



Mechanical Engineering

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Mech Mirror

Volume 5, Issue 2

Semester wise Newsletter
Even Term 2023-24 (Jan 2024 to June-2024)

Awards by Faculties of ME

Faculty of Mechanical Engineering, Mrs. Rimalini A. Gadekar has awarded the Ph.D degree. The hard work and efforts she put into her endeavours are beyond excellent. The Hon. Principal, faculties and staff of Mechanical Engineering extends hearty *Congratulations* to Dr. (Mrs) Rimalini A. Gadekar



on her successful *award of PhD* degree from Department of Mechanical Engineering, JadHAVpur University, Kolkata on 24-12-2023. Also another faculty of Mechanical Engineering, Mr. Naresh W. Besekar has submitted the doctoral thesis in the month of Jan 2024 and is ready to be entitled as doctorate.



Awards by Students

Final Year students of Mechanical Engineering have actively participated in MSBTE sponsored State level Technical Paper presentation held at Govindrao Wanjari College of Engineering & Technology, Nagpur. The project guided by Dr. J. B. Khurpade titled "Fabrication and Experi-



mental Verification of IOT Based 2D Plotter" was presented. They secured First Prize in State Level Paper Presentation Competition winning Rs 15000/- .

Also students have rocked at National level Paper and project competition held at Govt. Polytechnic, Gondia as they have won first prize in both the events and grabbed a cash prize of Rs. 2000/- each. The

pics of the same is depicted on the Left-hand side.





A institute level One day workshop on “**How to write research paper**” was conducted under ISTE Student Chapter on 22nd Feb 2024. The program was inaugurated by Mr. G. H. Dahole, HOD, ME. He emphasised the importance of good research paper for the budding engineers. In this workshop the participants exercised one sample research paper

based on one of the diploma project. 45 Student from the institute were benefited from this workshop. The experts for the workshop were Dr. Mrs. Rimalini Gadekar and Mr. Naresh W. Beseekar, PhD Research Scholar. They put their valuable experience & efforts for the successful conduction of workshop. Mrs. Rimalini Gadekar I/c. ISTE Student Chapter coordinated the workshop.



Dr. Rimalini Gadekar delivering the lecture

Expert Lecture:

For fulfilling the curriculum gap and achieving the program outcomes various experts lectures from different areas as given in the table have been organized by the department of Mechanical Engg. during the Even semester 2023-234.



Sr. No	Title of Lecture	Expert	Date
1.	Entrepreneurship Development	Nileshwar Bahekar, Proprietor, Maa Anusyaya Steel Industry, Dhotra, Gondiya	21-02-24
2.	Personality Development-Success Mantra	Dr. R. R. Gawande HOD APM, GP Gondia	23-02-2024
3.	Artificial Intelligence (Online Mode)	Mrs A. R. Mahajan(Raut) HOD IT, GP Nagpur	16-02-2024
4.	Product Design & Development	Yash Ramteke Proprietor, Pranay Associates, Dasgaon	04-03-2024

Parent Meeting:

Parent–Teacher meet was organized by the department on 01-03-2024 for strengthening the teaching learning process. The parents were made aware about the efforts taken by the faculties to improve the learning process. Various practical step's was demonstrated to parents for giving information about the practical facilities available in the department. The parents were made aware about the proposal of the digitalisation of classrooms under DPDC program. They were also told about the K-scheme implementation and its benefits to the students. The head of department extended the gratitude for their contribution in the NBA process. Mr. Sachin B. Punde, LME has coordinated the event and also presented the vote of thanks.



SSTP on “Recent Trends in Mechanical Engg” for Students

Developing smart factories provides an incredible opportunity for the manufacturing industry to enter the fourth industrial revolution and it is now shaping the future. Mechanical Engineering department has organised Two week FDTP for students

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No. UGPO/MSD/SSTP/2023/13 Date: 15/01/2024

Two Weeks Short Term Training Program
On
“Recent Trends in Mechanical Engineering”
For MEBI STUDENTS
Under
ISTE Student's Chapter G.P. Gondia
Organised By
Mechanical Engineering Department, GP Gondia

TIME TABLE FOR SSTP ON “Recent Trends in Mechanical Engineering”
Even Term: 2023-24
TIME: 09 a.m. to 10 a.m.

DAY	DATE	TOPIC	EXPERT NAME (ALL MED FACULTIES)
1	23/01/2024	Electric Vehicle	Shri G. H. Dabole, I.C.HOD
2	24/01/2024	Smart Industry	Dr. (Mrs.) R.A. Gadkar, LME
3	25/01/2024	Advanced Materials	Shri N.L. Lanjewar, LME
4	29/01/2024	Electric Two & three Wheeler	Shri R. P. Badole, LM
5	30/01/2024	Autonomous Vehicle	Dr. J. B. Khurpade, LME
6	31/01/2024	Industrial Automation	Shri V. B. Dupare, LME
7	01/02/2024	Green Engineering & Sustainability	Smt. V. M. Kapre, LME
8	02/02/2024	Safety in Automobiles	Shri N.W. Beskar, LME
9	03/02/2024	Advances in Agricultural Equipments	Shri S. B. Punde, LME
10	05/02/2024	Process Engineering	Shri Y.P. Nimje, LME

U/C Head of Department (ME)
Government Polytechnic, Gondia

Principal
Government Polytechnic, Gondia

Vision of Institute To create technically competent and socially responsible technicians for industries and society.
Mission of Institute MI. To impart knowledge to cater the need of industries and society.
M2. To develop technical and management friendly competencies to solve real life problem.
M3. To inculcate the spirit of team work, ethical values and industry qualities.
M4. To inculcate skills of facilitator and self through training.

of Mechanical Engineering on “Recent Trends in Mechanical Engg.” during the 23-1-24 to 5-02-24. Staff of the Mechanical department have delivered



a expert talks. 54 participants form 3rd Year ME have been benefited from this FDTP. The primary objective of the FDP is to provide an opportunity for students to enrich their knowledge in the upcoming technological fields, to cope up with these rapid changes in the technology. The gap between the academia and industry might be reduced by arranging this workshops and programs. The students were made aware about Autonomous Vehicle, Green Engineering etc.

Industrial Visit:

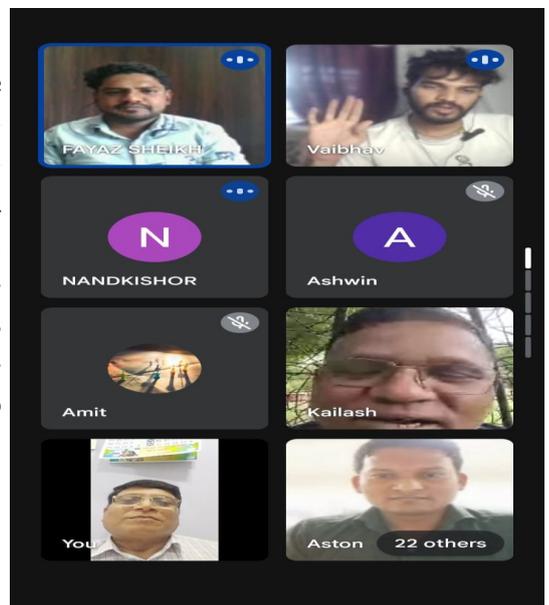
For giving practical exposure about various technical areas, the department conducting industrial visit of the student to nearby industries. One such visit was organised to “Pranay Associates, Dasgaon”. Students observed the process making of sleepers from the raw material.

Another visit was arranged at “Mintec Robotics, Gondia”. Ashok Leyland is an leading Indian multinational automotive manufacturer of the commercial Vehicle such as truck, bus etc. Student observed the process of various gear manufacturing, hardening and finishing process.



Alumni Meet:

As the regular practice, all the departmental aluminsise were invited on the annual function held yearly. The Alumni In-charge Shri R. P. Badole, Mechanical Engg. Faculty has conducted the alumni meet. This year i.e. academic year 2023-24 around twenty eight aluminsise attended online alumni meet. Mechanical engineering faculties had interacted with the alumni and shared their experiences about carrier, job opportunities in various industrial sectors and higher educations. The current year students were also present during the interaction so as to have the relevant information.



Interaction with pass out students



Mechanical engineering department has organised a get-together with the 2021-24 pass out batch students. The students had shared experiences about the department and institute's academic environment which they have received during their diploma tenure.

The students have appreciated the practical facilities and the environment offered by the department. They also praised the T&P policy, efforts and activities taken by the institute about the campus selection by the T&P cell. Here are the glimpses of felicitation of topper students of 2021-24 pass out batch.



MESA Activities

Mechanical Engineering Student Association (MESA) has organised various technical workshops/expert talks etc. in even term. One such was the **"Assembly & Disassembly of Engine"**. The second was expert talk on **"Science Day"**. All students of mechanical engineering student have been benefited. Such event were organised by the students which enhances the knowledge & skill. It also develops the managerial skill of the committee.



Laboratories Developed by Faculty

Department has developed 4 laboratories in the space provided in the Smithy workshop. These are Mechanical Engineering Measurement, Mechanical Engineering Materials, Industrial Engineering and Quality Control and Project Lab. The students will be able to utilise the facilities for carrying out activities related to capstone project, Micro project and final project.



Campus Placement:



SR. NO.	NAME OF INDUSTRY (2023-24)	TOTAL NO. OF STUDENT PLACED (83)
1	GE Aviation, Pune	07
2	John Deere, Pune	19
3	LTTS, Mumbai	01
4	Sigma Electric, Pune	34
5	Tata Projects, Nagpur	01
6	Ultratech Ltd, MP	01

Every year various national & international companies are visiting for the campus selection of mechanical final year students. The campus selection committee are regularly gives visit to the laboratories of the department and the other facilities of the department. In academic session 2023-24 companies and the number of campus selection is as per the table given.



Industry Institute Interaction:

The Industry-Institute Interaction would accrue mutual benefits when a symbiotic relationship is developed between the two systems. The ultimate aim of this relationship will be the creation of confidence in industry by the Institute which would result industries involving voluntarily the Institute at various stages of its development.

The faculties of Mechanical Engineering department has visited **Mintech Robotics** & Steel product manufacturing company “**Maa Anusaya Steel Furniture Industry, Datora, Gondia**” in summer 2024. Mr. G. H. Dahole, HOD ME along with the faculties discuss the different aspect such as Technology Development Transfer, Faculty Student Training, Industry supported lab, CSR Activities, Sharing of Facilities, Inputs in Curriculum development. The proprietor Mr. Lileshwar Bahekar guided the students about skill development & employability. He also motivated the students to become entrepreneur. They also showed keen interest in establishing the MOU with the mechanical engineering department.



National Level Paper & Project Competition:



The national level Project and Technical Paper Presentation competition and exhibition aims to foster creativity and curiosity in the young minds of the new generation. Objective behind this competition is to *promote talent, innovativeness* in the Diploma Engineering students across India.



On March 12, 2024, the technical event “National level Technical Paper competition 2024” was organized at Govt. Polytechnic Gondia by all department in their respective area. At the beginning of the program, lamp lighting and Saraswati Puja were performed. After that, the dignitaries were welcomed with shawls, coconut, and bouquets. The program was graced by Dr. C. D. Golghate, Principal, GP Gondia, Dr. Ram Nibudey, HOD Civil Engg. Dept., Dr. Rupesh Gawande, HOD APM, Shri G. H. Dahole, HOD ME, etc. Dr. D. G. Ghode, LME, GP Sakoli and Dr. J. B. Khurpade GP Gondia were present as evaluators. Around 25 papers were presented in the competition. The cash prize and memento were offered to the winner and runner. The event was successfully coordinated by Dr. Rimalini Gadekar at department and In-



stitute level.

On the same lines, on March 13, 2024, the technical event “National level Technical Project competition and exhibition 2024” was organized



at Govt. Polytechnic Gondia by all department in their respective area. The mechanical engineering department has organised the same in CAD/CAM Lab. The judge for the event was Mr. Vaibhav Morghade, Sakus Solar Solutions, Gondia, a solar installation firm. Around 20 Projectee participated from the various polytechnic's. The cash prize and memento were offered to the winner and runner. The event was successfully coordinated by Mr. Y. P. Nimje at department level.

Mechanical Engineering

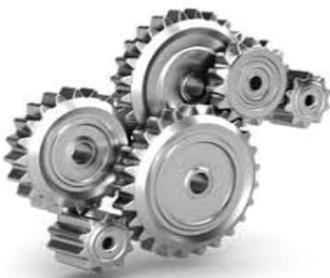
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Vision of Program

To serve the Industries and Society by Imparting Technical Knowledge and Skills through the Mechanical Engineering.

Mission of Program

- M1: To impart technical knowledge and professional ethics by using modern engineering tools with supportive facilities.*
- M2: To inculcate ethical values and leadership qualities in societal and environmental context.*
- M3: To impart lifelong learning by modern management tools, experiments and practices.*
- M4: To fulfil industrial and societal needs by establishing interactions with industries and providing solutions through problem analysis, design and development of system.*

PEOs, POs, PSOs of Mechanical Engineering Program

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Provide socially responsible, environment friendly solutions to Mechanical engineering related broad-based problems adapting professional ethics.

PEO2: Adapt state-of-the-art Mechanical engineering broad-based technologies to work in multi-disciplinary work environments.

PEO3: Solve broad-based problems individually and as a team member communicating effectively in the world of work.

PROGRAM OUTCOME (POs)

PO1: Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

PO2: Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.

PO3: 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.

PO4:Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

PO5: Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.

PO6: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.

PO7: Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.

PROGRAM SPECIFIC OUT-COME (PSOs)

PSO1: Modern Software Usage: Use latest Mechanical Engineering related Software's for simple Design, Drafting, Manufacturing, Maintenance and Documentation of Mechanical Engineering components and Process

PSO2 : Equipment and Instrumentation: Maintain Equipment and Instruments related to Mechanical Engineering

PSO3: Mechanical Engineering Processes: Manage Mechanical Engineering Processes by Selecting and Scheduling relevant Equipment, Substance, Quality Control Techniques, and Operational parameters