

ANNUAL REPORT (Academic Session 2024-2025)

Department of Mechanical Engineering

Details of the Academics

1. Teaching Learning

i) Odd Semester

A) Theory:

S. No.	Sem	Subject	Faculty Name	Average Student Attendance %	No. of Lectures Engaged and Syllabus Covered		
					Planned	Conducted	Syllabus Covered
1	III	3ME01-Mathematics-III	Prof. H. A. Nimkar	80	36	45	6 Units
		3ME02-Manufacturing Process	Prof. M. R. Dhawade	82	36	48	6 Units
		3ME03-Mechanics of Material	Prof. A. G. Bhatkar	82	36	48	6 Units
		3ME04- Engineering Thermodynamics	Prof. S. S. Galgat	82	36	47	6 Units
		3ME05- Fluid Mechanics	Prof. K. K. Padghan	83	36	48	6 Units
	V	5ME01- Heat Transfer	Prof. S. A. Pande	49	36	57	6 Units
		5ME02- Metrology & Quality Control	Prof. Ms. Y. B. Bhagat	48	36	55	6 Units
		5ME03- Kinematics of Machine	Prof. K. K. Padghan	45	36	55	6 Units
		5ME04-Measurement System	Prof. A. G. Bhatkar	48	36	55	6 Units
		5ME05-BBC	Prof. A. I. Malviya	44	36	41	6 Units
	VII	7ME01-Mechatronics	Dr. M. R. Dharme	39	36	54	6 Units
		7ME02- Productivity Techniques	Prof. Ms. Y. B. Bhagat	40	36	53	6 Units
		7ME03-Industrial Management & Costing	Dr. S. C. Jirapure	42	36	58	6 Units
		7ME04-Energy Conversion-II	Prof. S. S. Galgat	39	36	52	6 Units
		7ME05-Automobile Engineering	Prof. N. D. Jeughale	39	36	53	6 Units

B) Practical:

S. N.	Sem	Subject	Faculty Name	Average Student Attendance %	No. of Practical conducted	
					Planned	Conducted
1	III	Manufacturing Process-Lab	Prof. M. R. Dhawade	83	04	04
		Mechanics of Material-Lab	Prof. N. D. Jeughale	84	06	06
		Fluid Mechanics-Lab	Prof. K. K. Padghan	80	06	06
	V	Heat Transfer-Lab	Prof. S. A. Pande	49	06	06
		Metrology & Quality Control-Lab	Prof. Ms. Y. B. Bhagat	51	07	07
		Kinematics of Machine-Lab	Prof. K. K. Padghan	47	07	07
		Measurement System-Lab	Prof. A. G. Bhatkar	50	07	07
	VII	Mechatronics-Lab	Dr. M. R. Dharme	43	06	06
		Energy Conversion-II-Lab	Prof. S. S. Galgat	43	06	06
		Automobile Engineering-Lab	Prof. N. D. Jeughale	40	06	06

ii) Even Semester

A) Theory:

S. No.	Sem	Subject	Faculty Name	Average Student Attendance %	No. of Lectures Engaged and Syllabus Covered		
					Planned	Conducted	Syllabus Covered
1	IV	Material Science	Dr. S. C. Jirapure	50	36	42	6 Unit
		Energy Conversion - I	Prof. K. K. Padghan	48	36	42	6 Unit
		Manufacturing Technology	Prof. M. R. Dhawade	52	36	48	6 unit
		Hydraulic & Pneumatic Systems	Prof. S. S. Dandge	42	36	36	6 unit
		Basic Electrical Drives & Control	Prof. R. R. Solanke	48	36	38	6 unit
	VI	Design of Machine Elements	Prof. K. K. Padghan	55	36	48	4 Unit/out of 4 unit
		Dynamics of Machines	Prof. Y. B. Bhagat	65	36	47	6 unit
		Control System Engineering	Dr. M. R. Dharme	60	36	42	6Unit
		Non- Conventional Energy Sources	Prof. N. D. Jeughale	52	36	46	6 unit
		IEE	Prof. S. P. Pawar	52	36	36	6 Unit
	VIII	Operation Research Techniques	Prof. Y. B. Bhagat	56	36	45	6 unit
		I.C. Engines	Prof. S. A. Pande	55	36	46	6 unit
		Robotics	Prof. G. S. Shendre	55	36	42	6 unit
		Production Planning & Control	Prof. G. S. Shendre	51	36	44	6 unit

B) Practical :

S. N.	Sem	Subject	Faculty Name	Average Student Attendance %	No. of Practicals conducted	
					Planned	Conducted
1	IV	Manufacturing Technology-lab	Prof. M. R. Dhawade	63	4	4
		Hydraulic & Pneumatic Systems-lab	Prof. K. K. Padghan	64	6	6
		Basic Electrical Drives & Control -lab	Prof. R.R.Solanke	62	6	6
		Material Science-lab	Prof. N. D. Jeughale	63	6	6
	VI	Design of Machine Elements- lab.	Prof. K. K. Padghan	55	6	6
		Dynamics of Machines- lab.	Prof. Mrs. Y. B. Bhagat	65	7	7
		CAD Lab	Prof. K. K. Padghan	60	6	6
		Research Skills - lab.	Prof. G. S. Shendre	62	4	4
	VIII	I.C. Engines- lab.	Prof. S. A. Pande	55	6	6
		Robotics-lab	Prof. G. S. Shendre	53	5	5

2. Results Analysis:**A) Sessional Result:****i) Odd Semester:**

S.N.	Sessional	Semester	Appeared Student	Pass Student	Pass %	Overall Pass %
1	Sessional-I	III	20	8	40	65
2		V	10	8	80	
3		VII	8	6	75	
4	Sessional-II	III	17	7	41	64
5		V	15	10	67	
6		VII	6	5	84	

ii) Even Semester:

S.N.	Sessional	Semester	Appeared Student	Pass Student	Pass %	Overall Pass %
1	Sessional-I	IV	18	11	61	77
2		VI	18	14	78	
3		VIII	11	10	91	
4	Sessional-II	IV	14	07	50	72
5		VI	19	14	74	
6		VIII	11	10	91	

B) SGBAU Result: (Winter 2024)

S.N.	Semester	Appeared Student	Pass Student	Pass %	Overall Pass %
1	III	28	9	32.14	68.46
2	V	17	14	82.35	
3	VII	11	10	90.90	

3. Guest Lecture Organized:

S. No.	Date	Title of the Guest Lecture	Year/ Sem/ Class	Resource Person Details	No. of Students Attended	Subject Relevance	Outcomes
1	21/08/2024	“Opportunity through skill India”	II, III, & IV Year	Mr. Sharad Khandare	24	Opportunity through skill India	Awareness about Various Job Opportunity in core sector
2	24/08/2024	Art & Craft	II, III, & IV Year	Mr. Roy	24	Skill Development	Awareness about art & Craft
3	20/02/2025	Importance of Group Discussion & Essential Strategies for Personal Interview	II, III, & IV Year	Dr. Sandip Katole	57	Self-Development	Self-Development, Communication & Personality Development.
4	22/03/2025	Opportunities for Mechanical Engineers in core sector	II, III, & IV Year	Mr. Aniket Dandale	17	Core Sector Opportunity	Job Opportunity in core sector

4. Industrial Visit:

S. No	Date of Visit	Year/ Section	Industry Details	No. of Hours Spent	No. of Students	Faculty Accompanied	Relevant Subject Knowledge Gained
1	30/01/2025 to 31/01/2025	II, III, & IV Year	1. Sanvijay Rolling & Engineering Ltd. Nagpur. 2. Vinsar Ispat Nagpur. 3. Karamtara Pvt. Ltd. Nagpur.	48 Hrs	27	1. Prof. K. K. Padghan 2. Prof. G. S. Shendre 3. Prof. Ms. Y. B. Bhagat	Material Science, Mechanics, Kinematics of Machine, Production Technology.

5. Students Association Activities:

S. No.	Date	Description/ Activity/Topic	Resource Person	No. of Students Attended	Outcomes
1	11/01/2025	Awareness Program on Drawbacks of use of Nylon Thread for Kite. and also Distribute Kite Thread Protection Guard to Bike Riders	Mr.Sanjay Khatale (ACP Traffic Police)	20	It Protect bike riders from kite thread injury
2	17/01/2025	Mechanical Engineering Student Association (MESA) Activity - Distribution of Drawing sheets and its folders to Blind student's school.	Mr. Navnath Ingole , Principal , Dr. Narendra Bhiwapurkar Andh Vidyalay Vadali Amravati.	20	Understand the challenges faced by visually impaired people and how they are educated. what are Braille Languages and how blind students study it.
3	31/08/2024	Inauguration of Departmental wall Magazine decorated by MESA Volunteer.	Dr.S .C. Jirapure	35	It Motivate students for participating in extracurricular activities. • It highlights the achievements of students of department and encouraging them
4	18/09/2024	Engineer's Day Celebration" organized by Mechanical Engineering Students Association for Mechanical Engineering students.	Dr.S .C. Jirapure	35	To Motivate students in participating in Poster making competition activity

6. Skill Training Program Organized:

S. N.	Period		Year/ Sem/ Class	No. of Student s Attende d	Course Details	Resource Person Details	Objective	Outcom es
	From	To						
1	13/01/ 2025	17/01/ 2025	Final Year	15	Pre-placement drives (PPDs) aim to bridge the gap between academia and industry by preparing students for recruitment processes and helping companies find suitable candidates. They involve pre-placement training (PPT) to enhance students' skills and knowledge, as well as company presentations to inform students about job opportunities.	Prof.N.D. Jeughale Prof.G.S. Shendre , Prof.D.S. Kalyankar, Prof.P.R. Patil	Pre-placement drives (PPDs) aim to bridge the gap between academia and industry by preparing students for recruitment processes and helping companies find suitable candidates. They involve pre-placement training (PPT) to enhance students' skills and knowledge, as well as company presentations to inform students about job opportunities.	Students get valuable knowledge of Placement.
2	21/03/ 2025	22/03/ 2025	Final Year	17	The Campus Placement Drive of " Klassic Wheels Ltd, Ahmednagar, ESSEM Auto Electrical Pvt Ltd, Chakan Pune, Laxmi Agni Pvt Ltd, Aurangabad " was a successful event, providing an opportunity for the students to showcase their skills and knowledge.	Prof.N.D. Jeughale Prof.G.S. Shendre	The Campus Placement Drive of " Klassic Wheels Ltd, Ahmednagar , ESSEM Auto Electrical Pvt Ltd, Chakan Pune, Laxmi Agni Pvt Ltd, Aurangabad " was a successful event, providing an opportunity for the students to showcase their skills and knowledge.	Students get valuable knowledge of Placement.

7. Students Conferences / Seminars/Work Shop/Symposium etc., Participated:

S.No.	Name of Student / Year/ Class	Title of Paper	Organized by	Date	Knowledge Gained/Outcome
1.	Ms. Pradnya Thul/Second	A self-healing AI Integrated smart surface for aerospace and automotive application	ICRTRES-25	31/5/25 to 1/6/25	<ul style="list-style-type: none"> To improve presentation skill
1.	Mr. Rushikesh Shelke/Third	Recycling and repurposing of EV Batteries	ICISSET-25	6-7-May 2025	<ul style="list-style-type: none"> To improve presentation skill Recycling of EV Batteries
2.	Ms Dipti Bhagat/Third				
3.	Ms Pallavi Kordate/Third				
4.	Mr. Sarvadnya Ingole/Third				
5.	Ms Vaudehi Gorle/Third				
6.	Mr Saran Behare/Third				
7.	Mr Rohit Mehare/Third				
8.	Ms. Pradnya Thul/Second				
9.	Mr. Harshad Talan/Second				
10.	Mr. Samyak Ingle/Second				
1.	Mr. Yash G Navlakhe/ Final	A Review on Composition and Properties of Banana Fibers	IJARSCT	August 2024	<ul style="list-style-type: none"> To improve presentation skill Composition and Properties of Banana Fibers Nuclear Energy and Radiation
2.	Mr. Vedant G Davare/ Final				
3.	Mr. Sarthak Dhamnde/ Final				
4.	Mr. Harish S Dautpure/ Final				
5.	Ms Jayashri Dongare/ Final	Nuclear Energy and Radiation			
6.	Mr.Abhishek Meheshre/ Final	Impact			
7.	Mr Aakash Indore/ Final	Management			

8. Extra-Curricular Activities: (Sports/NSS/ & Others) :

S. No.	Game/ Event	Date	Venue	No. of Students Participated	Prize Details	Remarks
1	Malkhamb	05/01/2025 to 08/01/2025	L. N. C. T. University, Bhopal	1	Colour Cote (Blazer)	Inter University Sports Tournament.

9. Placements Details:

S. No.	Name of Company/s	No. of Eligible Students	No. of Student Placed	Placement %	Average CTC
1.	Epitome Components PVT. Ltd, Ahmednagar	20	06	30	2.10 Lac
2.	Skill IT, Pune	10	01	10	2.0 Lac
3.	Klassic Wheels Ltd, Ahmadnagar	20	02	10	2.25 Lac
4.	Laxmi Agni Pvt Ltd. Aurangabad	20	06	30	2.25 Lac

10. Other if Any :

2. Department Activities

1. Department Meetings with Faculty:

S. No	Semester	No. of Meetings Conducted	Major Decisions Taken
1	Odd Semester	12	<ul style="list-style-type: none"> • Mentors instructed to improve attendance of students by calling them telephonically. • WhatsApp group of Mentor mentee and parents should be form by respective Mentors. • All the faculties are instructed to check the dress code and I card of students. • All the faculties were instructed to publish paper in SCOPUS Journal. • Faculties were instructed to file patents & Copyrights • Faculties were instructed to attend reputed International Conferences.
2	Even Semester	12	<ul style="list-style-type: none"> • All the faculties were informed to prepare various format required for Academic Audit • All the faculties were instructed to prepare the Departmental Autonomy files assign to them. • All the faculties were informed to prepare appraisal in the given format. • Mentors instructed to improve attendance of students by calling them telephonically.

2. Class Committee Meetings:

S. No	Session	Semester	No. of Meetings Conducted	Major Decisions Taken
1	Odd Semester	III	6	<ul style="list-style-type: none"> • Time table revise and all the practical is converted into lectures • Class committee was instructed to prepare Detention list for low attendance students. • Improve the attendance of students by phone calling them. • To identify slow learner students and arrange extra lectures for them.
2		V	6	
3		VII	6	
4	Even Semester	IV	6	<ul style="list-style-type: none"> • Class committee was instructed to prepare Detention list for low attendance students. • To improve the attendance of students by phone calling them. • Time table revise and all the practical is converted into lectures • Every subject teacher should provide notes to students.
5		VI	6	
6		VIII	6	

3. Parents Meet Conducted:

S. No.	Year/Sem /Class	Date of Meeting	No. of Parents Attended	Feedback from Parents
1	All Year	28 sept 2024	9	<ul style="list-style-type: none">Regular parents-teacher meetings will be held to foster better collaboration.Regular messages will be sent out to keep parents informed about college activities and updates.Use of latest technology aids in teaching.

4. Details of Lecture Monitored by HoD:

S. No.	Date	Time	Class	Subject	Name of Faculty	Observations
01	17/02/2025	11:50am to 12:40 am	VI Sem	Non- Conventional Energy Sources	Prof. N. D. Jeughale	Good teaching skill
02	17/02/2025	01:15pm to 02:05 pm	VI Sem	Dynamics of Machines	Prof. Ms. Y. B. Bhagat	Visual Aids are good
03	17/02/2025	02:05pm to 02:55 pm	IV Sem	Hydraulic & Pneumatic Systems	Prof. Ms. M. S. Patne	Teaching with good examples
04	18/02/2025	11:00am to 11:50 am	IV Sem	Manufacturing Technology	Prof. M. R. Dhawade	Interactive Class
05	18/02/2025	11:50am to 12:40 Pm	VI Sem	Design of machine element	Prof. K. K. Padghan	Good teaching skill
06	27/03/2025	01:10pm to 02:05 pm	VII Sem	Production Planning & Control	Prof. G. S.Shendre	Teaching with good examples
07	27/03/2025	02:05pm to 02:55 pm	VII Sem	IC engine	Prof. S.A.Pande	Good class control

5. Other if Any :

3. Activities Related to Faculty Members

1. Ph.D. Work Progress of Faculty :

S. No.	Name of the Faculty Member	Exact Date of Ph.D. Registration	Name of the Supervisor	Institution/ University	Specify the Progress as on Date
1	Prof.Y.B.Bhagat	02/05/2022	Dr.M.R. Dharme	SGBAU Amt	Fabrication under process
2	Prof.S.A.Pande	02/01/2025	Dr.M.R. Dharme	SGBAU Amt	Course work
3	Prof.K.K.Padghan	19/10/2024	Dr. Kiran Kaware	Sandip University Nashik	Course work

2. Faculty Publications (Journal/Magazine/ Book/Articles if any) :

S. No	Author(s)	Title	Publisher	UGC Care/ Scopus/ WoS	Issue, Page No./Month/ Year
1	Prof. K. K. Padghan, Prof. N. D. Jeughale & Prof. G. S. Shendre	An Apparatus for Plant Extract	TANZ	Scopus	1869-7720) VOL20 ISSUE1 2025
2	Prof. K. K. Padghan	Design and Manufacturing	IJARSCT	UGC Care	VOLUME 4, ISSUE 1, ISSN NO. 2581-9429
3	Prof. K. K. Padghan	A Research Paper on AI	IJARSCT	UGC Care	VOLUME 4, ISSUE 1, ISSN NO. 2581-9429
4	Prof. K. K. Padghan	Flow Analysis of Car	IJARSCT	UGC Care	VOLUME 5, ISSUE 8, ISSN NO. 2581-9429
5	Prof. N. D. Jeughale	Research Paper on Green Engine	IJARSCT	UGC Care	VOLUME 4, ISSUE 1, ISSN NO. 2581-9429
6	Prof. N. D. Jeughale	A Review on Composition and Properties of Banana Fibers	IJARSCT	UGC Care	VOLUME 5, ISSUE 8, ISSN NO. 2581-9429
7	Prof. N. D. Jeughale	Design and Thermal Analysis of Portable Water Bottle.	Bridging Science and Technology. Dr.S.C.Jirapure	Book Chapter	ISBN: 978-93-342-3053-6
8	Prof.M.R. Dhawade	Rapid prototype sand casting/3	Bridging Science and Technology. Dr.S.C.Jirapure	Book Chapter	ISBN: 978-93-342-3053-6
9	Prof.Y.B.Bhagat	Ergonomically Studying the Seated Position of Students	Bridging Science and Technology. Dr.S.C.Jirapure	Book Chapter	ISBN: 978-93-342-3053-6
10	Dr. M. R. Dharme	Primary and Revision Total Hip Arthroplasty: A Comprehensive Review of Current Trends, Outcomes, and Challenges	Bridging Science and Technology. Dr.S.C.Jirapure	Book Chapter	ISBN: 978-93-342-3053-6

3. Papers presented by Faculty Members in National/International Conference/Seminars:

S. No.	Author(s)	Title of Paper	Presented at	Date
1	Prof. K. K. Padghan	Flow Analysis of Car AC Duct to find Temperature, Velocity and Pressure Difference.	ICISSET 2025	5th & 6th May 2025
2	Prof.M.R.Dhawade	Flow Analysis of Car AC Duct to find Temperature, Velocity and Pressure Difference.	ICISSET 2025	5th & 6th May 2025
3	Prof.Y.B.Bhagat	Flow Analysis of Car AC Duct to find Temperature, Velocity and Pressure Difference.	ICISSET 2025	5th & 6th May 2025
4	Prof. S. A. Pande	Flow Analysis of Car AC Duct to find Temperature, Velocity and Pressure Difference.	ICISSET 2025	5th & 6th May 2025
5	Prof.Y.B.Bhagat	Ergonomically studying the seated position of students	IMRC 2025	13 th to 15 th Feb 2025

4. Faculty Participation in Conferences / Seminars / Workshop / Continuing Education Programme:

S. No.	Date	Name of Faculty	Title of Programme	Organizer	Period
1	21st & 22nd March 2025	Prof. K. K. Padghan	ICIISM-2K25	Wainganga College of Engineering & Management, Nagpur	2 Day's
2	5th & 6th May 2025	Prof. K. K. Padghan	ICISSET 2025	IJARSCT	2 Day's
3	5th & 6th May 2025	Prof.M.R.Dhawade	ICISSET 2025	IJARSCT	2 Day's
4	5th & 6th May 2025	Prof.Y.B.Bhagat	ICISSET 2025	IJARSCT	2 Day's
5	13 th to 15 th Feb 2025	Prof.Y.B.Bhagat	IMRC 2025	SISSBS, Navi Mumbai	3 days
6	5th & 6th May 2025	Prof. S. A. Pande	ICISSET 2025	IJARSCT	2 Day's

5. Status of Consultancy Works :

S. No.	Name(s) of Faculty Coordinators	Title of the Consultancy Service	Industry Associated	Jobs/Works Completed	Revenue Generated (Rs)	Specify the Progress
Nil	--	---	--	--	--	--

6. Status of Faculty Members Pursuing Online Courses Offered By the Best Universities:

S. No.	Name of Faculty Member	Title of the On-line Course	Duration		University	Status of the Online Course
			Start Date	End Date		
1	Prof. Y.B. Bhagat	CAD/CAM Computer Aided Design /Computer Aided Manufacturing	15 July 2024	30 Nov 2024	NPTEL	Passed with 76 %
2	Prof. Y.B. Bhagat	Operation Management	20 Jan 2025	11 April 2025	NPTEL	Passed with 75 %

7. Other if Any :



HOD

Head of Department
Department of Mech. Engineering
D.R.G.I.T. & R., Amravati.