



Shri Vile Parle Kelavani Mandal's
Dwarkadas J. Sanghvi College of Engineering
(Autonomous College Affiliated to the University of Mumbai)

Department of Mechanical Engineering

(Accredited by NBA)

ACADEMIC REPORT AY 2023-24



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DEPARTMENT OF MECHANICAL ENGINEERING

VISION

To create academic excellence by developing competent mechanical engineers, capable of facing global challenges, with human values and skills for research and sustainable development.

MISSION

1. To impart fundamental concepts of basic sciences and allied areas of engineering and technology.
2. To enable students, to develop into competent engineering professionals.
3. To promote research activities.
4. To promote interaction and involvement with professional bodies and industries
5. To inculcate soft skills and professional ethics and mold students as socially responsible citizens.
6. To promote exposure to green technology for sustainable growth and development.

PROGRAM EDUCATIONAL OBJECTIVES

1. To prepare students with a sound engineering knowledge and a multi-disciplinary approach.
2. To enable students, to innovate, design and develop engineering systems using modern engineering practices and tools.
3. To motivate students, to interact with industry and professional bodies and participate in various professional activities.
4. To develop logical approach, analytical thinking and problem solving capabilities in students & facilitate them to undertake research/project work.
5. To impart training in soft skills and value education.

PROGRAM SPECIFIC OUTCOMES

1. Students will acquire analytical and application skills, specifically in areas of mechanical design, thermal engineering and manufacturing systems.
2. Students will be able to explore various methodologies & software and select appropriate process to bring about improvements.
3. Students will acquire soft skills, value education and competency in pursuing higher studies and finally lead a professional career while working in a global environment.
4. Students will be exposed to green technology and develop inter-disciplinary skills in mechanical systems.

ABOUT THE DEPARTMENT

- Department of Mechanical Engineering instituted in the year 2011 with undergraduate (BE) and post graduate (ME) programs permanently affiliated to the University of Mumbai.
- The department is accredited by National Board of Accreditation (NBA) for a period of three years with effect from the Academic Year 2018-19.
- The department has Ph.D. (Technology) program since 2013, which is affiliated to the University of Mumbai.
- Intake- BE : 180, ME : 18, Ph.D. : 20
- The department runs four professional student chapters viz. SAE, ISME, ISHRAE and RAS which help to enhance the skills of the student and also to add value in the process of acquiring knowledge.

ADMINISTRATION

Dr. Hari Vasudevan
Professor & Principal

Dr. K.N. Vijaya Kumar
Professor & Head

TEACHING STAFF

Dr. Atul Dhale
Professor

Dr. Rajendra Kavekar
Associate Professor

Dr. Vinayak Khatwate
Associate Professor

Dr. Rajkumar Patil
Associate Professor

Dr. Meeta Gandhi
Assistant Professor

Dr. Sanjeev Thool
Assistant Professor

Dr. Sandip Mane
Assistant Professor

Dr. Ramesh R Rajguru
Assistant Professor

Dr. Shashikant Auti
Assistant Professor

Dr. Amit Chaudhari
Assistant Professor

Dr. Naresh Deshpande
Assistant Professor

Dr. Bronin Cyriac
Assistant Professor

Prof. Sandeep Vaity
Assistant Professor

Prof. Avadhut Samant
Assistant Professor

Prof. Prasad Shirodkar
Assistant Professor

Prof. Mehul Prajapati
Assistant Professor

Prof. (Mrs.) Trupti Markose
Assistant Professor

Prof. Rajnarayan Yadav
Assistant Professor

Prof. Vyankatesh Bagal
Assistant Professor

Prof. Dhaval Birajdar
Assistant Professor

Prof. Dharam Ranka
Assistant Professor

Prof. Vinit Katira
Assistant Professor

Prof. Rohitkumar Chaurasia
Assistant Professor

Prof. Sanket Parab
Assistant Professor

Prof. Dhananjay Shukla
Assistant Professor

Prof. Prashant Patankar
Assistant Professor

Prof. Kartik Ajugia
Assistant Professor

Prof. Pavan Rayar
Assistant Professor

Prof. Greegory Mathew
Assistant Professor

Prof. Ravikant Hattale
Assistant Professor

Prof. Ranjit Patil
Assistant Professor

NON-TEACHING STAFF

Mr. S. M. Shimpi Instructor	Mr. P. D. Sawant Instructor	Mr. G. M. Wadke Instructor
Mr. V. V. Chavan Instructor	Mr. M. S. Devrukhkar Instructor	Mr. D. D. Telawane Instructor
Mr. Sunil Gurav Instructor	Mr. S. S. Vanne Lab. Assistant	Mrs. Vaishali Joshi Lab. Assistant
Mr. Gaurav Sapte Lab. Assistant	Mr. Suresh Mohite Lab. Attendant	

COMMITTEES

SAE

Dr. K.N. Vijaya Kumar
Prof. Rajnarayan Yadav
Prof. Vinit Katira
Prof. Rohit Chaurasia
Dr. Shashikant Auti
Prof. Ravikant Hattale

ISME

Prof. Sanket Parab

ISHRAE

Prof. Dhaval Birajdar
Prof. Vyankatesh Bagal

RAS

Prof. Pavan Rayar

TIME-TABLE COMMITTEE

Prof. Rohit Chaurasia
Prof. Vyankatesh bagal

PLACEMENT COORDINATOR

Prof. Rohit Chaurasia

EXAM COORDINATOR

Prof. Karthik Ajugia
Prof. Dhaval Birajdar

U. G. COORDINATOR

Dr. Bronin Cyriac

P. G. COORDINATOR

Prof. Greegory Mathew

Ph.D. COORDINATOR

Dr. Vinayak Khatwate

Prof. Greegory Mathew
Dr. Bronin Cyriac
Prof. Dharam V. Ranka
Dr. Ramesh Rajguru
Prof. Prashant Patankar

PROJECT COORDINATOR

Prof. Vinit Katira
Dr. Ramesh Rajguru

NBA COORDINATOR

Prof. Prashant Patankar- PC
Dr. Ramesh Rajguru

NAAC COORDINATOR

Prof. Prashant Patankar
Prof. (Mrs.) Trupti Markose

HONOURS/MINORS COORDINATOR

Dr. Sanjeev Thool

CURRICULUM COORDINATOR

Dr. Atul Dhale

I.P.D. COORDINATOR

Dr. Meeta Gandhi., Prof. Mehul Prajapati
Prof. (Mrs.) Trupti Markose

INTERNSHIP COORDINATOR

Prof. Ranjit Patil, Prof. Vyankatesh bagal

F.E. COORDINATOR

Dr. Vinayak Khatwate , Prof. Prasad Shirodkar

CULTURAL COMMITTEE

Prof. Ravikant Hattale

SPORTS/CULTURAL COMMITTEE

Dr. Ramesh Rajguru

ALUMNI COORDINATOR:

Dr. Shashikant Auti, Prof. Dharam R.

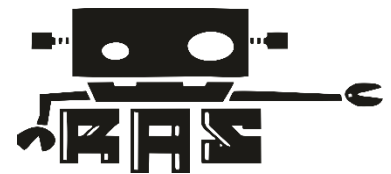
WORKSHOPS/ CONFERENCE ORGANIZED BY THE DEPARTMENT

Sr. No.	Date	Name of Activity/event	Details in 2-3 lines
1	18 th March 2023 to 2 nd April 2023	VAP course on MATLAB Mechanical applications.	Dr.Suhas Deshmukh, 20 students participated.

STUDENT CHAPTERS

Department of Mechanical Engineering organizes various co-curricular activities in-line with its vision of creating competent Mechanical Engineers capable of facing global challenges. The Department motivates students to participate in various national and international competitions and exhibit proficiency. By creating a competitive ambience exclusively suited for their development, the department inspires students to push their limits. This year too, students brought accolades to the department by winning awards in competitions of International and National repute. Under the guidance of the Head of Department Dr. K N Vijaya Kumar and faculty members, the future engineers of DJSCE are set to make a difference to the society.

The various student chapters of SAE, ISME, ISHRAE and RAS regularly organizes Seminars, Workshops and Guest Lectures to motivate students to go beyond the university curriculum and to create awareness about the trending developments in the Mechanical field. Following is a brief description of activities conducted by various Student Chapters.



ACHIEVEMENTS



FORMULA BHARAT 2024

- 8th Overall Rank
- 5th Business Plan
- 5th Cost Event
- 11th Design Event





E-BAJA SAE INDIA 2024

- 2nd Sales Report

A-BAJA SAE INDIA 2024

- 2nd Overall





GO-KART DESIGN CHALLENGE 2024

AIR 5 OVERALL, 4TH IN DESIGN, 4TH IN AUTOCROSS AND SKIDPAD.



IDRL S7E6 2023 IIT GANDHINAGAR, 2023

- 6th position nationally

IDRL S7E8 SVPCET, NAGPUR 2nd position nationally

AEROTHON 2024, BANGALORE

- AIR 2 Design Report Presentation





SAE AERO DESIGN WEST 2024, TEXAS

MICRO CLASS

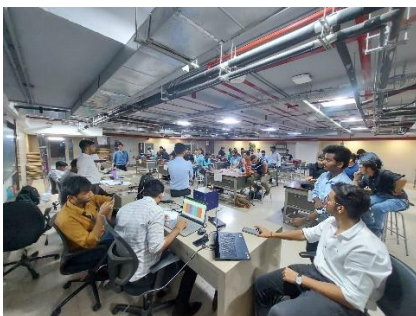
- Design Report - 1st Worldwide
- Technical Presentation – 3rd Worldwide
- Overall - 6th Worldwide

REGULAR CLASS

- Design Report – 2 nd Worldwide
- Overall – 5th Worldwide



- The Indian Society of Manufacturing Engineers (ISME) hosted an event DJ NIRMITI 2023 for students of all branches.



PERFORMANCE IN END SEMESTER EXAMINATIONS

S.E. SEM IV

RESULT ANALYSIS OF MAY 2024 EXAMINATIONS

No. of Students Appeared	191
No. of Students Passed	135
Percentage Result	70.68%
CGPA	No. of Students
O (9-10)	2
A (8-9)	23
B (7-8)	35
C (6-7)	38
D (5-6)	38
E (4-5)	3
Failed	56

T.E. SEM VI

RESULT ANALYSIS OF MAY 2024 EXAMINATIONS

No. of Students Appeared	110
No. of Students Passed	95
Percentage Result	86.36%
CGPA	No. of Students
O (9-10)	1
A (8-9)	24
B (7-8)	35
C (6-7)	26
D (5-6)	11
E (4-5)	0
Failed	15

B.E. SEM VIII

RESULT ANALYSIS OF MAY 2024 EXAMINATIONS

No. of Students Appeared	128
No. of Students Passed	127
Percentage Result	100%
CGPA	No. of Students
O (9-10)	12
A (8-9)	69
B (7-8)	40
C (6-7)	4
D (5-6)	0
E (4-5)	0
Failed	01

PLACEMENTS



Shri Vile Parle Kelvani Mandal's
**Dwarkadas J. Sanghvi College of
 Engineering**

(Autonomous College Affiliated to the University of Mumbai) NAAC
 Accredited with "A" Grade (CGPA: 3.18)

Department of Mechanical Engineering



Placement 2023-2024 update

Sr. No	Company Name	CTC (LPA)	No. of Students Placed
1	Edelweiss	18	1
2	Ijewel	9	1
3	Fleet Management	8.85	2
4	Tresvista	8	1
5	Mahanagar Gas	7.8	6
6	Godrej & Boyce	7.5	9
7	Burns & McDonell	7	1
8	L&T	6.8	6
9	Frootle India	6.5	3
10	Technimont	6.5	6
11	Ritika Woods	5.78	1
12	Gandhi Automation	5.5	2
13	Forceia	5.5	1
14	Kansai Nerolac	5.5	4
15	H&K Rolling	5.5	1
16	Kent	5.5	1
17	Zeeco	5.5	5
18	Saffron Stays	5	1
19	Swegon Blue Box	5	3
20	Lixil window	5	1
21	Concast	5	1
22	Joyti Strutures	5	2
23	Voltas	4	3
24	WPS	4	2
Total Number of Offers Including Multiple offers			64

95% of interested students of batch 2024 are placed in various prestigious companies through our campus placements till date.
 Rest of the students are pursuing higher studies.

...and counting

RESEARCH WORK OF THE FACULTY MEMBERS

PATENTS FILED

Application No.	Title	Application Status
318130-001	ADJUSTABLE PROSTHETIC ADAPTER	Design has been registered in the Register of Designs by the Indian Patent Office on 14th July 2023
L-142129/2024	DESIGN AND DEVELOPMENT OF MACHINE VICE FOR HOLDING IRREGULAR SHAPED OBJECTS	Registered copyright, 2024.

PUBLICATIONS

Name of the Author(s)	Title of the paper	Name of the Journal / Conference	Year of publication	DOI of the Publications
Dr Hari Vasudevan and Dr Ramesh Rajguru	Investigation of surface roughness parameters under dry end milling of Inconel 625 with coated tool	9th International & 30th All India Manufacturing Technology, Design and Research Conference (AIMTDR2023)	Dec. 2023	Organized by Department of Mechanical Engineering, IIT, BHU, Varanasi (8th to 10th December 2023)
Dr Hari Vasudevan and Dr Ramesh Rajguru	Predictive modelling of surface roughness parameters and MRR during turning of Inconel 625 with coated inserts using artificial neural network	9th International & 30th All India Manufacturing Technology, Design and Research Conference (AIMTDR2023)	Dec. 2023	Organized by Department of Mechanical Engineering, IIT, BHU, Varanasi (8th to 10th December 2023)
Dr. Vinayak H. Khatawate	A Conceptual Framework for Drivers Aiding the	International Congress on Advances in	July 2023	Organized by Department of Mechanical

	Integration of Additive Manufacturing with Industry 4.0 Practices	Mechanical Sciences (ICAMS-2023)		Engineering, Vardhaman College of Engineering, Hyderabad during 27th & 28th July 2023.
Dr. Sanjeev Thool	Fabrication, experimentation and numerical simulation of micro channel heat sink for enhancing thermal performance of electronic devices	International journal on interactive design and manufacturing	2023	Indexed by Scopus
Dr. Rajkumar Patil	Slope Stability Analysis of Xanthan Gum Biopolymer Treated Laterite Soil Using Plaxis Limit Equilibrium Method (PLAXIS LE)	KSCE Journal of Civil Engineering	2024	Indexed by Scopus
Dr. Rajkumar Patil	Failure Modes and Effects Analysis of Polycrystalline Photovoltaic Modules Exposed to the Composite Climate of India	Journal of The Institution of Engineers (India): Series C	2024	Indexed by Scopus
Dr. Bronin Cyriac	Numerical Studies on the Effect of Different Obstruction Geometries on Performance of Rectangular Channel Air Heaters	Journal of Heat and Mass Transfer Research	2024	Indexed by Scopus

FACULTY TRAINING PROGRAMMES ORGANIZED BY THE DEPARTMENT

Sr. No.	STTP	Title of the STTP	Date	Resource Persons
1	ISTE approved one week Short Term Training Programme	Research Funding, Publications, and IPR: A Journey from Fundamentals to Advanced Methodologies	10th June 2024 - 14th June 2024	Dr. Suhas Deshmukh, Dr. Akash Awale, Dr. Kiran Bhole, Dr. Sudeep Thepade, Dr. Nilesh Ware.

INDUSTRIAL VISIT ORGANIZED BY THE DEPARTMENT

Sr. No.	Date	Name of Company	No of students visited
1			
2	18 th -20 th March, 2024	Sai Metals, Evergreen Industries and Siyesha Industries Vasai East)	90

INTERACTION WITH OUTSIDE WORLD

Name of the faculty	Nature of Interaction	Date	Organized by
Dr. Dr. K.N. Vijaya Kumar	Advisory BOS member	1 st April 2023	Thakur College of Engineering & Technology (TCET), Mumbai.
Dr. Dr. K.N. Vijaya Kumar	Attended the 5th Board of Studies meeting as Subject Experts in Mechanical Engineering	2 nd February 2023	R C Patel Institute of Technology, Shirpur.
Dr. Atul Dhale	Expert Member of screening – cum evaluation / selection committee for Promotion of incumbent University Teachers under Career Advancement scheme (CAS) for subject General engineering (Mechanical Engineering)	-	Laxminarayan Institute of technology (L.I.T.) of Rashtrasant Tukdoji Maharaj, Nagpur University, Nagpur.
Dr. Atul Dhale	Referee for evaluating Ph.D. thesis	-	Rashtrasant Tukdoji Maharaj, Nagpur University, Nagpur.
Dr. Atul Dhale	Reviewer	-	Journal of The Institution of Engineers (India): Series C (IEIC) and Eng (ISSN 2673-4117) is an international, peer-

			reviewed open access journal.
Dr. Vinayak Khatawate	To assess Poster presentations on innovative ideas	03/02/23	Organized by IIC's Rajiv Gandhi Institute of Technology Mumbai.
Dr. Ramesh Rajguru	Reviewer	July 2023	IEEE Transactions on Automation Science and Engineering