

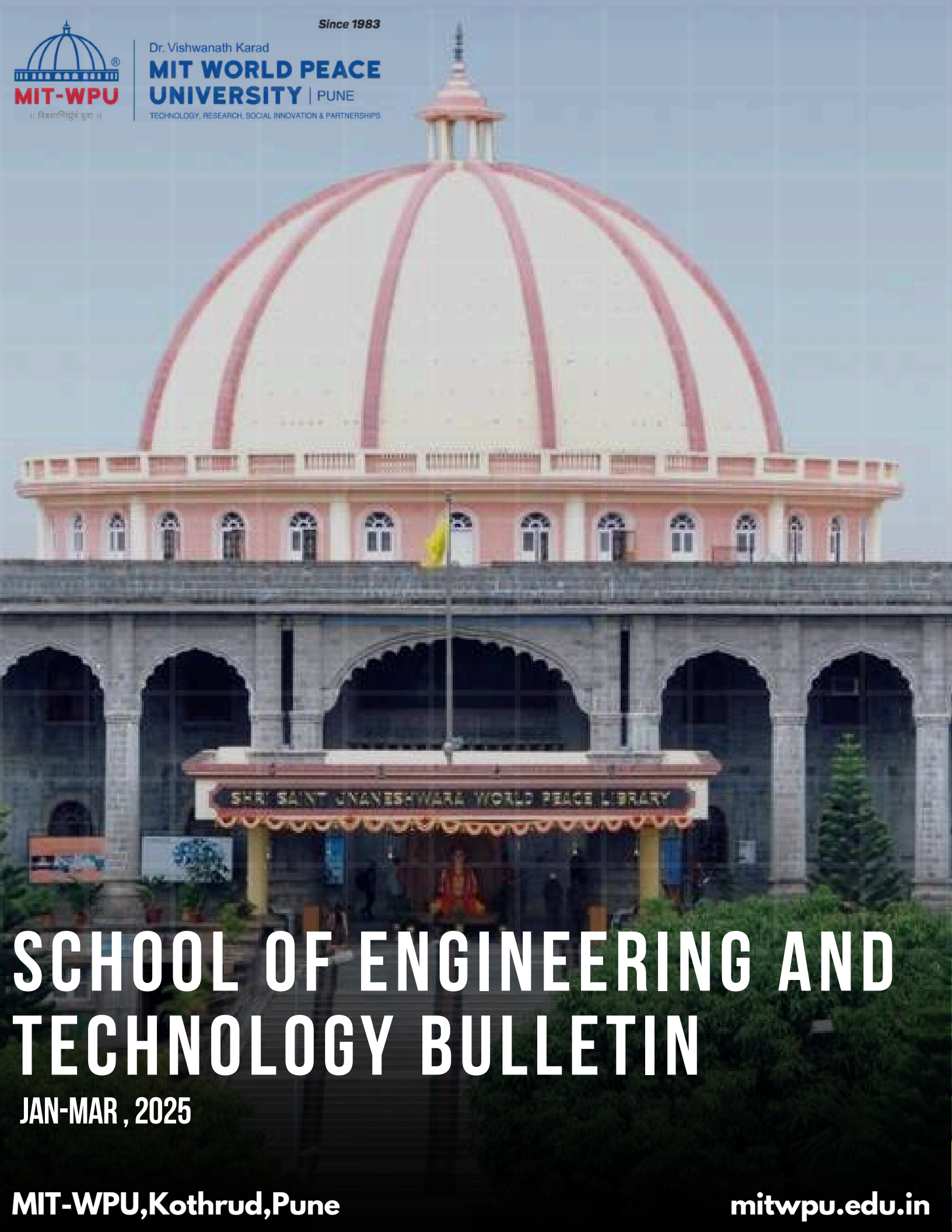


Since 1983

Dr. Vishwanath Karad

**MIT WORLD PEACE  
UNIVERSITY** | PUNE

TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS



# SCHOOL OF ENGINEERING AND TECHNOLOGY BULLETIN

JAN-MAR, 2025



**WITH THE BLESSINGS OF REVERED  
PROF. DR.VISHWANATH D. KARAD**



**SHRI DR. RAHUL V.KARAD**  
TRUSTEE AND EXECUTIVE PRESIDENT, MAEER'S MIT  
GROUP OF INSTITUTIONS DR

## UNDER THE GUIDANCE OF



**UNIVERSITY DR. PRASAD DATTAKUMAR  
KHANDEKAR**  
CHIEF ACADEMIC OFFICER  
MIT WORLD PEACE UNIVERSITY



**DR. RM CHITNIS**  
VICE CHANCELLOR  
MIT WORLD PEACE UNIVERSITY

# WORLD PEACE PRAYER

ॐ नमोजी जाद्या । वेद प्रतिपाद्या । जयजय स्वयंवेद्या । आत्मरूपा ॥१॥  
 देवा तुंचि गणेशु । सकलार्थ मतिप्रकाशु । म्हणे निवृत्तिदासु ।  
 अवधारितो जी ॥२॥

गुरुर्ब्रह्मा गुरुर्विष्णुः गुरुर्देवो महेश्वरः । गुरुः साक्षात् परब्रह्म तस्मै श्री  
 गुरवे नमः ॥

ॐ पूर्णमदः पूर्णमिदं पूर्णात् पूर्णमुदच्यते । पूर्णस्य पूर्णमादाय  
 पूर्णमेवावशिष्टे  
 ॥ ॐ ॐ ॐ ॐ शान्तिः । शान्तिः । शान्तिः ॥

हरि ॐ ईशा वास्यमिदं सर्वम् । यत्किंच जगत्यां जगत् ॥ तेन त्यक्तेन  
 मुंजीथाः । मा गृधः कस्यस्विद् धनम् ॥

ॐ भूर्भुवः स्वः । तत्सवितुर्वरुण्यं ॥ भर्गो देवस्य धीमहि । धियो यो नः  
 प्रचोदयात् ॥

सर्वेऽपि सुखिनः सन्तु । सर्वे सन्तु निरामयः सर्वे भद्राणि पश्यन्तु । मा  
 कञ्चिद् दुःखमाप्नुयात्

द्यौः शान्तिः । अन्तरिक्षं शान्तिः । पृथ्वी शान्तिः । आपः शान्तिः ।  
 औषधयः शान्तिः । वनस्पतयः शान्तिः । विश्वे देवाः शान्तिः । ब्रह्म  
 शान्तिः । सर्व शान्तिः । शान्तिरेव शान्तिः । साऽमा शान्तिरेधि ॥१७॥  
 ॐ ॐ ॐ शान्तिः । शान्तिः । शान्तिः ।

# Faculty Editorial Board Members

- **Dr. Jagruti Patil**
- **Dr. MitulKumar Solanki**
- **Prof. Prajakta Pardeshi**
- **Dr. Lipsa Mishra**
- **Dr. Ajay Sahu**
- **Dr. Harshali Zodpe**
- **Prof. Manisha Wani**
- **Prof. Sagar Kanekar**
- **Prof. Sulakshana Malwade**
- **Dr. Ashish Utage**

# Student Editorial Board Members

- **Disha Agrawal**
- **Digvijay Patankar**
- **Sodagar Parth**



## **Dr. Siddharth Chakrabarti** **Dean - School of** **Engineering & Technology**

It gives me immense pleasure to present the latest edition of the Quarterly Journal, the quarterly academic journal of the Faculty of Engineering at *MITWPU*. This publication reflects the dynamic spirit and academic vibrancy that define our faculty, showcasing the collective accomplishments of our students, faculty, and researchers.

This edition highlights several key pillars of our academic community. On the academic front, we continue to prioritize curriculum innovation, interdisciplinary learning, and outcome-based education. The rigorous academic environment nurtures critical thinking, problem-solving, and a lifelong passion for learning—qualities essential for tomorrow's engineers. Our publication section features good quality research and thought-provoking articles from both faculty and students. These contributions underscore the commitment of our academic community to addressing real-world challenges through knowledge creation and innovation.

We are also proud to introduce the *Faculty Corner* and *Student Corner*, platforms that bring visibility to classroom insights, academic reflections, and co-curricular engagements. These sections provide a space for sharing perspectives and fostering dialogue across all levels of our community.

Student achievements remain a cornerstone of this issue. From winning national competitions and securing prestigious internships to presenting papers at conferences and leading innovative projects, our students continue to make us proud. Their accomplishments are a testament to their dedication and the guidance of our committed faculty.

The faculty, too, have received notable recognition through publications, patents, funded projects, and media coverage, bringing honor to our institution. We also spotlight the extracurricular pulse of our faculty—from sports and cultural events to leadership activities and social outreach—which contributes to the holistic development of our students.

I thank the editorial team, contributors, and all those who have worked diligently to bring this issue to life. As you turn the pages of this journal, I hope you find inspiration in the stories, scholarship, and spirit that make our Faculty of Engineering a hub of excellence and opportunity.

## 1. Department of Chemical Engineering



**Dr. Dinesh Bhutada**  
(Program Director)

The Department of Materials Science and Engineering boasts a distinguished faculty, including researchers ranked among the top 2% of scientists globally (Stanford University, 2024). Their expertise drives innovation and academic excellence in the field.

A major achievement of the department is the successful completion of the "BiofreshPak Materials" project, funded by UK Innovate and the Department of Biotechnology (DBT), Government of India, with a ₹1.57 crore grant. This project highlights the department's commitment to cutting-edge research in sustainable materials.

With a focus on interdisciplinary collaboration, the department provides students with exposure to industry trends and emerging technologies. Its research initiatives not only contribute to scientific advancements but also enhance real-world applications. Through international recognition and impactful projects, the department continues to establish itself as a leader in materials science and engineering, fostering a culture of innovation and excellence.

## 2. Department of Petroleum Engineering



**Dr. Siraj Bhatkar**  
(Program Director)

The Department of Petroleum Engineering plays a crucial role in shaping the future of energy resources, balancing national security and sustainability. As Phil Gramm aptly stated, "Nothing could do more to immediately bolster national security than enabling us to produce more oil and gas here at home at a price consumers could afford." This highlights the significance of domestic energy production in ensuring economic stability and energy independence.

On the other hand, M. King Hubbert emphasized the need for sustainable resource management, stating, "Were we a rational society, a virtue of which we have rarely been accused, we would husband our oil and gas resources." His perspective underscores the importance of conservation and responsible utilization of petroleum reserves.

The department is committed to bridging these perspectives through innovative research, efficient extraction techniques, and sustainable energy solutions. By fostering industry collaboration and technological advancements, it aims to drive a balanced and responsible energy future.

## 3. Department of Electrical and Electronics Engineering



**Dr. Parul Jadhav**  
(Program Director)

The Department of Electrical and Electronics Engineering is dedicated to fostering academic excellence and industry readiness through various initiatives. To enhance research quality, the department has established the Centre of Expertise in AI & ML, Communication, VLSI & Embedded Systems, and e-Vehicles, promoting advanced learning and high-impact publications.

Recognizing academic achievements, the department introduced the Academic Performance Appreciation Scheme (APAS) and Consistently High Academic Performers (CHAPs). These initiatives motivate self-driven students, rewarding consistent academic excellence and significant improvement.

# Academic Insights

To strengthen placement opportunities, the department has implemented specialized training programs, company-specific sessions led by alumni, personalized guidance, and direct engagement with recruiters, ensuring students are industry-ready. Additionally, the department encourages professional growth through active student chapters such as IETE, ISLE, IEEE, and GRSS, providing students with a platform for networking, skill development, and industry exposure.

## 4. Department of Polytechnic



**Dr. Rohini Kale**  
(Program Director)

The Department of Polytechnic offers high-quality technical education, bridging the gap between industry needs and academic learning. With diploma programs across various engineering disciplines, the department focuses on practical skills, ensuring students are industry-ready.

The curriculum is regularly updated to incorporate emerging technologies like automation, robotics, renewable energy, and data science, preparing students for modern challenges. The department fosters industry collaborations, providing opportunities for internships, live projects, and workshops with leading companies.

Students gain hands-on experience in well-equipped laboratories and workshops across areas such as mechanical, civil, electrical, and computer engineering. This practical exposure enhances their technical expertise and problem-solving skills.

The department also promotes co-curricular activities and student clubs, helping students develop leadership and teamwork abilities. With a robust placement cell and a strong alumni network, students are well-supported in securing employment, ensuring a smooth transition to the workforce.

## 5. Department of Mechanical Engineering



**Dr. Shivprakash Barve**  
(Program Director)

The Department of Mechanical Engineering is a center of excellence, blending innovation, research, and industry collaboration. With state-of-the-art labs in Computational Fluid Dynamics, Mechatronics, Automation, Advanced Manufacturing, and Renewable Energy, students gain hands-on experience with cutting-edge technologies like AI, Machine Learning, Electric Vehicles, and Autonomous Systems.

The department emphasizes research and industry partnerships, enabling students to work on funded projects, publish in high-impact journals, and present at global conferences. Collaborations with leading companies offer internships, live projects, and real-world problem-solving opportunities.

A holistic learning approach integrates academics with creativity, supported by interdisciplinary clubs such as SAE Collegiate Club, Team Robocon, Team Hyperloop, and Team Phoenix. Additionally, global university collaborations provide international exposure, while a strong alumni network ensures mentorship and career guidance.

At MIT-WPU, mechanical engineering students don't just learn—they innovate, lead, and shape the future of technology.

## 6. Department of Civil Engineering



**Prof. Dr. Shantini Bokil**  
(Program Director)

The civil engineering industry is experiencing a transformative shift with advancements in IoT, AI, sensor technology, and image processing. Keeping up with these innovations is crucial for future engineers. To adapt to globalization and emerging trends, fostering a multidisciplinary team culture is essential. The rapidly evolving infrastructure sector demands the integration of "new normal" changes into academic curricula, ensuring students stay industry-ready. However, challenges such as the family business approach can limit placements in renowned core companies, restricting growth and industry exposure. By embracing technological advancements and encouraging collaborations with global industries, the department aims to equip students with cutting-edge skills, real-world experience, and diverse career opportunities. Additionally, the department encourages professional growth through active student chapters such as IGBC Student Chapter Pune, and Civil Engineering Student Association (CESA).

## 1.2 Research Articles

### 1.2.1 Research Articles of Department of Petroleum Engineering

While renewable energy grows, petroleum engineering remains vital to the global economy. Oil and gas still fuel industries and daily life, and petrochemicals—essential in electric vehicles, construction, and consumer goods—highlight the field's ongoing importance. Career paths in petroleum engineering are diverse, including Drilling, Reservoir, Production, and Petrochemical Engineering, offering exciting and impactful opportunities.

Innovations like AI, IoT, and smart sensors are revolutionizing the sector, enhancing efficiency and sustainability. Petroleum engineers play a key role in shaping the future of energy, blending tradition with cutting-edge technology. Stay curious, stay informed, and explore the dynamic world of petroleum engineering!

### 1.2.2 Research initiatives of Department of Electrical and Electronics Engineering

The Space Technology Research Group (STeRG) celebrated a major milestone with the successful launch of STeRG P1.0 aboard PSLV C-60 from Satish Dhawan Space Centre on December 30, 2024. STeRG continues to excel in CanSat missions, model rocketry, CubeSat development, and ground station operations, reinforcing its leadership in space research.

Meanwhile, the Center of Excellence in Edge AI is set to evolve into a cutting-edge research hub over the next five years. Now in its second year, the center focuses on pilot projects, research grants, and high-impact publications, aiming to drive innovation, secure patents, and deliver real-world AI solutions—ultimately becoming a self-sustaining hub for low-power AI breakthroughs.

Additionally, MIT-WPU is partnering with the International Automobile Centre of Excellence to establish a Centre of Excellence in eMobility, fostering stronger academic-industry collaboration in sustainable transportation.

## 1.2.3 Research Articles of Department of Civil Engineering



**Dr. Vishakha Sakhare**

The Department of Civil Engineering is advancing innovative solutions for the construction industry. 3D printing with sustainable materials is revolutionizing building techniques, offering faster and more eco-friendly construction by optimizing formulations for Pumpability, Extrudability, and Buildability.



**Prof. Pravin Minde**

Offsite construction, using prefabrication and modular methods, is gaining traction in India to tackle delays, cost overruns, and labour shortages. This approach can reduce project timelines by 30-50%, enhance quality control, and minimize waste, making it a sustainable solution for rapid urbanization.



**Dr. Abhaysinha Gunvantrao Shelake**

The integration of the IRPAD framework, which predicts delays with 95% accuracy, alongside Six Sigma for quality management, is enhancing construction efficiency. By combining these methods, especially with the rise of precast and prefabrication technologies, the industry can ensure timely project completion, improve quality, and minimize defects, paving the way for a more efficient and reliable construction process.

## 1.2.4 Research Articles of Department of Polytechnic

**Mr. Y.J. Gaikwad - “Start-Ups & Government Initiatives”**

Start-ups are vital engines of India’s economic growth, driving job creation, innovation, and diversification. They generate significant employment opportunities, especially for youth, and pioneer new industries and business models across sectors like healthcare, education, and agriculture. By delivering breakthrough products and services, start-ups contribute substantially to India’s GDP and foster an entrepreneurial spirit that encourages risk-taking and original thinking. Many also address pressing social and environmental challenges, supporting sustainable development.

The Indian government actively supports this ecosystem through initiatives like Startup India, FFFS funding, tax incentives, and streamlined regulations. Programs such as the Atal Innovation Mission (AIM), Stand-Up India, and the GeM platform empower entrepreneurs, with special focus on women and underrepresented groups, playing a crucial role in nurturing India’s vibrant start-up landscape.



**Dr. Ritesh Verma**

Mentor in IIT & Startup Jharkhand. Advisory Board member- PHN Technology & Rozgar Dhaba. Rashtriya Abhiman Puraskar 2023, Atmanirbhar Bharat award 2022, Man of Excellence award 2020-21. Ex Acenture, Capgemini, Deloitte, KPMG

Fueling India's Startup Revolution: The Role of AI, Academia, and Government

India's startup ecosystem is rapidly evolving, driven by breakthroughs in AI, machine learning, and automation that are reshaping the global IT landscape. Startups are leveraging advanced technologies like natural language processing, blockchain, and data analytics to innovate across fintech, healthtech, and agritech sectors. AI empowers these ventures with hyper-personalization, predictive analytics, and enhanced operational efficiency, enabling scalable, market-tailored solutions.

Government initiatives such as Startup India, Atal Innovation Mission (AIM), and the Startup India Seed Fund provide vital infrastructure, funding, mentorship, and regulatory support to accelerate growth nationwide. Academic institutions are stepping up by creating incubation centers, entrepreneurship programs, and accelerator initiatives that nurture student innovators and foster real-world skills. Private universities have the opportunity to emulate leading institutes by promoting hands-on learning, industry partnerships, and vibrant startup ecosystems on campus. This synergy of government support, academia, and cutting-edge technology is positioning India's startups as global leaders, fueling sustainable growth and digital economy leadership.

## 1.3 Publications

Sr. No.	Title of Paper	Name of Author	Indexed in (Scopus/Wos)	Publication	Year
<b>Department of Mechanical Engineering</b>					
1	Frequency Response Analyses of 1U CubeSat Under Random Vibration Condition	Sapre A.; Parab M.; Dhattrak P.	Scopus		2025
2	Enhanced Oil Recovery Using Viscosity-Augmented Guar Gum: A Comparative Study with Xanthan Gum and Partially Hydrolyzed Polyacrylamide	Kumar G.; Mahajan S.; Agrawal A.; Deshmukh M.P.; Sangwai J.S.	Scopus	Energy and Fuels	2025
3	Tribological assessment of rice paddy straw filled green modified phenol formaldehyde composites	Girase S.B.; Kothavale B.S.; Kulkarni M.B.; Gholam N.; Radhakrishnan S.; Siva I.	Scopus	Engineering Research Express	2025
4	Investigating wall shear stress and the static pressure in bone scaffolds: a study of porosity and fluid flow dynamics	Gadgil V.; Kumbhojkar S.; Sapre T.; Deshmukh P.; Dhattrak P.	Scopus	Biomechanics and Modeling in Mechano-biology	2025
5	Dough kneading load simulation for stand mixer using smoothed particle hydrodynamics approach	Shrey S.; Kothavale B.; Saraf M.; Kusupudi K.; Kakade H.; Shelke S.	Scopus	Simulation	2025
6	Dough kneading load simulation for stand mixer using smoothed particle hydrodynamics approach	Misal P.S.; Chothe U.P.; Raut S.A.; Ballal R.S.; Kalubarme R.S.; Kulkarni M.V.; Chaudhari S.R.; Kale B.B.	Scopus	Energy Technology	2025
7	Biohydrogen: Advancing a sustainable transition from fossil fuels to renewable energy	Meena P.K.; Patane P.M.	Scopus	International Journal of Hydrogen Energy	2025

8	Intelligent Systems for Digitalization and Automation of Agriculture Equipment	Sadul O.; Phirake S.; Sonawwanay P.D.	Scopus	Lecture Notes in Networks and Systems	2025
9	Blockchain-Powered Framework for Trust Enhancement in FinTech: A Comprehensive Trust Evaluation Approach	Vairagade R.S.; Parkhi P.; Hande Y.; Hambarde B.	Scopus	Concurrency and Computation: Practice and Experience	2025
10	Design and Analysis of Rotary Slag Skimmer Machine	Hujare P.; Mutagekar R.; Mache A.; Hujare D.; Patil S.; Chavan T.	Scopus	Lecture Notes in Mechanical Engineering	2025
11	Advancing Business Security in Cloud for Fileless Malware Detection Using Machine Learning	Balotia I.; Purnaye P.; Kulkarni V.	Scopus	Smart Innovation, Systems and Technologies	2025
12	A comprehensive review on configuration, design and programming of robotic systems used in various applications	Kulkarni A.; Raut R.; Dhattrak P.	Scopus	International Journal of Intelligent Robotics and Applications	2025
12	Biocompatibility of Plasma Electrolytic Oxidation Coated Titanium Alloy for Biomedical Applications	Pesode P.; Barve S.	Scopus	Bio-NanoScience	2025
14	Investigation of combustion characterization of single-point and two-point laser ignition of LPG-air mixture in a constant volume combustion chamber	Patane P.M.; Patil S.S.; Nandgaonkar M.R.	Scopus	Combustion and Flame	2025
15	Experimental Assessment and Verification of Biomechanical Properties of Newly Designed Bone Scaffold Using FEA	Sapre T.; Deshmukh P.; Gadgil V.; Kumbhojkar S.; Dhattrak P.	Scopus	Advances in Science, Technology and Innovation	2025

16	Performance Analysis of Green Friction Brake Pad Materials for Environment Sustainability: A Review	Chheda M.N.; Kothavale B.	Scopus	Advances in Science, Technology and Innovation	2025
17	Investigation of CFRP as a Material for Fabrication of 1U CubeSat Structure for Reduction of Weight with Improved Strength	Belsare A.; Kulkarni S.; Kajale A.; Hujare D.; Hujare P.	Scopus	Lecture Notes in Mechanical Engineering	2025
18	Efficient Searls predictive estimators for the computation of mean under ranked set sampling: an	Yadav S.K.; Vishwakarma G.K.; Singh A.	Scopus	International Journal of System Assurance Engineering and Management	2025
19	Harnessing machine learning for	Jain S.; Jain R.; Patel M.; Sahoo B.; Bhowmik A.	Scopus	Materials Letters	
20	Investigating Heat Transfer Enhancement Using Metal Foam in Double-	Dhavale A.A.; Lele M.M.	Scopus	Journal of Porous Media	

**Department of Civil Engineering**

1	Experimental and analytical study on flexural strength of corroded	Sathe S.	Scopus	Springer Nature	2025
2	Sustainable silver recovery by chemical treatment of metal rich fines	Gajare O.; Jadhav N.B.; Zeke S.; Gogate N.	Scopus	Elsevier B.V.	2025
3	Comparative study on structural behavior of fibrous-ferro-	Sathe S.; Dandin S.	Scopus	Springer Science and Business Media B.V.	2025
4	Optimizing Self-Compacting Concrete with Bone China Ceramic and	Gautam L.; Maaze M.R.; Sharma K.V.	Scopus	American Society of Civil Engineers (ASCE)	2025
5	Machine Learning based Material Demand	Katyare P.; Joshi S.S.; Kulkarni M.	Scopus	University of Bahrain	2025
6	Revolutionizing Indian construction	Minde P.; Kulkarni M.	Scopus	Springer Science and Business Media	2025
7	Seismic evaluation and retrofit of reinforced	Shendkar M.R.; Tantri A.; Rao A.U.	Scopus	Springer Nature	2025

8	Enhancing Quality and Safety of Shotcreting in	Srivastava A.; Potnis S.	Scopus	Central Board of Irrigation and Power	2025
9	Effect of fly ash on compressive strength, carbonation and	Gaikwad P.; Sathe S.	Scopus	Emerald Publishing	2025
10	Enhancing the mechanical properties' performances	Kiran G.U.; Nakkeeran G.; Roy D.; Shinde S.N.; Alagumalai S.H.	Scopus	Nature Research	2025
11	Printing performance of 3D-printed geopolymer through	Sakhare V.; Najar M.; Deshpande S.	Scopus	Taylor and Francis Ltd.	2025
12	Machine learning applications in flood forecasting and	Kumar V.; Sharma K.V.; Mangukiya N.K.; Tiwari D.K.; Ramkar P.V.;	Scopus	American Institute of Mathematical Sciences	2025
13	India's flood risk assessment and mapping with multi-criteria	Kumar V.; Solanki Y.P.; Sharma K.V.; Patel A.; Tiwari	Scopus	IWA Publishing	2025
14	Enhancing Water Level Prediction Using Ensemble Machine	Alsulamy S.; Kumar V.; Kisi O.; Kedam N.; Rathnayake N.	Scopus	Springer Science and Business Media B.V.	2025
15	Investigation on combined use of biochar and ground	Kallimani R.; Minde P.	Scopus	Springer	2025
16	Influence of corrosion on bond strength in	Sathe S.; Devsale A.	Scopus	Taylor and Francis Ltd.	2025
17	Optimization of waste plastic fiber concrete with recycled coarse	Shinde S.N.; Christa S.; Grover R.K.; Pasha N.; Harinder D.;	Scopus	Nature Research	2025

18	Leveraging level data for accurate downstream flow prediction in the Narmada River Basin with advanced machine learning models	Kumar V.; Rathnayake N.; Reddy S.; Kedam N.; Rathnayake U.; Hoshino Y.	Scopus	IWA Publishing	2025
19	Integrating GIS, MCDM, and Spatial Analysis for Comprehensive Flood Risk Assessment and Mapping in Uttarakhand, India	Maru D.R.; Kumar V.; Sharma K.V.; Pham Q.B.; Patel A.	Scopus	John Wiley and Sons Ltd	2025
20	Environmental impacts of COVID-19 lockdown on Indian metropolitan cities: a comprehensive analysis of air quality, water quality, and surface temperatures	Mathew A.; Kunal R.; Sharma K.V.; Shekar P.R.	Scopus	Springer	2025
21	Geostatistical Kriging Interpolation for Spatial Enhancement of MODIS Land Surface Temperature Imagery	Sharma K.V.; Kumar V.; Prajapat D.K.; Mathew A.; Gautam L.	Scopus	Springer	2025

## Department of Electrical and Electronics Engineering

1	Classification of Epileptogenic networks in temporal lobe epilepsy patients in contrast to the healthy controls	Dr. Deepa Nath, Dr. Anil Hiwale	Scopus	Journal of Integrated Science and Technology	Jan 31, 2025
2	Detection of Postpartum Depression using Machine Learning	Dr. Alka Barhatte	Scopus	Journal of Information Systems Engineering and Management	Jan 1, 2025
3	Unified Institute Management System for Efficient Administration and Accurate Data Management	Dr. Alka Barhatte	Scopus	Journal of Information Systems Engineering and Management	Jan 1, 2025
4	A Hybrid Breast Masses Detection In Mammograms Using Geometric Deformable Contour Model and Convolutional Neural Network	Dr. Anuradha C. Phadke	Scopus/SCIE Q1/WoS	Elsevier	Feb 7, 2025
5	A comprehensive review of direction of Arrival Estimation Techniques and Algorithm	Dr. Anil Hiwale	Scopus	Journal of Electronics and Electrical Engineering	Feb 10, 2025
6	Comprehensive Survey on Radar Systems and Its Target Classification	Mrs. Vanita Raj Tank	Scopus	Journal of Electronics and Electrical Engineering	Feb 21, 2025

Department of Petroleum Engineering					
1	Advancements and challenges in the use of surfactants and nanoparticles for enhanced oil recovery: mechanisms, synergies, and field applications	Minal Deshmukh; Aadil Pathan	Springer	Environmental Science and Pollution Research	2025
2	Harnessing biochemical innovations for sustainable oil recovery: perspectives from the Indian context on green enhanced oil recovery (GEOR) methods for matured petroleum fields	Tanvi Kothawade; Minal Deshmukh; Ganesh Kumar	Springer	Environmental Science and Pollution Research	2025
3	Enhanced Oil Recovery Using Viscosity-Augmented Guar Gum: A Comparative Study with Xanthan Gum and Partially Hydrolyzed Polyacrylamide	Ganesh Kumar; Sugandha Mahajan; Akhil Agrawal	ACS Publication	Energy & Fuels	2025

MIT-WPU is dedicated to advancing knowledge through high-impact research and publications. Our faculty and students consistently contribute to renowned journals, showcasing innovative ideas and solutions across various fields. These publications highlight our commitment to academic excellence, fostering a culture of research that addresses global challenges and drives technological advancements.

## 1.4 Book chapter

A book chapter is a scholarly contribution to an edited book, focusing on specific research topics, innovations, or case studies. At MIT World Peace University, faculty and students actively engage in writing book chapters, contributing to global research and knowledge dissemination. With a strong emphasis on innovation and sustainability, MIT-WPU encourages research-driven publications that address real-world challenges, fostering academic excellence and industry relevance.

Sr. No	Title of book	Title of chapter	Name of Publisher	Name of author	Remark if any
1	Rehabilitation Engineering, Assistive Technologies and the Future of Healthcare using Robotics	Flex Sensors In Healthcare Communication: Accessibility & Interaction	Elsevier	Dr. Netra Lokhande	Department of Electrical and Electronics Engineering
2	Rehabilitation Engineering, Assistive Technologies and the Future of Healthcare using Robotics	Kukade S.; Singha S.; Ringe A.; Gupta N.; Gunale K.	Scopus	Lecture Notes in Mechanical Engineering	Department of Electrical and Electronics Engineering
3	Adaptive Intelligence	Anomaly Detection Using Embedded AI	Springer	Dr. Savitri Jadhav Dr. Nathrao B. Jadhav	Department of Electrical and Electronics Engineering
4	Sorption	Carbon Capturing Materials: A review of their	Intech open	Vinayak S. Wadgaonkar	Department of petroleum Engineering
5	Geotechnical Issues in Energy, Infrastructure and Disaster Management	Implementation of Integrated Seismic Prediction and Probe Drilling Technique for Ground Characterization of TBM Driven Tunnels in Lesser Himalayan Region	Springer Science and Business Media Deutschland GmbH	Kumar M.; Potnis S.	Department of civil Engineering

6	FOSS4G ASIA 2024	Mysore 2034: An Integrated Geoinformatics Approach for Real Estate Valuation and Urban Growth	Association for Geo-information Technology	Chandan M.C.; Shreyanka M.; Nikitha K.; Swamy T.; Pramath H.P.; Sharma K.V.	
7	CNC Programming		Tech Knowledge	Mr.Vaibhav Rangari	Department of Polytechnic Engineering
8	Production Processes		Tech Knowledge	Mr.Vaibhav Rangari	Department of Polytechnic Engineering
9	Estimating Costing and Valuation		Tech Knowledge	Mrs.Kavita L.Bawdekar	Department of Polytechnic Engineering
10	Information Technology for Business		Nirali Publication	Mrs.Pallavi U. Nehete, Mrs.Nita G. Dongre	Department of Polytechnic Engineering

## 1.5 Patent/ IPR

At MIT-WPU, we are proud to highlight the growing culture of innovation and intellectual property creation. Our faculty and students are consistently engaged in groundbreaking research, leading to the development of patents that contribute to advancements in various fields. These patents not only showcase our commitment to fostering creativity but also position us as leaders in transforming ideas into tangible solutions for the future.

# Academic Insights

Title	Type (Indian / Australian etc)	Name of Inventers	Details of the Invention	Department
Isolation and characterization of haloarchaeal rhodopsin protein to be used in the development of biosensitized solar cells	Indian (Filed on 11/2/2025)	<u>S. P. Kanekar, A. D. Kulkarni, V. Chakraborty, R. V. Mathad</u>	Indian Patent filed - PIN2024186	Department of Chemical Engineering
A SOLAR THERMAL ENERGY ABSORPTION APPARATUS	Indian	SANJAY NARAYAN HAVALDAR, Kaustubh Ganesh Kulkarni, Harsh Vishwanath Malapur	A system designed to efficiently capture and utilize solar thermal energy for heating or power	Department of Mechanical Engineering
A PROXIMITY SENSING APPARATUS	Indian	SAKSHI SATISH SHINDE, SURBHI RAZDAN, RAWAAD BILAL SARANG	A sensor-based device that detects the presence or movement of objects within a specific range.	
Optimized Five Port Non-Blocking Optical Router for Two Dimensional Multicore Processors	Indian Grant	Dr. Nathrao B. Jadhav Dr. Bharat S. Chaudhari	The optical router is the core component of Optical Network-on-Chip (ONoC). ONoC is the	Department of Electronics and Electrical Engineering
AN INTELLIGENT WEIGHT INDICATOR AND MONITORING DEVICE FOR DOMESTIC LPG CYLINDER	Indian	Vinayak S. Wadgaonkar, Siraj Bhatkar, Pallavi Tatpate, Vignesh Shenoy	An Intelligent weight indicator and monitoring device for domestic LPG Cylinders.	Department of Petroleum Engineering

# Academic Insights

AN INTELLIGENT WEIGHT INDICATOR AND MONITORING DEVICE FOR DOMESTIC LPG CYLINDER	Indian	Vinayak S. Wadgaonkar, Siraj Bhatkar, Pallavi Tatpate, Vignesh Shenoy	An Intelligent weight indicator and monitoring device for domestic LPG Cylinders.	Department of Petroleum Engineering
A METAL ION ADSORBENT	Indian	Vinayak S. Wadgaonkar, Pratiksha Khutpadekale, Siraj Bhatkar, Pallavi Tatpate,	A metal ion adsorbent	Department of Petroleum Engineering

## 1.6 Faculty Achievements & Recognition



Dr. Vinayak Nirmale

**Completed Ph.D in “Solving the classic problems in the field of extremal graph theory”**



Dr. Abhaysinha Gunvantrao  
Shelake

**Completed a thesis on "Development of a Comprehensive Framework for Reducing Delays in Scheduling for Predictable Risks" under the guidance of Dr. Nivedita Gogate at MIT-WPU, 2025**



Dr. Anuradha C. Phadke

**Received recognition from IEEE as one of the top contributors to IEEE publications from MITWPU commemorating International Women's Day on 10<sup>th</sup> March 2025**



Dr. Sunil Somani

**Elected as chairperson of the IETE Pune Center. (The Institution of Electronics and Telecommunication Engineers)**

# Industry Collaborations

## 2. Industry Collaborations

Industry-Academia Conclave 2025: Shaping India's Future Together

MIT World Peace University (MIT-WPU), in collaboration with the National Institute of Personnel Management (NIPM) Pune Chapter, hosted the Industry-Academia Conclave 2025 on 31st January at the Saint Dnyaneshwar Hall, Kothrud. Themed "Strategic Envisioning India 2047," the event brought together 150+ industry leaders and 25 expert speakers to strengthen academia-industry collaboration in line with the National Education Policy (NEP) 2020.

The conclave featured impactful panels on:

- Industry-Academia Synergy
- HR & AI Integration
- GenZ Leadership Development

A student grooming session and an exclusive networking dinner with HR leaders from 125+ companies further enhanced engagement and career opportunities.

Spearheaded by Prof. Dr. Ganesh Kakandikar, the event welcomed notable dignitaries including:

- Mr. Rishikesh Patankar (NSDC)
- Mr. Santosh Iyer (Mercedes-Benz India)
- Prof. Dr. Vishwanath D. Karad (Founder, MIT-WPU)
- Dr. R. M. Chitnis (Vice-Chancellor, MIT-WPU)

Industry voices from Tata Motors, Capgemini, CEAT, Omega Seiki Mobility, Invest India, and more enriched the discourse. Co-organized by NIPM Pune Chapter and MIT-WPU leadership, the conclave marked a significant step toward future-ready education, skill-based learning, and industry-aligned curricula



## 2.1 Industry Collaboration

MIT World Peace University (MIT-WPU) continues to build robust partnerships with leading industries to bridge the gap between academia and the professional world. These collaborations offer students practical exposure through internships, live projects, and specialized training, equipping them with in-demand skills and real-world insights.

The Department of Petroleum Engineering recently advanced this mission by signing an MoU with Wellkin Energy Pvt. Ltd. on January 25, 2025. This strategic alliance promotes joint R&D projects, student training, industry-aligned curriculum development, and faculty upskilling.

Key highlights of the collaboration include:

- Hands-on learning via internships, projects, and industry visits
- Faculty development programs and guest lectures
- Joint seminars and research initiatives
- Continuing Education and Management Development Programs (MDPs)

The Department of Electrical and Electronics Engineering (E&E) at MIT-WPU has strengthened its industry engagement by signing four MoUs during the 2024–25 academic year, fostering innovation, practical training, and professional growth for students and faculty.

Key collaborations include:

- IN-SPACE, Ahmedabad (Sept 30, 2024): Focus on satellite payload design, testing, and launches.
- Vedrev Technologies Pvt. Ltd., Pune (Dec 10, 2024): Partnership for the HR Conclave 2025.
- Devise Electronics Pvt. Ltd. (Dec 15, 2024): Training on EV Educational Kits under a Center of Excellence.
- Prushal Technology Pvt. Ltd., Pune (Jan 31, 2025): Offers internships and participation in HACK-MITWPU 2025.

The Department of Polytechnic at MIT-WPU, in collaboration with the Department of Electronics and Communication Engineering (ECE), organized a Faculty Development Program (FDP) on "Embedded Systems & Automation" from December 16–20, 2024, sponsored by Auxipower Dynamic Technologies Pvt. Ltd., Pune.

MIT-WPU Hosts International Summit on Materials Science and Engineering

On February 27, 2025, the Department of Chemical Engineering at MIT-WPU organized a One-Day International Industry-Academia Summit focused on Materials Science and Engineering. The summit served as a dynamic platform for collaboration, bringing together global leaders, researchers, and industry experts to drive innovation in the field.

Distinguished speakers included:

- Dr. Richard Lobo, Global Head of Innovation, Tata Chemicals
- Dr. Vilas Tathavadkar, Senior VP, Aditya Birla Group
- Prof. Dr. Ajit Kulkarni, IIT Bombay

Experts from Mid Sweden University, Lupin Pharma, and SPEL Technologies also shared insights on cutting-edge developments in materials science.



## MIT-WPU Welcomes MAHLE Group CEO for Inspiring Student Interaction

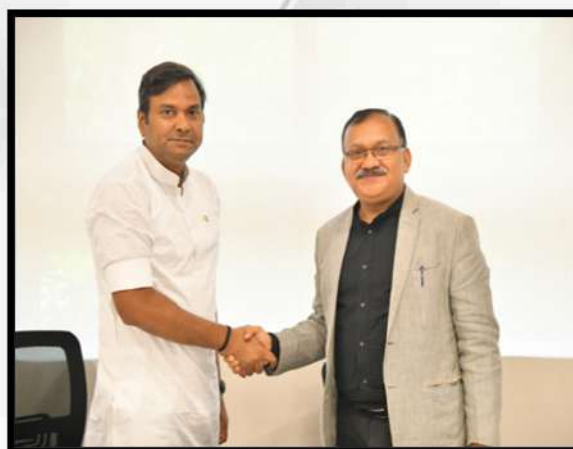
The Department of Mechanical Engineering at MIT-WPU was privileged to host Mr. Arnd Franz, CEO of MAHLE Group, Germany, for an engaging session with students. In his keynote, Mr. Franz shared his leadership journey and vision for innovation, inspiring students to think ambitiously and pursue bold ideas.

A major highlight was the inauguration of the official Vegapod Hyperloop Club website, celebrating a key milestone in student-led innovation. Mr. Franz also reviewed MAHLE-supported projects, including the Vegapod Hyperloop prototype and Piranha Racing's All-Terrain E-Vehicle, offering expert feedback to refine their designs.

## Strengthening Ties with Konkan Railway: Industry-Academia Collaboration at MIT-WPU

MIT-WPU had the honor of welcoming Shri Santosh Kumar Jha, Chairman and Managing Director of Konkan Railway, in the esteemed presence of Prof. (Dr.) Vishwanath D. Karad, Founder President, and Dr. Rahul V. Karad, Executive President of MIT-WPU.

This visit marked a pivotal step in enhancing industry-academia collaboration in the railway sector. Shri Jha shared key insights on technological advancements and explored future collaborative opportunities, reinforcing the shared vision of innovation and applied learning.



# Industry Collaborations



Panel Discussion on 'Bridging the Gap: Industry, Academia & a Mechanical Engineer's Journey



## b) Mahle Industries



### Industry-Academia Conclave 2025: A Power-Packed Start

The Industry-Academia Conclave 2025 began on a high note with powerful insights from academic and industry leaders. Dr. R.M. Chitnis, Vice Chancellor, MIT-WPU, emphasized the importance of hands-on HR experience, while Mr. Rishikesh Patankar, VP, NSDC, addressed the pressing need to close the skills gap and prepare industry-ready talent.

With 150+ industry professionals and 25+ distinguished speakers, the conclave featured dynamic discussions on Gen Z leadership, talent development, and strengthening academia-industry partnerships.



Sr. No.	MoU's
1	Lotlite Technology Pvt Ltd.
2	Hydroteck Engineering company, Chinchwad
3	Indeed Inspiring Infotech Pvt,Ltd, Pune
4	Surface Design Technologies pvt ltd, Pune
5	EV Robotics Skill Coach(India) pvt ltd, Thane



The Department of Civil Engineering at MIT-WPU has forged impactful collaborations through multiple initiatives and MoUs. A key partnership with Maharashtra Metro Rail Corporation promotes a green campus by extending E-bicycle usage from metro stations to the university. The department also hosted a National Hackathon encouraging innovative interdisciplinary solutions. Further strengthening industry ties, an MoU was signed with SHARVAL EDTEC Pvt. Ltd. On December 5, 2024, MIT-WPU partnered with the Ministry of Road Transport and Highways (MoRTH) to advance tunnel construction technologies. Additionally, a two-week training program was conducted for Young Officers of the Border Roads Organization (BRO), focusing on tunnel construction techniques.




MIT-WPU's active participation as an academic partner at Constro 2024 and CEMCON FEB 2024, along with the International Workshop on Underground Space Utilization, highlights its commitment to bridging academia and industry, enriching student placements and collaborative opportunities.



# Industry Collaborations

## 2.2 Industrial Visit

Industry visits provide students with valuable hands-on experience and insights into real-world applications of their academic knowledge. These visits allow students to observe cutting-edge technologies, interact with industry experts, and understand the practical challenges and solutions in various sectors

Visit Location	Details of the visit	Pictures
TATA IIS, Mumbai	20 Second Year ECE student and Two Faculty members 8-02-2025	
Cutek Circuit India Pvt. Ltd. Kondhawa Bk. Pune	60 First Year ECE students and two faculty members 25-02-2025	
Techno Circuit System Pvt. Ltd. Kondhawa Bk, Pune	First Year ECE student, 25-02-2025	

The Department of Electrical and Electronics Engineering arranged multiple industrial visits to enhance practical learning for students such as, Jendemark India Pvt. Ltd. in Saswad, Pune, gaining valuable insights into robotics and industrial automation for electric vehicles.

TATA IIS in Mumbai, exploring cutting-edge industrial advancements. Quick Circuit India Pvt. Ltd., and others toured Techno Circuit System Pvt. Ltd., enhancing their understanding of circuit system technologies.



# Industry Collaborations

Department of Chemical Engineering

Industrial Visits & Hands-on Learning Experiences: Transformative Industrial Visit to JSW Steel Coated Products Limited  
JSW Steel Coated Products Limited (JSWSCPL) in Khopoli, gaining valuable industry exposure. These visits bridged classroom knowledge with real-world steel production processes, enriching the students' learning experience.



The department secured ₹28 lakh funding from the Rajiv Gandhi Science & Technology Commission for the project titled “Utilization of Jackfruit (*Artocarpus heterophyllus*) Waste for Making Value-Added Polymers and Novel Adsorbents.”

Mr. Soham Joshi, a SY B.Tech student, is interning at Ambitious Polytech since March 10, 2025, working on the synthesis of biodegradable polymers from potato starch.

Mr. Manmohan Jena, a second-year B.Tech student, contributed significantly to Formula Bharat 2025, manufacturing critical composite parts like the driver's seat and nose of the car.

Department of Civil Engineering

The Department of Civil Engineering at MIT-WPU organized a site visit to the Missing Link Project in Lonavala. This visit, supported by CESA, underscores MITWPU's commitment to providing learning beyond the classroom, preparing students to shape the future of infrastructure. Additionally, the National Academic Immersion Program (NAIP) at Konkan Railway Academy in Madgaon, Goa, offered civil engineering students' practical insights into railway infrastructure, accident relief systems, and logistics.



# Alumni Engagement

## 3. Alumni Engagement

At MIT-WPU, alumni engagement plays a pivotal role in strengthening the connection between current students and industry professionals. Through webinars, mentorship programs, and guest lectures, alumni share valuable insights, offering guidance and fostering networking opportunities. This collaboration enriches the academic experience, preparing students for success in their careers.

The Department of Electrical and Electronics Engineering actively involves its alumni to mentor and inspire current students. Notable alumni, including Gaurav Joshi and Reshma Chavan, participated as mentors during RIDE'24 (August 20–24, 2024), leading sessions on research, innovation, design, and entrepreneurship. Additionally, Om Godbole returned as a judge for the CHARM event under the Triangle Trophy on March 21, 2025.



# Alumni Engagement



## Department of Civil

Janhavi Shekhar, an IPS Officer from the 2016 batch, is a proud alumna of MIT-WPU's Civil Engineering department. Her journey showcases the versatility of engineering education, proving that civil engineering skills can pave the way for impactful careers in public service. Organized Guest Session to FY M Tech students from Alumni Omkar Jadhav and Bhagyashree Rahate (2023 Batch)



# Alumni Engagement



Organized guest lecture to FY M Tech Structure students by Pranav Darda – 2016 Batch Alumni Meet and Network December 2024



## Department of Chemical

Our alumni play impactful roles in advancing technology, addressing environmental challenges, and contributing to various industries worldwide. We congratulate Ms. Nivedita Naik on her new job at Lacerta Group in Mansfield, Massachusetts as a Process Engineer. We successfully conducted a guest lecture under Student Welfare and Entrepreneurship (SWE) on "How to be a Lady Entrepreneur" by our esteemed alumna, Deepti Chandrachud, Director of Quality Paints and Coating, Pune on 18<sup>th</sup> March 2025.

# Alumni Engagement

## Department of Polytechnic: Alumni

Deven Naik: "MITWPU's integration of peace education with engineering courses helped me grow not just as an engineer but as a leader. The focus on ethical leadership, teamwork, and communication equipped me with soft skills that have been crucial in my career

Astha Bhayani: MIT World Peace University (MITWPU) offers an Integrated B.Tech program in Mechanical and Robotics Engineering, which combines technical depth with a forward-thinking approach to automation and robotics.

b) Pranjali Kirane: "The Integrated B.Tech program in Mechanical and Robotics Engineering at MITWPU is designed to provide a solid foundation in core mechanical engineering principles while integrating the latest trends in robotics and automation. The curriculum helped me understand everything from classical mechanics to cutting-edge robotics. What stood out to me was the extensive hands-on experience.

c) Vinit Deshmukh: "One of the best aspects of the Integrated B.Tech program was the interdisciplinary approach. We worked alongside students from other departments such as electronics, computer science, and design, which gave us a holistic understanding of how robotics operates in different domains.

## 4. Achievement & Milestones

The MIT-WPU achieved significant milestones this year, including industry collaborations, student accolades, and impactful research contributions. From securing top ranks in prestigious competitions to organizing insightful guest lectures and technical workshops, the students and faculty demonstrated excellence across various domains. These accomplishments reflect the department's commitment to innovation, sustainability, and academic growth.

Department of Electrical and Electronics Engineering

Eshal Asfeen Shaikh and Revati Jagdale of TYBTech (ECE-AIML) of Department of Electrical and Electronics Engineering, Won first place in the IEEE Pune Section Innovate and Investigate Research Paper Challenge.



Achintya Chawre , Shreerang Saranjame, Gaurav Prajapati, Vivaswan Sapre, Prathamesh Phatak, Vedant Vaidya, Pratham Chavan, Gaurang Mathur, Chaitanya Sahasrabuddhe, Tanush Joshi, Prabhjot Bhatia, Maitreyee Choudhary of Department of Electrical and Electronics Engineering are part of POEM (PSLV Orbital Experimental Module) Project: The POEM-4 payload, STeRG-P1.0, was designed to test attitude determination using COTS IMU sensors in Low Earth Orbit (LEO). The payload successfully operated in space for 21 days, exceeding mission expectations by 150%.



# Achievements & Milestones

Daksh Jangid of SYBTech (AI & ML) won first prize in the event ICE by Symbiosis School for Liberal Arts, an inter-collegiate fest held on March 21-22, 2025



Satwik Wakankar of TYBTech(ECE) and team won second prize at national level competition; “Baja SAE India” held at Hyderabad on February 9, 2025.

Divyaansh Gupta of SYBTech (ECE) won first prize at National level event, CMR Hackfest 2.0 and Innovathon 2.0, held at Hyderabad on January 29, 2025

**Research Breakthroughs: Department of Electrical and Electronics Engineering**

The Space Technology Research Group (STeRG) of Department of Electrical and Electronics Engineering, at MIT World Peace University, Pune, participated in S2: STEP 2025 and the Sixth Indian Planetary Science Conference (IPSC2025) from 4th March 2025 to 7th March 2025 at IIT Roorkee. The event brought together leading scientists, researchers, and organizations in the field of planetary science and space technology.

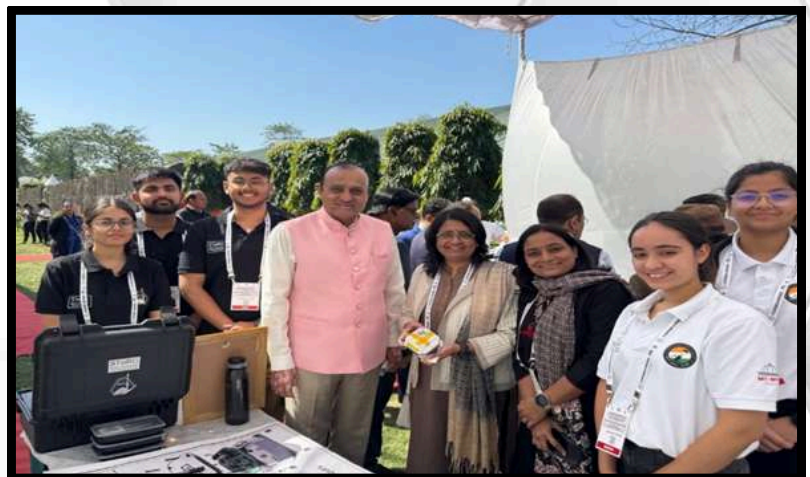
STeRG was represented by six members:

Tanush Joshi  
Vedant Vaidya  
Anish Singh  
Maitreyee Choudhary  
Janhavi Saraf  
Riya Tambekar

**Accompanied by faculty mentors:**

**Dr. Parul Jadhav**




**Dr. Savitri Jadhav**



# Achievements & Milestones

## Department of Polytechnic

Students from the Polytechnic department achieved remarkable milestones across various competitions

Sr. No	Prize	Competition	Event	Name of College/ University	Name of students	Class	Photo
1	Best Paper Award	Conference	IEEE Sponsored International Conference	AISSM, Pune	Tanushree Balote, Neel Suryvanshi, Harshda Suryawans	TYCSE Div A	
2	First	Poster Presentation Competition	Navonmesh	DES University	Suveer Upasani, Siya Pawar, Tanvi Aglawe	TYCSE Div B	
3	Top 1%, 166th position world wide	Competition based on coding and cybersecurity skills.	Hack the Code Challenge 2025	The Reply Challenge, Global Platform	Ram Kansal Sujal Sokande	TY AIDS	
4	Third	Capture The Flag competition	Cyber Vault Connect	MIT World Peace University	Ram Kansal Parth Doshi	TYAIDS TYECE	
5	Faculty appreciation by VC sir for 14th BCS, BANA and MIA						

# Achievements & Milestones

## Department of Civil Engineering

The G. Shirke Vidyarthi Award 2025 at CONSTR-2025 honored exceptional research contributions in civil engineering. Ms. Pratibha Mudhe (M. Tech CEM, Batch 22-24) secured the 2nd rank. She was awarded ₹15,000, along with a certificate and a trophy and Mr. Sachin Deshpande (M. Tech CEM, Batch 22-24) earned the 3rd rank mentored by Dr. Vishakha Sakhare. His contributions were recognized with a cash prize of ₹10,000, a certificate, and a trophy.



## Department of Petroleum

Two of our brilliant third-year B.Tech students, Ms. Sanika Mokashi and Mr. Shrey Bhat, have clinched the prestigious IADC (International Association of Drilling Contractors) Student Scholarship, securing a remarkable \$5,000 each.





A team of six students from MIT-WPU, titled “Alchemists”, emerged victorious in the Smart India Hackathon (SIH) under the problem statement of the Ministry of Power, Government of India. The team comprised Moharjyoti Chakraborty, Shrey Bhat, and Naila Shaikh from TY BTech Petroleum Engineering, along with Soham Paranjpe, Diptasha Das, and Harsh Badonia from TY BTech Chemical Engineering, under the mentorship of Dr. Neeraj Topare. They worked on Hardware Problem Statement ID 1577, which focused on the development of a co-electrolyzer to synthesize both ammonia and methanol in a single stage. The national finale was held at KIET Group of Institutes, Ghaziabad.



MIT-WPU had a strong presence in SIH, with 500 teams participating from the university. However, only five teams made it to the final round, out of which just two were from the hardware category, including Team Alchemists. With an overall national finale selection rate of just 2.4%, their achievement highlights their exceptional innovation and problem-solving abilities.

## Career Advancement for Btech Robotics and Automation Students

A career advancement course was conducted by Prof. Pramod Dastoorkar for B.Tech Mechanical Robotics and Automation students. The course was held in offline mode on 20th March 2025. The objective of the session was to provide information about placement opportunities for B.Tech students and address any doubts related to the placement process. During the session, Prof. Pramod Dastoorkar shared insights on career prospects, industry trends, and essential skills for placement success.

## Course advancement for M.tech Students

A career advancement course was conducted by Prof. Manas Mohanti for M.Tech students across all streams. The course was held in offline mode on 23rd January 2025. The primary objective of this course was to provide insights into placement opportunities for M.Tech students and address doubts related to the placement process. During the session, Prof. Manas Mohanti shared valuable information on various career prospects, company expectations, and essential skills required for securing placements.

## 5. Placements & Career Progression

Department of Petroleum: Internship Experiences & Learnings



**Balraj Tavanandi**

**PRN : 1032210165**

**Roll no : 1**









**Branch : Department of Petroleum Engineering**

Over the past four years at MIT-WPU, pursuing Petroleum Engineering, I had the opportunity to intern with industry leaders—Cairn Vedanta and Reliance Industries. At Cairn, I gained firsthand exposure to upstream operations, including drilling, well testing, and reservoir simulation. At Reliance, I focused on production optimization and digital oilfield technologies, working with real-time monitoring tools.


These experiences sharpened my technical and analytical skills, reinforced the importance of precision and safety, and prepared me for the fast-paced world of oil and gas

Department of EEE

Campus Placement Highlights: Department of Electrical and Electronics Engineering

Sr. No.	Name of the placed student	Designation	Name of the Company	Photograph of student	Company logo
1	Jha Rohan	Business Technology Solutions	ZS Associates		
2	Deshmukh Sanya Yashodhan	Business Technology Solutions Associate	ZS Associates		
3	Ashish Kumar Tiwari	Business Technology Solutions	ZS Associates		
4	Mathew Jeremy John	Business Technology Solutions	ZS Associates		



# Placements & Career Progression

5	Bishoi Ashutosh	Graduate Engineer/Analyst	ANZ		
6	Somani Varun Rakesh	Software Engineer	UBS		
7	Bishnoi Isha	Software Developer	IBM		
8	Ashish Aryan Kumar	Software Developer	ISDL (IBM)		
9	Shrivastava Selina	Software Engineer	SLB		
10	Salunkhe Anuja Sarjerao	Software Engineer	Schneider electric		
11	Gupta Simon Prashant	Software Engineer	Schneider electric		
12	Md Faiz Alam	software Development Eng-1	Amadeus 2025		
13	Chintamani Shivam Bipin	software Development Eng-1	Amadeus 2025		
14	John Allen Shyju	Intern	A.P. Moller		

# Placements & Career Progression

15	Gupta Aryan	Intern	A. P. Moller		
16	Pande Awadhoot Ravindra	GET	ATS conveyor		
17	Sneha Sunil Gadgil	GET	ATS conveyor		
18	Saksham Jain	Jr. Software Developer	Onextel		
19	Siddharth Kumar Sharma	Jr. Software Developer	Onextel		
20	Anshika Mishra	Jr. Software Developer	Onextel		

## Department of Mechanical

Sr. No.	Name of the placed student	designation	Name of the Company	Photograph of student	Company logo
1	DEVESH SUDHIR DONGARE	Assistant Manager Operations	Essar Power		

# Placements & Career Progression

2	Aatm Prakash	Assistant Manager Operations	Essar Power		
3	Aayush Sachin Patil	GET	ATS Conveyors		
4	Pratik Prasad Kshirsagar	GET	ATS Conveyors		
5	Dhruv Vivek Aher	Inside Sales Specialist	Jyesta Corporate Entity		
6	Jai Mahesh Sarang	Inside Sales Specialist	Jyesta Corporate Entity		
7	Jappan Gujral Gujral	Inside Sales Specialist	Jyesta Corporate Entity		

# Placements & Career Progression

8	M Anirudh	Inside Sales Specialist	Jyesta Corporate Entity		
9	Tejus Divakar Kulkarni	GET	Seros Energy Private Ltd.		 
10	Sanidhya Kishor Bagad	Trainee Engineer	Quest Global		
11	Ronak Subhash Mule	Engineer Intern	Gyrodrive Machineries Private Limited		 GYRODRIVE MACHINERIES
12	Arhan Noor Shaikh	Engineer Intern	Gyrodrive Machineries Private Limited		 GYRODRIVE MACHINERIES

# Placements & Career Progression

13	Viraj Shah	Voyage Engineering	Marriott International		
14	Vaidehi Kokate	Voyage Engineering	Marriott International		
15	Abhishek Brahma	Inside Sales Specialist	Jyesta Corporate Entity		
16	Akbar Asif Pathan	Inside Sales Specialist	Jyesta Corporate Entity		
17	Rajesh Dilip Chaudhary	Inside Sales Specialist	Jyesta Corporate Entity		
18	Aditi Ram Dhapte	GET	L&T		

# Placements & Career Progression

19	Savani Dhanajay Sirsikar	GET	Tata Technologies		
20	Rishi Shreedhar Vaidya	GET	Blue Star		
21	Aadish Praveer Purohit	GET	Tata Technologies		
22	Nishtha Naresh Jagasia	GET R&D	Forvia Faurecia		
23	Smeet Dilip Mutha	GET	HNI GBSC		
24	Pranav Kumar	Manufacturing Production Associate	Indus		

# Placements & Career Progression

25	Pranav Valvekar	GET	Keyence		
26	Pratham Prashant Ayre	SCM Analyst	EATON		
27	Rohit Vishwas Deshmukh	GET	Tata Technologies		
28	Samrat Gandhi	Graduate Apprentice	Indus		
29	Pranav Vilas Pawar	GET	Tata Technologies		

# Placements & Career Progression











Department of Civil

Sr. No.	Name of Students	Company	AY	Photos	Company logo
1	Atharav Yadav	Essar Power pvt ltd	B. Tech Civil Engineering		
2	Vaishnavi Ghadge	Essar Power pvt ltd	B. Tech Civil Engineering		
3	Aditya Jagnor	Essar Power pvt ltd	B. Tech Civil Engineering		
4	Uma Deshmukh	Essar Power pvt ltd	B. Tech Civil Engineering		
5	Luqmaan Baba	Vconstruct pvt ltd	B. Tech Civil Engineering		
6	Pratap Dhankwade	Megha Engineering	B. Tech Civil Engineering		

# Placements & Career Progression

7	Harsh Ghadia	Megha Engineering	B. Tech Civil Engineering		
8	Om Sanjay Kankale	Megha Engineering	B. Tech Civil Engineering		
10	Aditya Kumar	Megha Engineering	B. Tech Civil Engineering		
11	Manjiri Haridas Khule	Megha Engineering	B. Tech Civil Engineering		
12	Amir Lehri	Reliance Industries	B. Tech Civil Engineering		

# Placements & Career Progression

Sr. No.	Name of Students	Company	AY	Photos	Logo		
1	Ankit Manoj More	Megha Engineering and Infra Ltd	M Tech - Tunnels				
2	Omkar Naresh Sarangkar	Megha Engineering and Infra Ltd	M Tech - Tunnels				
3	Arya Marjive	Megha Engineering and Infra Ltd	M Tech - Tunnels				
4	Shivam Dayanand Masali	Megha Engineering and Infra Ltd	M Tech - Structural				
5	Abhishek Vilas Bhagwat	Megha Engineering and Infra Ltd	M Tech - Structural				

# Placements & Career Progression

6	Faizmohammad	Megha Engineering and Infra Ltd	M Tech - Structural		
7	swathi Jamadar	Megha Engineering and Infra Ltd	M Tech - Cons Mgt		
8	Tejas Nimba Amrutkar	Megha Engineering and Infra Ltd	M Tech - Cons Mgt		
9	Preeti Paidi	Megha Engineering and Infra Ltd	M Tech - Cons Mgt		
10	Rajvardhan Kallimani	Megha Engineering and Infra Ltd	M Tech - Cons Mgt		
11	Ashutosh Subhash Thakare	Megha Engineering and Infra Ltd	M Tech - Cons Mgt		

# Placements & Career Progression

12	Aayush Ajay Bhadane	Afcons Infrastructure pvt ltd	M Tech - Tunnels		
13	Ashutosh Rajendra Jagtap	Afcons Infrastructure pvt ltd	M Tech - Tunnels		
14	Monali Kanaiyalal More	Afcons Infrastructure pvt ltd	M Tech - Tunnels		
15	Abhishek Beede	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
16	Anjali Raju Gabhane	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
17	Darshan Gopal Nilapwar	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		

# Placements & Career Progression

18	Deep Rajendra Khatu	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
19	Harshvardhan Lalasaheb Patil	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
20	Nachiket Tushar Kalpe	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
21	Purushottam Balasaheb Hundekari	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
22	Rajat Balasaheb Kshirsagar	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
23	Sameer Rohidas Thamke	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
24	Shreeraj Anand Narsale	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		

# Placements & Career Progression

25	Swaraj Rajesh Yamgawali	Afcons Infrastructure pvt ltd	M Tech - Cons Mgt		
26	Sushmit Shinde	Afcons Infrastructure pvt ltd	M Tech - Tunnels		
27	Abhishek Bhagwat	Sgurr Energy pvt ltd(Internship)	M. Tech-Structure		
28	Shaheed Motiwale	The Eyrie Projects pvt ltd	M. Tech-Structure		
29	Drishti Oza	Eyrie Project	M. Tech-Environment Engineering		
30	Pratil ATole	Greenko pvt ltd	M Tech - Cons Mgt		
32	Amruta Gorde	Burns & McDonnell India	M. Tech-Structural Engineering		

## 6. Department Initiatives & Strategic Developments

The Department of Mechanical Engineering (DoME) has established a strategic collaboration with the University at Buffalo, providing students with an exceptional opportunity to engage in advanced Capstone Projects. This initiative allows students to work on cutting-edge research and innovative solutions under the expert guidance of renowned professors, including Prof. Mahesh Pradhan and Prof. Dr. Deepak Hujare. Through this partnership, students gain hands-on experience in industry-relevant projects, fostering critical thinking, technical expertise, and global exposure. The collaboration enhances their academic and professional growth, equipping them with the skills necessary for future technological advancements. This initiative reaffirms DoME's commitment to excellence in engineering education and research, paving the way for groundbreaking innovations.

### Department of Polytechnic

Content updating program for semester first and second



## 7. Campus Events & Activities

Department of Petroleum

MIT-WPU at India Energy Week 2025!

India Energy Week 2025, held at Yashobhoomi from February 11–14, was a premier platform showcasing the latest innovations and trends in the energy sector. Our team's active participation offered unparalleled exposure to cutting-edge technologies, industry insights, and networking opportunities.

India Energy Week 2025: A Transformational Experience

Students gained invaluable hands-on experience with energy technologies and deepened their understanding of global energy advancements.

·Day 1: Explored company booths from SLB, ONGC, Weatherford, ADNOC, and Baker Hughes, including immersive VR simulators for experiential learning.

·Day 2: Focused on industry standards, regulatory frameworks, and sustainability with insights from API and MNGL.

·Day 3: Featured sessions on leadership, networking, and green fuel initiatives by Mr. Pushkar Ghodke, Arun & Sangeeta Karle, along with interactions with SLB, Jio & BP, and DGH. Students worked on real-world problem statements.

·Day 4: Discussions on the role of AI & ML in energy, internship opportunities, and FIPI's collaboration plans for IEW 2026.

This event enriched students' knowledge and equipped them to become future leaders in the evolving energy landscape.

We extend our gratitude to IADC, FIPI, MIT-WPU faculty, and all industry professionals who supported us throughout this journey.

Guest Lectures & Expert Talks at MIT-WPU

MIT-WPU organized a series of expert sessions to complement the learnings from India Energy Week, bridging academia and industry.

·17 Feb 2025: Dr. R.V. Marathe (Ex-Executive Director, ONGC) delivered a Masterclass on Reservoir Engineering, covering classical reservoir tools and water flooding techniques.

·18 Feb 2025: Mr. Ruchin Pandey and Mr. Kunal Bachhav (OneSubsea) presented on Dynamic Innovations and Challenges in Underwater Engineering, focusing on subsea advancements.

·20 Feb 2025: Mr. Vijaykumar Pawar and Mr. Sudhir Annapurne (OneSubsea) conducted a deep dive session on Subsea Well Programs and Equipment, discussing planning and advanced technologies.

·21 Feb 2025: Dr. Pranab N. Jha (Bharat Flow Analytics) shared insights on Production Flow Assurance Issues, addressing practical problem-solving in petroleum engineering.

These sessions broadened students' perspectives and enhanced their readiness for industry challenges in the energy sector.



## SPE Week 2025: A Blend of Knowledge & Social Responsibility

SPE Week 2025 featured a series of expert guest lectures, delivering key insights into petroleum engineering topics:

- February 17: Dr. R.V. Marathe (Ex-Executive Director, ONGC) presented on Classical Reservoir Tools and Waterflooding, sharing expertise on traditional reservoir techniques and modern challenges.
- February 18: Mr. Ruchin Pandey and Mr. Kunal Bachhav (OneSubsea) discussed Dynamic Innovations and Challenges in Underwater Engineering, focusing on subsea technological advancements.
- February 20: Mr. Vijaykumar Pawar and Mr. Sudhir Annapurne (OneSubsea) delivered an in-depth session on Subsea Well Programs and Equipment, covering key aspects of well operations.
- February 21: Dr. Pranab N. Jha (Director, Bharat Flow Analytics) concluded the series with a talk on Production Flow Assurance Issues, addressing critical operational challenges.

On February 22, as part of the SPE Cares initiative, students and faculty organized a Cleanliness Drive at Sinhad Fort, promoting environmental sustainability and heritage conservation.





Department of Polytechnic

## Workshops, Seminars, & Conferences:



Several insightful workshops were conducted to enhance students' technical skills and industry readiness. The Machine Learning workshop, led by Mr. Bhushan Garware, took place from 22nd to 25th January 2025, providing hands-on experience in AI-driven solutions. From 10th to 12th January 2025, Mr. Kiran Ghorpade conducted a session on E-Tendering: A Contract Bidding, equipping students with essential procurement skills. The Workshop on Arduino, led by Mr. Vimal Oza, was held from 26th February to 2nd March 2025, focusing on microcontroller-based automation. Additionally, the Infosys Springboard Lab on Wheels Program was organized on 17th and 18th February 2025, offering industry-aligned training. A specialized session on Data Visualization Tools (Power BI & Tableau) took place from 13th to 15th January 2025, empowering students with analytical skills.

# Department Initiatives & Strategic

Lastly, a workshop on Ki-Cad, an open-source PCB design tool, was conducted on 22nd January 2025, enhancing students' circuit design capabilities.


Sr.No	Workshop Details	Trainer Name	Date	Photographs
1	Machine Learning	Mr.Bhushan Garware	22nd Jan-25th Jan 2025	
2	E-Tendering:A contract Biding	Mr.Kiran Ghorpade	10th Jan 2025-12th Jan 2025	
3	Workshop on Arduino	Mr.Vimal Oza	26th Feb-2025-2nd March 2025	
4	Infosys Springboard Lab on wheel Program		17th and 18th February 2025	

# Department Initiatives & Strategic




<b>Data Visualization Tools (Power BI and Tableau)</b>		13th January 2025 to 15th January 2025	
<b>Ki-cad</b>		22nd January 2025	

## Guest Lectures & Expert Talks:

MIT-WPU organized a series of insightful webinars, featuring industry experts who shared valuable knowledge on emerging technologies. On January 3, 2025, Rahul Malewar delivered a session on Trending Technologies and Global Certification in AI through Salesforce, highlighting advancements in artificial intelligence. Mr. Sujeet Dhere, Director of Techno Vision Solutions Pvt. Ltd., Pune, conducted a webinar on PLC & Automation on January 22, 2025, emphasizing industrial automation. On February 17, 2025, Mr. Aditya Thakare explored AI and Machine Learning, offering insights into cutting-edge developments. Mr. Tushar Kute, Sr. Data Scientist at MITU Research, Pune, discussed Industry 4.0 on February 24, 2025. The series concluded on March 17, 2025, with Dr. Mousumi Bhanja from Symbiosis Institute of Technology, Pune, presenting on Latest Trends in Semiconductor Technology. These webinars provided students with industry-relevant expertise and practical knowledge.

Sr. No	Date of Webinar	Webinar Title	Speaker Name	
1	3rd Jan 2025	Trending Technologies and Global Certification In AI through Salesforce	Rahul Malewar	

# Department Initiatives & Strategic

22/01/2025	“PLC & AUTOMATION”	Mr.Sujeet Dhere, Director, Techno vision Solutions Pvt. Ltd, Pune.	
24/02/2025	“Industry 4.0”	Mr. Tushar Kute, Sr. Data Scientist, MITU Research, Pune	
17/03/2025	<b>Latest trends in Semiconductor Technology”</b>	Dr. Mousumi Bhanja, Assistant Professor, Dept of E&TC, Symbiosis Institute of technology, Pune	
17/02/2025	“AI and Machine Learning”	Mr. Aditya Thakare, Researcher and Trainer, MITU Skillologies ,Pune.	

## Department of Civil

### Workshops, Seminars & Conferences | Guest Lectures & Expert Talks

The Department of Civil Engineering organized a one-day workshop on “Earthquake Engineering and Structural Retrofit” as part of the Industry-Institute Collaboration on Tuesday, 21 January 2025, at 9:30 AM in Tikona Hall, Chanakya Building, MIT-WPU campus.

Guided by Program Director Prof. Dr. Shantini A. Bokil, the workshop was delivered by experts Prof. Dr. Sudhir P. Patil and Prof. Dr. Sandhya R. Mathapati. The session focused on traditional and modern techniques for retrofitting old and existing structures to withstand earthquakes. The workshop attracted over 100 enthusiastic students who gained valuable practical knowledge.



## Department of Chemical

### 1. International conference attended:

Shravani Gajendragad of SY Bioengineering presented her research work poster in Springer Nature International Conference on Sustainable Energy & Environment (ICSEE 2025) organised by the Department of Chemical Engineering at BITS Pilani, K K Birla Goa Campus. In the same conference Dr Shubhangi Rastogi gave an oral talk on sustainable energy.

<https://drive.google.com/file/d/1GdapzXthn6h0xcuzFUqQcZt5hAwRka5d/view?usp=sharing>

### 2. Best paper award at National conference:

Vanchita Nagdeo (S.Y. B.tech Chemical Engineering) and Samruddhi Sankhe (T.Y. B.tech Bioengineering) received the Best Paper Award at the 5th National Conference on Materials and Devices, sponsored by ANRF (DST, Government of India) organized by Teerthanker Mahaveer University, U.P. for the paper titled "Biosensors for Wastewater Treatment: Status, Opportunities, and Challenges." attended in online mode. This research explores the significant role of biosensors in wastewater management, offering insights into current technologies, future innovations, and the challenges we face.

I am deeply grateful to my mentor, Prof. Himangi Neve, for her continuous support and guidance throughout this journey. I would also like to extend my heartfelt thanks to Dr Dinesh Bhutada (Program Director), Dr Ratnadip R Joshi (Programme Coordinator, Chemical engg.), Dr. Sharbani Kaushik, PhD (Program Coordinator, Bioengineering), Dr. Vikrant Gaikwad (Dean, Academics), Dr Sidharth Chakrabarti (Dean, Engineering) and Datta Dandge sir for their support.



### 3. BEST paper award at International conference

Prof. Mrs. Himangi Neve and Dr. Vinayak Wadgaonkar received best paper award at 4th International Conference on “Advances in Water Treatment and Management (ICAWTM - 25) held on March 01 - 02, 2025, organized by the School of Technology, Pandit Deendayal Energy University (PDEU), Gandhinagar, Gujarat, India for the paper titled - Agricultural Waste Derived Nanomaterials and Their Modification for Wastewater Treatment: Achieving Sustainability through Circularity of Materials attended in online mode.

Workshop conducted for Bioengineering students

Industrial Workshop on Homology Modeling and Molecular Docking using Molsoft

At Dr. Vishwanath Karad MIT World Peace University, hands-on technical sessions led by industry experts play a vital role in enhancing student learning beyond the classroom and preparing them for industry challenges.

On January 30, 2025, the Department of Chemical Engineering, Bioengineering, and Materials Science & Engineering successfully conducted an insightful workshop on Homology Modeling and Docking for B.Tech Bioengineering students. Organized in collaboration with Advent Informatics Pvt. Ltd., the session featured an in-depth introduction to cutting-edge computational tools for drug discovery.

The workshop was led by Dr. Mohsin Khan, Application Scientist at Advent Informatics, who provided a comprehensive live demonstration of molecular docking techniques, highlighting practical applications in drug discovery. Students gained valuable insights into molecular docking fundamentals and explored the advanced capabilities of modeling tools.

Participants learned to analyze protein and small-molecule conformations, understand molecular interactions, perform automated ligand screening, evaluate docking results, and design small molecules targeting specific proteins using the automated docking pipeline integrated within Molsoft software.

# Department Initiatives & Strategic

This workshop empowered students to deepen their expertise in bioinformatics, equipping them with essential skills in computational biology crucial for advancing their careers in bioengineering.



## GUEST LECTURE RECAP: Biomaterials, Regulatory affairs and intellectual property rights

On February 28, 2025, the SBE MIT-WPU Student Chapter hosted an insightful guest lecture by Dr. Swarali Hirlekar, Regulatory Associate at Serigen Mediproducts, for Bioengineering students. Dr. Hirlekar discussed the fundamentals of biomaterials, their composition, and their significance in modern medical applications. She introduced Serioss, a silk-based bone void filler aiding bone regeneration in trauma, infections, and cancer-related defects. She also shared insights into Serigen's innovative silk-protein-based medical products, emphasizing their role in regenerative medicine. Additionally, she highlighted the rigorous safety standards, testing protocols, and regulatory affairs involved in biomaterials development. The session offered valuable knowledge on intellectual property rights in biotech innovation. The event was graced by esteemed dignitaries, including Dr. Dinesh Bhutada, Dr. Vikrant Gaikwad, Dr. Surbhi Razdan, and Dr. Sidharth Chakrabarti.

# Department Initiatives & Strategic

One day workshop on Project Management for Bio-engineers:

The SBE MIT WPU Student Chapter successfully organized a one-day workshop on The Blind Side of Project Management for Bioengineering students on 22nd February 2025. The session, led by Mr. Anand Gaikawai, Head of Marketing at Hi-Tech Biosciences, India, provided Final Year and Third Year students with industry-focused insights. The workshop covered essential topics such as the importance of project management, macro and micro management, finance and costing for bioprocess engineers, enzyme production processes, scaling up bioreactors, and piping & instrumentation design. Students also explored market gap identification, game theory in research, and man-hour calculations. The session was enriched with interactive case studies and an engaging visualization of enzyme  $V_{max}$ , making learning more practical.

[Sharbani Kaushik, PhD](#) (Program Coordinator, School of Bioengineering)

[Dr Dinesh Bhutada](#) (Program Director, Dept. of Chemical, Bioengineering and Materials Science and Engineering)

[Dr. Vikrant Gaikwad](#) (Associate Dean & Industry-Academia Collaboration)

[Dr. Surbhi Razdan](#) (Associate Dean, Faculty Affairs)

[Dr Sidharth Chakrabarti](#) (Dean of the School of Engineering and Technology)

Faculty, Department of Bioengineering: Dr. Sagar Kanekar, Dr. Shraddha Kulkarni, Dr. Maneesha Shaji, Dr. Ankita Agarwal, Dr. Sharbani Kaushik, Dr. Shubhangi Rastogi, Prof. Himangi Neve, Dr. Pratiksha Khurpade.



# Student & Faculty Corner

## 8. Student & Faculty Corner

The Student & Faculty Corner of the Mechanical Engineering Department serves as a platform to showcase creative writing, blogs, and personal reflections. Notably, Dr. G. M. Kakandikar received significant recognition through print media coverage for his contributions. While this edition does not feature international exchange experiences or student-led technical projects, the department continues to encourage students and faculty to engage in research, innovation, and knowledge-sharing. Future editions will highlight remarkable achievements and initiatives undertaken by the department's talented members.

# Clubs & Extracurricular

## 9. Clubs & Extracurricular

### Department of Petroleum

The Petroleum Engineering Department witnessed an exciting display of sportsmanship and teamwork during the inter-club cricket tournament held on 18th March 2025. Organized through the collaborative efforts of SPE, SEG, IADC, and FIPPI, the event brought together students and faculty members for a thrilling day of cricket. The tournament not only fostered a spirit of friendly competition but also strengthened camaraderie among participants. Enthusiastic players showcased their cricketing skills, while spectators cheered passionately from the sidelines. This event served as a refreshing break from academics, reinforcing the importance of extracurricular activities in holistic development. The success of the tournament highlighted the vibrant sporting culture within the department, inspiring future events that promote fitness, teamwork, and unity.



### Department of Mechanical

The Department of Mechanical Engineering continues to make waves in national competitions, showcasing the brilliance and perseverance of its students. Team Skytroopers soared high, securing AIR 1 at the National Aeromodelling Competition, IIT Bombay, winning a ₹50,000 cash prize and setting a payload-lifting record. Team Bolt proved its mettle at FMAE Moto Student India Season 3, achieving AIR 4 in the EV category and winning the Best Aesthetic Design award. Meanwhile, Team Piranha Racing excelled at the BAJA SAEINDIA 2025 Physical Round in Pithampur, Indore, securing AIR 3 overall, along with multiple AIR 1 wins in Static Events, Virtual Dynamics, Acceleration, and Suspension & Traction. Their success continued at eBAJA SAE India 2025, Hyderabad, where they achieved AIR 2 overall, dominating in Virtual Dynamics, Durability/Endurance Race, and Validation Events. These achievements reflect the university's commitment to nurturing future leaders in engineering, innovation, and technology.

# Clubs & Extracurricular

## Department of Civil

The IGBC (Indian Green Building Council) Students Chapter at MIT-WPU, Pune, successfully hosted the 7th Harit Prem Bharat Mahotsav from 23rd to 29th January 2025, fostering sustainability and innovation in civil engineering. The week-long celebration featured a guest lecture by Dr. B. B. Das (NIT Surathkal) on High-Performance Cementitious Composites, alongside an Innovative Business Ideas session led by Dr. Sunil Pimplikar. Students showcased their expertise in a Sustainability Quiz and a Poster Presentation on sustainable construction. A Plantation Drive was also organized, reinforcing the commitment to a greener future. Engaging discussions on Green Building Concepts were conducted by Dr. Vishakha, highlighting eco-friendly design principles. Enthusiastic participation from M.Tech (Construction Engineering & Management) and Structural Engineering students made the event a resounding success. Through such initiatives, MIT-WPU continues to inspire the next generation of civil engineers to embrace sustainability and innovation in infrastructure development.



## Department of EEE

The Triangle Trophy is a vibrant, student-led initiative within the Department of Electrical and Electronics Engineering that promotes holistic development through a blend of co-curricular and extracurricular activities. This prestigious event revolves around three dynamic clubs: **MASS** (Meta Association of Study Skills), which champions academic excellence; **CHARM** (Cultural Hive and Recreational Mesh), fostering creativity and artistic expression; and **MARS** (Meta Association of Recreational Sports), which encourages sportsmanship and teamwork.

# Clubs & Extracurricular








**Department of Electrical & Electronics Engineering**

We cordially invite you for



**TRIANGLE TROPHY**

**FRIDAY** | **TIMING**  
 21 MARCH 2025 | 02 PM - 05:30 PM

**VENUE: SWAMI VIVEKANANDA AUDITORIUM,  
 MIT-WPU, PUNE**

Over the academic year, students from three competing houses—RED, GREEN, and BLUE—enthusiastically engaged in a diverse array of challenges across academics, cultural events, and sports. The excitement culminated in the eagerly awaited Triangle Trophy 2025, where the house with the highest overall score was crowned champion.

This initiative not only offers a platform for students to showcase their varied talents but also cultivates teamwork, leadership, and a spirit of healthy competition, making it a cornerstone of the department's extracurricular calendar.










**triangle trophy**  
 शनि मार्च २०२५  
 presented by doeee

# Clubs & Extracurricular

Winner of Triangle Trophy Blue House



# Community Impact & Outreach

(Rural Immersion /NAIP/ International immersion details along with pictures)  
**Department of Petroleum**

The SPE Cares Initiative took a significant step toward environmental sustainability and heritage preservation with a Cleanliness Drive at Sinhagad Fort on 22nd February 2025. Students and faculty from the Department of Petroleum Engineering actively participated in this noble cause, emphasizing their commitment to social responsibility. The historic fort, a symbol of Maharashtra's rich heritage, faces challenges due to littering and pollution. Through this initiative, volunteers engaged in waste collection, segregation, and awareness activities, ensuring the site remained clean and eco-friendly. This effort not only restored the beauty of the fort but also instilled a sense of civic responsibility among participants. The event reinforced the importance of preserving cultural landmarks while promoting sustainable practices. By fostering a greener tomorrow, the initiative aligned with MIT-WPU's broader Sustainable Campus & Green Initiatives, inspiring students to take an active role in protecting both the environment and historical sites for future generations.



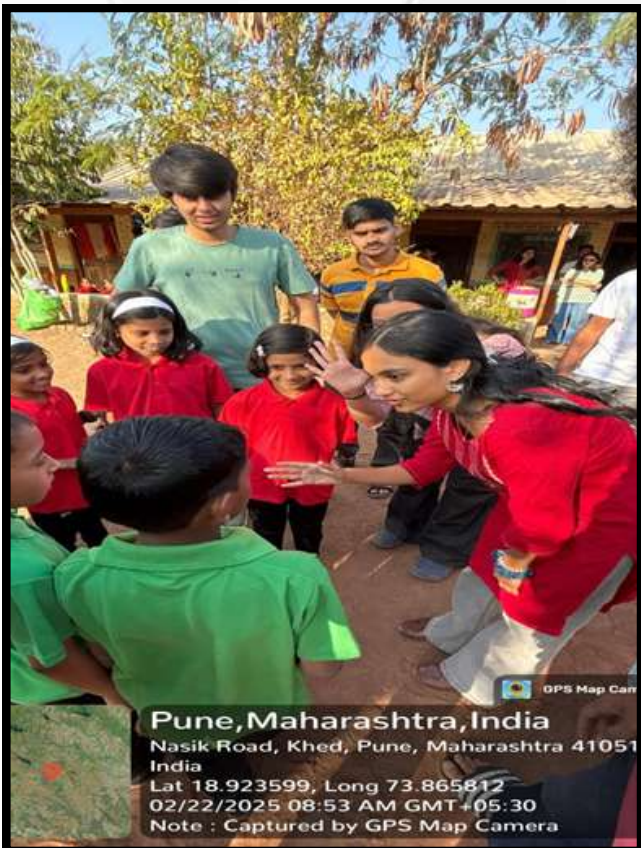
## **Department of Electrical and Electronics Engineering**

Community Impact & Outreach (Rural Immersion):

The Department of Electrical and Electronics Engineering at MIT-WPU conducted a Rural Immersion and Community Outreach Program from 22nd to 25th February 2025 across various villages. The initiative aimed to promote social interaction, education, health, and sustainability. In Donde village, students participated in activities to reconnect with real-world social interactions, reducing anxiety and digital overexposure.

# Community Impact & Outreach

A sports activity in Bahirwadi focused on enhancing cognitive and physical development among children. In Dahigaon, an educational program aimed at improving literacy, boosting school attendance, and empowering families through awareness. A career guidance session in Gosasi helped rural students explore educational opportunities and career paths. On 22nd February in Saigaon, students led a riverbed cleaning drive, improving water quality, reducing pollution, and promoting sustainability. Finally, on 25th March in Varve, a voluntary labor initiative encouraged self-sufficiency and infrastructure improvement, strengthening community responsibility. This immersive experience significantly impacted both students and rural communities.



# Community Impact & Outreach



## Rural Immersion & Sustainability Initiatives

### Rural Immersion – Rujuri Village

The S.Y. B. Tech Civil Engineering Department students embarked on an insightful rural immersion program in Rujuri Village, gaining firsthand experience of rural infrastructure, water management, and sustainable construction techniques. Through interactions with the community, they explored real-world challenges and identified potential solutions to enhance rural development



Students from SY Chemical Engineering and Materials Science & Engineering at MIT-WPU engaged in a five-day rural immersion program in Nimgaon Sawa, Junnar, Pune. Through activities such as Mashal Pheri, Shramdaan, village surveys, and school career guidance, they gained valuable insights into rural life while addressing Sustainable Development Goals (SDGs) including Agriculture

# Community Impact & Outreach

& Nutrition (SDG 2), Clean Water & Sanitation (SDG 6), Energy Security (SDG 7), and Responsible Consumption & Recycling (SDG 12).



Each group analyzed local challenges, identified key problems, and proposed innovative solutions, continuing their research at MIT-WPU. Their report, “A Journey to Nimgaon Sawa: Lessons Beyond the Classroom,” celebrates the richness of rural life, community resilience, and collective spirit.

From hands-on farm work to collaborative problem-solving, the program fostered gratitude, empathy, and a strong sense of purpose. This immersive experience underscored that true education extends beyond classrooms, inspiring meaningful action and inclusive, sustainable progress.



# Community Impact & Outreach

## Department of Polytechnic

A comprehensive medical checkup camp for first-year students was successfully conducted on 24th March 2025 at MIT-WPU Polytechnic. The initiative aimed to assess the students' overall health, ensuring their well-being as they embark on their academic journey. A team of experienced medical professionals conducted thorough health screenings, including general checkups, vision tests, and vital health assessments. The camp provided valuable insights into preventive healthcare, encouraging students to adopt a healthier lifestyle. This initiative reflects MIT-WPU's commitment to holistic student development, ensuring their physical well-being aligns with academic excellence. The event was well-received, with active participation from students, faculty, and healthcare experts.



# Community Impact & Outreach

## Department of Chemical

### A Journey to Nimgaon Sawa: Lessons Beyond the Classroom

Rural immersion program is a flagship initiative by Dr. Vishwanath Karad MIT World Peace University. In this program students experience rural life, understand the lifestyle of the villagers and in doing so identify the problems faced by them. Using their engineering knowledge, they try to provide possible solutions to these problems. The exercise intends to sensitize the students about the sustainable development goals (SDGs) and how engineering solutions can help achieve them.



### Rural Immersion: A Transformative Journey to Nimgaon Sawa

Students from SY Chemical Engineering and Materials Science & Engineering at MIT-WPU participated in a five-day rural immersion program in Nimgaon Sawa, Junnar, Pune. Through activities such as Mashal Pheri, Shramdaan, village surveys, and school career guidance, they gained deep insights into rural community life while actively addressing Sustainable Development Goals (SDGs) including Agriculture & Nutrition (SDG 2), Clean Water & Sanitation (SDG 6), Energy Security (SDG 7), and Responsible Consumption & Recycling (SDG 12). Each student group conducted detailed analyses of local challenges, identified key problem statements, and proposed innovative solutions—continuing their research back at MIT-WPU. Their comprehensive report, "A Journey to Nimgaon Sawa: Lessons Beyond the Classroom," celebrates the richness of rural life, the resilience of the community, and the power of collective spirit.

From hands-on work on farms to collaborative problem-solving sessions, the program instilled values of gratitude, empathy, and a sense of purpose. This immersive experience reinforced that true education transcends the classroom, inspiring action and fostering inclusive, sustainable progress.

# Community Impact & Outreach

Glimpses captured by the students Kushal Dhokariya, Anuj Hanchate and Piyush Gharat are available at <https://youtu.be/o5yheuWv1f8?si=-u6iihpUIlu2zZoG>

## Bioengineering Rural Immersion:

Rural Immersion Program: SY B.Tech Bioengineering Students at Gurholi Village  
From February 5–9, 2025, SY B.Tech Bioengineering students of MIT World Peace University participated in a transformative Rural Immersion Program at Gurholi Village, Pune. This hands-on experience deepened their understanding of rural life, sustainability, and community engagement.

The program began with a mashal pheri (torchlight procession) to raise social awareness, followed by meaningful interactions with villagers to learn about their traditions and challenges. Students explored the rural economy by visiting fig farms, a local packaging unit, and a biogas plant, gaining insights into entrepreneurship and sustainable practices. They also performed a street play addressing rural-urban migration.

Educational activities included village surveys, school visits, and environmental efforts such as tree planting and fencing. Additionally, students engaged with floriculture farming and experienced the village's spiritual heritage through a trek to a hilltop temple. The immersion concluded with a vibrant cultural event and felicitation ceremony, fostering a strong bond between students and the community.

## Gratitude and Acknowledgment

A heartfelt thank you to MIT WPU for organizing this transformative experience. Special appreciation to our LR [Aditi Surwase](#) and CR [SAHIL VAGHOLE](#) for representing our batch and leading the initiative with dedication. I would also like to extend my sincere gratitude to [Prof. Himangi Neve](#) for coordinating the program and to faculty members [Dr. Shraddha Kulkarni](#) and [Vishal Putte](#) who accompanied during rural immersion.

Additionally, we all deeply appreciate the support and mentorship of [Dr. Vikrant Gaikwad](#), [Dr Dinesh Bhutada](#), [Dr. Pratiksha Khurpade](#) and [Dr. Sagar Kanekar](#), whose encouragement made this experience even more valuable. The experiences, insights, and connections we built in Gurholi Village will stay with us as we move forward in our academic and professional journeys.

# Community Impact & Outreach



B.National Academic Immersion Programme to IIT BHU, Varanasi for the Chemical Engineering Students from 17th March 2025 to 30th March 2025. The students of Btech Chemical Engineering had been for the National Academic and Immersion Programme to IIT BHU Varanasi from 17<sup>th</sup> March 2025 to 30<sup>th</sup> March 2025.

The National Academic Immersion Program (NAIP) is an initiative aimed at providing students with exposure to premier academic institutions, cutting-edge research, and industry practices. This report highlights the experiences and learnings from the NAIP for B.Tech Chemical Engineering students at IIT BHU, Varanasi.



Dr.Ratnadeep Joshi

Mrs.Deepali S.Kulkarni

Dr.Rupali Sonolikar

Dr.Pallavi Tatpate

Dr.Kiran Shejale

# Community Impact & Outreach

## Daily Schedule for NAIP

The daily schedule consisted of two lectures of 1.5hrs each by expert faculty of IIT BHU, followed by lunch break and then visit to the various laboratories for practical sessions. Topics covered were on Heat Transfer, mass transfer, Chemical Reaction Engineering, Fluid Mechanics. Certificate distribution took place on the last day.

## Conclusion

The National Academic Immersion Program at IIT BHU was a highly enriching experience, bridging the gap between academic learning and real-world applications. The exposure gained will undoubtedly benefit participants in their academic and professional journeys.

The Department of Materials Science and Engineering conducted successful outreach programs to engage and inform 12th-grade students about the exciting opportunities in Materials Science and Engineering (MSE).

On 15th March 2025, an interactive session was held at Deodhar Classes, Laxmi Road Branch, Pune, where Mrs. Anagha Khare and Mrs. Deepali Kulkarni provided valuable insights into career prospects, technological advancements, and the crucial role of materials in emerging fields. The session sparked curiosity among students and encouraged them to explore this dynamic discipline.

Continuing this initiative, on 26th March 2025, another outreach session was conducted at Government Polytechnic, Pune, led by Dr. Malhari Kulkarni, Dr. Vaibhav Kathavate, and Dr. Dinesh Bhutada. This session delved deeper into MSE applications in nanotechnology, aerospace, renewable energy, and biomedical engineering. Through interactive discussions and real-world examples, students explored the impact of materials on modern innovations and industrial advancements.

These sessions successfully inspired students to consider MSE as a promising career path, bridging the gap between education and industry applications.

# Future Outlook & Announcements

The Department of Mechanical Engineering will host a One-Week Hybrid Faculty Development Program (FDP) on “AI in Mechanical Engineering” from April 7–11, 2025. This program will explore AI’s transformative impact on mechanical systems, automation, and advanced manufacturing. Targeted at faculty, researchers, and industry professionals, the FDP features sessions by renowned experts, offering deep insights into AI-driven innovations and future trends.

Meanwhile, the Department of Electrical and Electronics Engineering, in collaboration with Design Tech Pvt. Ltd., Pune, is organizing a three-day workshop on Altair HyperWorks: FLUX MOTOR SIMULATION from March 27–29, 2025. This hands-on workshop will cover advanced simulation techniques for electric motor design and analysis.

Looking ahead, the department will also host the IEEE International Conference on Sustainable Technologies for Humanity and Smart World (HSWTech-2025) from September 2–4, 2025. The conference will gather academicians and industry experts to discuss innovative solutions for sustainability and smart technology addressing societal and environmental challenges.

Stay tuned for updates and registration details!

## National Study Tour: Bridging Theory with Industry

The National Study Tour offered students valuable industry exposure through visits to leading organizations across Gujarat.

- On February 25, 2025, SYCSE and SYAIDS students visited Odoo, Ahmedabad, gaining insights into business software solutions and enterprise management systems.
- On February 27, 2025, the same group toured AMUL, Anand, exploring dairy processing, supply chain management, and cooperative business models.
- On March 4, 2025, SYECE and SYME-RA students visited TATA IIS, Ahmedabad, learning about cutting-edge research, innovation, and industrial advancements.
- On March 5, 2025, the tour continued at IIT RAM, Ahmedabad, where students explored technological research, engineering innovations, and startup incubation programs.
- Later that day, the students returned to AMUL, Anand for hands-on learning in food technology, automation, and quality control.

This tour effectively bridged classroom theory with real-world industry practices, enriching students’ technical knowledge and enhancing their career readiness.

# Future Outlook & Announcements

Date	Visited Industry	Class of Students
27/2/25	AMUL Anaand , Gujrat	SYCSE, SYAIDS
25/2/25	Odo,Ahemadabad	SYCSE, SYAIDS
Apr 3, 2025	TATA IIS Ahmedabad	SYECE, SYME-RA
May 3, 2025	IIT RAM Ahmedabad	SYECE, SYME-RA
May 3, 2025	AMUL Anaand , Gujrat	SYECE, SYME-RA

# Future Outlook & Announcements



# Future Outlook & Announcements



## THE HINDU businessline.

### MIT-WPU Hosts BioConclave 2025, Emphasizing Integrity in Bio-Entrepreneurship

"We live in an era of innovation, and bioengineering holds immense promise for the future. But for entrepreneurs to truly make a difference, integrity and honesty must be their guiding principles," said Vivek Mishra, Founder and CEO of Fibroheal Woundcare, at the inauguration of BioConclave 2025 held at MIT World Peace University (MIT-WPU). Organized by the Department of Bioengineering at MIT-WPU, BioConclave 2025 served as a confluence of ideas in biotechnology, uniting academia, industry, and research under one platform. The event began with introductory remarks by Professor Dr. Vikrant Gaikwad, Associate Dean and one of the event organizers. A welcome address was delivered by Professor Dr. Siddharth Chakravarty, Dean of the Faculty of Engineering and Technology. Vice-Chancellor Dr. R. M. Chitnis also addressed the gathering, emphasizing collaboration between bioengineering startups, researchers, and industry leaders. Dignitaries present on the dais included Chief Academic Officer Dr. Prasad Khandekar, Associate Dean and Chief convenor of the event Dr. Ganesh Kakandikar, Registrar Mr. Ganesh Pokale, Head of the Department of Chemical and Bioengineering Dr. Dinesh Bhutada, and event convenor Dr. Sharbani Kaushik. Co-conveners Dr. Shraddha Kulkarni and Dr. Shubhangi Rastogi also contributed significantly to the success of the event. Two expert panel discussions formed the academic core of the conclave. The first featured Dr. Parveen Goyal (National Chemical Laboratory), Gaurav Tripathi (Innoplexus), Sarang Salunke (3S Analytical), and Dr. Kavita Modi-Parikh (Venture Center). Topics ranged from AI in medical research to the need for affordable diagnostic technologies and integrated education-industry research models. Gaurav Tripathi introduced the concept of AI as a "simulator and



critic," while Sarang Salunke stressed that "accessibility is the highest priority in rural healthcare." The session was moderated by Dr. Sharbani Kaushik. The second panel included Dr. Ramesh Bhonde (DY Patil Dental College), Dr. Pranav Kshirsagar (Agharkar Research Institute), Dr. Sujoy Saha (Grape Research Center), and Mr. Akshay Zhanwar (Gene Spectrum), who shared cutting-edge insights on stem cell therapy, clinical genomics, and techno-economic analysis in modern medical research. Innovative approaches like pain-guided diagnostics were highlighted, inspiring students toward original research. The session was moderated by Dr. Manisha Shaji under the theme: "Understand the complex in simple ways and implement them effectively."

## Use of common electronics by MIT-WPU students in payload tests reliability in space

Ardhra.Nair@timesofindia.com

**Pune:** What if satellites use everyday electronics instead of costly space-grade components? Students at MIT World Peace University (MIT-WPU) tried to answer this with their first space payload, STeRG-PL0, launched aboard ISRO's PSLV-C60 rocket on Dec 30.

Designed by Space Technology Research Group (STeRG) at MIT-WPU, the payload experiments with MEMS-based sensors and ARM-based microcontrollers, to test their reliability in space. These components, found in automation and robotics, are cheaper than traditional space-grade systems.

Pratham Phatak, a member of the hardware team, said MEMS-based 9-axis

### RUGGED, COST-EFFECTIVE SOLUTION

The payload at 100mm x 100mm x 25mm and weighing 380g was developed by electrical & electronics engineering department students and faculty

- Over 38 weeks, the team designed, tested and refined it without pre-made circuits
- The project includes mission founder Achintya Chaware, mission lead Shreerang Saranjame, software head Gaurav Prajapati, software team member Vivaswan Sapre, hardware team member

Pratham Phatak, mission manager Vedant Vaidya, mechanical team member Pratham Chavan, and project founders Gaurang Mathur, Chaitanya Sahasrabudde, with team manager Tanush Joshi and members Prabhjot Bhatia and Maitreyee Choudhary

- Faculty coordinators were Vinaya Gohokar, Parul Jadhav, Apurva Naik, Raghunath Bhadade, Savitri Jadhav, Anjali Askhedkar, Murthy Chavali, and Siddharth Chakrabarti

IMU sensors combine accelerometers, gyroscopes, and magnetometers to measure acceleration, orientation, and magnetic fields across three

axes each.

He added, "While these sensors are not typically designed for space, the mission seeks to understand how they

perform in orbit. The sensors help determine the satellite's orientation, with the data undergoing advanced filtration techniques for analysis."

The team compares the data collected by their payload with ISRO's space-grade systems to validate its accuracy. "If the results match perfectly, it could mean a significant reduction in the cost of building spacecraft," Phatak said.

Mission founder Achintya Chaware said, "This payload will serve as our pilot mission for further research and development in space technology," he added. The team is preparing to develop MIT-WPU's first CubeSat with experimental payloads. Plans are to establish a dedicated ground station for satellite communication and tracking.

www.educationtimes.com

---

**MEA opens vacancies at Sushma Swarna Institute of Foreign Service**

The Ministry of External Affairs (MEA) is looking for applications for faculty members. The positions are available in various departments across the country. The candidates should have a minimum of a Bachelor's degree in any discipline and a minimum of 10 years of teaching experience. The candidates should also have a minimum of 5 years of experience in the field of foreign service. The candidates should apply through the MEA website.

**ONOS increases access to research journals but rural agri varsities suffer digital gap**

Most agricultural universities under MARES have already registered at ONOS. ICAR institutes that are not registered for AISHE codes need to apply now.

**MIT-WPU's conclave focuses on making education more industry relevant**

Experts shared insights on bridging the skill gap and aligning curricula, emphasizing on real world applications.

---

**MIT-WPU's conclave focuses on making education more industry relevant**

Experts shared insights on bridging the skill gap and aligning curricula, emphasizing on real world applications.

**There is a need for personalisation of education which can be achieved by focusing on the student-teacher ratio**

Dr. Pratham Phatak, VP, Government programmes, Industry and Academia, MIT-WPU, said that the industry needs graduates who are not only technically sound but also have the soft skills to work in a team. He said that the industry needs graduates who are not only technically sound but also have the soft skills to work in a team.

**ONOS increases access to research journals but rural agri varsities suffer digital gap**

Most agricultural universities under MARES have already registered at ONOS. ICAR institutes that are not registered for AISHE codes need to apply now.

The ability to access research from various fields will drive innovation in addressing complex agricultural challenges.

**Key challenges**

While the industry needs graduates who are not only technically sound but also have the soft skills to work in a team, the industry also needs graduates who are not only technically sound but also have the soft skills to work in a team.

---

**Admission**

PGDFT 3 Year

PG Dip. In Financial Technology

Commencing from July 3, 2025

Regular with IDBIT Fellowship & the best of facilities

Part-time (employed)/Externally Funded (Sponsored/Govt. Schemes)

Building from the year

Link for Application & Details: <https://www.idbit.ac.in/academics/>

**99786 57598**

[www.rathindia.org](http://www.rathindia.org)

**99786 57598**

[www.rathindia.org](http://www.rathindia.org)

