



Shri Vile Parle Kelavani Mandal's Institute of Technology, Dhule
(Approved by AICTE, Recognized by DTE and Affiliated to DBATU, Lonere)

Department of Mechanical Engineering

Mind-Spark



June 2021



CHAIRMAN'S MESSAGE

Hon. Shri. Amrishbhai R. Patel

I am happy to see the first edition of newsletter "**Mind Spark**" June 2021 edition under Mechanical Engineering department of SVKM's Institute of Technology, Dhule.

The newsletter/magazine is a communication medium for all students, staff, parents and friends to know the recent activities and developments that are taking place at the departmental level.

I congratulate the HOD, staff, students and the editorial team for coming up with this new issue of newsletter/magazine for the department.

At SVKM's Institute of Technology, we remain committed to give very best to the students under our assistance. I want to extend my heartfelt gratitude to all the parents, students, stakeholders who have put their trust in us and been a part of this wonderful journey of SVKM's Dhule Campus.

Let's come together to work with vision of Trust "Pursuing Excellence in Education"



PRINCIPAL'S MESSAGE

Dr. Nilesh Salunke

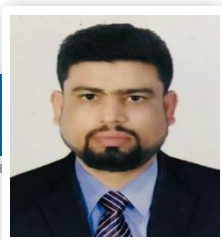
I am very pleased to see the second edition of newsletter of Mechanical Engineering department "**Mind Spark**" June 2021 edition.

The newsletter contains all the information related to student activities, achievements, faculty achievements, workshops and other activities conducted at the departmental level.

Indeed it is a canvass that has taken its forum through the contribution of all the concerned in the department.

I would like to congratulate the Head of Department as well as staff and students.

I wish many more activities, academic pursuits, and achievements coming across our path as we journey together to conquer the milestone with SVKM's Institute of Technology, Dhule.



HOD 's MESSAGE

Mr. Mohammed Juneduddin

I am very blissful to inform that Department of Mechanical Engineering, has taken a leading role constructively in various development activities. The newsletter report highlights many evidences in the areas, such as, industrial visits, internship, training of students and faculties. A major area of focus during this Academic Year 2020-21 has been enhancement of industry institute interaction.

The department continually strives to nurture the new relations with follow-up activities to strengthen the bond between academia and industry. Students got opportunities to learn in this new fashion and innovate through industry supported projects, internships, and guest lectures of eminent persons. As in previous years, students passionately participated in national level technology competitions like SAE eBAJA, Aeromodelling etc. Department conducted some student centric training's like Hypermesh and ANSYS etc. Research papers have been published in the renounced national and international conferences by the department in this year which shows a healthy trend and positive look. This year I proud to express that our faculties are showing interest in pursuing their research works and few are having interest to join in PhD program which is a good sign.

INSTITUTE VISION

“To be a socially sensitive engineering institute of excellence adding value to the nation.”

INSTITUTE MISSION

- ❖ M1. To provide resources of excellence with a focus on nurturing and developing the society.
- ❖ M2. To strive to be an institute of global recognition.

DEPARTMENT VISION

“Pursuing excellence in Mechanical Engineering Education.”

DEPARTMENT MISSION

- ❖ M1. To develop conceptual and analytical skills.
- ❖ M2. To collaborate with academia, industries and professional bodies to facilitate continuous improvement in teaching, learning and research.
- ❖ M3. To inculcate team work, professional ethics and entrepreneurial spirit.

PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

- ❖ 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 best post-graduate engineering institutes, acquiring advanced degrees in engineering and related disciplines.
- ❖ PEO3. Alumni should establish a successful career in an engineering-related field and adapt to changing technologies.
- ❖ PEO4. Graduates are expected to continue personal development through professional study and self-learning.
- ❖ PEO5. Graduates should be good citizens and cultured human beings, with full appreciation of the importance of professional, ethical and societal responsibilities.

PROGRAM SPECIFIC OUTCOMES (PSO's)

- ❖ PSO1. Design and select Mechanical Engineering components, appropriate manufacturing processes, process automation and quality assurance systems using technical and financial analysis tools.
- ❖ PSO2. To identify, formulate and solve problems related to conventional & non-conventional energy systems as well as support sustainability in the surrounding region.
- ❖ PSO3. Systematically communicate the methodology and conclusion of Mechanical engineering problem solution with colleagues and superiors through effective documentation as well as oral presentation.

PROGRAM OUTCOMES (POs)

- ❖ 1.Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- ❖ 2.Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- ❖ 3. Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- ❖ 4. Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions for complex problems.
- ❖ 5.Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- ❖ 6.The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- ❖ 7.Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- ❖ 8.Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ❖ 9.Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ❖ 10.Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- ❖ 11.Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- ❖ 12.Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

FACULTY MEMBERS



Dr. Nilesh Salunke
Principal and Professor



Prof. Mohammad Juneduddin
Coordinator and Assistant Professor



Prof. Dhiraj Bhandarkar
Assistant Professor



Prof. Yogesh Sonawane
Assistant Professor



Prof. Satish Patil
Assistant Professor



Prof. Dattatray Doifode
Assistant Professor



Prof. Mahesh Dalwani
Assistant Professor



Prof. Bhushan Behede
Assistant Professor



Prof. Prakash Katdare
Assistant Professor

TECHNICAL ASSISTANTS



Mr. Mahendra Patil
Technical Assistant



Mr. Ganesh Patel
Technical Assistant

WORKSHOP INSTRUCTORS



Mr. Narendra Patil
Welding Shop



Mr. Mahendra Lohar
Machine Shop



Mr. Ravindra Badgajar
Plumbing Shop



Mr. Mahesh Gaikwad
Carpentry Shop



Mr. Yogesh Chaudhari
Fitting Shop

FACULTY CONTRIBUTIONS

Faculty publication in Journals/Conferences/Book chapters :

Sr. No.	Name of Faculty	Title of Paper	Journal Title	Journal ISSN No.
1	Dr. Nilesh Salunke	A Comprehensive Review on Performance Improvement of Diesel and Biodiesel fueled CI Engines using Additives	International Journal of Performability Engineering	0973-1318
2	Mr. Bhushan C. Behede	Cycles for air conditioning systems operated using Rotary Desiccant wheels	International Journal of Multidisciplinary educational Research	2277-7881
3	Mr. Mohammad Juneduddin	Design and Analysis of Solar Water Purification System	International Research Journal of Engineering and Technology (IRJET)	2395-0056
4	Mr. Satish Patil	A review: Studies on different performance improvement methods for Battery thermal management systems for Li-ion battery	International Journal of Creative Research Thoughts (IJCRT)	2320-2882
5	Mr. Dhiraj K. Bhandarkar	Analysis of Vehicle Chassis Frame made of different Composite Materials	International Journal of Creative Research Thoughts (IJCRT)	2320-2882
6	Mr. Dhiraj K. Bhandarkar	The Rocker Bogie Mechanism: Design and Fabrication	International Journal of Innovations in Engineering and Science (IJIES)	2456-3463

**Mr. Dhiraj K. Bhandarkar
has successfully
completed 08 Modules of
NITTTR**



FACULTY CONTRIBUTIONS

Faculty Development Programme / STTP Attended :

Sr. No.	Name of Faculty	FDP/STTP/ Training program attended	Resource Person/ Agency /Company	Venue	Date
1	Mr. Mohd. Juneduddin	Comprehensive future in Artificial Intelligence	CUMMINS College of Engineering for Women, Nagpur	Online	22nd to 27th June 2021
2	Mr. Mohd. Juneduddin	Role of Machine Learning and Artificial Intelligence in Data Analytics-TEQIP-III FDP	DBATU, Lonere & BAJAJ INSTITUTE OF TECHNOLOGY, WARDHA	Online	24th to 26th March 2021
3	Mr. Mohd. Juneduddin	AICTE Training And Learning (ATAL) Academy Online FDP on "Data Sciences"	AICTE & Institute of Aeronautical Engineering	Online	15 to 19 Feb 2021
4	Mr. Yogesh Sonawane	Design thinking	AICTE & ATAL & Bharati Vidyapeeth College of Engineering	Online	21st June to 25th June 2021
5	Mr. Dhiraj Bhandarkar	Electric Vehicles	AICTE (ATAL) & VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE MUMBAI	Online	1st Feb to 5th Feb 2021
6	Mr. Dhiraj Bhandarkar	FRP COMPOSITES	AICTE (ATAL) & L D COLLEGE OF ENGINEERING	Online	18th Jan. to 22nd Jan. 2021
7	Mr. Bhushan C. Behede	CFD	AICTE & ATAL & L B S College of Engineering, Kasaragod	Online	4th Jan to 8th Jan 2021
8	Mr. Yogesh Sonawane	Design and manufacturing	AICTE & ATAL & Pillai College of Engineering	Online	15th Feb to 19th Feb 2021



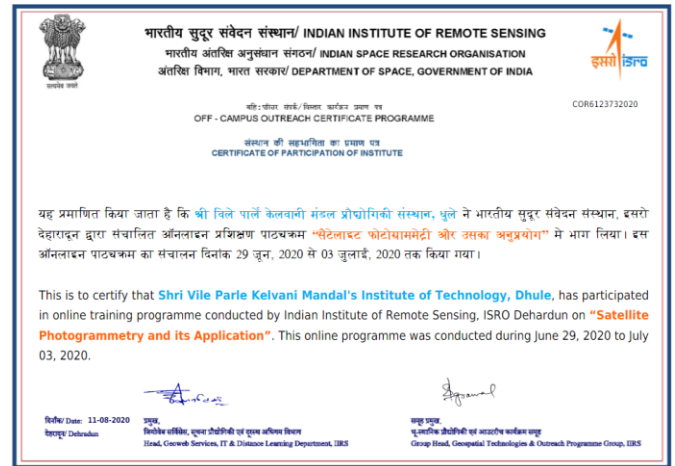
**SPOC Appreciation letter
from NPTEL**

Online Training Program and Webinars

One week (**11th January 2021**) Online Training Programme has been conducted on **“Space Technology and its Applications”**

The total number of students has participated: **02**

Coordinator: Mr. Mahesh Dalwani



One week (**26th April-30th April-2021**) Online Workshop on **“ANSYS 2020 R1 (Mechanical & CFD)”**

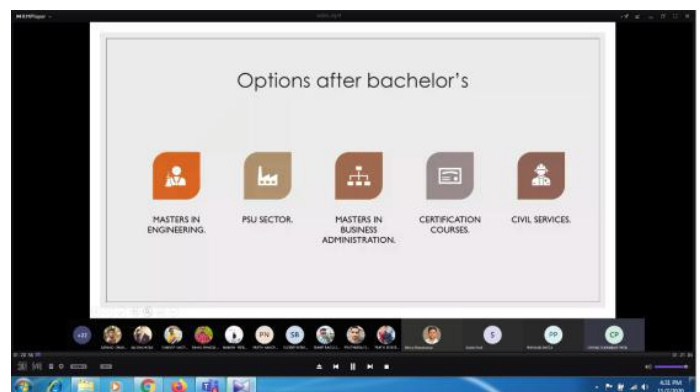
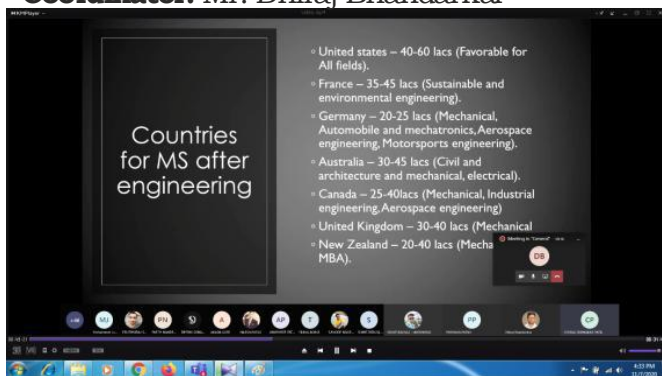
The total number of students has participated: **64**

Coordinator: Mr. Mohammad Juneduddin

Online Webinar on **“Career Opportunities in Supply Chain Management and Logistics”** dated on 22nd March 2021

The total number of students has participated: **123**

Coordinator: Mr. Dhiraj Bhandarkar



STUDENT ACHIEVEMENTS

GATE-2023 Qualification

Mechanical Engineering Department Achievement - **Batch 2021**

Congratulations!
for Qualifying GATE-2023 Examination



Mr. Ratndip Patil
(Mechanical B. Tech 2021)

All India rank: **9245**

~ Examination Paper ~

Mechanical Engineering (ME)

Hon. Management, Principal, HOD &
All Staff Members.

NPTEL Certification by Student



Elite

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

SHAIKH DANISH SHAIKH SHAFEEQUE

for successfully completing the course

Manufacturing Process Technology - I & II

with a consolidated score of **65** %

Online Assignments	24.69/25	Proctored Exam	40.5/75
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Total number of candidates certified in this course: **571**

Prof. Rajesh M. Hegde
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Apr 2021
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur



Indian Institute of Technology Kanpur



Roll No: NPTEL21ME30S24330015

To validate and check scores: <https://nptel.ac.in/noc>

MESA Members



Prof. Yogesh Sonawane
Faculty Coordinator

Sr. No.	Name of Students	Designation	Year
1.	Mr. Prasad Jambhale	President	Final Year
2.	Mr. Sarang Chaudhari	Joint President	Final Year
3.	Mr. Nayan Suryawanshi	Vice-President	Third Year
4.	Mr. Saurabh Pukale	Joint Vice-President	Third Year
5.	Mr. Tejraj Borse	Secretary	Final Year
6.	Mr. Nikhil Chaudhari	Treasurer	Third Year

Editorial Members



Prof. Dhiraj Bhandarkar
Faculty Coordinator

Sr. No.	Name of Students	Year
1.	Mr. Abhishek Jain	Third Year
2.	Mr. Yogesh Mali	Second Year