



# Mech Matter

vol 2

**1. Vision Mission**

**2. PEOs**

**3. Committee**

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## Chief Editor's Desk:-

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*The Mechanical Engineering Department established in 2010 has intake of 60 students. Mechanical Engineering is one of the major streams in the engineering profession and its principles are involved in the design, development, production and construction of nearly all of the physical devices and systems. Mechanical engineers use the basic principles of motion, energy, and force to design and manufacture a vast-range of products.*

*Mechanical Engineering is a creative profession in which students are trained to conceive, construct, test, and operate all kinds of mechanical, thermal, and biomedical devices. The Department along with well-equipped teaching staff also has well established Machine shop & Workshop, CNC Lab, Fluid Mechanics & Machinery Lab, Thermal Engineering Lab, Theory of Machine Lab, Manufacturing process Lab, Mechanical Engineering Materials Lab, Metrology & Quality Control Lab, Industrial Fluid Power Lab, along with the Academic development, various activities are organized to develop soft skills of the students such as Paper Presentation, Industrial Visits and Expert Lectures etc.*

*The Mechanical Engineering Department at BSIET Polytechnic aims to create high-caliber mechanical engineers for a demanding profession which helps them to learn how to design and conduct experiments and to collect, analyze, and interpret data*

-Mr. A. R. Nadaf

## **Vision:**

- To be the preferred department of skill-based education in mechanical engineering for producing competent industry professionals with responsible contribution towards manufacturing sector.

## **Mission:**

- M1 – To impart skill-oriented quality education for enriching students learning experience. (Quality Education in OBE process)
- M2 – To develop critical thinking and problem-solving attitude and by providing hands-on experiential training (Critical Thinking and Research Skills)
- M3 – To encourage students and teachers for frequent industry interactions towards better skilling, entrepreneurship and job opportunities. (Industry Professionals, skilling)
- M4 – To instill professional ethics, environment safety, communal harmony and sensitize all the stakeholders towards upliftment of our society. (Sensitizing towards nation building).

## **PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

PEO-1 –Domain knowledge – Diploma Graduates will make use of their technical knowledge along with practical hands-on skills for analyzing and solving real problems in Mechanical industry.

PEO-2 –Professionalism – Diploma Graduates will apply modern tools, high ethical standards, professional & soft skills for the growth of their organization.

PEO-3 -Lifelong learning – Diploma Graduates will utilize their lifelong learning abilities to upgrade their knowledge & skills for accelerating their professional career growth.

## Academic Achievements

### MSBTE RESULT WINTER 2024

Class	Rank	Name	Percentage
FY	FIRST	MS. TANMAYI PATIL	83.65%
	SECOND	MR. KEDAR SAWANT	82.35%
	THIRD	MR. VARAD HAWAL	78.00%
SY	FIRST	MR. SANRAJ PATIL	91.22%
	SECOND	MS. SHRUSHTI DESAI	87.22%
	THIRD	MR. SARTHAK MORE	83.44%
TY	FIRST	MR. SOHAM SURYAVANSHI	89.62%
	SECOND	MR. KRISH PATIL	83.14%
	THIRD	MS. SAMRUDDHI KUIGADE	87.81%

## Faculty list

<b>Sr. No.</b>	<b>Staff Name</b>	<b>Qualification</b>	<b>Designation</b>
1	Mr. A. R. Nadaf	M.E. Mechanical Design Engineering	HOD
2	Mr. B. B. Patil	M. E. Design (Applied), B.E. Production	Lecturer
3	Mrs. P. S. Khade	M. E. Production (Applied), M. B. A, B. E. Mechanical	Training Placement Coordinator
4	Mr. H. T. Shinde	Ph. D (Appearing), M. Tech Material Science & Metallurgy	F. Y. Coordinator
5	Mr. S. R. Koli	M.E. Mechanical Design Engineering	Lecturer
6	Mr. J. A. Mullani	M. E. Mechanical Machine Design	Workshop Superintendent
7	Mr. T. P. Kulkarni	M.E. Production (Appearing), B.E. Mechanical	Lecturer
8	Mr. S. V. Pujari	M. E. Production (Applied), B. E. Mechanical	Lecturer
9	Mrs. S. K. Mestri	M. E. Heat Power (Applied), M. B. A, B. E. Mechanical	Lecturer

# Industrial Visit

## 1. Advance Measuring System

The industrial visit was conducted on 04/03/2025 Advance Measuring System G-109, M.I.D.C., Gokul Shirgaon, Kolhapur - 416 234, Maharashtra. The company Advance Measuring Systems is an ISO-9001-2008 certified company having NABL accredited Calibration Laboratory.



## 2. Amrut Engineers

The industrial visit was conducted on 12/02/2025 At Amrut Engineers W -56 MIDC Shirol, Near Sakal Press, Kolhapur, 416122



### 3. Arunoday enterprises

Arunoday Engineering works mainly deals with development of Fixtures for Pump industries , Submersible motor and pump maintenance. Now they are entered into Special purpose machine and automation division as Arunoday Enterprises.



### 4. Dynamic Hydraulics

Dynamic Hydraulics, 527 Shiye Bavada Road, Opposite M.I.D.C, Shirol Kolhapur 416122. Dynamic Hydraulics is a leading provider of complete solutions for hydraulic cylinders and hydraulic power packs.



## 5. RSA forge

RSA Forge D-38, MIDC, Shirol, Maharashtra 416122. The company visit was conducted on 12<sup>th</sup> February 2025. The visit to your company was an invaluable experience for our students.



# Expert Lecture

## 1. Opportunities in Manufacturing Sector

On Friday, 25<sup>th</sup> October, 2024 at 10.30 AM, we arranged an expert lecture “Opportunities in Manufacturing Sector” for the Second and Third year Mechanical engineering students. The lecture was given by Mr. Virajanand M. Ingawale, Senior sales Manager (West region), Faseco India Ltd., Kolhapur



## 3. Energy Conservation & Renewable Energy

On Saturday, 15<sup>th</sup> of March, 2025 at 10.00 AM, we arranged an expert lecture on “Energy Conservation & Renewable Energy” for the Second and Third year Mechanical engineering students.



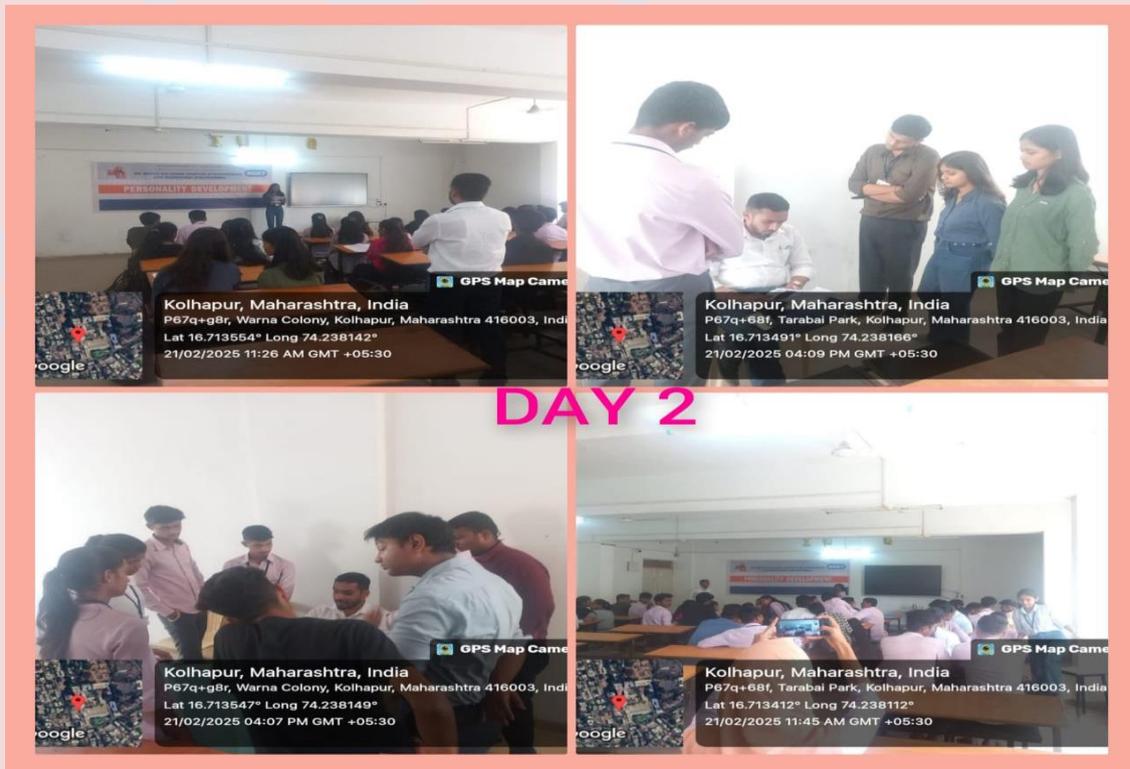
### 3. Additive Manufacturing: 3D printing

On Thursday, 23<sup>th</sup> January, 2025 at 10.30 AM, we arranged an expert lecture on “Additive Manufacturing: 3D printing” for the Second and Third year Mechanical engineering students. The lecture was given by Mr. Niranjn A. Shinde, Director of Arunoday Enterprises, Kolhaur.



# Life Skills Development Program

A three-day "Life Skill Development Program" was successfully conducted at Dr. Bapuji Salunkhe Institute of Engineering and Technology from 25<sup>th</sup> to 27<sup>th</sup> September 2024. The program received an overwhelming response from students and was conducted by trainers from TWJ Institute. The program was organized by the Training and Placement Department of the institute





### DAY 3



### FEEDBACK SESSION



## JallosH 2025

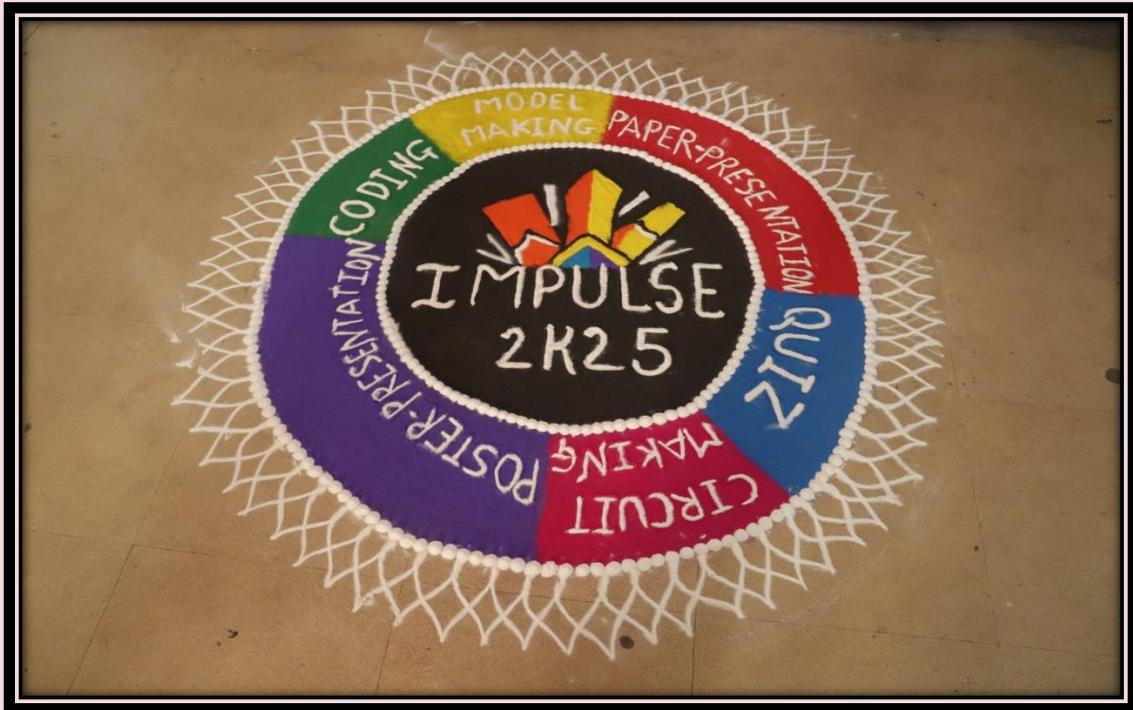
“JallosH 2025” an annual social event was organized in institute on 25th January 2025 “JallosH 2025” was 1 day festival of college that include various events where in student get the chances to think, step forward and showcase their talent. Various events had organized like face painting, Photography competition, rangoli competition, Mehandi competition, singing and dancing competition, fasion-show etc.



**Extra co-curricular Activity for Mechanical Engineering**  
**Students**  
**Traditional Day**



**IMPULSE 2024-25**  
**TECHNICAL EVENT**





# PARENT MEET





# Scope of Mechanical Engineering

Mechanical engineering, a broad and impactful field, focuses on the design, analysis, manufacturing, and maintenance of mechanical systems, with a scope encompassing diverse industries like automotive, aerospace, manufacturing, and renewable energy.

## **Core Principles and Applications:**

Mechanical engineering applies principles of physics, mathematics, and materials science to analyze, design, and develop mechanical systems.

## **Industries and Job Roles:**

- **Automotive:** Designing and developing vehicles, including engines, suspension systems, and aerodynamics.
- **Aerospace:** Working on aircraft, satellites, and other space-related technologies.
- **Manufacturing:** Designing and optimizing production processes and machinery.
- **Robotics:** Developing and implementing robotic systems for various applications.
- **Renewable Energy:** Designing and developing systems for harnessing renewable energy sources.
- **Thermal Plants:** Designing and maintaining power plants and related systems.
- **Other Industries:** Mechanical engineers are also employed in the defense, railways, and research & development sectors.
- **Specific Job Titles:**
  - Aerospace Engineer
  - Automotive Engineer
  - Mechanical Design Engineer
  - Maintenance Engineer
  - Research and Development Engineer
  - Nuclear Engineer
  - Powertrain Engineer
  - Senior Design Engineer
  - Tool Engineer
- **Skills and Knowledge:**
  - Strong analytical and problem-solving skills.
  - Knowledge of thermodynamics, fluid mechanics, and materials science.
  - Proficiency in CAD/CAM software and other engineering tools.
  - Ability to work in teams and communicate effectively.
- **Future Outlook:**

The field of mechanical engineering is expected to continue growing, with increasing demand for skilled professionals in various industries.

## In Government sector

Mechanical engineers in the government sector in India find opportunities in various public sector undertakings (PSUs) and government departments, with roles ranging from research and development to project execution and maintenance, offering good job prospects and competitive salaries.

- **Public Sector Undertakings (PSUs):**
- **Oil & Gas:** ONGC (Oil and Natural Gas Corporation), IOC (Indian Oil Corporation), BPCL (Bharat Petroleum Corporation Limited), HPCL (Hindustan Petroleum Corporation Limited), GAIL (Gas Authority of India Limited).
- **Power:** NTPC (National Thermal Power Corporation), NHPC (National Hydroelectric Power Corporation), BHEL (Bharat Heavy Electricals Limited).
- **Steel:** SAIL (Steel Authority of India).
- **Defense:** DRDO (Defense Research and Development Organization).
- **Space:** ISRO (Indian Space Research Organization), VSSC (Vikram Sarabhai Space Center).
- **Other:** Railways, Heavy Industries, and various state-level departments.
- **Government Departments:**
- **Project Execution:** Working on large-scale infrastructure projects, construction, and industrial development.
- **Research and Development (R&D):** Developing new technologies and improving existing systems in various sectors.
- **Maintenance and Operations:** Ensuring the smooth functioning of machinery and equipment in government facilities and industries.
- **Quality Control:** Ensuring that products and processes meet specific standards and regulations.
- **Job Roles:**
- **Assistant Engineer/Junior Engineer:** Entry-level positions with responsibilities in design, construction, and maintenance.
- **Project Engineer:** Managing the entire project lifecycle, from planning to execution.
- **Research and Development Engineer:** Focusing on innovation and improvement of existing systems.
- **CAD Technician:** Creating technical drawings and plans for products and parts.

How to Get a Government Job:

- **Competitive Examinations:**

Individuals can apply for government job vacancies through competitive examinations conducted by various recruiting agencies such as UPSC (Union Public Service Commission), SSC (Staff Selection Commission), and state-level public service commissions.

- **Engineering Degree:**

A Bachelor of Technology (B.Tech) degree in Mechanical Engineering is generally required for most government jobs.

- **Specialization:**

Some roles may require specialization in areas like thermal engineering, fluid mechanics, or manufacturing.

- **Networking:**

Building connections within the industry and attending job fairs can also help in securing a government job.