Sakeshwar Gramin Vikas Seva Sanstha's

SAU. SUNDARBAI MANIK ADSUL POLYTECHNIC

Department of Mechanical Engineering

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Chas-Nimblak Bypass Road, Chas, Ahilya Nagar, Maharashtra 414005

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In This Issue

About Department

Mechanical Engineering stands at the forefront of innovation and industrial advancement, seamlessly integrating science and technology to develop solutions that shape the modern world. Established in 2010, the Department of Mechanical Engineering at our institute is committed to producing industry-ready professionals equipped with strong technical expertise and a spirit of innovation.

The Department is supported by a team of highly qualified and experienced faculty members dedicated to nurturing globally competent engineers. It features state-of-the-art laboratories outfitted with advanced technologies and modern machinery. The curriculum emphasizes practical, hands-on learning and is carefully designed to align with current industry standards and emerging technological trends.

Special focus is given to CAD/CAM, simulation, and design-oriented projects, supported by a dedicated project laboratory exclusively for final-year students to develop and execute innovative ideas. The Department also offers specialized training programs in CNC Programming, CAD/CAM, and CATIA, facilitated through well-equipped labs featuring industry-standard software and hardware tools.

To enhance engagement and competitiveness, the Department regularly organizes workshops, seminars, and industrial visits. Hobby clubs and technical forums at both the institute and departmental levels encourage holistic development. The Mechanical Engineering Student Association (MESA) actively conducts various technical and co-curricular events, while student chapters of professional bodies such as SAE (Society of Automotive Engineers) provide additional platforms for growth.

These professional bodies host state- and national-level competitions, including paper presentations, project exhibitions, and design challenges. Workshops and training programs are conducted on emerging topics such as Industry 4.0, 3D Printing, and Renewable Energy. With a strong emphasis on academic excellence, practical exposure, and industry interaction, the Department of Mechanical Engineering strives to develop future engineers who will drive technological progress and contribute meaningfully to society.

Welcome

It It gives me immense pleasure to share my thoughts on the continuous growth and achievements of the Department of Mechanical Engineering. Along with maintaining a strong foundation in academics and discipline, our department consistently adopts innovative practices to enrich student learning and overall development..

The department is equipped with excellent infrastructure and supported by a team of dedicated and highly qualified faculty members who are committed to delivering quality education. We promote healthy interaction among students, parents, and staff to create a collaborative environment that fosters holistic growth. Furthermore, our Training and Placement Cell plays a crucial role in guiding students toward successful careers by building strong industry connections and facilitating valuable internship and placement opportunities.

I wish them all continued success in their academic and professional pursuits and look forward to their meaningful contributions to the field of Mechanical Engineering.

PROF. JADHAV M. B.

Head of Department

Vision of Department

To be a premier department in mechanical engineering to serve the needs of industry and society.

Mission of Department

M1: To provide state-of-the-art facilities to impart quality education.

M2: To undertake various value-added and add-on courses to make students technically sound and thorough professionals.

M3: To collaborate with the industries and strive to instil the research and problem-solving attitude amongst students and faculty.

M4: To inculcate high moral, ethical values, and spirit of national pride amongst students and faculty.

Programme Educational Objectives (PEOs)

PEO1 To prepare Mechanical engineering graduate with standing knowledge of Mathematical, scientific, engineering, technology, management, humanities and Various other interdisciplinary
subjects for successful career.
PEO2. To equip students with modern tools, technology and advance software's for deliberating Engineering solutions.
PEO3. To equip students with broad based knowledge to support the service industry, economic development and to address social and engineering challenges of nation
PEO4. To inculcate student with leadership skill with high level of integrity and ethical value for team building and team work

Program Specific Outcomes(PSO's)

PSO 1 : An ability to design solution for thermal, hydraulic systems, design components and production processes that meet the specified needs with team work and management skill for safety, societal and environmental aspects through lifelong learning.
PSO 2: An ability to use modeling and analysis software such as NX, Creo, CATIA, ANSYS, etc. technologies necessary for obtaining quick, economical and accurate solution of engineering problems.
PSO 3: An ability to design electromechanical and automation systems in multidisciplinary environments through better communication.

Program Outcomes (POs)

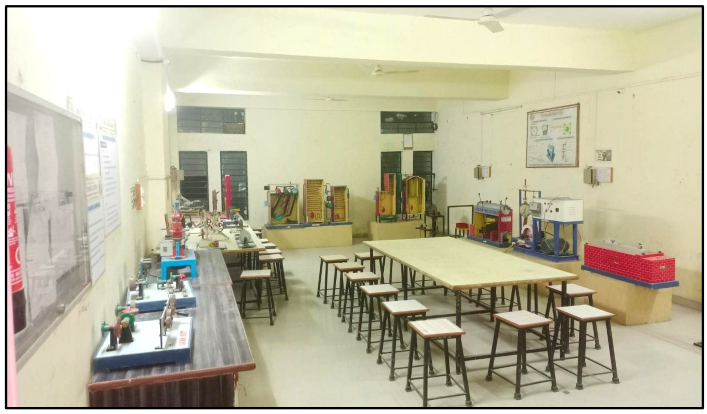
PO 1. Basic and Discipline Specific Knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
PO 2. Problem Analysis: Identify and analyse well-defined engineering problems using codified standard methods.
PO 3. Design/ Development of Solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
PO 4. Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
PO 5. Engineering Practices for Society, Sustainability and Environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.
PO 6. Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
PO 7. Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.

Labrotires

CNC

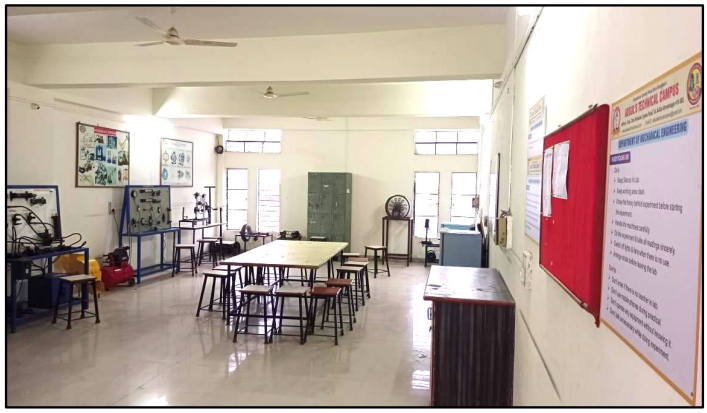
AEN & PER

MQC & MAC



TOM

CAD



IHP

Achievements

IDESSA 2025-26

S.N.	NAME OF PARTICIPANT	YEAR	EVENT/ GAME
1	KALE SANSKAR (2nd Rank E1 Zone)	Third Year	ATHLETES
2	SAYYED NAVAJISH	Third Year	CARROM
3	SAYYED NAVAJISH	Third Year	CHESS
4	OMKAR KALVLE	Third Year	CARROM
5	JARE ATHARVA	Third Year	BADMINTON
6	JARE ATHARVA	Third Year	CRICKET
7	SHAIKH MOHHAMAD KAIF	Third Year	CRICKET
8	DALVI SHUBHAM	Third Year	CRICKET
9	BHALEKAR JAY	First Year	CRICKET

Results

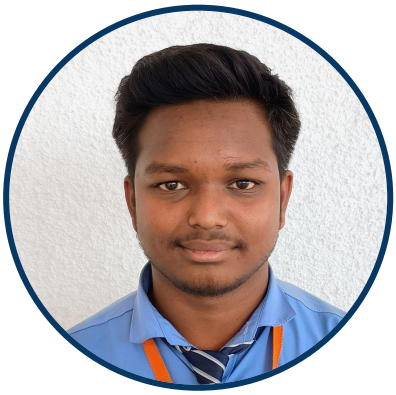
THIRD YEAR

1st
PAWAR RUTIK LAHU

2nd
WABALE YOGESH SUBHASH

3rd
CHAVHAN DIPAK VALMIK

SECOND YEAR



1st
SUPEKAR MANGESH SOMNATH

2nd
MATE ARATI RAJENDRA

3rd
URMUDE SARTHAK PANDIT

FIRST YEAR

1st
JADHAV PRANJALI SANTOSH

2nd
NAWALE SWAPNIL SHRIKRUSHNA

3rd
JADHAV SARTHAK ABA

MOUs

S. N.	NAME OF COMPANY	DURATION
1	Tara Motors, MIDC Supa	2025-26
2	Abhinav Alloys Pvt. Ltd., MIDC, Ahilyanagar	2025-26
3	HI TECH Fishnet Pvt. Ltd., MIDC, Supa	2025-26
4	Shreya Industries Pvt. Ltd., MIDC, Ahilyanagar	2025-26
5	Adarsh Gaon, Hiware Bazar	2025-26

Expert Lectures

S. N.	Name of Expert	Topic
1	Mr. Janjire A. S.	Hybrid Solar Power Plants : The future of Sustainable Energy
2	Mr.Aniket M. Patil	Automation In Industry and correlation with Mechanical Engineering.
3	Mr. Jorigal Ravi	Career Opportunities in Piping Design Engineering

An expert lecture on **"Hybrid Solar Power Plants: The Future of Sustainable Energy"** delivered by **Mr. Janjire A. S.** was organized to enhance students' understanding of modern renewable energy technologies. The session focused on the integration of solar power with other energy sources such as wind and battery storage systems to improve efficiency and reliability. The expert explained the concept, working principles, and advantages of hybrid solar power plants in addressing the growing global energy demand. Emphasis was given to how hybrid systems help overcome the limitations of standalone solar plants by ensuring continuous power supply.

We recently organized an expert lecture on **"Automation in Industry and its Correlation with Mechanical Engineering"** delivered by **Mr.Aniket M. Patil** to provide students with insights into the rapidly evolving industrial technologies. The session aimed to help students understand the growing importance of automation in modern manufacturing and production systems. The expert speaker explained how automation improves efficiency, accuracy, and productivity in industrial operations.

The speaker also introduced students to advanced technologies such as robotics, sensors, and programmable logic controllers (PLC).

Industrial Visits

S.N.	NAME OF COMPANY	VISIT LOCATION
1	Tara Motors	MIDC Supa
2	Indo German Tool Room	Chilkalthana, Chhatrapati Sambhajinagar
3	Abhinav alloys Pvt. Ltd.	MIDC Ahilyanagar
4	Social & Life Skill	Hiware Bazar

Tara Motors

Indo German Tool Room

Adarsh Gaon Hiware Bazar

Abhinav alloys Pvt. Ltd.

Publications

SR. NO	NAME OF STAFF	TITLE	NAME OF JOURNAL
1	MR. JADHAV M. B.	Tribological Investigation of PTFE filled composite with varying percentage of MoS2 in bearing application	IJARSCT
2	MR. KHANDIZOD S. S.	Experimental Analysis of Tribological Properties of Aluminium 6061-A1203-TiO2 MMC	IJSREM
3	MR. KHANDIZOD S. S.	Comparative Analysis of Two Wheeler Suspension Helical Compression Spring for Steel and Composite Material at Different Loading Conditions	IRJMETS
4	MR. CHHAJED R. V.	Vibration Analysis and Experimental Validation of a Single-Cylinder Engine Crankshaft using FEA and UTM Testing	IJSRM
5	MR. SHAHANE G. R.	Topic-Topology Optimization based Design of lightweight and low vibration Gear bodies Publication	IJRPS