

ANNUAL REPORT

(2022 - 2023)



Department of Mechanical Engineering
Dr. Babasaheb Ambedkar Technological University
Lonere - 402 103, Dist- Raigad, Maharashtra (India)

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Dr. Neeraj Agrawal
Professor and Head, Department of
Mechanical Engineering

1. MESSAGE FROM THE HEAD OF THE DEPARTMENT

STRIVE THE PERFECTION AND REACH TOWARDS THE EXCELLENCE

With great happiness and pleasure, I herewith present the annual report card of the Department of Mechanical Engineering for the year 2022-23. The Department constantly strives towards excellence and has done significant progress at all levels; academics, research, innovations, and co-curricular activities. The Department strives to bring research and innovations even at the UG level and motivate the UG students for higher education. The academic spectrum and content delivery adopted by the Department is in-lined with the needs of the industry and profession.

To prepare the true professionals who can take on the challenges of life and keep in tune with the fast-changing world and Technologies, Department ensures and care about the overall development of the students. Students are nurtured, trained, and infused with the latest Technologies through well-equipped laboratories and good academic ambiances such as design work, project work, industrial training, professional society activities, and teamwork. The department maintains and exhibits a research culture through meaningful research and innovation carryout by the Faculty member by involving not only Ph.D./M. Tech students but also B. Tech students.

Students are exposed to and prepare for today's job market through expert lectures, visiting technical exhibitions, hands-on experience, model preparation, software learning, etc. in addition to regular and rigorous classroom teaching by dedicated and experienced faculty. Students are also encouraged and assisted by the Department to take part in national-level events to enhance their vision. Department has successfully carried out the teaching-learning process in the most challenging time, COVID-19, through online classes. I take this opportunity to thank all of my learned colleagues and students for their untiring and wholehearted support in maintaining the academic standards with the vision to make the Department a centre of excellence in the coming years. My best wishes to all the students in their future endeavours.

Dr. Neeraj Agrawal
Head, Department of Mechanical Engineering

2. VISION AND MISSION STATEMENTS OF THE DEPARTMENT

Vision:

The vision of the department is to achieve excellence in teaching, learning, research and transfer of technology and overall development of students

Mission:

Imparting quality education, looking after holistic development of students and conducting need based research and extension.

3. ABOUT THE DEPARTMENT

Established in the year 1992, the Department of Mechanical Engineering offers various academic programs, like B. Tech. (Mechanical Engineering), M. Tech. (Manufacturing Engineering), M. Tech. (Thermal & Fluids Engineering) and Ph.D. The department takes pride in its highly qualified and motivated faculty members most of whom are PhDs from IITs. The alumni of the Department have made a mark in industry and profession. Over the years, the department has maintained good academic and research culture. As a result, the faculty members in the Department have published more than 600 papers in peer-reviewed international journals and conferences so far. Further, some of the laboratories have developed innovative products which are being patented for commercial usage. The Department has strong linkages with institutes like IIT Bombay and BARC. In addition, the Department has also conducted several continuing education programs (CEPs) and STTPs for the benefit of faculty and industry personnel.

4. PROGRAM EDUCATIONAL OBJECTIVES (PEOs) & PROGRAM OUTCOMES (POs)

Program Educational Objectives (PEOs)

PEO1	Graduates should excel in engineering positions in industry and other organizations that emphasize design and implementation of engineering systems and devices.
PEO2	Graduates should excel in the best post-graduate engineering institutes, reaching advanced degrees in engineering and related disciplines.
PEO3	Within several years from graduation, alumni should have established a successful career in an engineering-related multidisciplinary field, leading or participating effectively in inter-disciplinary engineering projects, as well as continuously adapting to changing technologies.
PEO4	Graduates are expected to continue personal development through professional study and self-learning.
PEO5	Graduates are expected to be good citizens and cultured human beings, with full appreciation of the importance of professional, ethical and societal responsibilities.

Program Outcomes (POs)

PO1	Apply knowledge of mathematics, science and engineering to analyze, design and evaluate mechanical components and systems using state -of-the-art IT tools.
PO2	Analyze problems of mechanical engineering including thermal, manufacturing and industrial systems to formulate design requirements.
PO3	Design, implement, and evaluate mechanical systems and processes considering public health, safety, cultural, societal and environmental issues.
PO4	Design and conduct experiments using domain knowledge and analyze data to arrive at valid conclusions.
PO5	Apply current techniques, skills, knowledge and computer-based methods & tools to develop mechanical systems.

PO6	Analyze the local and global impact of modern technologies on individual organizations, society and culture.
PO7	Apply knowledge of contemporary issues to investigate and solve problems with a concern for sustainability and eco-friendly environment.
PO8	Exhibit responsibility in professional, ethical, legal, security and social issues.
PO9	Function effectively in teams, in diverse and multidisciplinary areas to accomplish common goals.
PO10	Communicate effectively in diverse groups and exhibit leadership qualities.
PO11	Apply management principles to manage projects in multidisciplinary environment.
PO12	Pursue life-long learning as a means to enhance knowledge and skills.

5. OVERVIEW OF ACADEMIC PROGRAMS

Academic Program		Duration	Intake
B. Tech	Mechanical Engineering	Four Years	54
M. Tech	Manufacturing Engineering	Two Years	16
M. Tech	Thermal Engineering	Two Years	16
Ph. D.	Mechanical Engineering	Four Years	---

5.1 UG Students Statistical Information

Year	Category Wise Distribution								Total		
	Open	OBC	VJNT	SC	ST	SBC	J&K	TFWS	M	F	T
First	15	11	02	04	00	01	00	00	30	03	33
Second	22	23	05	07	00	00	00	00	51	06	57
Third	31	18	04	10	02	00	00	00	59	06	65
Four	32	16	10	10	02	01	00	00	63	08	71

5.2 Result Analysis

B. Tech Pass Out Students' Data (CGPA)	
Pointer	No. of Students
8.0-10.0	69
6.8-8	07
<6.8	00
Fail	03
Total	79

5.3 Campus Placements

Following students from the department have got campus placement during academic year 2022-23 from Training and Placement Cell, DBATU.

Sr. No.	Name of Student	Name of the Company	CTC offered
1	Vinayak s vanjare	Supreme petrochem ltd, nagothane	4 LPA
2	Siddhesh Santosh Mhparle	Pyramid Consulting Engineers Pvt. Ltd. Thane	3.5 LPA
3	Sanil Balu Bhoir	Supreme petrochemical Ltd, Nagothane	4 LPA
4	Omkar Gopal Palav	Shree Rapid Technologies, Mumbai	4 LPA
5	Smit Patil	Adani Group	4.5 LPA

6. FACULTY AND STAFF



Dr. Neeraj Agrawal

Professor and Head of Department

B. Tech (Mechanical Engg.)

M. Tech. (Ref. & AC, Mechanical Engg.) Ph.D. (Mechanical Engg.)



Dr. V. G. Sargade

Professor

B. Tech. (Mechanical Engg.)

M. Tech (Mechanical Engg.)

Ph. D. (Mechanical Engg.)



Dr. M. S. Tandale

Professor

B.E. (Mechanical Engg.)

M. Tech. (Mechanical Engg.)

Ph.D. (Mechanical Engg.)



Dr. Mudigonda Sadaiah

Professor

B. Tech (Mechanical Engg)

M.E(Production Engg)

Ph.D. (Mechanical Engg.)



Dr. R. P. Kate

Professor

B. E. (Mechanical Engg.)

M. Tech. (Energy Systems Engg.)

Ph.D. (Mechanical Engg.)



Dr. H. N. Warhatkar

Professor

B. E. (Mechanical Engg.)

M. Tech (Mechanical Engg.)

Ph. D. (Mechanical Engg.)



Dr. B. F. Jogi

Professor

B.E. (Mechanical Engg.)

M. Tech. (Manufacturing Technology)

Ph.D. (Nano Materials)



Dr. R. S. Pawade

Associate Professor

B. E. (Mechanical Engg.)

M. E. (Machine Tool Engg.)

Ph.D. (Mechanical Engg.)



Dr. H. S. Joshi

Associate Professor

B.E. Production Engg.

M.E. Mechanical-CAD/CAM

Ph.D. (Mechanical Engg.)



Dr. G. S. Warkhade

Associate Professor

B. E. (Mechanical Engg)

M.Tech. (Thermal and Fluids Engg.)

Ph. D. (Mechanical Engg.)



Dr. D. B. Waghmare

Associate Professor

B. E. (Mechanical Engg.)

M. E. (Mechanical - Production Engg.)

Ph. D. (Mechanical Engg.)



Dr. S. R. Dhale

Assistant Professor

B. E. (Mechanical Engg.)

M. E. (Design Engg.)

Ph.D.(Manufacturing Engg.)

Ad-hoc Faculty

	Mr. P. D. Agwane Assistant Professor M. Tech (Manufacturing Engg.) Ph.D. (Mechanical Engg) (Pursuing)		Mr. Neeraj Kulkarni Assistant Professor M. Tech (Machine Design) Ph.D. (Mechanical Engg) (Pursuing)
	Mr. Pratik Dange Assistant Professor M. Tech (Thermal and fluid Engg.) Resigned in December 2022.		Miss. Nivedita Patil Assistant Professor B.E. (Mechanical Engg.) M. Tech (Thermal Engg.) Resigned in September 2022.
	Dr. Vishal Y. Bhise Assistant Professor B.E. (Mechanical Engg.) M.E. (Manufacturing Engg.) Ph.D. (Mechanical Engg.)		Miss. Shruti C. Tembhe Assistant Professor B.E. (Mechanical Engg.) M.E. (Manufacturing Engg.)

Technical Supporting Staff

	Mr. R. M. Chavan Lab Technician C.E.A.(BTE. Mumbai), B.A (Mumbai University)		Mrs. Manisha Umesh Sakate Lab Assistant (Technical) B.Sc. in Microbiology
	Mr. Apekshit Patil Lab Assistant Diploma in Mechanical Engineering		

7. ADDITIONAL RESPONSIBILITIES OF THE FACULTY

Dr. N. Agarwal

- Head, Mechanical Engineering Department.
- Training and Placement Officer
- Faculty Advisor, ISHRAE Local Chapter
- Chairman BOS of Mechanical Department

Dr. M.S. Tandale

- IQAC Coordinator
- CR Processing Officer
- M.Tech Faculty Advisor
- Dept Project Coordinator
- Dean (Skill Development)

Dr. V.G. Sargade

- Dean (Students' Welfare)

Dr. R. S. Pawade

- OSD Regional Center Nagpur
- Coordinator, UGC Cell and Manufacturing Engineering
- Workshop Superintendent

Dr. H. N. Warhatkar

- NSS Coordinator
- Prof. In charge, University Guest House

Dr. B. F. Jogi

- Registrar
- OSD Affiliation as Joint Director Level
- Rector Sahyagiri and Gagangiri Boys Hostel

Dr. G. S. Warkhade

- Procurement Head

Dr. D. B. Waghmare

- Rector, Sahyagiri Hostel
- IQAC Committee Member
- Coordinator, NAAC Criterion VII
- Class Teacher FY (Mechanical Engineering)
- Coordinator, Annual Report, Academic Audit

Dr. S. R. Dhale

- Associate COE

8. ADVISORY BOARD AND BOARD OF STUDIES (BoS)**Advisory Board:**

- Prof. Shripad P. Mahulikar, Professor, Dept. of Aerospace Engg., IIT Bombay
- Dr. Debdatta Ratna, Deputy Director, Polymer Science & Technology, Naval Materials Research Laboratory, DRDO, Ambarnath (East)
- Mr. Vivek Garg, General Manager, Sudarshan Chemical Roha
- Dr. Shendage Dadasaheb J., Sr. General Manager – Application Development, h2e Power Systems Pvt. Ltd, Pune
- Dr. R. K. Shrivastava, Professor and Head, Dept. of Mechanical Engineering, GEC Karad
- Mr. Adosh Thomas Varekat, General Manager, Reliance Jio, Ghansoli, Navi Mumbai

Board of Studies:

Dr Neeraj Agrawal , Chairman

Dr. V. G. Sargade, Member

Dr. A Kumaraswamy, Member

Dr. P. B. Maheshwary, Member

Dr. Rahul Barjibhe, Invitee

Dr. Sanjeev Suryawanshi, Invitee

Dr. R. D. Patil, Invitee

Dr. Dilip Pangavhane, Invitee

Dr. Shendage Dadasaheb J., Invitee

9. FACULTY RESEARCH AND PUBLICATIONS (April 2022- March 2023)**9.1 International Conference Publications**

- **Dhanraj B. Waghmare**, Gopal B. Mudholkar, and Sanket Shambharkar, Numerical Simulation of Fiber Laser Welded Sub-millimeter Thick SS 316 Sheets, Transdisciplinary International Conference

on Integrated Sustainability Approaches in Sciences, Technology, Commerce and Social Sciences: Current Research and Future Perspectives, ICIASTCSF-2022 held during 23-24 Nov. 2022 at Nagpur.

- **Dhanraj B. Waghmare** and Partha Saha, Microstructure, Tensile Behaviour and Weld geometry of Sub-millimeter Thick SS 304 Stainless Steel after Laser Welding, 4th International Conference on Materials, Manufacturing and modelling (ICMMM-2023), VITU, Vellore from 24-26 March 2023.
- **Dhanraj B. Waghmare** and Partha Saha, Effect of Percentage Overlap on Mechanical and Microstructural Properties of SS 304 and SS 316 Stainless Steel using Modulated Pulse Mode, 4th International Conference on Materials, Manufacturing and modelling (ICMMM-2023), VITU, Vellore from 24-26 March 2023.
- **Rahul Gujar, Hemant Warhatkar**, “Computational and Experimental Analysis of Femur to Investigates the Effect of Different Bone Inclinations on Fracture Risk under Compressive Static Load”, presented in 8th International Congress on Computational Mechanics and Simulation (ICCMS-2022) under the auspices of Indian Association for Computational Mechanics (IndACM) organised by IIT, Indore, India, 9th-11th December 2022, Paper ID: ICCMS21_1668954291.

9.2 International Journals

- Ketan A. Jagtap and **Raju S. Pawade**, Monitoring of Surface Topography in CNC Turning of Co-Cr-Mo Biomaterial by Using Acoustic Emission Signals, International Journal of Surface Review and Letters, Vol. 29 No. 08 (2022), 2250108 pp 1-12 (SCI & Scopus Indexed, IF =1.24)
- Ganesh S. Kadam, **Raju S. Pawade**, Comparative assessment of machining induced hardening in HSM of Inconel 718 with aid of eco-friendly cutting fluids, Materials Today: Proceedings, 62 (2022) 7528-7533
- Ganesh S. Kadam, **Raju S. Pawade**, Water Vapour assisted machining of Inconel 718 incorporating through-tool cutting fluid delivery approach, International Journal on Interactive Design and Manufacturing (IJIDeM), Springer Nature, 2023, doi: 10.1007/s12008-023-01335-3.
- Ganesh S. Kadam & **Raju S. Pawade**, Water vapor cutting fluid assisted productive machining of Inconel 718, Materials and Manufacturing Processes, Taylor and Francis, 2023, DOI:10.1080/10426914.2023.2190389

Book Chapters

- **Raju Pawade and Ganesh Kadam**, Cutting force assessment in HSM of Inconel 718 aided with water vapour as an eco-friendly cutting fluid, Recent advances in Manufacturing Processes and Systems, Edited by Harshi K Dave, Uday Shankar Dixit, Dumitru Nedelcu, Springer, 2022, ISBN 978-981-16-7787-8.

Book

- **Dr. Dhanraj B. Waghmare**, “Engineering Graphics & Design” (Marathi), under AICTE NEP2020, Published by Khanna Publications, New Delhi, ISBN - 978-93-5538-022-7.

9.3 National Journals And Conferences

National Conference

- Niket Malwade, **Raju Pawade**, Surface roughness and cutting forces optimization in machining of Biodegradable Magnesium Calcium alloy, National level Conference on Emerging Trends in Engineering Design and Manufacturing ‘ETEDM – 2022’, 15-16 June 2022.

10. DEPARTMENT ANNUAL BUDGET 2022-2023

Sr. No.	Details	Amount
P. 1.1	Salaries and Wages Teaching	-----
P. 1.2	Salaries and Wages Non-Teaching	-----
P. 1.3	Ad-hoc Salary Teaching	-----

P. 1.4	Ad-hoc Salary Non-Teaching	-----
P. 1.5	Daily Wages Salary	-----
P. 1.6	Machinery & Equipment UG	21,11,354
P. 1.7	Machinery & Equipment PG	2,50,000
P. 1.10	Laboratory Expenditure(recurring)	3,92,219
P. 1.11	TA/DA	85,879
P. 1.12	Medical/LTC	-----
P. 1.14	Conferences & Seminars	69,974
P. 1.15	Office Expenses	28,602
P. 1.16	Departmental Students' Activities	15,060

11. LABORATORIES

11.1 Major Facilities/Instruments/Equipment added in Laboratories during 2022-2023

Sr No	Name of Instrument	Qty.	Total Cost
Academic Year 2022-23			
1	Steam Engineering Laboratory	01	16,00,000/-
2	Heat Transfer Laboratory	01	9,00,000/-
3	Centre for Advanced Machining (CAMT)	01	3,00,000/-
4	Polyjet / Multijet based 3D Printer	01	47,59,394/-
5	3D Scanner	01	25, 04,722/-
6	FDM based composite 3D Printer	01	19,00,000/-
7	ANSYS Academic Mechanical & CFD Research (Latest version 2023 R1)	05	20,78,600/-
8	GT-SUITE Simulation software	02	11,80,000/-
Before Academic Year 2022-23			
9	CNC TRAINER LATHE with Supporting Software, Training Manuals	01	4,79,476.69/-
10	CNC MILL TRAINER MT- 200 with Supporting Software & Training Manuals	01	4,62,272.36/-
11	A.C. 1.5 Tonnes Videocon,	03	77,000/-
12	CAD / CAM Table, Size: H 30" X L 96" X W 24", 6 Drawer with Lock	10	92,936/-
13	Computer system	06	1,92,000/-
14	HP Compaq system	05	1,75,000/-
15	Liebet made Online UPS	01	77,480/-
16	HP Compaq Presario Computer System SR1530	05	1,92,500/-
17	HP Compaq Presario Computer System SR1530	05	1,92,500/-
18	Desktop HP DX 7200 Processor Computer System	15	6,52,500/-
19	Desktop HP DX 7200 Processor Computer System	05	217500/-
20	Desktop HP DX 7200 Processor Computer System	10	4,18,270/-
21	Computer Application Software (Autodesk Inventor Professional 2008 Education Network Copy) (Sr. No. 346-8911-0604,0998,1255,1592, 1889, 2186,2483,0703,1790,1493,1097,1394,1691,1988,2285,2582,0802,1196, 2087,2384)	20	6,34,400/-
22	Computer Application Software(Autodesk Inventor Professional 2008 Education)	20	90,000/-
23	Online UPS System of KVA Capacity	01	2,27,595/-
24	Laptop DELL Vostro 1510 (Sr. No. 68GL2BS, D8GL2BS, 26HN2BS,68GL2BS, B8GL2BS, 78GL2BS, CIDN2BS, 58GL2BS, 88GL2BS, 98GL2BS, 48GL2BS)	11	4,34,500/-
25	HP/8300 Desktop computer with preloaded operating system Microsoft windows 8	20	7,56,000/-
26	HP/830 Desktop Computer with Preloaded operating System	15	

27	Carbon Dioxide 2 kg	01	19,096.87/-
28	Drawing Desk Frame	110	55,249/-
29	Drawing Stool	180	52,189/-
30	G.I.Pipe 2350 mm dia	8mtr	68,888/-
31	Fluid Mechanics Test Bench	02	2,95,510/-
32	SAJ make Eddy current dynamometer	01	1,12,760/-
33	Constant temperature oil bath with ms powder stand	01	68,000/-
34	Metzer - m Trinolar Research metallurgical microscope	01	1,24,110/-
35	Microhardness Tester Shimadzu make	01	1602300 yen
36	Measuring microscope	01	404468 yen
37	Automatic Specimen mounting press Bain mount	01	1,18,390/-
38	Slip Gauge Accessories	1 set	1,58,207/-
39	Digital Venturis 466 as Nodes	04	3,62,660/-
40	2KVA CVT Elect.	01	95,250/-
41	Rank Tailor Hobson Surface Roughness Testing Instrument Surtronic 3+(Battery Operated Printer)	01	1,90,179/-
42	Gear Rolling Tester	01	96,286/-
43	Baker Dot Matrix 24 column print Module "PM" suitable for ED1/EC10	01	10,400/-
44	Monochromatic Light Source	01	52,312/-
45	Refrigeration Test Rig	01	75,240/-
46	Pyrometer	01	1,44,000/-
47	Universal Testing Machine	01	1,50,000/-
48	Pyranometer	01	1,84,653/-
49	Vibration Laboratory	01	86,130/-
50	Cam Analysis Apparatus	01	37,125/-
51	Journal Bearing Apparatus	01	66,037/-
52	Coriolis Acceleration Apparatus	01	79,531/-
53	Lab View Software	01	1,41,614/-
54	CRIO-9025	01	3,15,188/-
55	CRIO-9118	01	2,94,228/-
56	NI 9234	01	2,43,661/-
57	NI 92194	01	72,181/-
58	12" Industrial Panel	01	72,181/-
59	PS-2 Power supply for field point	01	1,68,074/-
60	CDAR 9174 Compact	01	83,250/-
61	Stat graphics centurion professional xv -01 box with CD and Manual	02	62,450/-
62	Metallurgical sample saw	01	1,23,750/-
63	Wear and Friction monitor	01	3,93,750/-
64	Refrigeration test ring	01	84645/-
65	Fluid mechanics test bench 02	01	2,95,510/-
66	Signal cylinder Two stroke petrol engine test ring.	01	87,912/-
67	Fluid mechanics test bench 01	01	1,85,364/-
68	Heat transfer in Forced Convection	01	59,061/-
69	Wire Electrical Discharge Machine- ECOCUT- Electronica	01	2509000/-
70	Constant temperature oil bath with ms powder stand	01	68000/-
71	Inverter 600 VA luminous make	01	10940/-
72	Electromagnetic Flow Meter	01	23388/-
73	Magnetic dial stand	01	6750/-
74	Monochromatic Light Source	01	45562/-

75	Mounting Arrangement	01	6325/-
76	Erichsen cupping tester	01	41468/-
77	CNC Simulators for offline programming (HASS USA Make, Model: CSMD)	06	999000/-
78	High Speed Camera	01	2298339/-
79	Mini smart classroom	01	178925/-
80	Engineering Graphics Laboratory HP Multifunction Printer	01	23,800/-
81	Refrigeration & Air Conditioning Laboratory Vapour Compression refrigeration	01	1,12,000/-

11.2 Some Major Instruments in the Laboratories



Polyjet Multijet based 3D Printer
Based on Multi-Jet Plastic
Printing (MJP) Technique
Build Envelop: 294x211x142 mm



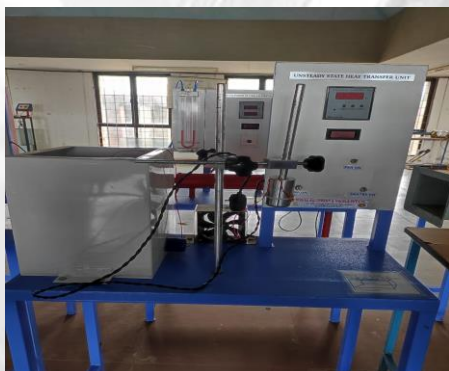
FDM based composite 3D Printer
Mark Two, 2ND Generation
Build volume : 320 x 132 x 154
mm (WidthxDepthxHeight)



3D Scanner
GOM Scan 1 System Package
including GOM ROT 350 Rotary
table



Hilton make Air conditioning Test
Rig



Unsteady State Heat Transfer
Unit



Heat transfer in forced convection
apparatus



Stefan Boltzmann Apparatus



Thermal Conductivity of metal
bar



Heat Transfer in natural
convection



Parallel Flow heat exchanger



Environmental chamber



Vapor Compression Test Rig



Thermal Conductivity insulating powder



Thermal conductivity of gases and liquid apparatus



Heat pipe demonstration unit



Counter Flow heat exchanger

12. PROJECTS

12.1 List of Undergraduate Projects (2022-2023)

Sr. No.	Name of the Project	Name of the Students (PRN)	Advising Faculty
1	BARC Mumbai	Manasi Kasare 1930331612048	Dr. N. Agrawal
2	Energy Simulation of a High School Building using eQUEST: A Case Study	Sweta Brahmkar 1930331612062	
3	3D analysis of piping system	Kunal Phadatare 1930331612052	
4	Design of the pressure vessel for chemical plant	Bhushan Sunil Sakhare 1930331612073	
5	3 D analysis of piping system	Manthan Mohan Patil 1930331612046	
6	CAD Industrial Design Projects at	Raj Guru Surve 1930331612016	
7		Suraj Ramakant S. 2030331612018	

8	STERADIX Pune	Siddhesh Santosh M. 1930331612030	Dr. M. S. Tandale
9		Sanil Balu Bhoir 2030331612011	
10	Automated Inspection System for	Aarti Chandrakant S. 2030331612016	
11	Industrial Quality Control	Suraj Ramdas Sawant 2030331612016	
12	Piping Designing and 3D Modelling	Gaurav R. Gaikwad 2030331612001	Dr. H. S. Joshi
13	Optimization of Process Parameters for FFF 3D Printing	Omkar Gopal Palav 1930331612008	
14		Jayesh Bhatu Patil 2030331612009	
15	Robot based library automation	Chaitanya Baliram S. 2030331612014	
16		Chinmay Vivek Vaze 2030331612004	Dr. V. G. Sargade
17		Dekhale Sairaj Satish 1930331612035	
18	Piping Designing and 3-D Modelling	Waghmare Mayuri R 1930331612012	
19	Die Design for Front Door Inner of D22 Model of Hycross Vehicle	Rathod Akshay Dadasaheb 1930331612006	
20	Experimental Investigation into Micro	Shankar More (1930331612047)	Dr. R. S. Pawade
21	milling of Shape memory alloy Nitinol	Gaurav Datir (1930331612069)	
22	Piping Design and 3D Modeling	Kalpesh Mhatre (1930331612004)	
23	Estimation of threshold stress for hydride reorientation in Zr-2.5% Nb alloy at BARC Trombay	Smit Rajendra Patil 1930331612034	
24	Production planning and management for Toyota Kirloskar Auto Part A-400	Tushar Davang 1930331612033	Dr. R. P. Kate
25	Defects in Sand Casting	Khonde Kishan Madhav 2030331612003	
26	Analysis of Rejection of front Fork outer tube	Vishal Prakash Matte 1930331612071	
27		Dhananjay M Kadam 1930331612072	
28		Harshawardhan V Yadav 1930331612070	Dr. M. Sadaiah
29	Design of Pressure Vessel	Balkrushna R Yadav 1930331612061	
30	3D Modelling of Stirred Tank Reactor using CREO Software	Makardhwaj Vijay Bhosale 1930331612040	
31	Advanced Engineering Techniques for Industrial Design(3D Solid Modelling)	Mahesh P Chaudhari 1930331612053	
32	Study of Sheet Metal from Raw Material to Finished Control Panels	Dnyaneshwar B. Chaudhary 1930331612054	Dr. B. F. Jogi
33	Assembly & Inspection of Jig & Fixture	Ajay Trimbak Munde 1930331612066	
34	Piping Designing and 3D Modelling	Pratiksha Adsul 1930331612039	
35	Polymer Nano-Composite	Siddiqui Tausif Siddiq 2030331612007	
36	Testing & Installation of Die Casting m/c	Tarade Avishkar Rajesh 1930331612056	Dr. H. N. Warhatkar
37	Toughened FRP Composites	Kachpure Rushikesh P. 1930331612060	
38	Power hammered Ukhli	Kondwilkar Talha S 2030331612002	
39		Sajid Akram 2030331612020	
40		Solkar Azal Abdul Gani 1930331612021	Dr. D. B. Waghmare
41	Study of Robotics at SVR Infotech, Pune	Adnan Akhlaque Ghole 1930331612018	
42		Hujaifa Farhan Chougale 1930331612009	
43		Ali Mustufa Deshmukh 1930331612019	
44		Arman M Ali Undre 1930331612015	
45		Nabil Akhtaruzzaman Taj 030331612015	Dr. G. S. Warkhade
46	Analytical and Parametric Design of Industrial Boiler and its Components	Ganesh Pramod M. 1930331612067	
47	Advanced engineering techniques for	Ashish Anant Sutar 1930331612032	

48	industrial design (3d solid modelling)	Omkar Vinod Tarade 1930331612057	
49		Vaibhav Namdeo M. 1930331612042	
50		Sumit Jagan Chavan 1930331612074	
51	Detailed study of Mechanical Equipment in Hydroelectric power plant	Abhishek Padmakar M. 1930331612068	Dr. S. R. Dhale
52		Om Pradip Gawande 1930331612041	
53	3D Modeling and Automation	Suyash S Deshmane 1930331612014	
54	Body In White Fixture Design	Anish Shankar Pimple 1930331612075	
55	VMC programming	Apteja Ajay Padghan 2030331612012	Prashant Agwane / HSJ (Bhise)
56	Piping Design and 3D Modelling	Sakshi Sanjay Shinde 1930331612002	
57	Piping Design and 3D Modelling	Sayali Santosh Nakashe 1930331612043	
58	Robot based library automation	Rutik Atmaram Bhise 2030331612010	Shruti Tembhe/ HSJ (Sunil Bhangare)
59	Study of induced draft cooling tower & its performance monitor & improvement	Vinayak Shankar V. 2030331612005	
60		Siddhesh Dipak Shinde 2030331612013	
61	Robot based library automation	Sunil Namdev Bhangare 2030331612019	
62	Piping and 3D Modelling	Vignesh Bharat C. 1930331612049	
63		Vishwatej Sanjay Ghole 1930331612064	
64		Vipul Mahendra Kasare 1930331612003	
65	Assembly line capacity UP	Pritam Siddharth D. 2030331612006	Mr. Neeraj P. Kulkarni
66	Tensile Flow Behavior of a low alloy steel	Shreyas N. Wankhede 1930331612050	
67	Logistic cycle optimisation	Raj Sunil Korpe 1930331612005	
68	Piping modelling	Viraj Vijay Chogale 1930331612045	
69	Gear cariant poka yoke system and jishuken activity	Sarvesh Chindu Dhamanase 1930331612001	

12.2 List of TPCS Projects (2022 - 2023)

Sr. No	Name of the Project	Name of the Students (PRN)	Advising Faculty
1	Cooling Cap (Solar Type)	Bhaveshe Surendra Chaudhari 2130331612503	Dr. Neeraj Agrawal
		Ganvir Ayush Siddharth 2130331612502	
		Vineet Vijay Kadam 2130331612046	
		Barkume Ashutosh Madan 2130331612006	
2	Energy audit with Sustainable Solution	Chaudhari Siddhi Bhaidas 2130331612512	Dr. M. S. Tandale
		Mangalkar Atharva Avinash 2130331612514	
		Patil Vedang Pradeep 2130331612515	
		Aditya Sachin Chalke 2030331612002	
3	Multi-purpose Seiving Machine	Atharva Chandrakant Bhuse 2130331612510	Dr. M. Sadaiah
		Ashutosh Gorakh Lomte 2130331612007	
		Prithvi Pravin Jadhav 2130331612023	
		Swaraj Krushana Pophalkar 2130331612042	
4	Smart Stick for Blind	Nagarkar Omkar Mangesh 2130331612505	Dr. V. G. Sargade
		Patil Siddhesh Adhik 2130331612506	
		Nadkar Manish Mukund 2130331612501	
		Manoj Kanhaiya Pailkar 2130331612017	
5	Ultrasonic Glasses for Blind	Akshay Annasaheb Borhade 2030331612004	Dr. R. P. Kate
		Nagame Akshata Laxman 2030331612511	
		Swapnil Vinayak Bawankule 2030331612041	
		Vivek Nivratti Mule 2030331612047	
6	Self-Door Closer	Raj Rupesh Mahadik 2030331612024	

		Sirsat Rameshwar Vijay 2030331612025	Dr. G. S. Warkhade
		Ratan Santosh Yadav 2030331612026	
		Bodhale Rohit Satynarayan 2030331612027	
7	Survey on bike brake failure and road accidents	Samrudhi Sanjay Wasekar 2030331612032	Dr. D. B. Waghmare
		Bhadre Shubham Bhimrao 2030331612037	
		Upendra Anantrao Kendre 2030331612044	
		Udawanit Nikita Pralhad 2030331612043	
8	Indicator Light Sensor	Jaykant Tushar Jadhav 2030331612012	Dr. H. N. Warhatkar
		Jejurkar Bhavesh Vikas 2030331612009	
		Sonawane Rahul Bhalchandra 2030331612008	
		Nagesh Devidas Bhene 2030331612019	
9	Study of Chhatrapati Shiwaji Maharaj Weapons	Maaz Ismail Dhanshe 2030331612015	Dr. B. F. Jogi
		Safi Sabir Shahbunder 2030331612028	
		Sahil Suresh Palkar 2030331612030	
		Deshmukh Abrar Ayyub 2030331612504	
10	Optimization of Process Parameters for FFF 3D Printing	Omkar Gopal Palav 1930331612008	Dr. H. S. Joshi
11	Hacksaw Machine	Pranav Dashrath Pinjari 2030331612021	
		Yash Dattu Ivare 2030331612048	
		Suraj Jaykumar Patil 2030331612040	
		Kasadkar Shubham Sanjay 2030331612036	
12	Solar Power-Bank	Shivam Dinesh Bakkam 2030331612034	Dr. S. R. Dhale
		Lokhande Nayan Ramesh 2030331612020	
		Bhore Vitthal Dhaklu 2030331612013	
		Saish Jaydeep Bhopi 2030331612031	
13	Colour Sorting Machine	Yashpal Angad Phad 2030331612049	Mr. Neeraj Kulkarni
		Prathamesh Satish Dharme 2030331612022	
		Suraj Dineshkumar Nair 2030331612039	
		Shantanu Sambhaji Kadam 2030331612033	
14	Automatic Plant Watering System	Sudesh Purushottam Ganvir	Mr. Prashant Agwane
		Nissar Hussain 2030331612052	
		Rahul Mukhtiyar Gargal 2030331612053	
		Vedant Mahesh Sawant 2030331612045	
15	Door Opening Alarm	Yogita Madhukar Sahane 2030331612051	Ms. Shruti Tembhe
		Kanishka Anil Sawarbandhe 2030331612013	
		Bhushan Rajabhau Jadhav 2030331612010	
		Waghmare Shivam C. 2030331612507	

12.3 List of PhD candidates (2022-2023)

Sr. No.	Name of the Candidate	Registration Number	Broad area of Research	Research Guide
1	Shinde Babasaheb D.*	RS20140113	Machinability assessment of low electrical conductivity ceramics by using WEDM	Dr. R. S. Pawade
2	Khadtare Avinash N.*	RS20140108	Experimental investigation and modelling in micro-drilling of TBC Inconel 718 superalloy	Dr. R. S. Pawade
3	Mr. Kuldeep A. Mahajan *	RS 20140111	Effect of vibration in diamond turning of Polymethylmethacrylate	Dr. R. S. Pawade

4	Bhise Vishal Y.*	RS20150101	Sustainable manufacturing: An Eco-intelligent design of product system	Dr. B. F. Jogi
5	Gujar R.A.*	RS20140101	Some investigations in Bio-mechanical properties of Lower Extremity Bones	Dr.H. N. Warhatkar
6	Bhanavase Vishavjit L.	RS20140106	Study of tribological behaviour of polymer composite	Dr. B. F. Jogi
7	NirantarShripad R.	RS20150103	Preparation and Characterization of Polymer based nano composite	Dr. B. F. Jogi
8	Pansare S. R.	RS20140102	Some studies on Effect of Crack in Beam/Shaft	Dr. H. N. Warhatkar
9	Rohit V. Zende	RS20180102	Intelligent Monitoring of Cylindrical parts using Industry 4.0 Approach	Dr. R. S. Pawade
10	Pankaj M. Dhongade	RS20180103	Processing of Polymer-Matrix Composite Material	Dr. V. G. Sargade
11	Sagar Sakharkar	RS20180104	Mechanical Micro-drilling of Titanium CFRP stack material	Dr. R. S. Pawade
12	Prasad J Waste	RS20180105	Some Investigations in Wire EDM	Dr. B. F. Jogi
13	SagarAjanalkar	RS20180106	Robot based ASRS System	Dr. H. S. Joshi
14	Deshmukh Shahaji P.	RS20190103	Manufacturing	Dr. V. G. Sargade
15	Yogiraj Basavraj Dama	RS20190104	3D implant design	Dr. B. F. Jogi
16	Agwane Prashant D.	RS20190108	Evaluation of 3D printing strategies for strength & material optimization	Dr. H. S. Joshi
17	Vishal B. Dixit	RS20220104	Thermal Engineering	Dr. G. S. Warkhade
18	Bhosale Gajanan A.	RS20220101	Manufacturing Engineering	Dr. D. B. Waghmare
19	Chaugule Ajit Arjunrao	RS20220102	Mechanical Engineering	Dr. H. S. Joshi
20	Dongare Nagesh S.	RS20220103	Mechanical Engineering	Dr. Neeraj Agrawal
21	Dixit Vishal Bajarang	RS20220104	Mechanical Engineering	Dr. Neeraj Agrawal
22	Khake Rohit Ashok	RS20220105	Mechanical Engineering	Dr. M. Sadaiah
23	Kamble Avinash H.	RS20220106	Mechanical Engineering	Dr. R. S. Pawade
24	Sangwai Rohit Govind	RS20220107	Mechanical Engineering	Dr. G. S. Warkhade
25	Salunkhe RahulVasant	RS20220108	Mechanical Engineering	Dr. V. G. Sargade
26	Bhoge Dipak D.	RS20220109	Mechanical Engineering	Dr. Neeraj Agrawal
27	Mudholkar Gopal B.	RS20220110	Manufacturing Engineering	Dr. D. B. Waghmare

(All * candidates awarded Ph. D in 2022-2023)

13. INDUSTRY INSTITUTE INTERACTION

13.1 Industry Projects by Students (2022-2023)

Sr. No.	Name of the Students (PRN)	Name of the Project	Name of the Industry	Advising Faculty
1	Manasi Kasare 1930331612048	BARC Mumbai	BARC Mumbai	Dr. N. Agrawal
2	Sweta Brahmkankar 1930331612062	Energy Simulation of a High School Building using eQUEST: A Case Study	Gratitude Energy Pune	
3	Kunal Phadatare 1930331612052			
4	Bhushan Sunil Sakhare 1930331612073	3D analysis of piping system	Procycle Consultancy Services, Thane	
5	Manthan Mohan Patil	Design of the pressure vessal		

	1930331612046	for chemical plant		
6	Raj Guru Surve 1930331612016	3D analysis of piping system		
7	Suraj R. Shivalkar 2030331612018	CAD Industrial Design Projects	Steradix Solutions Pune	Dr. M. S. Tandale
8	Siddhesh S. Mhparle 1930331612030	CAD Industrial Design Projects		
9	Sanil Balu Bhoir 2030331612011	CAD Industrial Design Projects		
10	Aarti C. Sardekar 2030331612016	Automated Inspection System for Industrial Quality Control	DuFlon Ind. Mahad	
11	Suraj Ramdas Sawant 2030331612016	Automated Inspection System for Industrial Quality Control		
12	Waghmare Mayuri R. 1930331612012	Piping Designing and 3-D Modelling	Procycle Consultancy Services, Thane	Dr. V. G. Sargade
13	Rathod Akshay D. 1930331612006	Die Design for Front Door Inner of D22 Model of Hycross Vehicle	Toyota Kirloskar Motors Pvt. Ltd. Bangalore	
14	Omkar Gopal Palav 1930331612008	Optimization of Process Parameters for FFF 3D Printing	M/s Shree Rapid Technologies Mumbai	Dr. H. S. Joshi
15	Gaurav R. Gaikwad 2030331612001	Piping Designing and 3D Modelling	Procycle Consultant, Thane, Thane	
16	Kalpesh Mhatre 1930331612004	Piping Design and 3D Modeling	Procycle Consultancy Services, Thane	Dr. R. S. Pawade
17	Smit Rajendra Patil 1930331612034	Estimation of threshold stress for hydride reorientation in Zr-2.5% Nb alloy	BARC , Trombay, Mumbai	
18	Tushar Davang 1930331612033	Production planning and management for Toyota Kirloskar Auto Part A-400	Toyota Kirloskar Auto Parts Pvt. Ltd., Bidagi, Bangalore	
19	Khonde Kishan M. 2030331612003	Defects in Sand Casting	Riddhi Casting Pvt Ltd	Dr. R. P. Kate
20	Vishal Prakash Matte 1930331612071	Analysis of Rejection of front Fork outer tube	Endurance Technology Pvt Ltd	
21	Dhananjay M Kadam 1930331612072			
22	Harshawardhan V. Yadav 1930331612070			
23	Balkrushna R Yadav 1930331612061	Design of Pressure Vessel	Procycle Consultancy Services	
24	Makardhwaj Bhosale 1930331612040	3D Modelling of Stirred Tank Reactor using CREO Software	M/s. Padmatech Industries Pvt. Ltd, Pune	Dr. M. Sadaiah
25	Mahesh P. Chaudhari 1930331612053	Advanced Engineering Techniques for Industrial Design(3D Solid Modelling)	M/s. Steradix Solution Pvt. Ltd., Pune	
26	Dnyaneshwar B. Chaudhary 1930331612054	Study of Sheet Metal from Raw Material to Finished Control Panels	M/s. Vaibhav Energy Saving Equipments Pvt. Ltd, Nashik	
27	Ajay Trimbak Munde 1930331612066	Assembly and Inspection of Jig and Fixture	M/s. Toyota Kirloskar Motors Pvt. Ltd.,	

			Bengaluru, Karnataka	
28	Pratiksha Adsul 1930331612039	Piping Designing and 3D Modelling	M/s. Procycle Consultancy Services Thane	
29	Adnan Akhlaque Ghole 1930331612018	Design and Manufacturing	SVR InFotech, Pune	Dr. D. B. Waghmare
30	Hujaifa F. Chougale 1930331612009	Study of robotics at SVR InFotech, Pune		
31	Ali Mustufa Deshmukh 1930331612019	Design and Manufacturing at SVR InFotech, Pune		
32	Arman M Ali Undre 1930331612015	Study of PLC and industrial gripper kit at SVR InFotech, Pune		
33	Nabil Akhtaruzzaman Taj 2030331612015	3D Modellind and Automation at SVR InFotech, Pune		
34	Abhishek Padmakar More 1930331612068	Detailed study of Mechanical Equipment in Hydroelectric power plant	The TATA Power Co. Ltd, Bhira Generating Station	Dr. S. R. Dhale
35	Om Pradip Gawande 1930331612041			
36	Suyash S Deshmane 1930331612014	3D Modeling and Automation	SVR Info-tech Pune	
37	Anish Shankar Pimple 1930331612075	Body In White Fixture Design	Comau India Pvt Ltd	
38	Apteja Ajay Padghan 2030331612012	VMC programming	Advantech Engineering Company, Aurangabad	Prashant Agwane/ HSJ (Bhise)
39	Sakshi Sanjay Shinde 1930331612002	Piping Design and 3D Modelling	Procycle Consultancy Services, Thane	
40	Sayali S. Nakashe 1930331612043		Procycle Consultancy Services, Thane	
41	Vinayak Shankar Vanjare 2030331612005	Study of induced draft cooling tower and its performance monitor and improvement	Supreme Industries Limited and R. Raheja Investments Pvt. Ltd.	Shruti Tembhe/ HSJ (Sunil Bhangare)
42	Siddhesh Dipak Shinde 2030331612013	Study of induced draft cooling tower and its performance monitor and improvement	S. I. Group PVT. LTD. Rasal	
43	Vignesh B. Chandorkar 1930331612049	Piping and 3D Modelling	Procycle Consultancy Services, Thane	
44	Vishwatej S. Ghole 1930331612064			
45	Vipul M. Kasare 1930331612003			
46	Pritam S. Dhivare 2030331612006	Assembly line capacity UP	Toyota Kirloskar Auto Parts	Mr. Neeraj P. Kulkarni
47	Shreyas N. Wankhede 1930331612050	Tensile Flow Behavior of a low alloy steel	BARC , Mumbai	
48	Raj Sunil Korpe 1930331612005	Logistic cycle optimisation	Toyota Kirloskar Auto Parts	
49	Viraj Vijay Chogale 1930331612045	Pipng modelling	Procycle Consultancy Services, Thane	
50	Sarvesh C. Dhamanse 1930331612001	Gear cariant poka yoke system and jishuken activity	Toyota Kirloskar Auto Parts	

13.2 Industry Institute Interaction by Faculty

Sr. No.	Name of the Faculty	Name of the Industry and Interaction
1	Dr. Neeraj Agrawal, Dr. M. Sadaiah, Dr. H. N. Warhatkar	Consultancy and Third Party audit to Mahad Nagar Parishad.
2	Dr. Neeraj Agrawal, Mr. Neeraj Kulkarni	Consultancy and Third Party audit to Chabina Festival, Shree Vireshwar Temple Devsthan Trust (Reg. No PTR 252) Mahad Raigad.
3	Dr Neeraj Agrawal	Signed MoU with Bureau of Indian Standards Mumbai to start BIS Club.
4	Dr V G Sargade, Dr M Sadaiah, Dr neeraj Agrawal	Visit to Mahindra Composite, Talegaon Pune for Research Centre recognition.

13.3 Industry/Exhibition visits by Faculty, UG, PG students and Research candidates

Sr. No.	Name of Industry/Exhibition	Place	Visit by
1	Gratitue Energy	Pune	Faculty/TPO
2	h2e Power Systems Pvt. Ltd	Pune	Faculty/TPO
3	Soft Box	Panvel	Faculty/TPO
4	Steradix Solutions Pune	Pune	Faculty

14. WORKSHOPS ATTENDED BY FACULTY MEMBERS, RESEARCH SCHOLARS AND PG STUDENTS

14.1 Workshops attended by Faculty Members

Sr. No.	Title	Date	Participants
1	Online National Workshop on NAAC Accreditation at Engineering Staff College of India, Hyderabad.	3-4 March 2022	Dr. M. Sadaiah
2	UDAAN Tool for book translation by AICTE & DBATU	28-29 Dec, 2022	Dr. Neeraj Agrawal
3	AICTE online training on EVC and SC approval process		Dr. Neeraj Agrawal Dr. H. N. Warhatkar
4	UDAAN Tool for book translation by AICTE & DBATU Lonere	28-29 Dec, 2022	Dr. D. B. Waghmare
5	Training on Polyjet Multijet 3D Printer	2-6 Jan. 2023	
6	3D GoM Scanner Training	20-21 Jan. 2023	

14.2 Expert Lecture by Faculty Members (2022-23)

Sr. No.	Name of the Event	Faculty delivering the Lecture
1	'Mechanical Micro-drilling' Faculty Development Programme on 'Advances in Manufacturing Processes & Systems (AMPS-22)' organized by Dept. of Mechanical Engineering of Government Polytechnic, Nashik, 24 Feb. 2022.	Dr. R. S. Pawade
2	Speech on "Life Struggle of Dr. Ambedkar, Present Situation and Future Perspective" at Dr. Ambedkar College, Mahad on 14th April 2022.	Dr. D. B. Waghmare
3	Expert talk on "Role of New Education Policy in Higher Education" at D. G. Tatkar Arts & Commerce College, Tala, Raigad on 27th April 2022.	Dr. D. B. Waghmare
4	Invited talk on "Indian Constitution" at BARTI, Mahad on 26/11/2022	Dr. D. B. Waghmare
5	Expert talk on "Dr. Babasaheb Ambedkar – Founding Father of Modern India" to celebrate Aazadi ka Amrit Mahotsav at DBATU on 06/06/2022	Dr. D. B. Waghmare
6	Invited talk on "India - The Mother of Democracy" at IoPE, Lonere on 26/11/2022	Dr. D. B. Waghmare

15. ACADEMIC and RESEARCH ACTIVITIES

15.1 Faculty Achievements

Following list shows the statistics of citation index published by the faculty members of the department.

Sr. No.	Name of the Faculty	Total citations	h Index	i10 Index
1	Dr. N. Agrawal	860	15	18
2	Dr. H. N. Warhatkar	57	4	2
3	Dr. R. S. Pawade	313	17	29
4	Dr. B. F. Jogi	336	9	8
5	Dr. M. Sadaiah	415	12	18
6	Dr. M.S. Tandale	309	9	9
7	Dr. D. B. Waghmare	21	2	1
8	Dr. G. S. Warkhade	67	4	3
9	Dr R P Kate	203	5	5

- Two Research projects are approved worth Rs. 3 lakhs each under DBATU-VC-RPG-2023; PI: Dr. Neeraj Agrawal and Dr. G. S. Warkhade.
- Three faculties, Dr. Neeraj Agrawal, Dr. H. S. Joshi and Dr. D. B. Waghmare have been selected for AICTE text book conversion in the local languages.
- Patent (426474) is awarded on A MICROSTRIP ANTENNA-BASED DYNAMOMETER FOR FORCE MEASUREMENT to Dr M. Sadaiah and his team.

15.5 Distinguished Alumni of the Department

Sr. No.	Name	Name of the Company/Institution	Designation
1	Chandrashekhar Singh	Infosys Ltd.	Lead Technology Specialist
2	Vikram Masur	Siemens Indu Software Pvt. Ltd.	Manager
3	Kantilal Puri	Thyssenkrupp Industries, India	Manager
4	Sandeep Gosavi	John Deere Technology Center, India	Manager
5	Nilesh Kargutkar	Infosys Ltd.	Senior Engineering Manager
6	Amey Pore	Tata Technologies	Project Manager
7	Indranil Marathe	Precision Auto & Robotics Ltd.	Lead Member
8	Rajesh Ghadi	Air India	Senior Engineer
9	Jitendra Pathak	Dextra India	Director- Sales & Operations
10	Jitendra Deshmukh	Voltas Ltd.	Procurement Head
11	Nitin Tiwari	Ebmpapst India Pvt. Ltd.	Regional Sales Manager
12	Milind Choudhary	Sterling & Wilson Pvt. Ltd.	Procurement Senior Manager
13	Sachin Pawar	ShapoorjiPallonji	Assistant General Manager
14	Raju More	Reliance Group of Industries	Manager
15	Dr.Shivkumar Iyer	Rowan University, USA	Assistant Professor
16	Sandip Jadhav	CC Tech Pune	Chief Executive Officer
17	Nagesh Belure	Nyantara Enterprises, Pune	Entrepreneur
18	Yogesh Patil	DuFlon Industries Pvt. Ltd.	Head, Research & Development
19	Dr. Vikas Sargade	Dr. BATU	Professor, Former Registrar, Dean

16. DEPARTMENTAL ACTIVITIES BY FACULTY AND STUDENTS

- Mr Omkargopal Palav B Tech Mech 2022 -23 batch is selected for the 5 weeks POSCO TJ park foundation Global ESG Junior Leader Fellowship programme including 2 weeks (July 2 to July 12) at POSCO Center (Seoul) and POSTECH (Pohang) with the students from countries JNU New Delhi, Thailand, China, Vietnam, Kazakhstan, Malaysia, Myanmar, Indonesia and Turkey
- MoU with DGTP and MACTEP Mahad for Six Months Training Programme in Ref & AC for industry workers/operators/ITIs



75@AKAM (month of June) Organized Speech on “Dr. Babasaheb Ambedkar–Founding Father of Modern India” delivered by Dr. Dhanraj B. Waghmare.



75@AKAM (month of March)- Organized Speech on “Unsung Freedom Fighter of India ” delivered by Dr. Dhanraj B. Waghmare.



World Consumer Day
[14 March 2023 - BIS Training Program
15 March 2023 - World Consumer Day (Door-to - door campaign)] Organized by: Department of Mechanical Engineering, Dr. Babasaheb Ambedkar Technological University.



National Science Day Event (Seminar on “BIS Education Outreach Through Standards”)
Date: 28 February 2023 Time: 2pm to 4pm
Organized by: Department of Mechanical Engineering, Dr. Babasaheb Ambedkar Technological University.



On 12 December 2022 Department of Mechanical Engineering arranged expert lecture on “Opportunity and challenge in Energy Management”. The Guest speaker was Mr. Akshay Pahade he is Cofounder and CEO of Greattitude Synergy LLP pune. He is also ECBC Expert and Certified energy auditor.



POSCO Asia Fellowship Awarding Ceremony between Dr. Babasaheb Ambedkar Technological University and POSCO TJ Park Foundation, Tuesday, 27th September, 2022.



Industrial visit to GTPP Uran, 6th Dec 2022

Industrial visit to JSW Dol, 16 Dec 2022

17. FIVE-YEAR DEVELOPMENT PLAN (2019-2024)

Expansion of Academic Activities:

- Academic programs to be added:
 - ✓ M. Tech. in Design Engineering
 - ✓ M. Tech. in CAD/CAM in collaboration with Indo-German Tool Room
- To help in fetching QIP Centre to the university and become part of it.
- Each faculty member will have average three research scholars

Research & Development & Innovation:

- Number of research scholars to be enhanced to 3 research scholars per faculty at any point of time.
- Each faculty member with PhD qualification will have at least one sponsored project funded by external agency such as UGC/DST/AICTE/BRNS at any point of time.
- Each faculty member with PhD qualification will have at least one consultancy project from Industry per year.
- At least five commercial products/processes/ technologies to be developed by 2024.

Extension & Outreach Activities

- At least two CEPs/Workshops for industries/academia will be organized every year.
- At least one National/International conference to be organized every alternate year.
- At least 5 skill development program will be organized for the unemployed youth in the vicinity

Faculty & Staff Development

- Faculty will undergo on an average one week of training per year in the industry.
- Supporting staff will also undergo on an average one week of training as per training needs.

Networking

- At any point of time, at least five network projects in collaboration with organizations like ICT, IIT, RRCAT, BARC and NCL will be going on.

Co-curricular/Professional Chapter Activities

- SAE BAHA/ISHRAE chapters will be conducting activities with full swing. In addition, an ASM Students' Chapter is to be established.
- Robo-Study Circle will be established for the students.

18. DEPARTMENTAL STRENGTHS, WEAKNESSES, OPPORTUNITIES AND CHALLENGES

Major Strengths of the Department:

- Qualified and Experienced Faculty
- Advanced Research Facility
- Research culture through PGs and PhD programme

- No faculty attrition.
- Industry surrounding

Weaknesses of the Department:

- Soft computing facility
- Availability of latest software
- Decline admission at UG and PG
- Sufficient manpower
- In line with technology upgradation
- Student placement
- No grant for M. Tech. Program

Opportunities:

- Collaboration with surrounding industries
- Availability of Research Fund
- State Technical University
- Training and research collaboration with affiliated institutes
- Industrial consultancy

Challenges:

- UG/PG admissions
- Student placement
- keeping phase with Technology upgradation