

Dharmaprakasha Rajakarya Prasakta LATE SRI. B.M.SREENIVASAIAH Founder B.M.S. Educational Trust





LATE SRI. B. S. NARAYAN

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# MechInfo

**Biannual Department News Letter** 

February 2020 to July 2020

Volume10 Issue 2





Department of Mechanical Engineering

BMS Institute of Technology and Management



Accredited by NBA and NAAC with 'A' Grade Yelahanka, Bangalore-560064



**Chief Editor** 

Dr. K.M.Sathish Kumar

Professor and Head, Department Mechanical Engineering

**Editor** 

**Student Coordinators:** 

Prof. S.Nithya Poornima

Chinmayee Prasad : V Semester

Assistant Professor

**Spoorthy** : III Semester



## **Vision of the Department**

To develop technically competent Mechanical Engineering professionals for the benefit of the society.



### **Mission of the Department**

- Impart quality education in Mechanical Engineering and allied areas by state of the art infrastructure and dedicated faculty.
- Provide conducive environment for both students and faculty to pursue higher education & research and to work ethically for the benefit of society.

## Program Educational Objectives (PEOs)

#### **Graduates of the program will:**

PEO-1: Be successful professionals in the field of Mechanical Engineering and allied areas.

PEO-2: Exhibit skills to work effectively and ethically in multiple domains of engineering as

part of a team.

PEO-3: Excel in higher studies, research and adapt in a world of constantly developing

technology.

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#### **HODs Desk:**

Welcome to the Department of Mechanical Engineering, BMSIT&M. The Department of Mechanical Engineering was established in the year 2002-03. The Department offers full-time UG programme in Mechanical Engineering with an annual intake of 60 students. The programme is affiliated to Visvesvaraya Technological University (VTU), Belagavi and approved by All India Council for Technical Education (AICTE). The UG programme is provisionally accredited by the National Board of Accreditation (NBA), New Delhi and also Permanently Affiliated to Visvesvaraya Technological University (VTU), Belagavi. The Post-Graduation in Machine Design was started during the academic year 2014-15 with an approved intake of 18 students. The Department is recognised as a Research Center by Visvesvaraya Technological University(VTU), Belagavi where the number of research scholars registered stands at 21. Currently, the Department is headed by Dr. K. M. Sathish Kumar.



The Department's strength lies in having a good number of experienced and well qualified faculty. Department has 20 well qualified and dedicated faculty members with 08 faculty holding Doctoral Degree and 12 faculty pursuing their doctoral degree. Faculty members along with their regular academic activities also have published technical papers in quality International and National Journals and attended various International & National conferences. Faculty members have won

awards, are the reviewers for International Journals, Members of LIC, BoS, BoE, DRDO Recruitment Committee. All the faculty members of the department also undergo industry internships. Also, faculty members have authored Text Books to help the student community. The Department is supported by 9 well trained Technical staff. The Department of Mechanical Engineering has state-of-the-art laboratories. These laboratories not only satisfy the curriculum requirements of the students very lucidly, but also provide additional facilities to enhance the practical knowledge. Department has excellent computing facilities and resources in terms of both hardware and software.

The Department has Memorandum of Understanding (MoU) with Industries, Research and Academic Institutes. Department of Mechanical Engineering has established a State-of-the-art Centre of Excellence in collaboration with M/s. Toyota Kirloskar Motor Pvt. Ltd., Bengaluru. This spacious Centre consists of automobile chassis, engine and transmission systems capable of demonstrating the

functioning of the various parts. The Centre has several other equipment's totalling a value of over Rs.50 lakhs. Department has signed MoU with Industrial Technologies Bengaluru, to establish "Centre of Excellence in Industrial Automation". The objective of the centre is to train the students in the field of Automation Technologies, Hydraulics and Pneumatics, PLC, Sensors and Industrial IoT.

Department in a quest to build Holistic development among the students, various programmes were organised. Innovative teaching methods are followed to impart quality education to the students. The Department organizes Skill based workshops and Faculty Development Programs periodically. These activities will greatly benefit the faculty members to comprehend the essence of teaching and can teach very effectively and proficiently. The Department hosts and supports several activities like Project Based Learning (PBL), Interdisciplinary projects, Societal relevance projects, Skill Based Workshops, Student Internships, Industrial Visits, Partial Delivery of the curriculum by Industry experts, Poster presentations to name a few. All these activities will greatly enhance the learning ability of the students. The students of the Mechanical Engineering Department have participated as Finalists in Smart India Hackathon, have won awards in National Level events conducted by premier institutions. The student projects received awards from KSCST Bengaluru and VTU Belagavi. Some of the projects were also funded by the Institute based on their innovative ideas. Students have participated and also won awards in Indian Karting Race, a National level event. Also, students were involved in building a Range Extended Electric Vehicle which is a Hybrid Vehicle and many interdisciplinary projects are also being carried out.

## **Faculty – Department of Mechanical Engineering**

Sl. No	Name of the Faculty	Designation	
1	Dr.Mohan Babu G N	Principal and Professor	
2	Dr.H.K Govinda Raju	Vice Principal and Professor	
3	Dr.K.M Sathish Kumar	Professor and Head	
4	Mr.Praveen Kumar T N	Associate Professor	
5	Mr.O.Gurumurthy	Assistant Professor	
6	Mr.K.Chandra Sekhara Reddy	Assistant Professor	
7	Mr.Anantha Krishna G.L	Assistant Professor	
8	Mr.Shripad Diwakar	Assistant Professor	
9	Mr.S.Nithya Poornima	Assistant Professor	
10	Mr.Sriganesh T.G	Assistant Professor	
11	Mr.Sundaresh.S	Assistant Professor	
12	Dr.Jagadeesh Y. J	Assistant Professor	
13	Mr.Madhu M.C	Assistant Professor	
14	Mr.Keerthi Kumar. N	Assistant Professor	
15	Mr.Kiran M.D	Assistant Professor	
16	Dr. Sangmesh B	Assistant Professor	
17	Dr. Santosh Kumar	Assistant Professor	
18	Dr. Nandini R	Assistant Professor	
19	Dr. G. Avinash	Assistant Professor	
20	Mrs. B. J. Tejaswini	Assistant Professor	

## **Technical Staff – Department of Mechanical Engineering**

Sl. No	Name	Designation	
1.	P.K Ramurthy	Foreman	
2.	Ananda.R	Instructor	
3.	R.Venkatesha	Instructor	
4.	Umashankar.S	Assistant Instructor	
5.	Srinivasa	Assistant Instructor	
6.	Abdul Razak	Assistant Instructor	
7.	G.K Bheemarao	Assistant Instructor	
8.	Pradeep.C	Mechanic	
9.	Ashok.G.C	Mechanic	
10.	Srinivasa.K.A	Mechanic	

## MoUs / Awards / Recognitions



BMSIT&M has signed MoU with Industrial Technologies, Bengaluru to establish "Centre of Excellence in Industrial Automation". The objective of the centre is to train the students in the field of Automation Technologies, Hydraulics and Pneumatics, PLC, Sensors and Industrial IoT and New trends in Automation



Dr. Sangmesh B had been to S J C Institute of Technology for the Faculty Convention of ISTE as the Chief Guest on 4 Feb 2020. Also as a part of Student Convention, He also had been to KS Institute of Technology, Bangalore as the Chief Guest on 22<sup>nd</sup> Feb 2020.



**Chief Guest for Convention of ISTE** 

The BMSIT&M- Toyota Centre of Excellence was inaugurated by Dr. B S Ragini Narayan, Chairperson, BMS Educational Trust and Sri M. Madan Gopal, IAS (Retd), Chairman, BOG, BMSIT&M and Sr. Aviram Sharma, Trustee, BMS Educational Trust on 3rd March 2020. An advanced CNC Machine Lab aimed at empowering the students to be industry ready with desired skill sets was also inaugurated on the same day.





Inauguration by the chief Guest Dr. B S Ragini Narayan

Dr. Sangmesh, Assistant Professor, Mechanical Engineering Department has published an article in Prajavani Newspaper on 25<sup>th</sup> April 2020. The article highlights the current scenario of Teachers working in various Engineering Colleges and the role of Educational Institutes highlighting the concern over Teachers in the current COVID 19 lockdown crisis.

Mr Shripad Diwakar, Assistant Professor, Mechanical Engineering Department is a reviewer of the research article "Implementation of ASAB (Angle Sensor Air Bag) without Air Bag Module in 2-wheelers" for Global Research and Development Journals

Department of Mechanical Engineering was involved in the fabrication of FIVE varieties of "Foot operated sanitizer dispenser system". All the Technical staff members with the guidance of Faculty members fabricated the system in the Machine Shop.



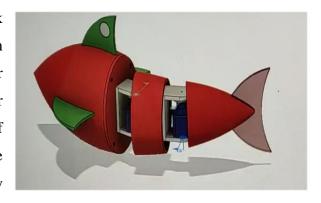
Five varieties of "Foot operated sanitizer dispenser system".



Semi-autonomous food and medicine delivery robot

Department of Mechanical Engineering VIII Semester students Mr. Kaushik Balasundar (1BY16ME032), Aby J Kottoor (1BY16ME002) and Akash S Nambiar (1BY16ME007) have designed and developed a semi-autonomous food and medicine delivery robot which has now been bought and deployed by Kodagu Institute of Medical Sciences at their COVID19 ward. The testing of the robot is currently underway at their hospital.

A team of 4th year students from BMSIT took part in the E-yantra ideas competition. The team consisted of: Kaushik Balasundar – Team Leader (ME), Aby J Kottoor (ME), Akash S Nambiar (ME), Shwetha D (CSE) Under the guidance of Mrs S.Nithya poornima, Assistant Professor. The project they presented was titled – "Hydraulically



Actuated Autonomous Nurse (HYAAN)". They first took part in a MOOC about entrepreneurship which gave them an insight on product ideation, customer requirements, etc. Through the months of October – February 2020, they worked on developing a full-scale model of the project. The aim of the project was to help hospital nurses lift and turn sedated and unconscious patients amid the increasing shortage in skilled nursing staff across the world. They believe that this project will prevent nurses from physical stress and improve efficiency by automating the arduous process of lifting and turning a patient. The full-scale prototype was completed by January and they submitted a video for evaluation which was shortlisted for the Regional Finale that took place at PSG Institute of Technology and Applied Research, Coimbatore, where their efforts were highly appreciated by the judging panel on 12<sup>th</sup> July 2020. Their project was then selected for the National Finale, conducted by IIT Bombay, and was commended by the judging panel of acclaimed IIT Bombay professors and Angel Investors. Their project finished in the top 5% of the competition.

A team of 4th year students from BMSIT took part in the E-yantra Theme competition. The team consisted of: Kaushik Balasundar – Team Leader (ME), Aby J Kottoor (ME), Akash S Nambiar (ME), Shwetha D (CSE) Under the guidance of Mrs S.Nithya poornima, Assistant Professor The team first took part in an aptitude round which they cleared to secure a spot in the competition, which was held in two stages. The theme assigned to the team was called "Patrol Fish", where the aim was to design a biomimetic fish for underwater pollutant inspection in the Ganges river. In the first stage, the design of the fish and the PCB was completed. After qualifying to the second stage, the fabrication was completed and a set of tasks assigned were performed. The team then qualified for the National Finals conducted by IIT Bombay on 6<sup>th</sup> July 2020 and finished in the top 5% of the competition.

#### **Faculty as Resource Person**

Mr. Praveen Kumar T N, Chief Co-Ordinator, IP Cell, and Associate Professor, Dept. of ME delivered a talk on Inventions/Patents on Artificial Intelligence and related technologies at Dept. of AI&ML, BMSIT & M on 24<sup>th</sup> April 2020. Total No. Participants were 45.

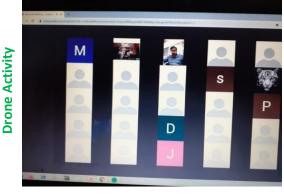
#### **Reviewer for Journal / Conference**

Dr. K. M. Sathish Kumar, Professor and HoD, Department of Mechanical Engineering was a reviewer for International Conference on "Futuristic Trends in Mechanical Engineering (ICOFTIME-2020) 2020" at Presidency University, Bengaluru, Karnataka.

Dr. K. M. Sathish Kumar, Professor and Head, Department of Mechanical Engineering was a reviewer for the Journal "Materials Today" – Elsevier Publication Journal.

Mr. G.L.Anantha Krishna, Assistant professor, Department of Mechanical Engineering, is a reviewer for the journal RVJSTEAM published by RVCE, Bengaluru. He received appreciation from Dr. H N Narasimha Murthy, Managing Editor – RVJSTEAM for reviewing a paper titled "Design and Tuning Parameters of a Continuously Variable Transmission for Racing Applications

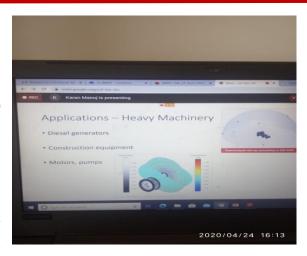
#### Students Workshop conducted/ organised



The Aeroclub organised an online club activity on 3<sup>rd</sup> April 2020 with Mr. Leo Peter Charles, Mr M D, Jane Aerospace Pvt Ltd, Bengaluru delivering a talk on Flight dynamics, Aero modelling and flight simulation. There were 74 students and were benefitted with the knowledge of flight dynamics and aero modelling. The program was coordinated by Mr. Madhu M.C on

Zoom.us online platform. Dr K.M Sathish Kumar, HOD and Principal, Dr.Mohan Babu G.N were present during the online activity

Department of Mechanical Engineering has conducted a webinar on the topic "Career Prospects in CAE domain for Mechanical Engineering Students" on 24<sup>th</sup> April 2020 from 3.00 PM - 4.30 PM. The resource person: Mr. Vivek, Business Development Manager – Acoustics, Indo-Pacific Region, Hexagon MSC Software, Bangalore. Along with him, 5 Alumni of the ME Department for whom Mr. Vivek has assisted for placement also gave the inputs. Number of students participated is 58.



Career Prospects in CAE

#### **Seminars / Expert Talks**

The Department of Mechanical Engineering and Alumni Association organised a webinar on "Automotive Vehicle Development Process". The webinar was delivered by Mr. Birender Kumar, Team Leader, Design Department, Nissan Motors Co. Ltd, Global HQ, Japan on 7<sup>th</sup> May 2020.

#### **Departmental Co-Curricular Activities**

Department of Mechanical Engineering conducted Induction Programme for 1st year students from 10<sup>th</sup> to 17<sup>th</sup> FEB 2020. This induction programme had sessions on Ice breaking, Universal Human Values, creative arts, Sports, literary activity, club activities Cultural events and field trip.





Field trip and Cultural eyents



#### **Outcome Based Education Activities**

Mr. G. L. Anantha Krishna, Asst. Professor, Department of Mechanical Engineering conducted OBE activity titled "Working model Demonstration of simple and differential band brakes" on 28<sup>th</sup> Feb 2020. This would enable the students to understand the working of simple and differential band brakes. This would enhance student's attributes such as communication and life long learning.





**Working model Demonstration** 

Mrs. B. J. Tejaswini, Asst. Professor, Department of Mechanical Engineering organized a group discussion on "Should English be the medium of instruction in primary education" for 4<sup>th</sup> Sem TCE students on 19<sup>th</sup> Feb 2020 from 3.15 to 3.35pm. The event was conducted to mark the "Mathru Basha Diwas" and also as part of OBE for the subject Constitution of India Professional ethics and Cyber law (18CPC49). The students actively debated on



the significance of language and communication skills. This activity gave them a platform to think and express their views pertaining to education and mother tongue. Through this activity the students could exhibit their analytical and communication skills.

Mrs S. Nithya Poornima, Assistant Professor, Department of Mechanical Engineering organised flip class for the VIII semester Mechanical Engineering Students for the subject "Operations Research" on 22<sup>nd</sup> May 2020. The topic for the session was on game theory Sequencing and PERT /CPM. This Session enabled the students to work on self-Learning, Communication skills and Peer to peer learning.

Mrs S. Nithya Poornima, Assistant Professor, Department of Mechanical Engineering organised Quiz for the VII semester Mechanical Engineering Students for the subject "Operations Research" on 23<sup>nd</sup> May 2020. The topic for the session was Transportation Problems and Assignment Problems. This Session enabled the students to work on self-Learning.

Dr. Nandini R, Assistant Professor, Mechanical Engineering department carried out an OBE activity in the course named product life cycle management (15ME835) on May 9th and May 15<sup>th</sup> 2020 for VIII SEM students. The students were given topics to speak related to PLM/PDM/ Forecasting Technology / New Product development and Virtual manufacturing of a product. They were also supposed to relate this concept to some industries who have implemented these strategies successfully in their company as a part of real time application. This interaction come discussion session, helped the students to understand in reality how the concepts of PLM PDM/ Forecasting technology / New Product Development and virtual manufacturing will affect the life cycle of a product, how a new product launching could be successful with the help of virtual prototyping and manufacturing. It also helped the students to realize the pain and the cost associated by implementing PLM/PDM in an industry. It also helped the students to understand how forecasting technology can enhance in optimizing the manufacturing phases to yield with qualitative product. This interaction session helped overall students to get a clear picture of product life cycle management and its applications in reality.



#### **Publication of Research Papers**

- Dr. Nandini. R.Nadar "Influence of MWCNTs / Zinc Oxide Nanoparticles / Epoxy Resin Composite Coating on Mild Steel to Enhance Anticorrosion and Mechanical Properties' in International Journal of Innovative Technology & Exploring Engineering in, Vol-9, Issue -6, April 2020.
- Dr. Sangmesh, Performance Evaluation of Cryogenic Treated and Untreated Carbide Inserts during Machining of AISI 304 Steel in INTERNATIONAL JOURNAL OF AUTOMOTIVE AND MECHANICAL ENGINEERING (IJAME) ISSN: 2229-8649 e-ISSN: 2180-1606 VOL. 17, ISSUE 1, 7709 – 7718.
- 3. Kiran M D, H K Govindaraju, Lokesh Yadhav B R "Evaluation of Mechanical and Fracture Properties of Nickel Coated Short Carbon Fiber/Epoxy Composites with Nanofillers" Journal of Advanced Research in Dynamical & Control Systems, Vol. 12, Special Issue-02, 2020, DOI: 10.5373/JARDCS/V12SP2/SP20201090.
- 4. G.L.Anantha Krishna, "Development and Testing of Equipment for Free Damped Longitudinal Vibration Using Spring Mass Damper System" International Journal of Engineering Science and Computing (IJESC), Volume 10, Issue No.6, June 2020
- 5. S. Nithya Poornima. "Peer to peer learning- An effective tool in students learning", International Journal of Advance Research, Ideas and Innovations in Technology on 14 June, 2020 Paper ID-V6I3-1433 in Volume-6, Issue-3, 2020
- 6. H. K. Govindaraju, Kiran M D, ARK Swamy, Deepak S and Bhaskar Raju S A "Mechanical Behavior of Heat Treated Al6061-Tungsten Carbide and Graphite Reinforced Hybrid Composites", Journal of Critical Reviews, ISSN- 2394-5125 VOL 7, ISSUE 17, 2020.
- Kiran M D, Nithin Kumar, Ezhil Vannan.S, Vincent Linish Dsouza, Madeva Nagaral "Dry sliding wear behaviour of short Carbon fibre reinforced aluminium matrix composites", Journal of Critical Reviews, ISSN- 2394-5125 VOL 7, ISSUE 15, 2020.

- Kiran M D, H K Govindaraju, T Jayaraju, "Fracture toughness of surface treated short fiber reinforced epoxy composites" AIP Conference Proceedings 2247, 020006 (2020); https://doi.org/10.1063/5.0003825.
- 9. H K Govindaraju, Kiran M D, Lokesh Yadhav B R "Wear behavior of aluminum metal matrix composites: A Taguchi approach" AIP Conference Proceedings 2247, 040005 (2020); <a href="https://doi.org/10.1063/5.0003802">https://doi.org/10.1063/5.0003802</a>.
- 10. G.L.Anantha Krishna, "Analytical and Finite Element Analysis of a Typical Curved Beam Under loading" International Journal of Engineering Science and Computing (IJESC), ISSN -2321 3361, Volume 10, Issue No.7, July 2020, Pg 26631 26633

#### Workshops / Seminars / FDPs attended

- Mr Gurumurthy.O Assistant Professor, Department of Mechanical Engineering, has participated the online webex/webinar One Week Faculty Development Program on "GREEN MANUFACTURING: THE PRESENT & THE FUTURE" Organized by Santhiram Engineering College, Nandyal during 15.05.2020 to 20.05.2020.
- Mr. Gurumurthy. O Assistant Professor, Department of Mechanical Engineering, has participated in the online webex/webinar 5-Day Webinar Series on "Design Thinking" organized by Department of Electronics and Communication Engineering, Sri Ramakrishna Institute of Technology, Coimbatore, conducted during 27th to 31st May 2020.
- 3. Mr Gurumurthy. O Assistant Professor, Department of Mechanical Engineering, has participated in the online webex/webinar "Accelerating Industry 4.0 A Post Covid Paradigm", Conducted on 25th May 2020.
- 4. Mrs. S. Nithya Poornima, Assistant Professor, Department of Mechanical Engineering, has participated in the online "COVID-19 Quiz" on 3rd May 2020 organised by the Department of Information science and Engineering, Bapuji Institute of Engineering and Technology, Davengere, Karnataka
- Mrs. S. Nithya Poornima, Assistant Professor, Department of Mechanical Engineering, has participated in power seminar webinar on the theme "Gearing up the Job of Tomorrow" conducted ICT academy On 5th May 2020

- Mr Madhu.M.C Assistant Professor, Department of Mechanical Engineering, has attended the 5 days FDP on "Drone view of hotspots" in Mechanical Engineering at St. Peters Institute of Higher Education and Research from 25 -29 May 2020
- 7. Dr. Nandini R, Assistant Professor, Department of Mechanical Engineering has successfully completed the online quiz on "Professional communication skills" from Pillai HOC College of Engineering & Technology, Rasayani, Navi Mumbai on 7th May 2020.
- 8. Mr.Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering attended FDP on Research trends in Thermal Engineering, from date (9th to 13th June 2020) at Ballari Institute of Technology and Management.
- 9. Mr.Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering attended FDP on NBA and NAAC Accreditation Process, from 4th to 8th June 2020 at MSRIT, Bangalore.
- 10. Mr.Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering attended FDP on Emerging Engineering Materials, from 1st to 5th June 2020 at Ballari Institute of Technology and Management.
- 11. Mrs. S. Nithya Poornima, Assistant Professor, Department of Mechanical Engineering, has participated in three Days FDP On "Recent advances in computer Techniques in Mechanical Engineering Organised by the Department of Mechanical Engineering at Sir M.Visvesvaraya Institute of Technology Bengaluru From 11th June to 13th June 2020.
- 12. Mr Shripad Diwakar, Assistant Professor, Department of Mechanical Engineering, has attended Virtual Faculty Development Program (FDP) on "Agile Methodology and Frame work" on 13th June 2020 from 10 2 pm (04 Hrs) conducted by M/s. Cognizant company
- 13. Mr Shripad Diwakar, Assistant Professor, Department of Mechanical Engineering has attended webinar on "Big Data and Covid-19" by Prof. Anil Maheshwari conducted by McGraw Hill Education on 16.06.2020
- 14. Mr Shripad Diwakar, Assistant Professor, Department of Mechanical Engineering has attended webinar on "Future of Education Post Covid" by Prof. Rajendra Prasad Gupta conducted by McGraw Hill Education on 18.06.2020.
- 15. Dr. Jagadeesh.Y.J, Assistant Professor, Department of Mechanical Engineering attended Certification Course on "Composites Materials and its Characterization", from 22.06.2020 to 26.06.2020 at Acharya Institute of Technology, Bengaluru.

- 16. Dr.Jagadeesh.Y.J, Assistant Professor, Department of Mechanical Engineering attended 1-day Program- session, ICT Academy Virtual Book Launch of "Future of Higher Education - Nine Mega Trends" and expert talks held online on 30 June 2020. Online Chennai and New Delhi
- 17. Mr. SUNDARESH S, Assistant Professor, Department of Mechanical Engineering attended Online Faculty Development Program on "Applications of CAD tools in drawing courses" conducted by Department of Mechanical Engineering, Geethanjali College of Engineering and Technology (Autonomous), Cheeryal, Andhra Pradesh from 09<sup>th</sup> June 2020 to 13<sup>th</sup> June 2020.
- 18. Mr. SUNDARESH S, Assistant Professor, Department of Mechanical Engineering attended one week Online International Faculty Development Program on "ADVANCED ENGINEERING MATERIALS FOR STRATEGIC AND SOCIETAL SECTORS CURRENT PERSPECTIVES" conducted by Department of Mechanical Engineering, Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, Chennai, Tamilnadu, from 10<sup>th</sup> June 2020 to 15<sup>th</sup> June 2020.
- 19. Mr. SUNDARESH S, Assistant Professor, Department of Mechanical Engineering attended National level Online Quiz on "MECHANICS OF MATERIALS" conducted by Department of Mechanical Engineering, Sir MVIT, Bangalore on 23<sup>rd</sup> June 2020.
- 20. Mr. Sriganesh T G, Assistant Professor, Department of Mechanical Engineering, BMSIT&M attended five day FDP on "Applications of CAD Tools in Drawing courses" conducted by Geetanjali College of Engineering & Technology, Hyderabad, from 9th June to 13th June 2020.
- 21. Dr Nandini R, Assistant Professor, Department of Mechanical Engineering has participated in a webinar on Indian Green Building Council (IGBC) students' chapter, virtual inauguration and symposium on green building" organised by Pillai HOC College of Engineering & Technology, Rasayani, Navi Mumbai on Friday 26th June 2020.
- 22. Dr Nandini R, Assistant Professor, Department of Mechanical Engineering has participated in a webinar on "Yoga-Affirmations to train your subconscious Mind" organised by department of civil engineering, on Saturday 27th June 2020.
- 23. Mr.Madhu M.C, Assistant Professor, Department of Mechanical Engineering, has attended online FDP courses on "Modelling and Simulation –An Engineering perspective" organized by Department of Mechanical Engineering, SCMS School of Engineering and Technology from 22nd -27th June 2020

- 24. Mr.Madhu M.C, Assistant Professor, Department of Mechanical Engineering, has attended online 5 FDP courses on on "Academic Research in Engineering for Industry and patents" organized by CSI Hyderabad Chapter and EDC /Innovation cell and R&D Consultancy, MVSR College ,Hyderabad from 1st June to 5th June, 2020
- 25. Mr.Madhu M.C, Assistant Professor, Department of Mechanical Engineering, has attended online 5 day FDP courses on "Research Trends in Thermal Engineering -2020" from 9<sup>th</sup> to 13<sup>th</sup> June 2020 organized by Department of Mechanical engineering ,BITM, Ballari.
- 26. Mr.Madhu M.C, Assistant Professor, Department of Mechanical Engineering, has attended online 5 day FDP courses on 'Emerging Engineering materials' organized by Department of Mechanical Engineering, Ballari Institute of Technology in association with ISME from 1<sup>st</sup> to 5<sup>th</sup> June 2020.
- 27. Mr.Madhu M.C, Assistant Professor, Department of Mechanical Engineering, has attended online 5 day FDP courses "Application of CAD tools in drawing courses" conducted by Department of Mechanical Engineering, Geetanjali College of engineering &Technology,A.P, from 9<sup>th</sup> to 13<sup>th</sup> june 2020
- 28. Mr. K.C.S Reddy, Assistant Professor, Department of Mechanical Engineering, has attended online 5 days FDP on Research Trends in Thermal engineering from 9.6.20 to 13.6.20
- 29. Mr.K.C.S Reddy, Assistant Professor, Department of Mechanical Engineering, has attended online 5 days FDP Academic Research in Engineering for Industry and Patents 1.6.20 to 5.6.20
- 30. Mr. K.C.S Reddy, Assistant Professor, Department of Mechanical Engineering, has attended online 5 days FDP Agile Methodology and Framework 13.06.2020 (10 to 2 pm = 4 Hrs)
- 31. Mr K.C.S Reddy, Assistant Professor, Department of Mechanical Engineering, has attended online 5 days FDP on Advanced engineering materials for strategic & societal sectors-current perspectives 10<sup>th</sup> June 2020 to 15<sup>th</sup> June 2020
- 32. Mr. K.C.S Reddy, Assistant Professor, Department of Mechanical Engineering, has attended online 5 days FDP Application of CAD tools in drawing courses 9<sup>th</sup> June 2020 to 13<sup>th</sup> June 2020
- 33. Mr.K.C.S Reddy, Assistant Professor, Department of Mechanical Engineering, has attended webinar on design of experiments for parameter optimization 8<sup>th</sup> June 2020
- 34. Mr. K.C.S Reddy, Assistant Professor, Department of Mechanical Engineering, has attended webinar on introduction to multi criteria decision making approach 9<sup>th</sup> June 2020
- 35. Mr. K.C.S Reddy, Assistant Professor, Department of Mechanical Engineering, has attended webinar on multi robot systems for manufacturing excellence 10<sup>th</sup> June 2020

- 36. Mrs. Tejaswini B J, Assistant Professor, Dept. of ME attended the webinar on "Intellectual Property Rights patent filing procedure" organized by Dept. of Mech Engg., Shetty Institute of Technology. Kalaburgi on 15<sup>th</sup> June 2020 from 3.30 to 4.30pm.
- 37. Mrs. Tejaswini B J, Assistant Professor, Dept. of ME attended a Five days FDP on "Academic Research in Engineering for Industry and Patents" organized by CSI, Hyderabad chapter and Entrepreneurship Development Cell & Innovation Cell and R&D Consultancy Cell, MVSR Engineering College from 1st to 7<sup>th</sup> June 2020.
- 38. Mrs. Tejaswini B J, Assistant Professor, Dept. of ME participated in an online awareness quiz: "Climate change and Biodiversity Conservation" organized by the Dept. of Botany, S.S.Khanna Girls PG college, Prayagraj, UP, on the occasion of "World Environment Day-2020" 10<sup>th</sup> June 2020 with 76% score.
- 39. Mrs. Tejaswini B J, Assistant Professor, Dept. of ME attended the webinar on "Guidelines for writing and publishing effective research papers", organized by Presidency College, Bengaluru on 22<sup>nd</sup> June 2020 from 10.30 to 11.30 am.
- 40. Dr. Santosh Kumar, Assistant Professor, Dept. of ME attended the "IIC Innovation ambassador training series" on "Design thinking and innovations" organised by Institution's Innovation of MHRD's Innovation Cell, AICTE held at ACS college of engineering Bangalore, Karnataka on 26-27<sup>th</sup> February 2020
- 41. Dr. Santosh Kumar, Assistant Professor, Dept. of ME completed one-week live online certificate course on "Composite materials and Its Characterization" from 22-26<sup>th</sup> June, 2020 conducted by Acharya Institute of Technology, Bangalore.
- 42. Dr. Santosh Kumar, Assistant Professor, Dept. of ME completed one-week live online FDP on "Product Design and Novelty" from 6-10<sup>th</sup> June, 2020 conducted by Dr Vithalrao Vikhe Patil College of Engineering Ahmednagar, Maharashtra and The Institution of Engineers (India) Ahmednagar local Centre.
- 43. Dr. Santosh Kumar, Assistant Professor, Dept. of ME completed one-week online Webinar on "Industry 4.0" from 8-12<sup>th</sup> June, 2020 conducted by Nagarjuna College of Engineering, Bangalore and Technology, in Association with NCET, Institution's Innovation Council (IIC), MHRD.
- 44. Mr.O.Gurumurthy, Assistant Professor, Department of Mechanical Engineering has participated in a live webinar FDP on "Research Trends in Thermal Engineering -2020" from 9<sup>th</sup> to 13<sup>th</sup> June 2020 organized by Department of Mechanical engineering ,BITM, Ballari.

- 45. Mr. O.Gurumurthy, Assistant Professor, Department of Mechanical Engineering has participated in a two day STTP on "Recent Advances In Mechanical Engineering (RAME)" held on 12<sup>th</sup> & 13<sup>th</sup> June 2020 through online mode, organized by Department of Mechanical Engineering, S V College of Engineering, Tirupati.
- 46. Mr.O.Gurumurthy, Assistant Professor, Department of Mechanical Engineering has participated online 5 days FDP Application of CAD tools in drawing courses 9.6.20 to 13<sup>th</sup> June 2020
- 47. Mr.O.Gurumurthy, Assistant Professor, Department of Mechanical Engineering has participated online one week international FDP on Advanced Engineering Materials for strategic and societal sectors-current perspectives" 10<sup>th</sup> June 2020 to 15<sup>th</sup> June 2020
- 48. Mr.O.Gurumurthy, Assistant Professor, Department of Mechanical Engineering has participated online 5 days FDP Academic Research in Engineering for Industry and Patents 1<sup>th</sup> June 2020 to 5<sup>th</sup> June 2020
- 49. Mr.O.Gurumurthy, Assistant Professor, Department of Mechanical Engineering has participated in the webinar on "Tips on effective ways of scientific literature research presented by Dr.Ramesh L Gardas, IIT Madras organised by Chennai Institute of Technology on 11<sup>th</sup> June 2020.
- 50. Mr.O.Gurumurthy, Assistant Professor, Department of Mechanical Engineering has participated in 10 Hours of Faculty Development Program on Industry Drawings using AutoCAD (Online Live FDP) conducted by ICT Academy on 22<sup>nd</sup> Jun 2020 to 27<sup>th</sup> Jun 2020.
- 51. Mrs. Tejaswini B J, Assistant Professor, Dept. of ME attended a three days training workshop on "MENDELEY REFERENCE MANAGER" from 4<sup>th</sup> to 6<sup>th</sup> July 2020, organized by Nuhianwali Education Society, Haryana.
- 52. Mrs. Tejaswini B J, Assistant Professor, Dept. of ME attended a Six days FDP on "CYBER SPACE AND CYBER SECURITY" organized by School of Law, Sathyabama Institute of Science and Technology, Chennai from 20<sup>th</sup> to 25<sup>th</sup> July 2020.
- 53. Dr. Nandini R, Assistant professor, department of mechanical engineering attended online one-week FDP program on "Research Proposal Writing and Opportunities in the field of Science, Engineering and Management" organized by R & D Centre-BIT, from 6th July 2020 to 11<sup>th</sup> July 2020
- 54. Dr. Nandini R, Assistant Professor, Department of Mechanical Engineering, has successfully attended online workshop on "Swayam -NPTEL" on 28<sup>th</sup> July 2020, jointly organised by NPTEL,

- IIT madras, Visvesvaraya Technological University (VTU), Belagavi and Bheemanna Khandre Institute of Technology, Bhalki.
- 55. Mrs S.Nithya Poornima, Assistant professor, Department of Mechanical engineering participated in online Faculty Development Program on Research Proposal writing and Opportunities in Science, Engineering and Management organised by R& D Center BIT during 6<sup>th</sup> July 2020 to 11<sup>th</sup> July 2020
- 56. Mr. Sundaresh S, Assistant Professor, Department of Mechanical Engineering attended Online One Week Faculty Development Program on "RESEARCH PROPOASL WRITING AND OPPORTUNITIES IN THE FIELD OF SCIENCE, ENGINEERING AND MANAGEMENT" organized by R&D Centre, Bangalore Institute of Technology (BIT), Bangalore from 6<sup>th</sup> June 2020 to 11<sup>th</sup> June 2020
- 57. Mr. Sundaresh S, Assistant Professor, Department of Mechanical Engineering attended five days online International Faculty Development Program on "TOOLS AND TECHNIQUES FOR DATA ANALYSIS IN ACADEMIC RESEARCH" organized by Department of Mechanical Engineering in association with IQAC-MSRIT, Bangalore from 20<sup>th</sup> July 2020 to 24<sup>th</sup> July 2020.
- 58. Mr. Sripad Diwakar, Assistant Professor, Department of Mechanical Engineering has participated in one week Faculty Development Programme on "Green Energy" Organized by Department of Civil Engineering, BMSCE in association with ISTE-BMSCE, TEQIP III, IWWA and VJNL during 28th June 2020 to 4th July 2020
- 59. Dr. K. M. Sathish Kumar, Professor and Head, Department of Mechanical Engineering attended Online One Week Faculty Development Program on "RESEARCH PROPOSAL WRITING AND OPPORTUNITIES IN THE FIELD OF SCIENCE, ENGINEERING AND MANAGEMENT" organized by R&D Centre, Bangalore Institute of Technology (BIT), Bangalore from 6<sup>th</sup> July 2020 to 11<sup>th</sup> July 2020.
- 60. Dr.Sangamesh. B Assistant Professor, Department of Mechanical Engineering has attended Five Days FDP on Emerging Engineering Materials organized by the Department of Mechanical Engineering, Bellary Institute of Technology and Management in association with ISME from 1st to 5<sup>th</sup> June 2020
- 61. Dr.Sangamesh.B Assistant Professor, Department of Mechanical Engineering has attended Three days FDP on Advances in Machining Process organized by Department of Mechanical Engineering, PES Institute of technology and Management from 17<sup>th</sup> 19th June 2020

- 62. Mr.Madhu M.C, Assistant Professor, Department of Mechanical Engineering, has Completed Online FDP at Ramiah Institute of Technology titled" Tools and Techniques for Data Analysis in Academic Research." From 20<sup>th</sup> to 24<sup>th</sup> July 2020
- 63. Mr.Madhu M.C, Assistant Professor, Department of Mechanical Engineering, has attended 5 day FDP on "Developments in solar energy applications and solar tracking systems" jointly organized by UBDT Davangere and VTU from 27<sup>th</sup> to 31<sup>st</sup> July 2020.

#### ## 6 # 09 W-E-B-I+N-A-R

#### Webinars Attended

- Mrs. Tejaswini B J, Assistant Professor, Dept. of ME attended the webinar on "JOURNEY TO BECOME A START UP ENTREPRENEUR- SEEDS TO SHOOTS" organized by Sathyabama Institute of Science and Technology, Chennai on 18<sup>th</sup> July 2020 from 11.00 am to 12.00 pm
- Mrs. Tejaswini B J, Assistant Professor, Dept. of ME attended the webinar on "INTELLECTUAL PROPERTY PROSECUTION, FILING AND ENFORCEMENT DURING COVID-19 PANDEMIC", organized by ICFAI, Law School, in association with INNOVPATH and WORDICT-IP Hyderabad on 20<sup>th</sup> July 2020 from 3.30 to 4.30 pm
- 3. Dr. Nandini R, Assistant professor, department of mechanical engineering attended Webinar on "Rheology of ceramic slurries" hosted by Anton Paar India, Speaker: Dr. Kartik Pondicherry on 11<sup>th</sup> July 2020.
- 4. Dr. Nandini R, Assistant professor, department of mechanical engineering attended webinar on "Surface characterization of ceramics" hosted by Anton Paar India, Speaker: Dr. Prasad Gosavi on 12<sup>th</sup> July 2020.
- Dr. Nandini R, Assistant professor, department of mechanical engineering attended webinar on "engineered hybrid-porous materials synthesis & applications", speaker: Dr. Satish Nune, Pacific North Nat. Lab USA on 19<sup>th</sup> July 2020.
- 6. Dr. Nandini R, Assistant professor, department of mechanical engineering attended online ceramic lecture series from Indian ceramic society on "material synthesis at zero gravity "presented by Dr. MS Vijaya Kumar, hosted by ceramic department of PDA college of Engineering, Kalburgi on 25<sup>th</sup> July 2020.

- 7. Dr. Nandini R, Assistant professor, department of mechanical engineering attended Indian Ceramic online lecture series on "Graphene production from biomass gasification route "presented by Dr. Dr. Sam Weaver, Proton Power Inc USA, hosted by ceramic department of PDA college of Engineering, Kalburgi on 26<sup>th</sup> July 2020.
- 8. Mr.Madhu M.C, Assistant Professor, Department of Mechanical Engineering, has attended 5 day Webinar on "Green Energy from 29<sup>th</sup> to 4<sup>th</sup> July organized by Department of Civil engineering ,BMSCE in association with ISTE.
- 9. Dr. Nandini R, Assistant Professor, Department of Mechanical Engineering Attended International Webinar on the topic "(Super)-Resolution with Far Field Optics" Organized by Department of Physics, Christ College (Autonomous) Irinjalakuda. Resource Person: Prof. Paul Urbach, TU Delft, Netherlands on 22<sup>nd</sup> July 2020.
- 10. Dr. Nandini R, Assistant Professor, Department of Mechanical Engineering, has successfully Attended Webinar on "ENERGY EFFICIENT AND GREEN ENERGY TECHNOLOGIES" by Professor Dr. Muttu Kumar. Indian Institute of Technology, Guwahati Held on 27<sup>th</sup> July 2020.

#### **Online Quiz Attended**



- Mrs. Tejaswini B J, Assistant Professor, Dept. of ME participated in a National Level online quiz on "ACCREDITATION PROCESS" organized by the Dept. of Electrical and Electronics Engineering, Hirasugar Institute of Technology, Nidasoshi, Karnataka, on 19<sup>th</sup> July 2020.
- 2. Mrs S.Nithya Poornima, Assistant Professor, Dept. of ME participated in a National Level online quiz on "ACCREDITATION PROCESS" organized by the Dept. of Electrical and Electronics Engineering, Hirasugar Institute of Technology, Nidasoshi, Karnataka, on 19<sup>th</sup> July 2020.
- 3. Mrs S.Nithya Poornima, Assistant Professor, Dept. of ME participated in a National Level online quiz on "Electric Drives" organized by the Dept. of Electrical and Electronics Engineering, Hirasugar Institute of Technology, Nidasoshi, Karnataka, on 23<sup>rd</sup> July 2020
- Mr. SUNDARESH S, Assistant Professor, Department of Mechanical Engineering attended e- Online Quiz on "MECHANICAL ENGINEERING SUBJECT" conducted by Adichunchanagiri Institute of Technology on 3<sup>rd</sup> July 2020.

## **Internship Details**

- Dr. Nandini R, Assistant professor, Department of mechanical engineering attended online internship training program on Industry 4.0 from Gusto valley Technovations LLP from 21<sup>th</sup> July 2020 to 31<sup>th</sup> July 2020.
- S. Nithya Poornima, Assistant professor, Department of Mechanical engineering attended online internship training program in Firewall building from Tacitine solutions pvt ltd from 16<sup>th</sup> July 2020 to 31<sup>th</sup> July 2020.
- 3. Mr. Shripad Diwakar, Assistant Professor, Department of Mechanical Engineering has Undergone 10 day faculty internship in "Industry 4.0" at Gustovalley Technovations during 8<sup>th</sup> July 2020 to 18<sup>th</sup> July 2020.
- 4. Mrs Tejaswini B.J, Assistant professor, Department of Mechanical engineering attended online internship training program in APT Firm pvt ltd from 21<sup>th</sup> July 2020 to 31<sup>th</sup> July 2020.

# **Online Course completed:**

Sl. No	Faculty	Certified by	Course Tittle
1	Dr. K. M. Sathish Kumar	Coursera	Intelligent Machining
2	Dr. K. M. Sathish Kumar	Coursera	Advanced Manufacturing Enterprise
3	Mr.K.C.S.Reddy	Coursera	The Sustainable Development Goals – A global, transdisciplinary vision for the future
4	Mr.Shripad Diwakar	NPTEL ONLINE COURSE, conducted by IIT, Guwahati	IC Engines and Gas Turbines
5	Mr.Keerthi Kumar N	MATH Works	MATLAB Onramp
6	Mr.Keerthi Kumar N	COURSERA, AUTODESK	Autodesk Fusion 360 Integrated CAD/CAE
7	Mrs.S. Nithya Poornima	Udemy	Academic writing: Learn to publish in High Impact journals
8	Mrs.S. Nithya Poornima	Udemy	Counseling Practitioner certificate
9	Mr. Madhu M.C	Udemy	Solar energy Master class 2020 from zero to Hero
10	Dr. Santosh Kumar	NPTEL ONLINE COURSE, Conducted by IIT, Madras	Introduction to Machine Learning
11	Dr. Santosh Kumar	NPTEL ONLINE COURSE, Conducted by Chennai mathematics institute	Programming, Data Structures and Algorithms Using Python
12	Mrs. Tejaswini B J	Udemy	Cybersecurity Law and Policy
13	Dr.Sangamesh.B	NPTEL	Introduction to Research

#### **Open course**

Department of Mechanical Engineering has conducted Open course on "DESIGN THINKING" from 16<sup>th</sup> June to 20<sup>th</sup> June 2020 in association with Institute of Industrial Design, Bangalore. The open course is coordinated by Mr. Sundaresh S, Assistant Professor and Convened by Dr. K M Sathish



Kumar, Professor and Head. Totally 48 students including 2 students from the department of Civil Engineering have registered and participated in the open course. In this course, students were trained on product sketching by Mr. Aniruddh, a Corporate Trainer from Institute of Industrial Design, Bangalore. Also students were exposed to different aspects of product design and industrial design. On the last day, Mr. Venkataraman Padmanabhan, Head, Institute of Industrial Design has addressed all our student participants regarding job and career opportunities in Product Design field. The open course was concluded with evaluation of students by MCQs and feedback from the students.

## **Technical staff Details:**

#### **Achievements:**



All technical staffs are involved in Design & fabrication of "Foot operated hand sanitizer dispenser" in mass production.

#### **Technical Staff FDP/Quiz/Webinar Attended:**

All technical staffs participated in Three days on line staff development program on "Skill Enhancement in Civil Engineering Laboratories" Organized by Department of Civil Engineering, BMSIT & M from 8<sup>th</sup> -10<sup>th</sup> July 2020.

- 1. Mr.P K.Ramurthy, Foreman, participated in the webinar on "Smart Manufacturing and the Pandemic" by Mr. Prakash Vinod, Centre Head-Smart Manufacturing, CMTI, Bengaluru, organized by the Department of Mechanical Engineering, University Visvesvaraya college of Engineering, Bengaluru on 28<sup>th</sup> June- 2020.
- 2. Mr.P K.Ramurthy, Foreman, participated in the webinar on "Smart Manufacturing and the Pandemic" by Mr. Prakash Vinod, Centre Head- Smart Manufacturing, CMTI, Bengaluru, organized by the Department of Mechanical Engineering, University Visvesvaraya college of Engineering, Bengaluru on 28<sup>th</sup> July- 2020.
- 3. Mr. Ananda. R, Instructor, participated online quiz on **Engineering Drawing** on 4<sup>th</sup> June 2020 conducted by Chaitanya Bharathi institute of technology, Hyderabad.
- 4. Mr. Srinivasa K A, Technical staff, participated in online quiz on **Engineering Drawing** on 4<sup>th</sup> June 2020 conducted by Chaitanya Bharathi institute of technology, Hyderabad.



#### Vision of the Institute

To emerge as one of the finest technical institutions of higher learning to develop engineering professionals who are technically competent, ethical and environment friendly for betterment of the society.



#### Mission of the Institute

Accomplish stimulating learning environment through high quality academic instruction, innovation and industry - institution interface.

