The Mechanical Engineering Students' Association, MESA, creates an annual report with the intention of documenting its accomplishments, contributions, and activities over the year. The report gives stakeholders important information about MESA's accomplishments and influence by serving as an exhaustive record of the organization's activities, events, and objectives.

Role of MESA

MESA is essential to creating a thriving automotive culture on campus. It provides a forum for students interested in mechanical engineering and cars to interact, exchange ideas, work together on projects, and take part in events pertaining to their interests.

Major Events Organized by MESA

1. **Auto Expo:** Every year, MESA hosts the Auto Expo, a spectacular event designed to draw motorcycle and car owners and give enthusiasts a stage on which to celebrate their love of cars. The Expo gives visitors a fun and educational experience by showcasing the newest developments in the automotive industry.
2. **Yantram:** MESA organizes a mix of technical and enjoyable events called Yantram. It gives students the chance to take part in a range of activities that combine enjoyment and technical knowledge, encouraging teamwork and skill improvement.
3. **Seminars and Workshops:** MESA hosts seminars and workshops on a variety of subjects pertaining to mechanical engineering and automotive technology in addition to the Auto Expo and Yantram. These gatherings give students practical experience, insightful information, and industry networking possibilities.



CONTENT

Sr. No.	PARTICULAR	Page No
1	TECHNICAL EVENTS	
	MESA Orientation 2024-25'	19
	Introduction To MESA	20
	MESA Events and Workshops	20
	Introduction To Committee Members	21
	The Purpose Of MESA	25
2	CULTURAL EVENTS	
	AUTO EXPO 25' POSTER REVEAL	26
	Introduction	27
	Event Commencement	28
	Conclusion	31
	Auto Expo 25'	33
	Inauguration of Auto Expo	34
	Beginning of Autoexpo with a Roar	35
	Stunts and Burnouts	36
	Enthusiastic Crowd Throughout the Autoexpo	37
	Bikes	38
	Cars	39
	AUTO EXPO BREAKING NEWS	40
	AutoExpo Success Party at Night with DJ David	41
	Conclusion	42
	Field Visit Report to Sarasgad Fort	44
	Introduction	45
	Objectives of the Visit	46
	Promotion of Volunteerism	46
	Historical Awareness	46
	Timeline of Events	47
	Collaborative Efforts	48
	Student Feedback	49
	Reflections and Conclusions	50
3	YANTRAM 25'	
	Inter-Collage CAD Competition	52
	Impacts On Participants	52
	Winner of Inter-Collage CAD Competition	53

CONTENT

	SOLIDWORKS CAD WORKSHOP BY CADD CENTRE (Batch 1)	54
	Workshop Overviews	54
	Workshop Schedule:	55
	Outcomes	55
	SOLIDWORKS CAD WORKSHOP BY CADD CENTRE (Batch 2)	56
	Workshop Overviews	56
	Workshop Schedule	57
	Outcomes	57
	CONCLUSION	58
4	CAREER COUNSELING SESSION TO STUDY ABROAD	59
	Introduction	60
	Entrance Exam - GMAT-GRE & ETC	61
	Loans and Visa Counselling	62
	IMFS, To Study Abroad	63
	Conclusion	64
5	CAREER COUNSELING SESSION TO STUDY IN EUROPE	65
	Introduction	66
	Fear About Foreign Education	67
	Some Fascinating Things About Studies in Europe	68
	Loans and Visa Counselling	69
	To Study In Europe	70
	Conclusion	71
6	DEPARTMENT LEVEL ACTIVITIES OF MECHANICAL ENGINEERING	72
	Seminar/Expert Lecture/Workshop/Training Organized	73
	Crafting Winning LinkedIn Profile, conducted by Dr.Silpy Gupta, IBS (ICFAI) Business School, Powai, Mumbai for Final Year Students in month of August.	73
	Mr. Vasudev Gadgil, SMC Pneumatics (India) Ltd, conducted 2 days' workshop, 26-27 Aug 2024 On Japanese Management Principles	74
	Industrial Training	75
	Dr. Param, IIT Bombay on "Students Dive into Research", 26 Sept 2024.	76
	Competition organized	77
	Preplacement Training Program	78
	Automation Expo 2024, Goregaon, Mumbai	79

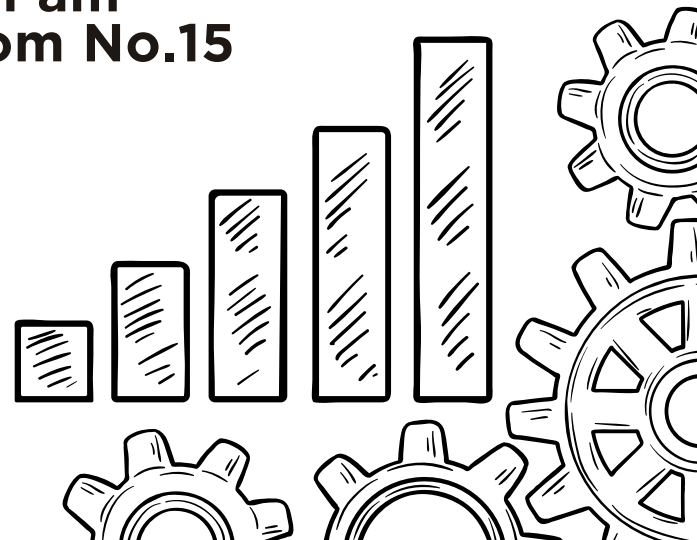
CONTENT

	Final year Mechanical Engg Students are participated in Jamboree on 10 Aug 2024 at Airoli, Navi Mumbai	80
	Job fair conducted by ISHARE, LTCOE, Navi Mumbai	81
	Attended at Thadomal Shahani College of Engg, Mumbai for Avishkar Workshop, 5 Aug 2024 coordinated by Prof. Fiords Khan.	82
	Participating in National Competition	83
	Internship	84
7	Extra-Curricular Activities organized	89
	NGO Visit	89
	Tree plantation	90
	Placement	91
	Parents Teacher Meet	92
	Faculty development program attended	93
	Digital transformation in Design and Manufacturing using Autodesk Fusion, VJTI Mumbai, 5-9 Aug 2024	94
	SAS Analytics Workshop, BVIMSR, Mumbai, 23-25 July 2024	95
	American Society of Non-destructive Testing (ASNT) conference, Hyderabad	96
	SWOC Analysis	97



MESA ORIENTATION 2024- 25'

Organised by MESA
Dated : 15th Sept 2023
Time : 11 am
Venue : Room No.15





Introduction to MESA

At our college, the Mechanical Engineering Student Association (MESA) is a vibrant student group that acts as a hub for students with an interest in mechanical engineering. MESA provides mechanical engineering students chances for both professional and personal growth, and it is essential in creating a feeling of community among them.



MESA Events and Workshops

One of MESA's primary objectives is to enhance the overall learning experience for its members. To achieve this, the association organizes a variety of events and workshops throughout the academic year. These activities cover a broad spectrum, including technical workshops, cultural events, sports activities, and more. MESA strives to create a holistic learning environment for students, nurturing both their technical skills and their personal interests.



Introduction of Committee Members

The success of MESA is attributed to the dedication and leadership of its committee members. The current committee comprises individuals with diverse skills and responsibilities:



President:

The President is the leader of MESA, responsible for overseeing the overall functioning of the organization. He provides direction, makes strategic decisions, and ensure that the committee works cohesively towards its goals.



Vice President:

The Vice President supports the President in their duties and often takes on a leadership role in the President's absence. He collaborates with other team heads to facilitate effective communication and coordination within MESA.



Treasurer:

The Treasurer manages the financial aspects of MESA, including budgeting, financial planning, and expense tracking. He plays a crucial role in ensuring the organization's financial stability and responsible use of resources.

Technical Team:

The Technical Team focuses on organizing workshops, events, and activities that enhance the technical skills of MESA members. They may also be involved in coordinating technical competitions, and projects, and collaborating with industry professionals.



Cultural Team:

The Cultural Team is responsible for organizing cultural events, celebrations, and activities that foster a sense of community within MESA. They contribute to the overall well-being of members by promoting cultural diversity and inclusion.



Marketing Team:

The Marketing Team handles the promotion and public image of MESA. They create marketing strategies, manage social media accounts, design promotional materials, and work to increase awareness of MESA's activities both within and outside the institution.





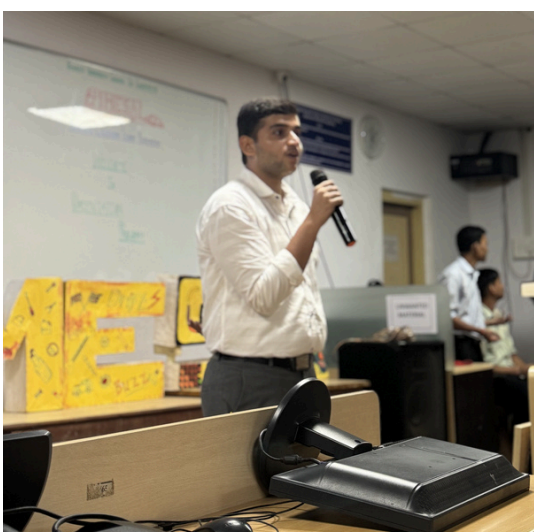
Digital Team:

The Digital Team manages MESA's online presence, including the website and other digital platforms. They may be involved in content creation, website maintenance, and ensuring that MESA's online communication is effective and engaging.



Camera Team:

The Camera Team is responsible for capturing and documenting MESA events through photography and videography. They help preserve memories, create promotional materials, and showcase the achievements and activities of the organization.



Public Relation Team:

The Public Relation Team handles communication between MESA and external entities, including the media, industry partners, and other organizations. They work to build and maintain positive relationships to enhance MESA's reputation.



Sports Team:

The Sports Team organizes sports-related activities and events, promoting physical well-being and team spirit among MESA members. They may coordinate sports tournaments, fitness sessions, and recreational events.



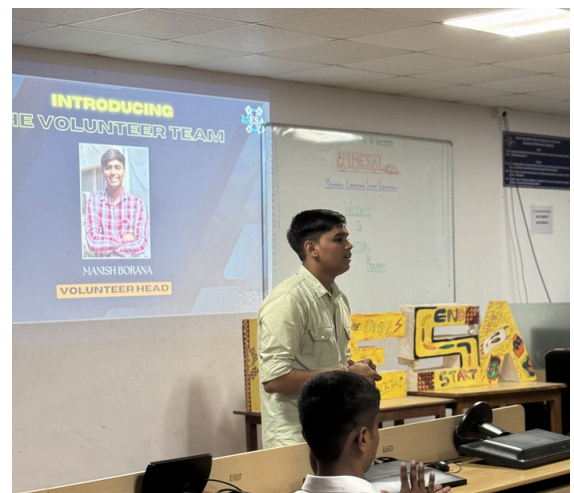
Creative Team:

The Creative Team focuses on artistic expression within MESA, including graphic design, visual arts, and creative projects. They contribute to the aesthetic aspects of MESA's promotional materials and events.



Volunteer Team:

The volunteers team is organized and utilized to achieve specific goals, especially in non-profits, events, community projects, or disaster response, and to manage the crowd in expo.





The Purpose of MESA

The primary goal of MESA (Mechanical Engineering Students' Association) was to successfully host a grand auto-expo at Bharti Vidyapeeth College of Engineering. This event aimed to attract a significant number of bikers and car owners, creating a platform for enthusiasts to come together and celebrate their passion for automobiles.

To generate interest and build anticipation, MESA members effectively utilized the orientation session by presenting a video preview of the upcoming auto-expo. This sneak peek provided attendees with a glimpse of what to expect, creating excitement and curiosity among students and auto enthusiasts alike.

The successful execution of the event and the engaging presentation during the orientation reflected MESA's commitment to fostering a vibrant automotive community within the college. Through such initiatives, MESA aimed to bring together like-minded individuals, showcase the latest trends in the automotive world, and create an enjoyable and informative experience for all attendees.





AUTO EXPO 25' POSTER REVEAL

Organized by MESA
Dated: 2nd Nov 2023
Time: 12.00 PM
Venue: BVCOENM Main Gate

Introduction

The Auto Expo 25', an exhilarating celebration of automotive innovation and industry prowess, came to life through a series of engaging events, with the Poster and Sponsor Reveal standing out as a pivotal moment in the extravaganza. Held on 22th October 2024 at Main Gate, this exclusive occasion marked the unveiling of captivating posters that encapsulated the spirit of the Auto Expo 25' and offered a sneak peek into the dynamic world of automobiles.



Event Commencement

The grand spectacle of the Auto Expo 25' kicked off splendidly at precisely 12:00 PM on the 22th of October 2024, as a palpable air of anticipation enveloped the throngs gathered at the Main Gate. The crowd, teeming with enthusiasm, had converged with a shared eagerness to witness the much-anticipated Poster Reveal—an event that promised to unveil the essence of the upcoming automotive extravaganza. Guiding us through the festivities was none other than the charismatic Mr. Shree Sadamate, whose vibrant energy and affable demeanor set the perfect tone for the day's proceedings. Amidst the buzz and anticipation, the atmosphere took an adrenaline-fueled turn when riders, with engines revving in harmony, took center stage to showcase a thrilling display of stunts. The collective roar of engines reverberated through the air, electrifying the audience and elevating the overall energy of the event.



Not to be outdone, a cadre of enthusiastic volunteers strategically navigated the swelling crowd. Armed with eye-catching flyers, they skillfully ignited curiosity and excitement, ensuring that every attendee was not only a spectator but an active participant in the unfolding spectacle. Their dual role of crowd control and engagement added a dynamic layer to the event, creating a seamless and immersive experience for everyone present.

The moment everyone had eagerly awaited was now on the horizon, and the synergy of passionate hosts, daring riders, and spirited volunteers had set the stage for a Poster Reveal that would encapsulate the spirit of the Auto Expo 25' in all its glory.





As the clock ticked towards the much-anticipated moment, a hushed expectancy settled over the gathering. The ambiance crackled with excitement as the distinguished chief guests, including Mr. Ashwin Malik, Manager of Royal Enfield, and our esteemed academic leaders, Dr. S.N. Teli, our Vice Principal, and Dr. Sandhya Jadhav, our Principal, made a grand entrance alongside the faculty. In a display of warm hospitality, our President, Mr. Rohit Kalekar, extended a heartfelt welcome to the esteemed guests, presenting each with a tastefully arranged bouquet that symbolized our gratitude for their presence and support. The anticipation reached a crescendo, palpable in the air, as the audience, now armed with phones poised for the perfect shot, awaited the unveiling of the event's focal point. The energy was infectious, and the gathering transformed into a collective heartbeat, pulsating with excitement. With the stage set and the audience hanging on the edge of anticipation, the pivotal moment arrived. A visual feast embodying the spirit of Auto Expo 24', were unveiled to a captivated audience. Simultaneously, the identity of the key supporter, Ram Motors Royal Enfield, was proudly announced as the official sponsor.





Conclusion

In retrospect, the Auto Expo 25' Poster and Sponsor Reveal event turned out to be a vibrant tapestry that skillfully combined the excitement of automotive innovation with the coziness of community involvement. The event was a huge success, from the heart-pounding antics to the spectacular unveiling in front of sponsors and notable guests. It created relationships that will surely help the event's enduring influence on both industry insiders and car enthusiasts, in addition to laying the groundwork for an aesthetically spectacular exposition.



AUTO EXPO 25'

Organized by MESA
Dated: 17th Jan 2025
Time: 11.00 AM



Auto Expo 25'

On January 17, 2025, the Mechanical Engineering Students Association (MESA) at Bharati Vidyapeeth College of Engineering in Navi Mumbai organized an incredible Autoexpo.

The inauguration, car exhibits, entertainment, special attractions, audience participation, and the lavish success celebration that marked the end of the day are just a few of the many aspects of the event that this indepth report attempts to cover in full.



Inauguration of Autoexpo

The Autoexpo commenced with a grand inauguration ceremony at 10.30 am, On the occasion of Bharati Vidyapeeth founder Dr. Patangrao Kadam's birth anniversary, an impressive exhibition of cars and bikes was organized under the Auto Expo 2025 initiative at the Bharati Vidyapeeth College of Engineering, Navi Mumbai.

The event was inaugurated by Dr. Vilas Kadam, Director of Bharati Vidyapeeth Academic Complex, and attended by Panvel RTO Prithviraj Kakade, Reliance Industries Senior HR Officer Subhash Jain, Principal Dr. Sandhya Jadhav, and key figures from the automotive sector.

The exhibition aimed to showcase the talents of Mechanical Engineering students, with participants presenting innovative and visually appealing vehicles. Students brought creative designs of motorcycles and cars, providing insight into the technologies and processes used in the automotive industry.



Beginning of Autoexpo with a Roar

The riders' and automobiles' spectacular arrival, which enthralled the spectators, was the centerpiece of the Autoexpo. A dramatic atmosphere was produced by the well planned entrance, which was timed with lighting and musical effects. A day of automotive splendor was put in motion by the roaring engines and unique sounds of each vehicle that filled the ground

The variety of vehicles entering the expo, ranging from future electric vehicles to vintage motorcycles, was given particular attention. This served the audience's diverse interests while also showcasing the development of the automobile sector. The procession was meticulously planned to guarantee a seamless and eye-catching Autoexpo opening.



Stunts and Burnouts

The range of vehicles entering the show, ranging from futuristic electric vehicles to Super motorcycles, was given particular attention. This served the audience's different interests while also displaying the expansion of the automobile sector. To ensure a smooth and striking Autoexpo inauguration, the parade was carefully organized.

The purpose of the stunt performances was to demonstrate the capabilities of the vehicles on display as well as demonstrate skills. Manufacturers and private proprietors had a chance to showcase the strength, control, and agility of their machines. Further to being entertaining, the performances provided insights into the possibilities offered by modern automobile engineering.



Enthusiastic Crowd Throughout the Autoexpo



The broad crowd's constant participation and excitement throughout the day was one of Autoexpo 2025's most satisfying features. Students and professionals from the industry were among the attendees, and they were clearly excited as they looked around the exhibits and talked to exhibitors and other fans.

With distinct areas designated for electric, hybrid, vintage, and future prototype cars, the Autoexpo's architecture made it easy to navigate. The area was filled with informational booths, virtual reality activities, and interactive exhibits that gave guests a comprehensive experience. The presence of food vendors, retail stores, and interactive games added to the lively environment and made sure that guests had a fun and interesting day.



Bikes



Cars



AUTO EXPO BREAKING NEWS

BY SAKAL NEWS PAPER

Bharati Vidyapeeth hosts stunning car and bike exhibition on founder's birth anniversary



By Chandrashekhar Hendve
@seashekhar

Kharghar: On the occasion of Bharati Vidyapeeth founder Dr. Patangrao Kadam's birth anniversary, an impressive exhibition of cars and bikes was organized under the Auto Expo 2025 initiative at the Bharati Vidyapeeth College of Engineering, Navi Mumbai.

The event was inaugurated by Dr. Vilas Kadam, Director of Bharati Vidyapeeth

Academic Complex, and attended by Panvel RTO Prithviraj Kakade, Reliance Industries Senior HR Officer Subhash Jain, Principal Dr. Sandhya Jadhav, and key figures from the automotive sector.

The exhibition aimed to showcase the talents of Mechanical Engineering students, with participants presenting innovative and visually appealing vehicles. Students brought creative designs of motorcycles

and cars, providing insight into the technologies and processes used in the automotive industry.

Dr. Vilas Kadam encouraged students to strive for excellence in their field and bring recognition to both themselves and the university through innovation. The exhibition attracted numerous visitors, including students and local residents, who marvelled at the ingenuity on display.

सकाळ 28/01/2025

कार आणि दुचाकींचे आकर्षक प्रदर्शन

खारघर (बातमीदार) : भारती विद्यापीठाचे संस्थापक डॉ. पतंगराव कदम यांच्या जयंतीचे औचित्य साधून ऑटो एक्सपो २०२५ या उपक्रमांतर्गत बेलपाडा येथील भारती विद्यापीठ कॉलेज ऑफ इंजिनीअरिंगच्या प्रांगणात वेगवेगळ्या कार आणि दुचाकींचे प्रदर्शन भरविण्यात आले होते. या प्रदर्शनाचे उद्घाटन डॉ. विलासराव कदम यांच्या हस्ते पार पडले. विद्यापीठात शिक्षण घेणारे बहुतांश विद्यार्थी आपल्या नावीन्यपूर्ण, आकर्षक दुचाकी आणि कार घेऊन सहभागी झाले होते. ऑटोमोटिव्ह उद्योग क्षेत्रात निर्माण केल्या जाणाऱ्या वाहनांची माहिती या वेळी देण्यात आली. या वेळी डॉ. विलासराव कदम यांनी मॅकेनिकल इंजिनीअरिंगच्या विद्यार्थीना नाविन्यपूर्ण कला सादर करून आपले आणि विद्यापीठाचे नावलौकीक करा, असा सल्ला दिला. या वेळी पनवेल पनवेल उपप्रादेशिक परिवहन विभागाचे अधिकारी पृथ्वीराज काकडे, रिलायन्स इंडस्ट्रीज मानव संसाधन विभागाचे वरिष्ठ अधिकारी सुभाष जैन, नेरूळ येथील अश्विनी मलिक, प्राचार्या डॉ. संध्या जाधव आणि प्रा. अमित कदम यांच्यासह ऑटोमोटिव्ह क्षेत्रातील अनेक मान्यवर उपस्थित होते.

The Auto Expo 2025 made headlines across leading newspapers, celebrating the creativity and engineering brilliance of our students. Hosted on the birth anniversary of our founder, Dr. Patangrao Kadam, the event featured an impressive lineup of student-built cars and bikes. The wide media coverage reflects the success of the exhibition and the enthusiasm it sparked among visitors, dignitaries, and the local community.

Autoexpo Success Party at Night with DJ David



Not only did the celebrations continue after the Autoexpo concluded, but they also evolved into a lavish success party as night fell. A live DJ created a lively atmosphere for guests and participants to relax and celebrate the day's accomplishments at the party, which was held in a specially dedicated location.

The DJ was chosen because he could accommodate a wide range of musical tastes, therefore he made sure the party matched everyone's tastes. The dance floor developed into a hub for impromptu festivities, bringing spontaneity and happiness to the evening. With its thoughtfully chosen entertainment, the success party brought Autoexpo 2025 to a successful close and gave attendees enduring memories of an exciting, inventive, and community-focused day.



Conclusion

MESA's Autoexpo 2025 at Bharati Vidyapeeth College of Engineering in Navi Mumbai was a thorough and overwhelming success. From the official inauguration to the dramatic vehicle displays, exhilarating performances, special attractions, passionate crowd participation, and the unforgettable success celebration, this comprehensive report has emphasized the careful planning and execution that went into every facet of the event.

The occasion offered a look into the future of the automotive industry in addition to celebrating its present status. Autoexpo 2025 demonstrated the advancement of automotive design and technology by showcasing a wide variety of automobiles, including Imran Majid's Nissan GTR. Attendees of all skill levels found value in the exhibits and activities because of the expo's dynamic and engaging nature.





The cooperation of MESA members, sponsors, exhibitors, and the enthusiastic attendance of the audience are all responsible for the success of Autoexpo 2025. As a forum for industry networking, community development, and knowledge sharing, the event not only achieved but surpassed its goals. Autoexpo 2025 made a lasting impression on the automotive industry and set the standard for future events at Bharati Vidyapeeth College of Engineering, Navi Mumbai, as the evening came to an end with the throbbing beats of the DJ at the success party.





Field Visit Report to Sarasgad Fort

Organised by MESA
Dated : 29th January 2025
By Yuva Maratha Foundation,





Introduction

This report is about a recent visit to Sarasgad Fort, organized by the MESA Committee students from Bharti Vidyapeeth College of Engineering. The trip was done with the help of the Yuva Maratha Foundation. The main goals were to help the community and teach students about the importance of history.

During the visit, students took part in cleaning the fort and carrying mud for renovation work. This hands-on work helped in preserving the fort and also taught students teamwork and responsibility.

Mr. Dipak Patil from the **Yuva Maratha Foundation** guided the students throughout the day. His support and direction made the activities more effective and meaningful.

The students also prepared and shared a meal together, which added to the feeling of teamwork and unity.

In short, the visit was a great way for students to serve the community, learn new things, and take part in preserving our culture.





Objectives of the Visit

The primary objectives of the field visit to Sarasgad Fort were multifaceted, emphasizing both educational growth and community engagement. The key goals of the event included:

Promotion of Volunteerism

- **Engagement:** The visit aimed to engage students in hands-on activities that foster a sense of volunteerism and social responsibility.
- **Community Service:** By participating in the cleaning and restoration of the fort, students learned the value of contributing their time and skills for the greater good.

Historical Awareness

- **Cultural Education:** One of the overarching goals was to raise awareness regarding the historical significance of Sarasgad Fort.
- **Preservation of Heritage:** The activities highlighted the importance of preserving cultural landmarks, not only to maintain their architectural integrity but also to educate future generations about their historical context.

In summary, the objectives of the visit were to promote volunteerism, enhance historical awareness, and contribute to the restoration of a significant cultural site. Each element of the visit played a vital role in reinforcing the students' connection to their heritage while simultaneously nurturing their growth as active members of the community.

Timeline of Events



- **08:00 AM - Arrival and Orientation**

-Students arrived at the fort, where they participated in an orientation session led by Dipak Patil of the Yuva Maratha Foundation. This session provided insights into the significance of Sarasgad and outlined the day's objectives.

- **09:00 AM - Cleaning Operations**

-The first task involved cleaning the fort premises. Students divided into groups to tackle different areas, collecting trash and debris to ensure that the site was presentable for future visitors.

- **11:00 AM - Mud Transportation for Renovation**

-Following the cleaning, the focus shifted to transporting mud essential for ongoing fort renovations. Students loaded mud into carts and carried it to various locations, showcasing their physical endurance and teamwork.

- **1:00 PM - Lunch Break**

-A communal meal was prepared, highlighting the collaborative spirit of the event. Students took turns cooking and sharing food, promoting camaraderie among the participants.

- **2:00 PM - Continued Restoration Work**

-After lunch, students resumed their efforts in both cleaning and helping fort workers with renovation tasks. This included reinforcing walls and clearing pathways, illustrating their commitment to the project.



Collaborative Efforts

The partnership with Yuva Maratha Foundation was pivotal throughout the visit. Dipak Patil's guidance ensured that all activities were executed efficiently and that the students understood the broader impact of their contributions. The collaboration fostered an environment of shared responsibility and mutual respect, encouraging students to connect with their heritage while working towards its preservation.

Through these collective efforts, the students not only contributed significantly to the fort's restoration but also gained invaluable experience in teamwork, leadership, and community service. Their dedication to these activities reflected a strong commitment to cultural conservation and a deeper understanding of the importance of safeguarding historical landmarks.



Student Feedback



Students shared various insights regarding their experiences, which included:

- **Enhanced Understanding:** Several participants noted a deeper appreciation for historical preservation efforts and the challenges associated with such projects.
- **Team Collaboration:** The collective effort involved in cleaning and renovation tasks reinforced the importance of teamwork, enabling students to bond through shared goals and activities.
- **Personal Growth:** Many reported feeling a sense of responsibility towards community service, recognizing its value beyond academic pursuits.



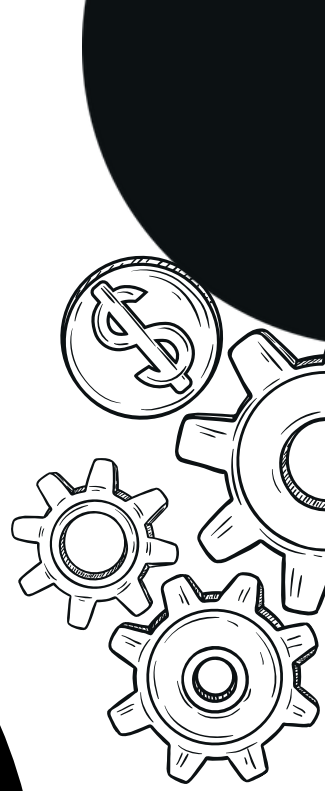
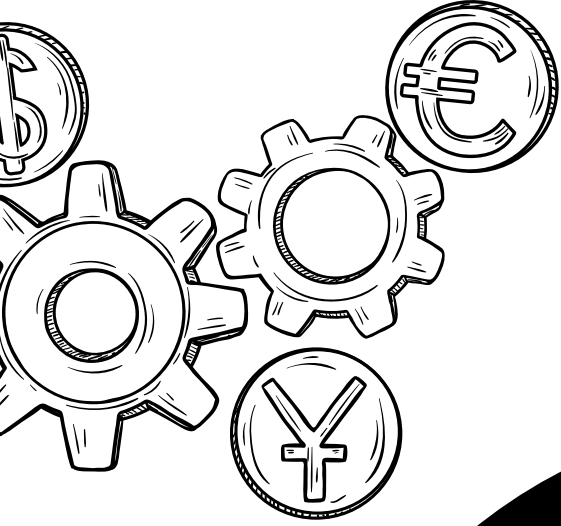
Reflections and Conclusions

Reflecting on the field visit to Sarasgad Fort, the overall sentiment among students was overwhelmingly positive. Many expressed that the experience was transformative, highlighting the profound impact of their volunteer work on the fort's restoration. The physical effort they contributed not only aided in conserving a significant cultural site but also instilled a sense of pride and accomplishment within each participant.

Acknowledgments

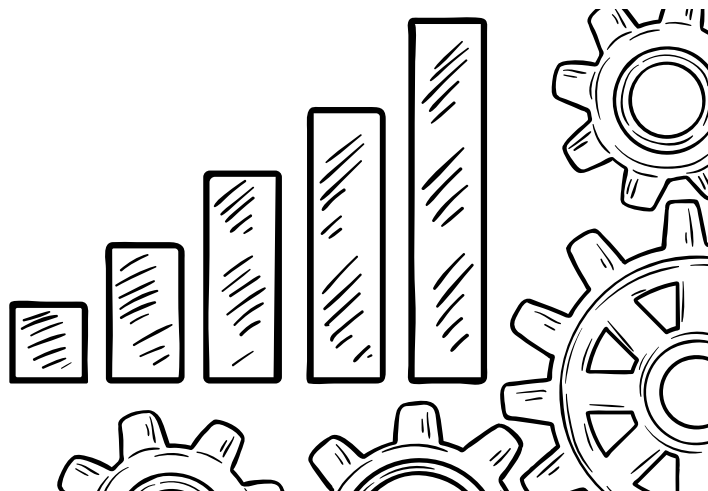
Special acknowledgment must go to **Dipak Patil** from the **Yuva Maratha Foundation**, whose leadership and support were instrumental throughout the visit. His guidance not only facilitated the successful completion of the activities but also provided the students with insights into the cultural significance of their work.





YANTRAM 25'

Organized by MESA



INTER-COLLEGE CAD COMPETITION: A BATTLE OF DESIGNERS AGAINST TIME



The MESA, in collaboration with CADD Centre, successfully conducted an inter-college CAD competition at Bharati Vidyapeeth College of Engineering (BVCOE) in Navi Mumbai, which brought together aspiring engineers from Terna College of Engineering and BVCOE. This engaging event featured a total of 29 participants who showcased their skills in computer-aided design, emphasizing the importance of practical application of theoretical knowledge in the field of mechanical engineering. The competition not only provided a platform for students to demonstrate their creativity and technical abilities but also fostered a spirit of collaboration and healthy competition among the participants.

Impacts On Participants:

This inter-college competition provided a significant opportunity for participants to enhance their technical and creative skills. The event enabled them to gain practical experience in CAD, which is a vital tool for mechanical engineers. Additionally, the competition helped them build confidence in their abilities and offered valuable exposure to real-world engineering challenges.





The winners of the competition

The competition concluded with an awards ceremony where the top three winners were recognized for their outstanding achievements in CAD design:

- First Prize: Prathamesh Panchal - Terna College of Engineering
- Second Prize: Aditya Bhalerao - Bharati Vidyapeeth College of Engineering (BVCOE)
- Third Prize: Krushnal Patil - Bharati Vidyapeeth College of Engineering (BVCOE)

The winners were awarded certificates and trophies, along with valuable industry-related resources, including training sessions from the CADD Centre, which will aid them in further enhancing their CAD and engineering skills.



SOLIDWORKS CAD WORKSHOP BY CADD CENTRE



Batch 1

A one-week Computer-Aided Design and Drafting (CADD) workshop by the CADD Centre Kharghar, and it is organised by the MESA in 23rd to 28th september 2024 to enhance the technical drawing and design skills of students using advanced computer software. The workshop focused on familiarizing students with industry-standard tools like AutoCAD, SolidWorks, and Revit, and aimed to bridge the gap between academic knowledge and practical industry applications.

Workshop Overviews

Over the course of a week, the SolidWorks CADD Workshop was successfully completed in two batches. The goal of the workshop was to give students practical knowledge and hands-on experience with SolidWorks, a well-known CAD program that is frequently used in the mechanical design sector.





Workshop Schedule:

Topics Covered

- Day 1: Introduction to CADD, Overview of AutoCAD Interface, Basic Tools
- Day 2: 2D Drafting - Lines, Circles, Arcs, Layers, Dimensions
- Day 3: Advanced 2D Drawing & Editing Tools, Practical Exercises
- Day 4: 3D Modeling Basics, Introduction to SolidWorks
- Day 5: Creating 3D Components, Assemblies and Renderings
- Day 6: Introduction to Revit and BIM Concepts
- Day 7: Final Assessment, Project Presentation, Feedback & Validation

Outcomes:

Students gained valuable CAD skills applicable in both academic projects and industry scenarios. Participants are now better equipped for internships and design-related roles in engineering.





SOLIDWORKS CAD WORKSHOP BY CADD CENTRE

Batch 2

A one-week Computer-Aided Design and Drafting (CADD) workshop was held from 12th to 18th February 2025 by the CADD Centre Kharghar, organized by MESA. The goal was to help students improve their technical drawing and design skills using computer software. The workshop introduced students to popular tools like AutoCAD, SolidWorks, and Revit, helping them connect what they learn in class with real-world industry use.

Workshop Overviews

The SolidWorks CADD Workshop was held over a week and completed in two batches. The main aim was to give students practical knowledge and hands-on experience with SolidWorks, a popular CAD software widely used in mechanical design.





Workshop Schedule:

Topics Covered

- Day 1: Introduction to CADD, Overview of AutoCAD Interface, Basic Tools
- Day 2: 2D Drafting - Lines, Circles, Arcs, Layers, Dimensions
- Day 3: Advanced 2D Drawing & Editing Tools, Practical Exercises
- Day 4: 3D Modeling Basics, Introduction to SolidWorks
- Day 5: Creating 3D Components, Assemblies and Renderings
- Day 6: Introduction to Revit and BIM Concepts
- Day 7: Final Assessment, Project Presentation, Feedback & Validation

Outcomes:

Students gained valuable CAD skills applicable in both academic projects and industry scenarios.

Participants are now better equipped for internships and design-related roles in engineering.





CONCLUSION

The inter-college CAD competition organized by MESA in collaboration with the CADD Centre was a resounding success. It offered participants an excellent platform to hone their CAD skills, showcased their creativity and technical knowledge, and fostered a spirit of collaboration and competition. Events like these play a pivotal role in shaping the future careers of students by bridging the gap between theoretical knowledge and practical application, ensuring that students are better prepared for their professional journeys in mechanical engineering. The competition also helped strengthen ties between Terna College of Engineering and Bharati Vidyapeeth College of Engineering.

The one-week CADD workshop was a successful initiative that provided valuable exposure to technical drawing software. It helped participants build a strong foundation in design and drafting and encouraged them to explore digital tools for future projects and career opportunities.

BHARATI VIDYAPEETH
COLLEGE OF ENGINEERING, NAVI MUMBAI
DEPARTMENT OF MECHANICAL ENGINEERING

MESA

Presents

INTER-COLLEGE CAD COMPETITION

In Association with

CADD CENTRE
KHARGHAR

ENTRY FEE ₹50

ROUND 1
AutoCAD Drafting

ROUND 2
3D CAD Modelling

Date : 24th Jan, 2025

Time : 10 A.M. Venue : Lab No. 13

Prizes All the winners will get the

- Cash Prizes
- E-Certificate
- Discount Coupon by CADD Centre

BHARATI VIDYAPEETH
COLLEGE OF ENGINEERING, NAVI MUMBAI
DEPARTMENT OF MECHANICAL ENGINEERING

MESA

SOLID WORKS CADD WORKSHOP

IN ASSOCIATION WITH

CADD CENTRE
Driving Digital Designs!

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MECHANICAL ENGINEERING STUDENTS ASSOCIATION

• CaddCentre Authorised Certificate
• Discount Coupon by CADD Centre

VENUE : CaddCentre Kharghar



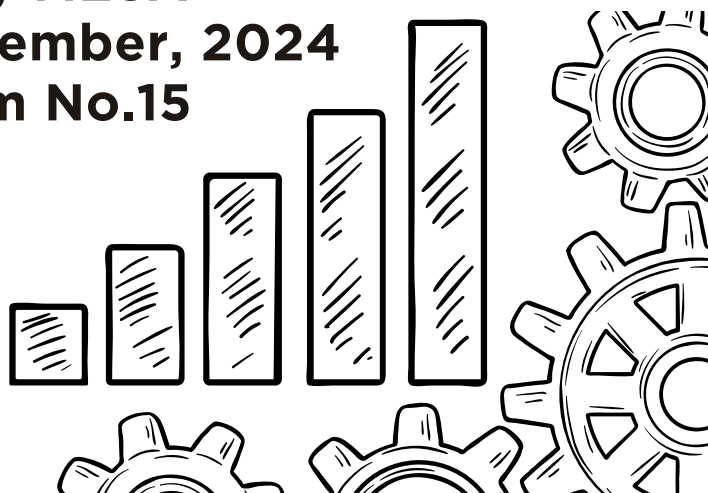
CAREER COUNSELING SESSION TO STUDY ABROAD

BY MR. NITIN LATHE

Organised by MESA

Dated : 30th September, 2024

Venue: Room No.15





Introduction:

The seminar conducted by MESA, in association with IMFS Education on September 30 at 11:00 AM, The International Monetary and Financial Studies (IMFS) Study Abroad Program offers students a unique opportunity to expand their academic horizons and gain firsthand experience in global finance. This program is designed to immerse students in diverse cultural environments while enhancing their understanding of international monetary systems, financial markets, and economic policies.

Participants will engage with leading institutions, attend lectures from renowned experts, and collaborate with peers from around the world. By combining theoretical knowledge with practical insights, the IMFS Study Abroad Program equips students with the skills and perspectives necessary to thrive in today's interconnected financial landscape.





Entrance Exam - GMAT-GRE & ETC

IMFS offers coaching and counseling for a variety of entrance exams for studying abroad, including:

- GRE: Graduate Record Examination, a standardized test for admission to graduate and business schools in the U.S.
- SAT: Scholastic Assessment Test, a standardized test for college admissions in the U.S.
- GMAT: Graduate Management Admission Test, standardized test for admission to MBA and other business-related graduate programs
- IELTS: An international language exam
- TOEFL: An international language exam
- PTE: An international language exam

IMFS is a study abroad institution that offers test prep coaching and counseling. They also offer a free IELTS test and a counseling portal. Some say the faculty and team are knowledgeable and the study materials are detailed.



Loans and Visa Counseling

Recognizing the financial implications of studying abroad, the seminar included a dedicated segment on financial planning. Expert counselors discussed options for securing education loans, scholarship opportunities, and financial aid. The intricacies of the visa application process were demystified, with a focus on documentation requirements, interview preparations, and potential challenges faced by international students.



IMFS, To Study Abrod



 **BHARATI VIDYAPEETH**
COLLEGE OF ENGINEERING, NAVI MUMBAI
DEPARTMENT OF MECHANICAL ENGINEERING 

Do you want to



STUDY ABROAD?

CAREER COUNSELLING & GUIDANCE SEMINAR

IN COLLABORATION WITH



IMFS[®]

K.P. SINGH EDUCATION SERVICES PVT. LTD.

SPEAKER: MR. NITIN LATHE



 **Date : 30th September, 2024**
 **Time : 11:15 A.M.**
 **Venue : Lab No. 15**

Conclusion:



The collaboration between MESA and IMFS Mumbai plays a pivotal role in equipping students with essential industry insights and practical knowledge. By bridging the gap between education and the professional world, this partnership enhances students' understanding of current market trends and emerging career opportunities. Through networking with industry professionals, participants gain valuable connections and advice that boost their career readiness. Ultimately, this initiative empowers students to navigate their career paths with confidence, ensuring they are well-prepared to succeed in a competitive job market.



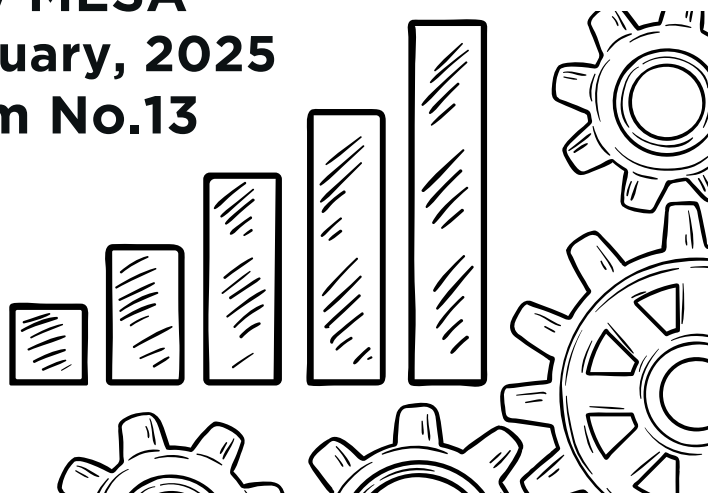
CAREER COUNSELING SESSION TO STUDY IN EUROPE

BY MR. ANIL JOSHI

Organised by MESA

Dated : 23th January, 2025

Venue: Room No.13

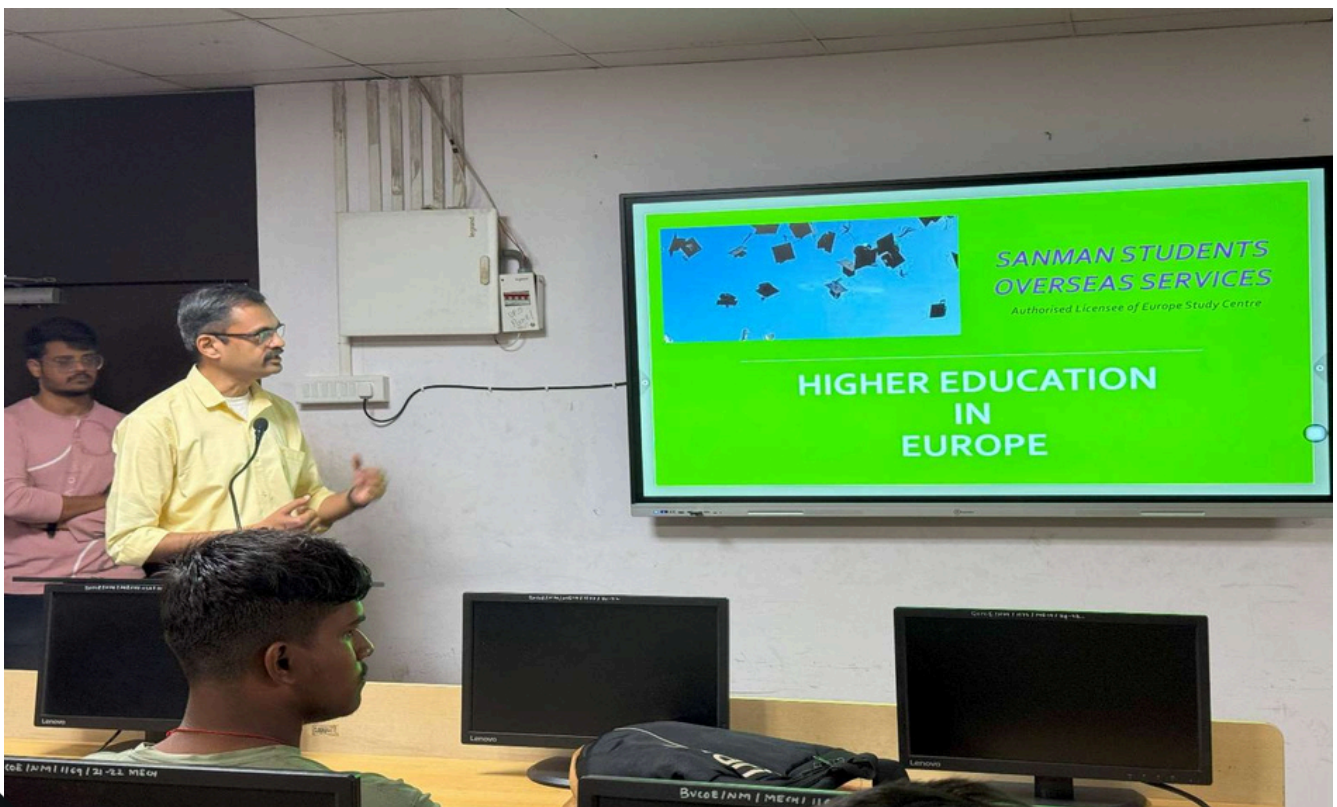




Introduction:

The seminar conducted by MESA, in association with (Explore Master's Opportunities in Europe) on January 23 at 11:00 AM, This session aims to provide valuable insights into the various options available for students who are considering pursuing their master's degree abroad, specifically in Europe. With years of experience in guiding students towards international education, BY Mr. Anil Joshi will cover essential topics such as university selection, scholarship opportunities, visa processes, and cultural adaptation.

Participants will engage with leading institutions, attend lectures from renowned experts, and collaborate with peers from around the world. By combining theoretical knowledge with practical insights, the IMFS Study Abroad Program equips students with the skills and perspectives necessary to thrive in today's interconnected financial landscape.



FEAR ABOUT FOREIGN EDUCATION

- Language Barriers: The anxiety or worry that someone might have about studying abroad due to potential difficulties in communicating and understanding lectures, assignments, and social interactions because of not being fluent in the local language.
- Cultural Mismatch: The anxiety of not fitting in or navigating social norms significantly different from your own culture.
- Quality of Education: The quality of education received might not be as high as expected.
- Difficult Visa Process: A complex and stringent application procedure for a student visa in a particular country, often requiring extensive documentation, rigorous financial verification, and a detailed explanation of your study plans.
- Cumbersome procedure of admission
- Unaffordable
- Authenticity of the consultant





SOME FASCINATING THINGS ABOUT STUDIES IN EUROPE...

- Funding to many of the Universities is made by Govt and Industries.
- Triple accredited Universities are in Europe.
- Maximum exposure to case study based practical education.
- Chances of performance-based Scholarships.
- Stay back options post completion of studies.

OUT OF 10 BEST COUNTRIES FOR HIGHER EDUCATION, 6 ARE IN EUROPE

- UK: Country known for quality teaching 2 years of stay back.
- Germany: Almost nil tuition fees in public universities. High quality engineering education.
- Sweden: High education standards. IELTS mostly required.
- Switzerland: Financial and banking hub. Focus on Research.
- France
- Denmark



Loans and Visa Counseling

Recognizing the financial implications of studying in Europe, the seminar included a dedicated segment on financial planning. Expert counselors discussed options for securing education loans, scholarship opportunities, and financial aid. The intricacies of the visa application process were demystified, with a focus on documentation requirements, interview preparations, and potential challenges faced by international students.





To Study In Europe

 **BHARATI VIDYAPEETH**
COLLEGE OF ENGINEERING, NAVI MUMBAI
DEPARTMENT OF MECHANICAL ENGINEERING



ORGANIZES

**DREAMING TO DO
MASTERS FROM EUROPE?**

GUEST LECTURE ON

**EXPLORE MASTER'S
OPPORTUNITIES IN EUROPE.**



SPEAKER
MR. ANIL JOSHI
Sanman Students Overseas
Services

JOIN US!

 **23 JAN 2025**

 **11 AM**

 **LAB NO.15**



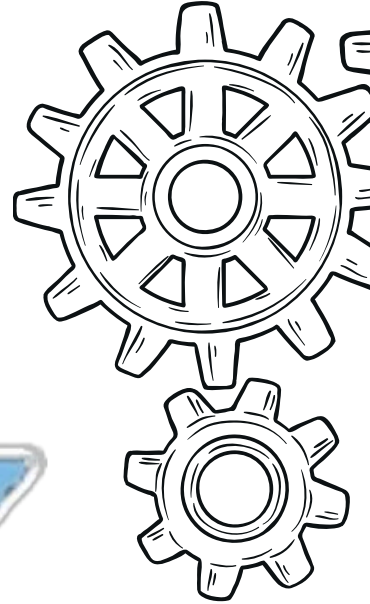
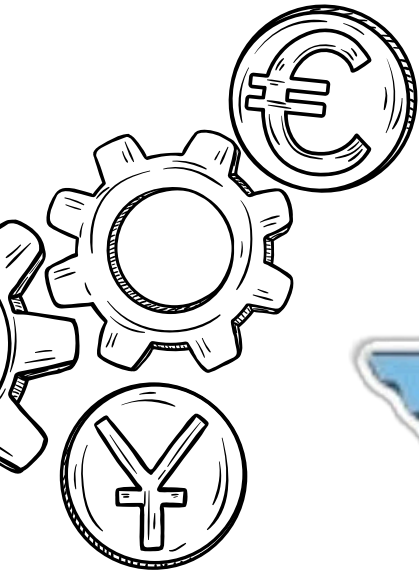
Conclusion:

Securing a student loan and obtaining a visa are vital steps in the journey of studying abroad. The loan process ensures you have the necessary funds to cover your tuition and living expenses, while the visa process allows you to enter and study in your chosen European country. By following the guidelines carefully and starting the application process early, you can ensure that both your loan and visa approval go smoothly, setting you on the path to a successful academic experience in Europe.



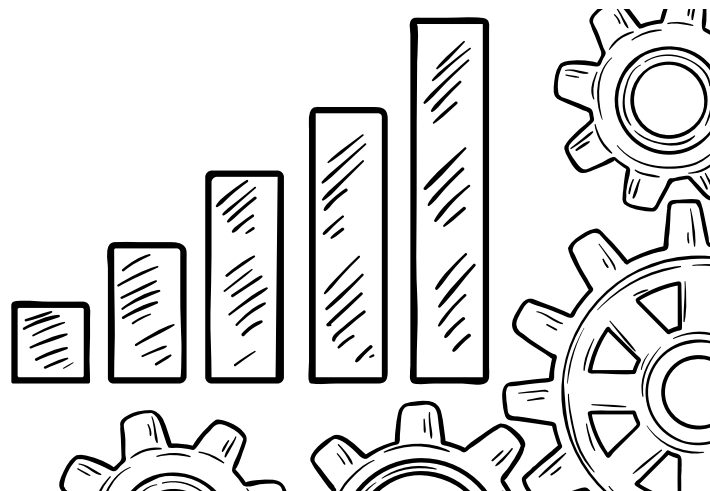
**BHARATI VIDYAPEETH
COLLEGE OF ENGINEERING, NAVI MUMBAI**

**DEPARTMENT OF
MECHANICAL ENGINEERING**



**DEPARTMENT LEVEL
ACTIVITIES OF
MECHANICAL ENGINEERING**

A/Y: 2024-25



1. Seminar/Expert Lecture/Workshop/Training Organized

Organizing seminars and expert lectures in engineering colleges provides students with valuable industry insights and networking opportunities, enhancing their understanding of real-world applications. These events also help develop essential skills like communication and problem-solving. Overall, they enrich the educational experience and prepare students for successful careers in engineering.

1.1 Crafting Winning LinkedIn Profile, conducted by Dr.Silpy Gupta, IBS(ICFAI) Business School, Powai, Mumbai for Final Year Students in month of August.



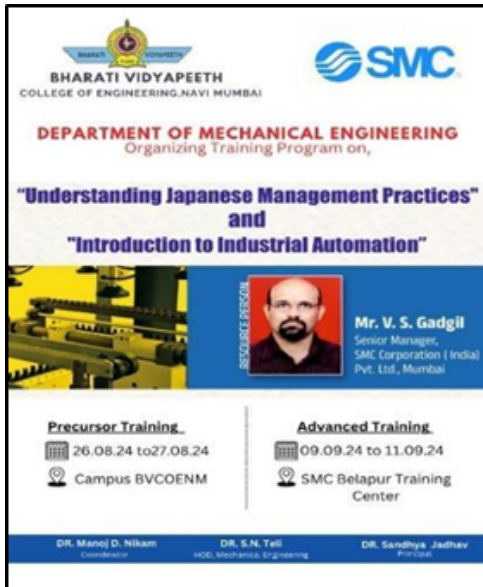
To create a standout LinkedIn profile, use a strong headline, professional photo, and an engaging summary that highlights your skills and career goals. Detail your experience with clear achievements and list relevant skills, supported by endorsements. Obtain recommendations for added credibility and use industry-specific keywords to improve search visibility. Customize your LinkedIn URL and showcase certifications or projects to demonstrate continuous learning. Lastly, engage regularly by sharing content and networking with professionals in your field.

1.2 Mr. Vasudev Gadgil, SMC Pneumatics (India) Ltd, conducted 2 days workshop, 26-27 Aug 2024 On Japanese Management Principles



Japanese management principles emphasize continuous improvement (Kaizen), where all employees contribute to enhancing processes and quality. Just-in-Time (JIT) production minimizes waste by producing only what's needed. Respect for people fosters teamwork and long-term relationships. Total Quality Management (TQM) focuses on customer satisfaction through organization-wide involvement in quality improvement. Hoshin Kanri aligns strategic goals with operational activities, while Genchi Genbutsu encourages managers to observe processes firsthand. Lastly, Nemawashi involves consensus-building before formal decisions, reflecting a collaborative approach.

1.3 Industrial Training



BHARATI VIDYAPEETH
 COLLEGE OF ENGINEERING, NAVI MUMBAI

SMC

DEPARTMENT OF MECHANICAL ENGINEERING
 Organizing Training Program on,

"Understanding Japanese Management Practices" and "Introduction to Industrial Automation"

Mr. V. S. Gadgil
 Senior Manager,
 SMC Corporation (India) Pvt. Ltd., Mumbai

Precursor Training 26.08.24 to 27.08.24 Campus BVCOENM	Advanced Training 09.09.24 to 11.09.24 SMC Belapur Training Center
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DR. Manoj D. Nikam, Coordinator | DR. S.N. Talli, HOD, Mechanical Engineering | DR. Sandhya Jadhav, Professor

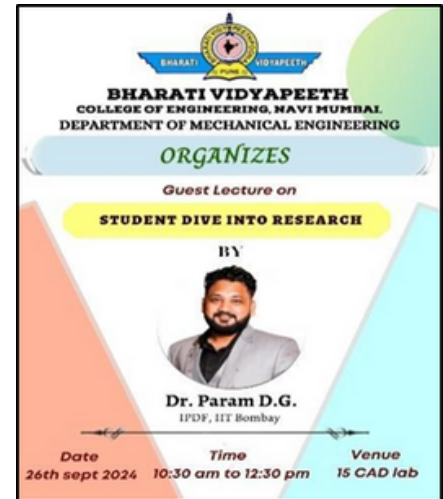


Industrial automation training focuses on equipping individuals with the skills and knowledge to design, operate, and maintain automated industrial systems. It typically covers:

- Automation Technologies:** Learning about PLCs (Programmable Logic Controllers), SCADA (Supervisory Control and Data Acquisition), DCS (Distributed Control Systems), and HMI (Human-Machine Interface).
- Sensors and Actuators:** Understanding how sensors, actuators, and control devices interact to automate processes.
- Programming and Control:** Gaining skills in automation programming languages like ladder logic and functional block diagrams used in PLCs.
- Robotics:** Training in industrial robotics, focusing on robot operation, programming, and maintenance.
- System Integration:** Learning how to integrate various automation technologies into existing production processes.

Industrial automation training is essential for roles in manufacturing, process control, and advanced robotics.

1.4 Dr. Param, IIT Bombay on “Students Dive into Research”, 26 Sept 2024.



Engineering students dive into research by working on real-world projects, often collaborating with industries to solve technical challenges. They develop prototypes, use advanced tools like CAD software, and explore areas like robotics, sustainable energy, and AI. Capstone projects and interdisciplinary work help them innovate solutions. Students often present their research at conferences or publish in academic journals. This hands-on experience prepares them for impactful careers in engineering.

2. Competition organized

The CAD Center, Kharghar held CADD Quest 2025 Engineering fest. The following students are selected for advanced free training.

- Rohit Ganesh Kalekar , Nihar Sabir Rhatwilkar, Adarsh Ramesh Hotkar
- Sanyog Salvi , Aryan Jayprakash Gavand , Krishna Sudam Nagargoje
- Ashish Govind Gaikwad , Darshan Shingane , Samarth Patil , Piyush Ramesh Thakur

A CAD (Computer-Aided Design) competition challenges participants to use CAD software to create innovative designs based on specific problem statements. Competitors are judged on criteria like functionality, creativity, and presentation. These competitions enhance technical skills, build portfolios, and offer networking opportunities with industry professionals. Participants can showcase their talents and gain recognition in fields such as engineering, architecture, and product design.



CADD CENTRE

CADD QUEST 2025
ENGINEERING FEST

Soar to Burj Khalifa,
Master Futuristic Engineering Design.

Register Now!

Up to **40% off** on Course Fee + Complimentary AR/VR Course

Bumper Prize
Win a Fully Paid Trip to Dubai!

Bi-Weekly Lucky Draw
Laptops, Digipads & Mobiles

Bumper Prize
Win a Fully Paid Trip to Dubai!

Valid Till 28th February 2025

Scan to Register



3.Preplacement Training Program

A pre-placement training session was conducted by Mr. Thakkar from Smartways, from 29th July to 2nd August 2024



A pre-placement training session was conducted by Mr. Thakkar from Smartways, from 29th July to 2nd August 2024, with 90 final-year students in attendance. The training focused on preparing students for placement opportunities.

Objectives:

1. Evaluate students' logical reasoning, critical thinking, and analytical abilities.
2. Test mathematical skills, including arithmetic, algebra, and data interpretation.
3. Determine how well students manage time while solving problems under pressure.
4. Ensure students are ready for the aptitude tests commonly used in company recruitment processes.

Outcomes:

1. Students improve their ability to think critically and solve complex problems.
2. Better handling of quantitative problems commonly asked in recruitment exams.
3. Students gain confidence in tackling placement tests and interviews.

Prepared students for the aptitude test phase of campus placement exams, increasing their chances of securing job offers

4. Students' participation in the outside the world

4.1 Automation Expo 2024, Goregaon, Mumbai



Department of Mechanical Engineering Faculty Dr. Manoj Nikam, Dr. Ganesh Kadam, Prof. D.B.Radkar, Prof. Kuldeep Pawar along with Final year and third year students Attended Automation Expo 2024, Bombay Exhibition Centre, Goregaon. Automation Expo is the largest expo in South-Asian region, where National, International Companies come together and display their technologies. Students of Mechanical Engg. Dept. got exposure through attending this expo and get to connect with Industry experts for their and institutes Better future.

4.2 Final year Mechanical Engg Students are participated in Jamboree on 10 Aug 2024 at Airoli, Navi Mumbai



This seminar was conducted by M/S Jamboree for 3 hours. The seminar was conducted in Airoli Sports Association complex on 10th August 2024, with globally renowned experts from Schulich-York, EDHEC Business School, ISB, and SPJIMR. The contents of the sessions are: The difference between MBA and MIM, The right Business schools for an MBA/MIM degree, Importance of GMAT, Profile improvement strategies, Funding options for an MBA/MIM abroad, Career opportunities after MBA/MIM , Actionable tips to increase chances of admission to an MBA/MIM college in India and abroad.

4.3 Job fair conducted by ISHARE, LTCOE, Navi Mumbai



These events feature booths for networking and information exchange. Job seekers should come prepared with updated resumes and a clear understanding of the companies they want to approach. Following up with contacts made during the fair can enhance chances of securing interviews and job offers.

4.4 Attended at Thadomal Shahani College of Engg, Mumbai for Avishkar Workshop, 5 Aug 2024 coordinated by Prof. Firdos Khan.



University-level project competitions aim to enhance students' practical skills and promote innovation by addressing real-world challenges. Participants submit project proposals, which are evaluated based on originality and feasibility, culminating in final presentations before judges. These competitions offer networking opportunities and recognition, boosting confidence and motivation. Prizes, scholarships, and valuable feedback contribute to students' personal and professional growth.

4.5 Participating in National Competition

Team Name : Triumphant Racers

Competition: Formula Imperial by ISIE

Venue: Buddh International Circuit, Greater Noida, Date: 5th Oct to 11th oct 2024,

Team member: Durgesh tanpathak (captain), Aniket dalvi (Vice Captain), Amey Vaje , Krish Shukla , Vishal Patil, Pranav Bhalekar, Soham Karande, vineet keer, Shreeram shelke , Piyush Thakur



5. Internship

Objectives

1. Apply theoretical knowledge in real-world industrial or research settings.
2. Develop technical, analytical, and problem-solving skills.
3. Gain exposure to industry workflows, tools, and technologies.
4. Build teamwork, communication, and professional networking skills.

Outcomes

1. Students applied academic concepts to practical tasks and projects.
2. Developed hands-on experience with industry-relevant tools and technologies.
3. Improved interpersonal and teamwork skills through collaborative work.
4. Gained insights into professional work culture and ethics.
Enhanced employability through exposure to industry practices and networks

Sr No.	Name Of Company	No of students
1	Geecy Engg. Pvt. Ltd.	12
2	Techfinix	15
3	Royal Enfield	36
4	IDEMI	18
5	Swami Engg.	6
6	Suyash Global Pvt. Ltd.	8
7	Kewaunee India	3
	Total	98

6. Research Article Published

Faculty should publish research articles in journals to contribute to the body of knowledge in their field and enhance their professional recognition and credibility. Engaging in research keeps faculty updated on current trends, enriching their teaching and curriculum.

1. U. R, S. Raha, A. Thangam, A. S. Bhongade, S. Kundu and G. C. Babu, "A Novel Approach to Predict Flight Fares in India Using SOM-LSSVM Model Approach, IEEExplore, 23 July 2024.
2. Vinod Patil, Jayadip Patil, Amol Kadam, Ajit R Patil, Devdatta Mokashi, G.M. Lonare AI-Driven Green Space Optimization for Sustainable Urban Parks: Enhancing Biodiversity and Resource Efficiency, Library Progress International, Vol. 44 No. 3, JULY 2024.
3. Ganesh Kadam, B. Nagarajan, V. Mirji, S. Sawant, Design of rigid-locking variable-angular-span welding fixture, Engineering Proceedings, MDPI, Vol. 66(1), 22 July, 2024.
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7. Patent Published

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8. Extra-Curricular Activities organized

8.1 NGO Visit

The extracurricular activities enhance a college's reputation and improve student satisfaction by providing a well-rounded experience. They help build a vibrant campus community and foster collaboration among students. Additionally, these activities strengthen connections with industry and alumni, benefiting the college's overall network and opportunities.

8.2 Tree plantation

On 17th July 2024, a significant tree plantation drive was organized in collaboration with Bank of Baroda. A total of 117 trees were planted as part of this green initiative. The event aimed at promoting environmental sustainability and community participation. Bank of Baroda played a key role in supporting this noble cause. The initiative is expected to contribute towards a greener and healthier environment.



9. Placement

Placements in engineering colleges are crucial as they provide students with job opportunities and help them apply theoretical knowledge in real-world settings. They also enhance students' career readiness and networking skills, making them more attractive to employers. For the college, successful placements boost its reputation and foster strong ties with industry partners, ultimately benefiting the institution.



BHARATI VIDYAPEETH
COLLEGE OF ENGINEERING, NAVI MUMBAI
 DEPARTMENT OF MECHANICAL ENGINEERING



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 YASH PATANGE INOX AIR PRODUCTS	 NIKITA DHOLE WORLEY	 SAKSHI RASALE WORLEY	 ROHIT KALEKAR GODREJ ENTERPRISE GROUP	 SOHAM JADHAV GODREJ ENTERPRISE GROUP	 KUNJ JAIN GODREJ ENTERPRISE GROUP	 VIKAS BABAR GODREJ ENTERPRISE GROUP
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10. Parents Teacher Meet

First PTM of this academic year 2024-2025 (ODD Semester) was held on Saturday 31/08/2023.

We first welcome all parents along with their ward for first PTM followed by HOD's small presentation about introduction of department, faculties and activities conducted in department in last year for skill development and knowledge enhancement of students, internships provided by college, student achievement in different competitions and achievements of faculties. MESA committee head also given small presentation on activities conducted last year and future plan of work. After the presentation, parents and faculties interacted with each other regarding progress of their ward in Term Test- I, attendance and behavior in class etc. Parents asked their doubts about activities planned for students for placements. We have taken feedback form filled from parents. Some parents had given some suggestions as follows:

- Test marks and University result should be informed to parents.
- Arrange Mock placement drive
- Arrange expert talk for carrier guidance.
- Progress of the students should be informed to parents regularly



11. Faculty development program attended

Name of Faculty	Title	From to TO	Organized by
Dr. Sandip Kanase Prof. Yayati Shinde Prof. Dileep Radkar Prof. Govind Jagtap Dr. Sanjay Pawar	Digital transformation in Design and Manufacturing using Autodesk Fusion	5/8/2024 to 9/8/2024	VJTI, Mumbai
Prof. Yayati Shinde Prof. Prathmesh Patil Prof. Ganesh Katke	SAS Analytics Workshop	23/7/2024 to 25/7/2024	BVIMSR, Mumbai
Prof. P. Y. Fulzele	American Society of Non-destructive Testing (ASNT) conference, ICENDE 2024	27/08/2024	Hyderabad

11.1 Digital transformation in Design and Manufacturing using Autodesk Fusion, VJTI Mumbai, 5-9 Aug 2024

Objectives

1. Understand digital transformation in design and manufacturing using Autodesk Fusion 360.
2. Gain hands-on skills in CAD, CAM, and CAE tools.
3. Integrate Fusion 360 into courses to enhance teaching and learning.
4. Align students' skills with industry needs and modern workflows.
5. Promote research and innovation through advanced design techniques.

Outcomes

1. Faculty proficient in Autodesk Fusion 360 tools and workflows.
2. Enhanced course content with practical, industry-relevant projects.
3. Improved student engagement and employability through modern tools.
4. Initiated collaborative research and innovative student projects.



11.2 SAS Analytics Workshop, BVIMSR, Mumbai, 23-25 July 2024

Objectives

1. Develop proficiency in SAS tools for data analytics and visualization.
2. Understand applications of analytics in education, research, and industry.
3. Learn to integrate data-driven techniques into academic curricula.
4. Enable faculty to mentor students in using SAS for research and projects.
5. Explore advanced analytics concepts, including predictive modelling and machine learning.

Outcomes

1. Faculty gained hands-on experience with SAS software for analytics tasks.
2. Enhanced course modules with data analytics content and practical applications.
3. Improved ability to guide students in analytics-based research projects.
4. Initiated interdisciplinary collaborations using data-driven insights.



11.3 American Society of Non-destructive Testing (ASNT) conference, Hyderabad



Ultrasonic-guided wave-based damage detection in plate structures using SVM and random forest algorithms," Proceedings of the 4th International Conference and Exhibition on NDE, Hyderabad, India, Aug. 22-24, 2024. Mr. P.Y. Fuljale presented this paper at the ASNT Conference, Hyderabad, on Aug. 27, 2024. The study explores damage detection in plate structures through ultrasonic-guided waves.

Supervised machine learning algorithms, Support Vector Machine (SVM) and Random Forest, are utilized for identifying structural defects. Experimental results demonstrate the effectiveness of these methods in non-destructive testing applications.

12. SWOC Analysis

Category	Description
Strengths	- Comprehensive academic and co-curricular coverage
	- Strong industry partnerships and practical exposure
	- Focused placement preparation, enhancing employability
	- Active faculty involvement in research, contributing to academic standing
Weaknesses	- Lack of quantitative impact assessment metrics
	- Limited inclusion of student and parent feedback
	- Insufficient focus on soft skills development
	- Lack of follow-up on suggestions from parents
Opportunities	- Enhanced integration of student feedback for improved program effectiveness
	- Expansion of soft skills programs to develop well-rounded professionals
	- New collaborations with industry partners for wider exposure
	- Increased community engagement through sustainability and social responsibility initiatives
Challenges	- High dependence on external experts for workshops and training
	- Resource constraints for expanding advanced training and follow-up
	- Maintaining consistent student engagement in extracurricular amid academic pressures
	- Need to keep pace with rapid technological advancements, requiring continuous curriculum updates