MECHANICAL ENGINEERING NEWS- LETTER 2020-21

Dr. R.N.JEERAGAL
HOD
MECHANICAL ENGINEERING DEPARTMENT

The department of Mechanical Engineering is a part of B.L.D.E.A's V.P. Dr. P.G. Halakatti College of Engg. & Tech., vijayapur since its inception and was established in 1980 with intake strength of 40. The present AICTE approved intake is 150. Mechanical Engineering Program is NBA accredited. The Department has strength of 38 multifaceted faculties and is homogeneous blend of experienced and junior faculty members. The average experience of teaching faculty is about 13 years. The department has enough infra-structure required to cater the needs of mechanical degree aspirants.

Programs Offered

B.E. in Mechanical Engineering Approved intake:60

M.Tech in Machine Design Approved intake: 12

Ph.D.

Best Practices of Department Following activities are conducted as part of best practices in the department.

1. We prepare students ready for industry through TATA Technologies Ready Engineer Program.
2. Students Training in Industrial Automation through BOSCH REXROTH Centre of Excellence
3. Social Awareness Program in nearby villages

CONTENTS

VISION AND MISSION OF THE INSTITUTE

VISION

To Emerge as a Widely Acknowledged Centre in Technical Education and Research to cater the need of Society with a Futuristic outlook.

MISSION

- To Enrich Students with the essence of Science and Engineering knowledge, Professional ethics and social values.

- To instil creativity and Research Temperament to Reach the Greater Heights of Professional Success.

VISION AND MISSION OF THE DEPARTMENT

VISION

To be recognized as a department of excellence by providing high quality mechanical engineering education also contribute in research relevant to industrial society

MISSION

- Imparting quality education to the students and enhancing their skills to make them competitive in industry
- Establish center of excellence and collaborate with R&D organizations to foster research activities.
- Collaborate with industries to provide solutions to the identified problems.
- Promote entrepreneurship

EDITOR BOARD

Dr. R.N.JEERAGAL
HOD MECH DEPT

Prof. R. S. KATTIMANI
ASSISTANT PROFESSOR

Prof. V. C. Nirale
ASSISTANT PROFESSOR

WEBINARS CONDUCTED

1. Topic of the Webinar: ***Emerging areas of Mechanical Engineering and Career guidance and Scope in Mechanical Engineering On 10.05.2021 at 10:00–12:30 pm***			
Resource Person	1. Mr. Santosh Bhoosthali, Technology Specialist , Garrett India Ltd, Bangalore. 2. Mr. Vinod Muchchandi, Design Engineer, Mercedes Benz, Bangalore	Coordinators	1)Dr. Iresh Bhavi , Associate Professor, Mech. Dept. 2)Prof. Vijaykumar V Nagathan- Assistant Professor, Mech. Dept 3)Prof. Santosh S Chappar - Assistant Professor, Mech. Dept
Highlights	➢Insight to Mechanical industry - its vertical & domains. ➢Job Prospects in Mechanical Engineering. ➢Career Guidance and Scope in Mechanical Engineering Future technologies and trends. ➢FAQ & Q&A.	Outcome	➢Learning the latest trends of the industry. ➢Exposure to the students & faculty. ➢Career opportunities and Scope for Mechanical Engineers ➢Cost effective learning with industry experts. ➢Open forum for questions & answers
2. Topic of the Webinar : ***Engine Combustion - Future Trends*** *on 29.05.2021 4.00PM to 5.00PM*			
Resource Person	**Mr. Mukund Kandi** Sr Manager in the Power train development team UD trucks India Pvt ltd, Bengaluru	Coordinators	1.Dr. S.S Kulkarni -Assistant Professor, Mechanical Dept 2) Prof. Sunilakumar Biradar – Asst. Professor, Mech.l Dept 3) Prof. V.S Konnur - Assistant Professor, Mechanical Dept
Highlights	➢ Introduction to the internal combustion engine ➢ Classification of IC engine and their working principles ➢ Thermodynamic cycles ➢ Introduction to engine performance ➢ Fuel Economy ➢ Factors that affect the engine performance and calibration ➢ Emissions	Outcome	➢ Learning the latest trends of the Automobile industry. ➢ Exposure to the students & faculty. ➢ B.S -VI and emission standards. ➢ Engine performance and calibration ➢ Learning together with industry experts. ➢ Open forum for questions & answers.

WEBINARS CONDUCTED

<table>
<tr><td colspan="4">3. Topic of the Webinar: Effective Problem solving Techniques using 8D and SPC methods on 05.06.2021 - 2pm to 3pm</td></tr>
<tr><td>Resource Person</td><td>Mr. Veerasekhara K. M.
Head – Quality functions Weir Minerals India, Bangalore</td><td>Coordinators</td><td>1. Prof. Aravindkumar Kotagond – Asst. Prof., Mech. Dept.
2. Prof. Dr C R Hiremath - Assistant Professor, Mechanical Dept.
3. Prof. S V Hiremath - Assistant Professor, Mechanical Dept.</td></tr>
<tr><td>Highlights</td><td>➢ Insight to Mechanical industry - its quality control department.
➢ Different problem solving processes in industry.
➢ 8D (Discipline) and 7 QC (quality control) tools.
➢ Future technologies and trends.
➢ FAQ and Q&A</td><td>Outcome</td><td>➢ Learning the latest trends of the industry in quality control.
➢ Exposure to the students & faculty.
➢ Cost effective learning
➢ Learning together with industry experts.
➢ Open forum for questions & answers.</td></tr>
<tr><td colspan="4">4. Topic of the Webinar : Pre requisites to be a Design Engineer On 08.06. 2021 - 4pm to 6pm</td></tr>
<tr><td>Resource Person</td><td>Mr. Ashwin Royston Lobo
Assistant Manager –
Skill Development
CAD MAXX Solutions, Bengaluru</td><td>Coordinators</td><td>1. Dr. Iresh Bhavi – Associate Prof. , Mech. Dept.
1. Prof. Vijaykumar V Nagathan- Assistant Prof. , Mech. Dept
2. Prof. Santosh S Chappar - Assistant Prof. , Mech. Dept
3. Mr. Mahendra S B – Business Development Executive, CADMAXX Solutions, Bangalore.</td></tr>
<tr><td>Highlights</td><td>➢ Insight to Mechanical industry - its vertical & domains.
➢ Product life cycle & associated job roles.
➢ Prerequisites to securing a job.
➢ Future technologies and trends.</td><td>Outcome</td><td>➢ Learning the latest trends of the industry.
➢ Exposure to the students & faculty.
➢ Cost effective learning
➢ Learning together with industry experts.
➢ Open forum for questions & answers</td></tr>
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WEBINARS CONDUCTED

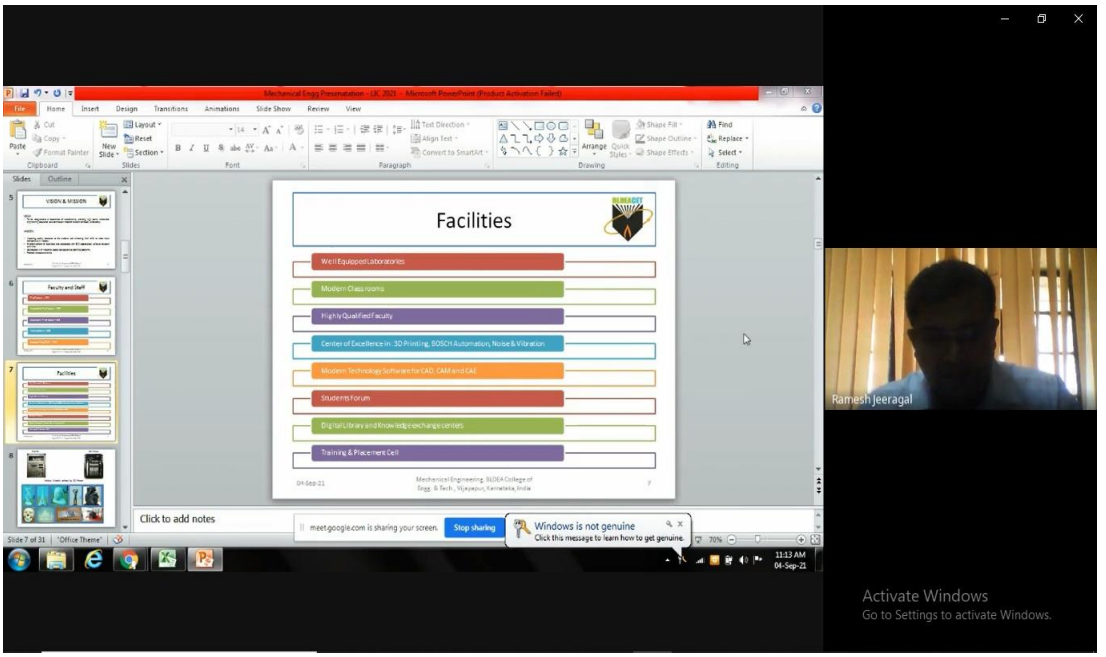
7. Topic of the Webinar: ***Early stages of entrepreneurship*** *On 24-06-2021. 9am to 10.30am*			
Resource Person	**Mr. Suraj Pattar** Owner of S. K. Jewels & Channel Partner for Angel Broking	Coordinators	1.Mr.Sushil Vijapur 2.Mr. V. V . Hokrani 3. Mr. R. K. Kanakaraddi
Highlights	➢ The need for the achievement of high objectives ➢ The ability of self-monitoring ➢ The creativity ➢ The feeling of independence ➢ The tendency for the undertaking of dangers	Outcome	➢ The entrepreneurial environment ➢ The entrepreneurial occasion ➢ The planning of the new enterprise ➢ The guarantee of the essential resources ➢ The operation of the new enterprise
8. Topic of the Webinar : ***R & D for Vehicle Performance in Global Market On 10.07.2021***			
Resource Person	**Mr. Bahuraj Teli** Senior Engineer & Technical lead, Renault Nissan Technical Center India Pvt. Ltd. Chennai"	Coordinators	Prof.S.V.Hiremath & Prof.P.L.Puthani.
Highlights	Resource person **Mr. Bahuraj Teli** focused on NVH analysis (noise, vibration, and harshness) and correlated theoretical subjects like Vibrations and FEM to the automotive industry. He also glanced on the basic principles in vibration like different modes, natural frequency, and resonance effect with demo videos.	Outcome	(NVH) performance is most often done with mode based finite element procedures. The accuracy of such analyses increases if the associated frequency range is increased to cover a larger fraction of the audible spectrum

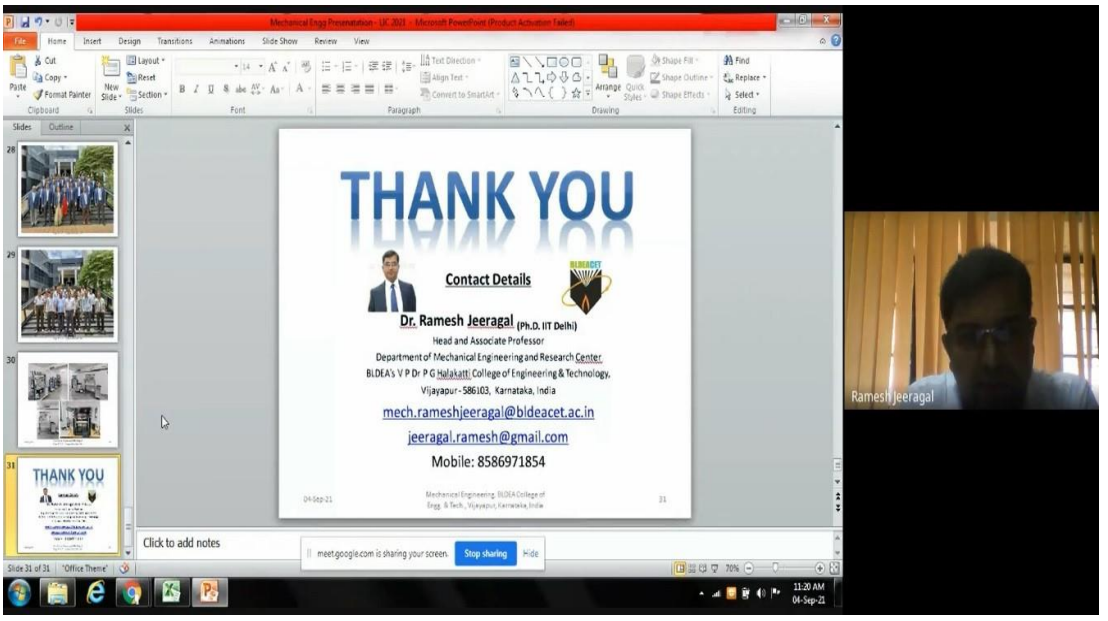
PUBLICATIONS

Si. No	Name of the Faculty	Title of Paper	Publication citation
1	Dr. Pradeep V.Malaji	Enhancement of harvesting capability of coupled nonlinear energy harvesters through high energy orbits	AIP Advances 10 (2020), 1-6
2	Dr. PradeepV.Malaji	Analysis of Pendulum-Based Nonlinear Energy Sink for Energy Harvesting	(2021) Lecture Notes in Mechanical Engineering, pp. 1065-1073
3	Aravind D. Kotagond	Reliability of different loads on Electro Hydrostatic Actuator	Springer Nature Singapore Pte Ltd. 2020, System Reliability, Quality Control, Safety, Maintenance and Management, pp. 67–72, 2020
4	Neeta S. Mathapati	Influence of heat treatment on the volumetric wear rate of Al-25Mg_2Si2Cu4Mn alloy	materialstoday:proceedings volume4,issue 10,2017,pages 10921-10926 https://doi.org/10.1016/j.matpr.2017.08.047
5	Chandrashekarayya R.Hiremath	Experimental analysis of low-temperature grain drying performance of vertical packed clay and clay-additives composite desiccant beds	https://doi.org/10.1007/s12046-021-01558-8
6	Virupaxappa.S.Konnur Vishwanath S.Kanal, Vishwanath V.Hokrani	Tribological and Mechanical Behaviour of the Polymer Matrix Composite Reinforced with Ceramics Used as Implant Material	2020, 10.35940/ijitee.f4502.049620
7	Bhavi, I., Patil, G.V. &Kuppast, V.V.	Early Detection of Failure of Spiral Bevel Gears Used in Differential Gearbox	J Fail. Anal. andPreven. (2021)
8	Bhavi, I., Kuppast, V.V. &Chillal, D.D	Experimental Investigation of Influence of Piston Pin-Offset on Reduction of Piston Slap Noise	J Fail. Anal. andPreven. (2021)
9	Aravindkumar D Kotagond, Dr. Somashekhar S Hiremath, Dr M A Kamoji	Reliability of different loads on Electro Hydrostatic Actuator	Springer Nature Singapore Pte Ltd. 2020
10	C R Hiremath and KadoliRavikiran	Experimental analysis of low-temperature grain drying performance of vertical packed clay and clay-additives composite desiccant beds	Sadhana Springer Link 2021
11	R S Kondaguli, P.V.Malaji	Mathematical modeling and numerical simulation of thermoelectric generator	AIP Conference Proceedings 2274, 030037 (2020)

PARENTS MEET

A "Parents meet" was conducted on 04-09-2021 in Google meet at 11.00 am, few parents attended the meet. parents were happy about teaching and learning process in the Mechanical department and also the academic progress of their wards. Interaction was done with the parents.HOD, parents meet coordinators, and all the staff were actively involved in the meet.





Online mode parents meet PICS

Faculty Activity

Books/ Book chapters published:

Sl No	Authors	Title, Publisher, Year
1	P V Malaji, M Rajarathinam, V Jaiswal, SF Ali, IM Howard	Recent Advances in Structural Engineering, Volume 2, Springer, Singapore, 2019, 467-478
2	Malaji, P.V.	Analysis of Pendulum-Based Nonlinear Energy Sink for Energy Harvesting (2021) Lecture Notes in Mechanical Engineering, pp. 1065-1073
3	P. V Malaji and S. F Ali	Energy Harvesting from Near Periodic Structures", volume 23 of Mechanisms and Machine Science, Springer International Publishing, 2015, 411–420

Sponsored Research Project:

Sl. No	Title of the Project	Name of Principal Investigator / Co-Investigator (If any)	Details of Funding Agency	Amt of Fund Sanctioned in Rs.	Year	Status
1	Numerical investigation of turbulence flow transition in presence of radiating fluids	Dr. Shashikant Cholake & Vinod Nirale	VGST	300000	2021	Selected

STUDENTS ACTIVITY

SL. No	Name of Students	Particulars	Organizer	Event	Date	Topic
1	Umair Ahmed Inamdar	IEEE Conference	IEEE Bangalore Humaitarian technology conference	B-HTC	8-10 Oct. 2020	PERFORMANCE AND EMISSION CHARACTERISTICS OF ETHANOL FUELED TRANSPORTATION ENGINE
2	Raghavendra Gumaste	WISOTECH-2020	V V P Institute of Engineering and Technology, Solapur	National Level Technical Symposium	16 March 2020	ROBO WAR
3	Shankar Jamkhandi	WISOTECH-2020	V V P Institute of Engineering and Technology, Solapur	National Level Technical Symposium	16 March 2020	ROBO WAR
4	Pavankumar & Shivukumar Kolli	WISOTECH-2020	V V P Institute of Engineering and Technology, Solapur	National Level Technical Symposium	16 March 2020	AQUATIC ROBOT

PLACEMENT

PLACEMENT LIST FOR THE ACADEMIC YEAR 2020-21

SL No	Students Name	Company Name
1	Sameer Umadi	**Technologics Global Pvt. Ltd.**
2	Uday Patil	
3	Raghavendra Gumaste	**Cognizant Technology Solutions India Private Limited.**
4	Yasin Indikar	**Tata Consultancy Services Limited.**
5	Sameer umadi	
6	Uday S Patil	**Minfy Technologies Pvt Ltd**
7	Vishal Agasar	
8	Akash Irakal	**Dhoot Transmission pvt.ltd. Aurangabad.**
9	Akshay Choudhary	
10	AsadullaKhan Pathan	
11	Avinash Siddappa Dhabe	
12	Fayaz Makandar	
13	Kartik Kusnur	
14	Mohammad Rafiq Mokashi	
15	Mr. Manikanth Patil	
16	Manjunath Hiremath	
17	Ravichandran B	
18	Sachin Sakanatti	
19	Sahil Gaikwad	
20	Samarth Karki	
21	Sangamesh Math	
22	Sanjeev Sadu Kolhar	

PLACEMENT LIST FOR THE ACADEMIC YEAR 2020-21

SL No	Syed Hussaini	
23	Veeresh M	
24	Veeresh Pattnad	
25	Yasin Indikar	
26	Anuradha B.C.	
27	Raghavendra Masali	
28	Rakesh Kumar	
29	Soumya Kuchnoor	
30	Sunil Kuchnoor	
31	Vaishnavi Joshi	
32	Akash Dunagi	
33	GopiKallappa	
34	Padmavati Javalkar	**Wheels India Pvt Ltd.(TVS Group) Chennai.**
35	Virupakshi P Hiremath	
36	Sahil Gaikwad	
37	Ravichandran B	
38	Shrinivas Poojari	
39	Sushmita Bagewadi	
40	Prasad Jadhav	
41	Aishwarya T Khanapur	
42	Akshay Kumar Sheelin	
43	Kartik Kusanoor	**Infosys Pvt Ltd Bengaluru.**
44	Veeresh Nimbal	**Qualitas Pvt Ltd Bengaluru.**

PLACEMENT

PLACEMENT LIST FOR THE ACADEMIC YEAR 2020-21

SL No	Umesh Gundappagol	KIRLOSKAR FERROUS INDUSTRIES LIMITED
45	Sharanu Suresh Basalganv	KOPPAL"
46	Mohammed Abdushsh Malli	**Verzeo Pvt Ltd Bengaluru**
47	Yasin Indikar	**BYJU'S**
48	Syed Md Murtuzauddin Hussaini,	**Teamware Solutions**
49	Anuradha B.C.	**IDC Engineering India Pvt Ltd**
50	Vaishnavi Joshi	**Eaton**
51	Umesh Gundappagol	**KIRLOSKAR FERROUS INDUSTRIES LIMITED KOPPAL"**

Ph.D AWARDED

Si. No.	Name of Faculty members	Year of Award	University	Research Area
1	Dr. S .G. Cholake	2020	IIT Madras, Chennai	Radiation Heat Transfer, CFD
2	Dr. Aravindkumar .D. Katagond	2021	VTU Belagavi	Hydraulics
2	Dr.S.S.Kulkarni	2021	VTU Belagavi	Mig-welding

Dr.S.G.Cholake

Area: Radiation Heat Transfer, CFD

Dr. Aravindkumar D Katagond

Area: Hydraulics

Dr.S. S.Kulkarni

Area: Mig-Welding

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- ESTABLISH A SUCCESSFUL CAREER IN MECHANICAL ENGINEERING OR RELATED FIELDS IN INDUSTRY AND OTHER ORGANIZATIONS WHERE AN ENGINEERING APPROACH TO PROBLEM-SOLVING IS HIGHLY VALUED.

- DEVELOP ABILITY AMONG STUDENTS TO SYNTHESIZE DATA AND TECHNICAL CONCEPTS FOR APPLICATION TO PRODUCT DESIGN.

- CONTRIBUTE SIGNIFICANTLY IN MULTIDISCIPLINARY A WORK ENVIRONMENT WITH HIGH ETHICAL STANDARDS AND WITH THE UNDERSTANDING OF THE ROLE OF MECHANICAL ENGINEERING IN THE ECONOMY AND THE ENVIRONMENT.

- EXCEL IN GRADUATE STUDY AND RESEARCH, REACHING ADVANCED DEGREES IN ENGINEERING AND RELATED DISCIPLINES.

- ACHIEVE SUCCESS IN PROFESSIONAL DEVELOPMENT THROUGH LIFE-LONG LEARNING.