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BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF MECHANICAL ENGINEERING

AVALAHALLI, YELAHANKA, BENGALURU-560 064



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:

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 strength lies in having a good number of experienced and well qualified faculty. Department has 22 well qualified and dedicated faculty members with 10 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 10 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 KSCSTBengaluru 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.

DEPARTMENT ADVISORY BOARD



LIST OF TEACHING STAFF

Dr. Mohan Babu G N
Principal and Professor



Dr. H.K. Govinda Raju
Vice Principal and Professor



Dr. K.M. Sathish Kumar
Professor and Head



Mr. Praveen Kumar T N
Associate Professor



Mr. O. Gurumurthy
Assistant Professor



Dr. G.L. Anantha Krishna
Assistant Professor



Mr. Shripad Diwakar
Assistant Professor



Mr. S. Nithya Poornima
Assistant Professor



Mr. Sriganesh T.G.
Assistant Professor



Mr. Sundaresh.S
Assistant Professor



Dr. Jagadeesh Y. J
Assistant Professor



Mr. Madhu M.C
Assistant Professor



Dr. Keerthi Kumar. N
Assistant Professor



Mr. Kiran M.D
Assistant Professor



Dr. Sangmesh B
Assistant Professor



Dr. Santosh Kumar
Assistant Professor



Dr. Nandini R
Assistant Professor



Dr. G. Avinash
Assistant Professor



Mrs. B. J. Tejaswini
Assistant Professor

LIST OF TECHNICAL STAFF**Mr.P.K.Ramurthy****Foreman****Mr.Ananda.R****Instructor****Mr.R.Venkatesha****Instructor****Mr. Umashankar.S****Assistant Instructor****Srinivasa****Assistant Instructor****Abdul Razak****Assistant Instructor****Pradeep.C****Mechanic****Ashok.G.C****Mechanic****Srinivasa.K.A****Mechanic**



MoUs / Awards / Recognitions



Mr. Shripad Diwakar, Assistant Professor, has been conferred the prestigious “**Adarsh Vidya Saraswati Rashtriya Puraskar**” National award of excellence 2020 by Global Management Council, Ahmedabad for his valuable and noble contribution in the field of Social Science Research on 17th November, 2020. And also, he has been nominated as editorial board member of Glacier Journal of Scientific Research.



Mr. Shripad Diwakar, Assistant Professor has been conferred the prestigious “Adarsh Vidya Saraswati Rashtriya Puraskar”

Mr. T N Praveen Kumar, Associate Professor, guided a "Design and development of reusable inflatable air Bag safety helmet for two wheelers and its communication system for crash location" an undergraduate project was funded by KSCST and was selected as one of best projects in the state level evaluation/exhibition 2019-20 conducted through online on 01st August 2020.

Dr. Sangamesh. B, Assistant Professor, was recognised for the valuable contribution towards promoting National Education Policy 2020 and creating awareness in building nation's knowledge and understanding about NEP that has been issued by Vidya Bharati, a non-profit NGO working in the education sector.

Mr. Keerthi Kumar N, Assistant Professor, has completed final Ph.D viva on 24th November 2020 under the guidance of Dr. T. K. Chandrashekar, Associate Professor, RNSIT, Bangalore. Title of the thesis: Studies on Combustion, Performance and Emission Characteristics of Four Stroke DI Compression Ignition Engine Using Simarouba Oil as Bio Fuel.

Dr. Nandini R, Assistant Professor, received best paper incentives of Rs 10,000/- on 28th Nov- 2020.

Dr Keerthi Kumar N, Assistant Professor, guided students of V semester (A Sai Sumanth, Ajay Sunil, Alap Mundayoor, Ankit Namniar and Ashitesh Nadella) and won first prize in PBL-open day competition for the project titled "Design & Fabrication of an ROV for under water exploration" held at BMS Institute of Technology and Management on 7th December 2020.

Dr. Keerthi Kumar N, Assistant Professor, has received certificate of achievement for the year 2020-2021 for the "Professional development, Skill development and Career Guidance for students" from Career Labs, Bangalore on 30th November 2020.

Dr. G L Anantha Krishna, Assistant Professor, has successfully completed his Ph.D viva voce examination on 15th January 2021 under the able guidance of Dr. K M Sathish Kumar, Professor and Head, Department of Mechanical Engineering. The title of his research work is "Study, Characterization and Optimization of Various Parameters of Permanent Magnet Eddy Current Braking System".

REVIEWER FOR JOURNAL / CONFERENCE



Dr. K. M. Sathish Kumar, Professor and HoD, was a reviewer for International Journal of Automotive and Mechanical Engineering (IJAME).

Dr. K. M. Sathish Kumar, Professor and HoD, has reviewed technical papers for International Conference for Frontiers in Engineering Science and Technology (ICFEST 2020).

Mr. Kiran M D, Assistant Professor, has reviewed technical papers for Elsevier Materials Today Proceedings.

Mr. Shripad Diwakar, Assistant Professor, has reviewed the research article "Implementation of ASAB (Angle Sensor Air Bag) without Air Bag Module in 2-wheelers" for Global Research and Development Journal.

ONLINE WORKSHOP

WORKSHOPS / FACULTY DEVELOPMENT PROGRAMMES/ FESTS

Department of Mechanical Engineering organized online Skill Development Program on “TOYOTA ENGINES” using Cisco WebEx platform for Teaching and non-Teaching faculties for Diploma and ITI colleges on 5th November 2020. There were two session organised. Around 159 members participated. This skill Developed gave an insight on the working of various components of I.C. Engine.



SDP on "TOYOTA ENGINES"

STUDENTS WORKSHOP ORGANISED

The Department of Mechanical Engineering organised E-Student Induction Program 2020-21 during 14th to 17th December 2020, 17th December 2020 & 21st December 2020 to 22nd December 2020. The Induction Program started with the Inauguration session at 10.00 am. Following were involved in the inauguration program of the e-SIP and educated the students and their parents of first year about the BE course and its importance. This program was conducted in the CISCO-Webex platform. The objective of the program was to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, creating a bond between faculty and students, developing awareness, sensitivity and understanding of the self, people around them, society at large and nature.

FDP CONDUCTED/ ORGANISED



The Department of Mechanical Engineering organized five days' online faculty development program (FDP) on the topic "Advanced Nano Materials, Nano Fabrication Techniques & Devices" from 10th to 14th August 2020. Around 368 participants had registered across the country. Dr. P.K. Panda, Head Material Science Division was the chief guest and he delivered the key note address on nano smart materials & its applications. All resource persons were from CeNSE department, IISC Bangalore. Dr. Nandini R and Dr. Santosh Kumar coordinated the above-mentioned FDP program successfully.

SEMINARS / EXPERT TALKS

Dr. Nandini R, Assistant Professor, was invited as resource person for AICTE Training & Learning (ATAL) academy sponsored national level 05 days online FDP on "ROBOTICS" organized by the Department of collegiate & Technical Education" Government Polytechnique, Harapanahalli. From 24 Aug 2020 to 28 Aug 2020.

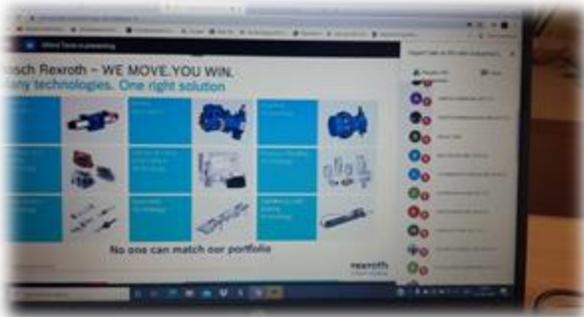
EXPERT TALK ORGANIZED

Organized an online talk on 'Multipurpose Unmanned Aerial vehicles' by Mr. Vinayak Tsalla, Founder & CEO of Tsalla Aerospace, Bengaluru on 18th September 2020 as part of the Aero club activity. Around 27 students attended the talk online. The students got an insight into the various aspects of Flight dynamics and Design and modelling of unmanned aerial vehicles. The program was coordinated by Mr. Madhu M.C, Assistant Professor.



Photos of the online talk by Mr. Vinayak Tsalla

Mrs. S. Nithya Poornima, Assistant Professor, organized an online talk on 'PLC with Industrial Internet of Things (IOT)' by Mr Milind Tavre, Assistant Manager, Bosch Rexroth, Pvt India LTD Bengaluru on 25th September 2020 as part of the Robotics club activity. Around 40 students attended the talk online. The students were enriched with basic knowledge of PLC and its application to suits in today's scenario.



Photos of the online talk by Mr. Milind Tavre

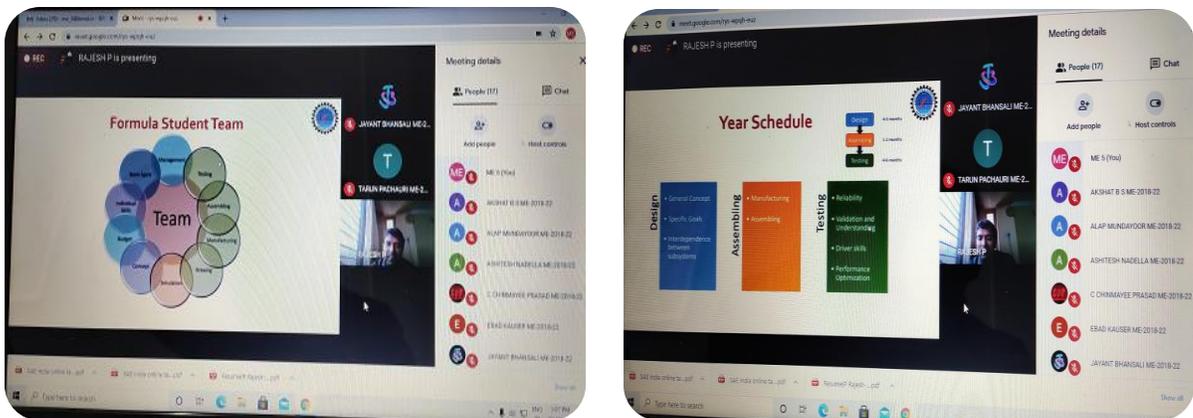
Dr. Keerthi Kumar.N Assistant Professor, organized virtual talk from Mr. Nithin Ravi, Career Coach from Career Labs Bangalore, powered by BYJU'S on "Carrier Guidance and Profile Building" for V semester ME students on 19th October 2020. Around 48 students from V Semester attended the program.

Mr.T. N Praveen Kumar, Associate Professor, organized an online talk on 'Latest Innovations in Mechanical Engineering' by Mr. Lokesh Venkata swamy, Founder & CEO of Innomantra consultancy PVT ltd, Bengaluru on 19th November 2020 for the 5 semester students. Around 30 students attended the talk online. The students got an insight into the various aspects of Innovations.

Mr.T.N Praveen Kumar, Associate Professor, organized an online talk on 'Digital evaluation-IIoT Robotic Process Automation' by Mr P.K Muthukumarswamy, Founder and CEO of Krutibimb, Vizistata Technologies Pvt LTD Bengaluru on 12th November 2020. Around 40 students attended the talk online. The students were enriched with knowledge of IOT and its application to suits in today's scenario.

DEPARTMENTAL CO-CURRICULAR ACTIVITIES

SAE India BMSIT Collegiate club organized an online club activity on 29th October 2020 with Prof. Rajesh P, Department of Mechanical Engineering, BMS College of Engineering, Bengaluru delivering a talk on “Awareness about SAE India”. Around 17 students attended the program and got the awareness about SAE India, its activities, SAE India student member benefits, scheduling an event and participation in the competition. The program was coordinated by Mr. Shripad Diwakar, Assistant professor, on Google Meet platform. Dr.K M Sathish Kumar, HoD and Vice Principal, Dr.H K Govindaraju were present during the online activity.



Club Activity

Mrs.S.Nithya Poornima,Assistant Professor, organised an OBE activity for the course Operation Management (18ME56). The activity was “Self-directed Blended Learning “on the topic Decision Making environment on 22nd September 2020. The main aspect of the activity was case study was given for them analyse the importance of Decision Making. This session enabled them to understand the concept in a better perspective as they could analyse the processes. The POs mapped are PO9, PO10 and PO12.

Mrs.S.Nithya Poornima Assistant Professor, organised an OBE activity for the course Financial Management (18ME743). The activity was “Flip class “ on the topic Cash Budget on 21th October 2020. The main aspect of the activity was enabled them to analyse the problems and solve independently. This session enabled them to understand the concept in a better perspective as they could solve independently. The POs mapped are PO9, PO10 and PO12.

Mrs. S.Nithya Poornima Assistant Professor, organised an OBE activity for the course Financial Management (18ME743). The activity was “Flip class “on the topic Ratio Analysis on 18th November 2020. The main aspect of the activity was enabled them to analyse the problems and solve independently. This session enabled them to understand the concept in a better perspective as they could solve independently. The POs mapped are PO9, PO10 and PO12.

Mrs. S.Nithya Poornima Assistant Professor, organised an OBE activity for the course Financial Management (18ME743). The activity was “Self-Directed Blended Learning Activity “on the topic Ratio Analysis on 26th November 2020. The main aspect of the activity was a Case study was shared for them to analyse Importance of Ratio Analysis The case study enabled them to understand the concept in a better perspective from industrial point of view. The POs mapped are PO9, PO10 and PO12.

Mrs. S. Nithya Poornima Assistant Professor, organised an OBE activity for the course Operation Management (18ME56). The activity was “think pair and share “on the topic MRPI, MRP II and ERP on 8th December 2020. The main aspect of the activity was a video on the topic was shown and a case study was given for them to pair and discuss to analyse the difference in the process. The video enabled them to understand the concept in a better perspective as they could visualise the processes. The POs mapped are PO9, PO10 and PO12.

<https://www.youtube.com/watch?v=hAaINQciTHo>

Mrs.S.Nithya Poornima Assistant Professor, organised an OBE activity for the course Financial Management (18ME743). The activity was “Blended Activity “on the topic Asset Management on 16th December 2020. The main aspect of the activity was a video on the topic was shown to analyse the need for and factors required for asset Management The video enabled them to understand the concept in a better perspective as they could visualise the processes. The POs mapped are PO9, PO10 and PO12.

<https://www.youtube.com/watch?v=z569rEDGU1s>

<https://www.youtube.com/watch?v=yzmpkwAXX9c>

Mrs.S.Nithya Poornima Assistant Professor, organised an OBE activity for the course Operation Management (18ME56). The activity was “Blended learning Activity “on the topic Supply Chain Management on 16th December 2020. The main aspect of the activity was a video on the topic was

shown and discuss to analyse the process. The video enabled them to understand the concept in a better perspective as they could visualise the processes. The POs mapped are PO9, PO10 and PO12.

<https://www.youtube.com/watch?v=DWKiAytjFE0>

<https://www.youtube.com/watch?v=vp196wKKdpA>

https://www.youtube.com/watch?v=Hf_ML38dSDM

Dr. Nandini R, Assistant Professor, carried out an OBE activity in the course named tribology (17ME742) on December 23rd and December 24th 2020 for VIII SEM students. The students were given topics to present the prepared ppt to the entire class. The topics covered all the modules of tribology. They were also supposed to relate the concepts of the topics to some real time applications by referring some case studies where in these concepts of tribology are used to reduce wear, friction & corrosion resistance successfully in their industry / organization as a part of real time application.

Video Link for the conduction of OBE activity is shared below

<https://youtu.be/Lz9Rd9fzFKk>

<https://youtu.be/OJI9ddC1L4I>

Mrs. S. Nithya Poornima Assistant Professor, organised an OBE activity for the course Operation Management (18ME56). The activity was “Blended Learning Activity “on the topic MRPI on 24th December 2020. The main aspect of the activity was a video on the topic was shown to analyse the MRP process. The video enabled them to understand the concept in a better perspective as they could visualize the processes. The POs mapped are PO9, PO10 and PO12.

[youtube.com/watch?v=W4DqzcLG1R4](https://www.youtube.com/watch?v=W4DqzcLG1R4)

Mrs. S. Nithya Poornima Assistant Professor, organised an OBE activity for the course Financial Management (18ME743). The activity was “Blended Activity “on the topic Ratio Analysis on 31th December 2020. The main aspect of the activity was a video on the topic was shown to analyse Importance of Ratio Analysis The video enabled them to understand the concept in a better perspective as they could visualise the processes. The POs mapped are PO9, PO10 and PO12.

<https://youtu.be/zl5YcY37MnY>

Dr. Nandini R, Assistant Professor, carried out an OBE activity in the course named smart materials & structures (18CAE331) on December 28th 2020 for M-Tech IIIrd SEM students. The students were given with the topics from the course smart materials & structures. They prepared ppt and presented to the entire class. Interaction among the students were conducted for better understanding of real time applications. The topics presented by students covered all the modules of tribology. Students prepared a report and submitted the same for evaluation.

Video Link for the conduction of OBE activity is shared below

<https://youtu.be/kIWU5R-ziWk>

**PUBLICATION OF RESEARCH PAPERS BY THE
FACULTY MEMBERS, BMSIT&M**

PUBLICATIONS

Journal

Dr. G.L.Anantha Krishna, Assistant Professor, has published a paper titled “Analytical and Finite Element Analysis of a Typical Curved Beam Under loading” in International Journal of Engineering Science and Computing (IJESC), ISSN -2321 3361, Volume 10, Issue No.7, July 2020, Pg 26631 – 26633.

Dr.H. K. Govindaraju, Kiran M D, ARK Swamy, Deepak S and Bhaskar Raju S A, have published a paper “Mechanical Behavior of Heat Treated Al6061-Tungsten Carbide and Graphite Reinforced Hybrid Composites” in the Journal of Critical Reviews, ISSN- 2394-5125 VOL 7, ISSUE 17, 2020.

Mr.Kiran M D, Nithin Kumar, Ezhil Vannan.S, Vincent Linish Dsouza , Madeva Nagaral, have published a paper “Dry sliding wear behaviour of short Carbon fibre reinforced aluminium matrix composites” in the Journal of Critical Reviews, ISSN- 2394-5125 VOL 7, ISSUE 15, 2020.

Mr.Kiran M D, Nithin Kumar, S. S. Sharma, B. Ravikiran Kamath, R. K. Veerasha, have published a paper “Sliding Wear Behaviour of Nickel-Coated Short Fibre-Reinforced Al7075 Composites” in the Journal of Failure Analysis and Prevention-Springer, <https://doi.org/10.1007/s11668-020-00955-1>, 11 August 2020.

Dr.Keerthi Kumar N, Raghunandhan G. H, Vinutha B, Prathiba N, have published a paper “ADVANCED DECISION SUPPORT SYSTEM FOR PRECISION AGRICULTURE USING WSN” in the International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 11th August 2020.

Dr.Keerthi Kumar N, Raghunandhan G. H, Karunya Sankar, Rushank Prabhudesai, have published a paper entitled “I- TRASHER- SMART WASTE MANAGEMENT SYSTEM” in the

International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 11th August 2020.

Dr.Keerthi Kumar N, Prathiba N, Raghunandhan G. H, Vinutha B, have published a paper entitled “Design and Implementation of Solar Based Smart Mobile Charging System” in the International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 4th September 2020.

Dr.Keerthi Kumar N, Assistant Professor, has published a paper entitled “Impact of injection timing on simarouba seed oil –fueled CI engine” in Materials Today: Proceedings, Elsevier on 20th November 2020.

Mr.Kiran M D, H K Govindaraju, T Jayaraju, have published a paper entitled “Fracture toughness of surface treated short fiber reinforced epoxy composites” AIP Conference Proceedings 2247, 020006 (2020); <https://doi.org/10.1063/5.0003825>.

Dr.H K Govindaraju, Kiran M D, Lokesh Yadhav B R, have published a paper entitled “Wear behavior of aluminum metal matrix composites: A Taguchi approach” AIP Conference Proceedings 2247, 040005 (2020); <https://doi.org/10.1063/5.0003802>.

INTERNATIONAL CONFERENCE

Dr.Keerthi Kumar N, Assistant Professor, has presented a paper entitled “Development of Brake Friction Material for Automotive Applications”, at International Conference on Advanced Material Science and Applications (ICASMA-2020), Organized by department of Physics and IQAC of Ramaiah Institute of Technology, Bangalore, from 3rd to 4th September 2020.

Mr. Sundaresh S, Assistant Professor, has presented a paper entitled “Influence of fly ash and nickel particles on fatigue behavior of Al-Si alloys (LM6) metal matrix composites” in the *International Conference on Accelerating Innovations in Material Science (AIMS 2020)* organized by Department of Chemistry, BMS Institute of Technology and Management, Bangalore from 4th Aug. to 6th August 2020.

Mr. K.Chandra Sekhara Reddy, Assistant Professor, has presented a paper entitled “Synthesis and Characterization of Magnesium Oxide Nanoparticles using Combustion Method to Study the Fuel Properties” in the *International Conference on Accelerating Innovations in Material Science (AIMS 2020)* organized by Department of Chemistry, BMS Institute of Technology and Management, Bangalore from 4th to 6th August 2020.

Dr.Nandini R, Assistant Professor, has presented a paper entitled “Optimization of Mechanical Attributes of an Energy-Absorbing PU Foam in the international conference “Accelerating Innovations in Material Science (AIMS -2020), conducted by department of chemistry, BMSIT &M, Bangalore.

Dr.Keerthi Kumar N,Assistant Professor, has presented a paper entitled “Effect of Injection Pressure and Nozzle Geometry on Engine Performance in Simarouba Methyl Ester Operated Diesel Engines”, in 1st International Conference on Accelerating Innovations in Material Science AIMS 2020, Organized by department of Chemistry, BMSIT & M, Bangalore from 4th to 6th August 2020.

Mrs S. Nithya Poornima Assistant Professor, has presented a paper entitled “Automated testing for quality Inspection of food Grains” in the AICTE sponsored Two Days International E-conference on

Sustainable Development in Mechanical Engineering (SDME 2020) organized by the department of Mechanical Engineering VNRVJIET Hyderabad during October 30-31, 2020.

Mr. Sundaresh.S Assistant Professor, has presented a paper entitled “Review on Damping Behavior of Aluminum matrix composites” in the on “Emerging Trends, Simulation & Manufacturing- Key components of Make in India Initiative” held at Department of Mechanical Engineering, M S Ramaiah Institute of Technology, Bengaluru-560054, Karnataka during November 23-24, 2020.

Mr.Madhu MC, Assistant Professor, has presented a paper entitled 'Hybrid DC-AC homes with Roof Top Solar power 'at the International conference on Renewable energy 2020 organized by PREMC from November 25th to 27th online .(venue : Rome,Italy)

Mr. Kiran M D, Assistant Professor, has presented a paper entitled “Fracture Toughness Study of Epoxy Composites reinforced with Carbon Fibers with Various Thickness” in International Conference on Smart and Sustainable Developments in Materials, Manufacturing and Energy Engineering (SME 2020) organized by Dept. of Mechanical Engg. NMAMIT, Nitte during 22 – 23 December 2020.

WORKSHOPS / SEMINARS / FDPs ATTENDED

Mr. Sriganesh T G, Assistant Professor, attended six day online National level Faculty Development Program on "Cryogenics & Superconductivity- A Research Perspective" from 21st Sept to 26th September 2020. organized by the Department of Mechanical Engineering, Coorg Institute of Technology, Ponampet.

Mrs. Tejaswini B J, Assistant Professor, attended a three days training workshop on "Mendeley Reference Manager" from 4th to 6th July 2020, organized by Nuhianwali Education Society, Haryana.

Mrs. Tejaswini B J, Assistant Professor, attended a Six days FDP on "Cyber Space and Cyber Security" organized by School of Law, Sathyabama Institute of Science and Technology, Chennai from 20th to 25th July 2020.

Dr. Nandini R, Assistant Professor, 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 11th July 2020.

Dr. Nandini R, Assistant Professor, attended online ceramic lecture series from Indian ceramic society on "material synthesis at zero gravity" presented by Dr. M.S Vijaya Kumar, hosted by ceramic department of PDA college of Engineering, Kalburgi on 25th July 2020.

Dr. Nandini R, Assistant Professor, 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 26th July 2020.

Dr. Nandini R, Assistant Professor, has successfully attended online workshop on "Swayam - NPTEL" on 28th July 2020, jointly organised by NPTEL, IIT madras, Visvesvaraya Technological University (VTU), Belagavi and Bheemanna Khandre Institute of Technology, Bhalki.

Mrs S. Nithya Poornima Assistant Professor participated in online Faculty Development Program on Research Proposal writing and Opportunities in Science, Engineering and Management organised by R& D Center Bangalore Institute of Technology (BIT) during 6th July 2020 to 11 July 2020.

Mr. Sundaresh S, Assistant Professor, attended Online One Week Faculty Development Program on “Research Proposals Writing And Opportunities In The Field Of Science, Engineering And Management” organized by R&D Centre, Bangalore Institute of Technology (BIT), Bangalore from 6th July 2020 to 11 July 2020.

Mr. Sundaresh S, Assistant Professor, 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 20th July 2020 to 24th July 2020.

Mr. Shripad Diwakar, Assistant Professor, 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 29.06.2020 to 04.07.2020

Dr K.M.Sathish Kumar, Dr Santosh Kumar, Dr Nandini, Mr. Sundaresh S, Mrs.S.Nithya Poornima, Dr.Avinash, Mr.Sri Ganesh, Mr. Keerthi Kumar, Mr. Shripad Diwakar and Dr Sangamesh, of Department of Mechanical Engineering attended one week Online International Faculty Development Program on “ADVANCED NANOMATERIALS, NANO FABRICATION TECHNIQUES AND DEVICES” conducted by Department of Mechanical Engineering, BMS Institute of Technology and Management from 10.08.2020 to 14.08.2020.

Mrs.Tejaswini B J, Assistant Professor, attended a ten days online workshop on “ADVANCED LEGAL RESEARCH METHODOLOGY” organized by University College of Law, Osmania University, Hyderabad, sponsored under the scheme of Rashtriya Uchchar Shiksha Abhiyan (RUSA 2.0) from 4th to 14th August 2020,

Dr.Keerthi Kumar N, Assistant Professor, attended two week Online International Faculty Development Program on “Experimental and Numerical Methods for Mechanical Engineers (ENMME-2020” conducted by Department of Mechanical Engineering, G B Pant Institute of Engineering & Technology, Pauri, Uttarakhand from 17th Aug to 28th Aug 2020.

Dr. Santosh Kumar, Assistant Professor, attended FDP on Demystifying Electrical Vehicle – A green energy revolution held by Manipal university, Jaipur during September 14-18, 2020.

Dr. Keerthi Kumar N, Assistant Professor, attended five days Online Faculty Development Program on “Additive Manufacturing” from 29th August 2020 to 2nd September 2020 organized by the Department of Mechanical Engineering, Presidency University, Bangalore.

Dr. Keerthi Kumar N, Assistant Professor, attended six days Online National Level Faculty Development Program on “Cryogenics & Superconductivity- A Research Perspective” from 21st Sept to 26th September 2020 organized by the Department of Mechanical Engineering, Coorg Institute of Technology, Ponnampet.

Mr. Madhu M C, Assistant Professor, attended a five day Faculty Development program on Academia Industry Interaction, Avenues in Funded Projects and Entrepreneurship conducted by REVA UNIVERSITY from 08th January 2021 to 13th January 2021. in online mode.

Mr. Madhu M C, Assistant Professor, attended a Short Term training program (STTP) on Research Methodology and Tools, organized by REVA UNIVERSITY from 18th January 2021 - 23rd January 2021 in virtual mode.

Mr.K. Chandra Sekhara Reddy, Assistant Professor, attended Online one-week short term training program(STTP) on “Research Methodology and tools” organized by School of Computer Science and Engineering, Reva University, Bengaluru, held between 18th January 2021 and 23rd January 2021.

Mr. K.Chandra Sekhara Reddy, Assistant Professor, attended Online five days Faculty Development Program on “Academia Industry Interaction, Avenues in Funded Project and Entrepreneurship” organized by School of C&IT, Reva University, Bangalore, held between 08th January 2021 and 13th January 2021.

Mrs. S Nithya Poornima, Assistant Professor, has participated in the Short Term Course on Lean Manufacturing and Industry 4.0 organized by the Department of Production Engineering, National Institute of Technology, Tiruchirappalli held during 04th January 2021- 08th January 2021. through Video Conferencing (Online mode).

Mr. Sundaresh S, Assistant Professor, attended AICTE sponsored six days Short Term Training program on “Rotor Dynamics – Series 3: Basics of Rotor Dynamics” organized by Department of Mechanical Engineering, Dr. Ambedkar Institute of Technology, Bengaluru-560054, Karnataka during 28th December 2020 - 2nd January 2021.

Mr.Kiran M D, Assistant Professor, participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "3D Printing & Design" at University Visvesvaraya College of Engineering. from 05th to 09th October 2020.

Mr.Kiran M D, Assistant Professor, participated & completed successfully AICTE sponsored online Short Term Training Programme (STTP) Series on RECENT ADVANCES IN TRIBOLOGY AND SURFACE ENGINEERING: Series 3 of 4 – Introduction to Special Topics like Nano tribology, Bio tribology, Space Tribology, Biomimetic and Tribology in Industry organized by the Department of Mechanical Engineering of Saintgits College of Engine Kottayam from 12th to 17th October 2020.

WEBINARS ATTENDED



Dr. Nandini R, Assistant Professor, attended Webinar on “Rheology of ceramic slurries” hosted by Anton Paar India, Speaker: Dr. Kartik Pondicherry on 11th July 2020.

Dr. Nandini R, Assistant Professor, attended webinar on “Surface characterization of ceramics” hosted by Anton Paar India, Speaker: Dr. Prasad Gosavi on 12th July 2020.

Dr. Nandini R, Assistant Professor, attended webinar on “engineered hybrid-porous materials synthesis & applications “; speaker: Dr. Satish Nune, Pacific North Nat. Lab USA on 19th July 2020.

Dr. Nandini R, Assistant Professor, 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 22nd July 2020.

Mrs. Tejaswini B J, Assistant Professor, 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 20th July 2020.

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 27th July 2020.

Mrs. Tejaswini B J, Assistant Professor, attended the webinar on “JOURNEY TO BECOME A START UP ENTREPRENEUR- SEEDS TO SHOOT” organized by Sathyabama Institute of Science and Technology, Chennai on 18th July 2020.

Dr. Nandini R, Assistant Professor, participated in web seminar on 3D Printing and its applications held on 19 August 2020, organized by Department of physics, BMSIT & M, Bengaluru.

Dr. Nandini R, Assistant Professor, participated in the global webinar “Demystifying the new education policy” Impact on the future of Indian education system on the 8th August 2020.

Dr. Nandini R, Assistant Professor, participated in international webinar on “super capacitor” by Dr. Libu Manjakkal, University of Glasgow, U K organized by department of physics, Christ college, Irinjalakuda on 03rd August 2020.

Mrs. Tejaswini B J, Assistant Professor, attended the webinar on “Introduction to Intellectual Property Rights (IPR) and Patent Filing” organized by Presidency University, Bangalore in association with Rajiv Gandhi National Institute of Intellectual Property Management on 12th August-2020.

Dr. Keerthi Kumar N, Assistant Professor, participated in webinar on “SCT paper and Research Proposal Writing” held on 14th August 2020, organized by Department of Industrial Engineering and Management, Ambedkar Institute of Technology, Bengaluru.

Dr. Keerthi Kumar N, Assistant Professor, participated in webinar on “Introduction to Intellectual Properties Rights (IPR) and Patent Filing” held on 12th August 2020, organized by department of Computer Science & Engineering and CIIE, Presidency University, Bengaluru.

Dr. Keerthi Kumar N, Assistant Professor, participated in webinar on “Future of Higher Education in India-Turning Challenges into Opportunities” held on 25th September 2020, organized by BMS Institute of Technology and Management, Bengaluru.

Mrs. Tejaswini.B.J Assistant Professor, participated in webinar on “Future of Higher Education in India-Turning Challenges into Opportunities” held on 25th September 2020, organized by BMS Institute of Technology and Management, Bengaluru.

Dr. Nandini R, Assistant Professor, has participated in the national level webinar on “Future of Higher Education in India-Turning Challenge into opportunities” organized by BMS Institute of Technology & Management on 25th September 2020.

Dr. Nandini R, Assistant Professor, has participated in national webinar on “Women & Science: Facts & Prejudice” by Dr. A. Seema (Scientist C-MET, Thrissur), Jointly organized by department of physics, Christ College (Autonomous) Irinjalakuda on 30th September 2020.

Dr.Keerthi Kumar N, Assistant Professor, participated in webinar on “Data Analysis and Artificial Neural network in Mechanical Engineering” held on 17th October 2020, organized by Department of Mechanical Engineering, Sai Vidya Institute of Technology, Bengaluru.

Dr. Keerthi Kumar N, Assistant Professor, participated in webinar on “Entrepreneurship and New Venture Creation” held on 31st October 2020, organized by Department of Computer Science and Engineering, Presidency University, Bengaluru.

Dr. Nandini and Mrs. S.Nithya Poornima, has participated webinar on “Effective Life Management during post covid-19” organized by Department of Physical Education in association with NSS and Civil Defence, BMS Institute of Technology and Management, Bengaluru –560064, on 27th November, 2020.

Mr. Tejaswini B J, Assistant Professor, attended the webinar on “Work Life Balance” organized by Women Empowerment Cell in association with the Department of Physical Education and Sports, BMSITM on 20th November 2020.

Mr. Tejaswini B J, Assistant Professor, participated in an online COVID -19 PANDEMIC AWARENESS QUIZ organized by National Civil Defence Corps in the month of November 2020.

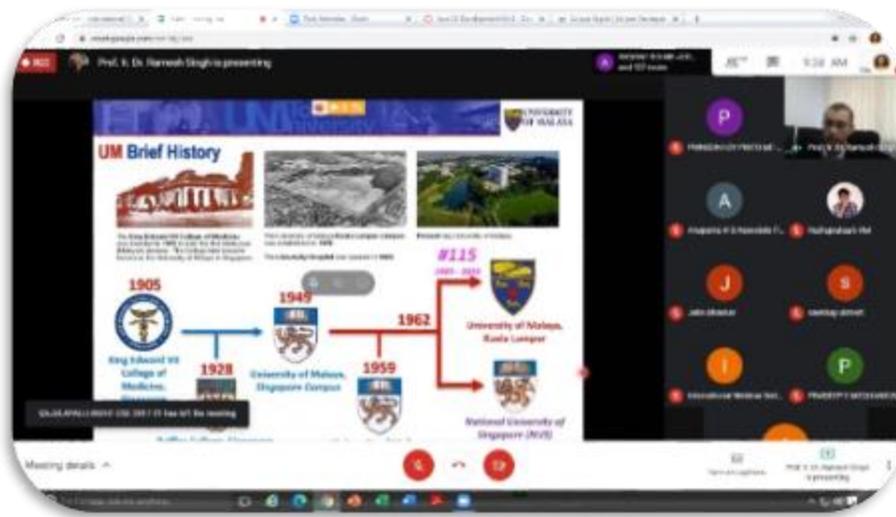
Dr. Keerthi Kumar N, Assistant Professor, has participated in one day National Level Awareness Webinar on “Optimization Techniques for Engineering”, organized by Sanathana Research and Training Institute in Association with Rotary Club of Mysore held on 29th November 2020.

Mrs. S. Nithya Poornima, Assistant Professor, has participated in webinar “Creating a Safe Educational Environment” on 23rd December 2020 organized by College Internal Compliance Committee, Sir MVIT, Bengaluru.



WEBINARS ORGANISED

Department of Mechanical Engineering organized an International Webinar on “Global Opportunities in Mechanical Engineering” by **Ramesh Singh (Ir. Dr.)** B.Eng. (UK), Ph.D. (UK), P.Eng., CEng. (UK), CPEng. (Aus), IntPE (Aus) FASc, FIMechE (UK), FIE Aust., Fellow, Academy of Sciences Malaysia Senior Professor of Mechanical & Materials Engineering, University of Malaya on 28th September 2020. This international webinar focuses on higher education, emerging areas of research, technology applications, best practices, and global advances for Mechanical Engineering aspirants.



Department of Mechanical Engineering and IP Cell organized a Webinar on “Patentability of Mechanical Inventions” for III year students on 8th September 2020. Around 40 students attended the talk online. The program was coordinated by T.N Praveen Kumar, Associate Professor, Dept. of ME, BMSIT&M.

Department of Mechanical Engineering and IP Cell organized a Webinar on “Importance of Materials in an Aerospace Domain” by Dr. Madeva Nagaral, Deputy Manager, Aircraft Research and Design Center, HAL, Bengaluru on 11th September 2020. Around 40 students attended the talk online. The program was coordinated by T.N Praveen Kumar, Associate Professor.



INTERNSHIP

Dr. Nandini R, Assistant Professor, attended online internship training program on Industry 4.0 from Gusto valley Technovations LLP from 21 July 2020 to 31st July 2020.

Mr.Sripad Diwakar, Assistant Professor, has Undergone 10 day faculty on "Industry 4.0" at Gustovalley Technovations during 08th to 18th July 2020.

Mrs. S.Nithya Poornima, Assistant Professor, Department of Mechanical engineering attended online internship training program on Firewall building from Tacitine solutions pvt. ltd from 16th to 31st July 2020.



ONLINE COURSE COMPLETED (FACULTY)



Name of the Faculty	Certified by	No. of (Unique) Course	Total no. of courses taken by Faculty
Mrs.S. Nithya Poornima Assistant Professor	Udemy	01 (Counseling Practitioner certificate)	01
Mrs.S.Nithya Poornima Assistant Professor	UDEMY	01 (TJ walker -Public speaking skills)	01
Dr. Keerthi Kumar. N Assistant Professor	COURSERA	01 (Learning how to Learn Powerful mental tools to help you master tough subjects)	01
Dr.Keerthi Kumar.N Assistant Professor	COURSERA	01 (Writing and Editing: Word Choice and Word Orders")	01
Dr.Keerthi Kumar.N Assistant Professor	COURSERA	01 (Introduction to Data Analysis Using Excel)	01
Mr.KC.Sekhara Reddy Assistant Professor	NPTEL	Introduction to Industry 4.0 and Industrial Internet of Things	01
Mr.T.N.Praveen Kumar Associate Professor	NPTEL	Patent law for engineers and scientists	01
Mr.Shripad Diwakar Assistant Professor	NPTEL	Technologies for clean and renewable energy production	01



ONLINE QUIZ



- **Mrs. Tejaswini B J, Assistant Professor,** participated in an online ENVIRONMENTAL AWARENESS QUIZ organized by OIKOS- Eco club of BMSIT&M, Bangalore on 4th August 2020 on the occasion World nature conservation day.
- **Mr. Sundaresh S, Assistant Professor,** attended e-Online Quiz on “MECHANICAL ENGINEERING SUBJECT” conducted by Adichunchanagiri Institute of Technology on 03rd July 2020.
- **Mrs S. Nithya Poornima, Assistant Professor,** 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 19th July 2020.
- **Mrs S.Nithya Poornima, Assistant Professor,** 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 23rd July 2020.
- **Mrs. Tejaswini B J, Assistant Professor,** 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 19th July 2020

CONSULTANCY WORK

Dr. Keerthi Kumar.N, Assistant Professor, Carried out consultancy work for M.Tech project on combustion, performance and emissions test using Computerized CI engine for the candidates: Guruprasad. S, M.Tech student from SSIT, Tumkur and Akshay Kumar Shetty, M.Tech Student from SSIT, Tumkur.

Dr. Nandini R, Assistant Professor, conducted executive development program for L & T Mumbai officials on Overview of ANSI / ASTM standards and Ingress Protection rating on 27 October 2020 from 9:30 AM -5:30 PM successfully

ALUMNI TALK

Mr. Bhala Chandra Khare, alumnus of Mechanical Engineering Department of 2007 batch, has given a Technical talk on “Design Considerations for Dashboard/Cockpit module” for 7th. Semester ME on 03rd October 2020.

YouTube link: <https://youtu.be/DmxGU1huUMg>



Technical talk on “Design Considerations for Dashboard/Cockpit module”

Parent- Teachers meeting was conducted online to the parents of 3rd, 5th and 7th semester students on 17th October 2020. HoD deliberated the conduction of online classes, assignment, quizzes conducted, proctor meeting etc. Parents were glad and appreciated the steps taken by the college for the wellbeing of the students during the lockdown period.



The Parents Teachers Meeting was conducted through online on 22nd and 24th October 2020. The Head of Department addressed the parents regarding the measures taken to engage the classes during the Covid-19 pandemic and also shared about details of Google class rooms. The Videos and study materials were periodically uploaded to the respective google class rooms for their references.

TECHNICAL STAFF DETAILS

ACHIEVEMENTS

- All technical staffs took a keen initiative on fabricating of “Foot operated hand sanitizer Dispenser unit” in mass production during COVID-19 pandemic.



Fabrication of foot operated hand sanitizer dispenser in mass production.

- Department of Mechanical Engineering Carried out Five days in house training Programme for Technical staff on “**Basic Operation and Programming of CNC Turning Machine**” –ACE Supper jobber 500J in two batches. Batch-1 from 09th to 13th December 2020. and Batch-2 from 17th to 21st December 2020. The program was coordinated by Mr. P. K. Ramurthy, Foreman.



Technical Staffs In house Training Programme (Programming & Operation of CNC Turning Machine)

TECHNICAL STAFF FDP/QUIZ/WEBINAR ATTENDED

1. All technical staffs participated in one-day online skill Development programme on “**Toyota Engines**” organized by Department of Mechanical Engineering, BMS Institute of Technology and Management 05th December 2020.
2. **Mr.P.K Ramurthy, Foreman,** participated in two-day online workshop on “**Modelling & Analysis using Ansys Software**” Under VTU TEQIP -1.3 from 06th to 07th August-2020 at Biluru Gurubasava Mahaswamiji Institute of Technology, Mudhol.
3. **Mr.P.K Ramurthy,Foreman,** participated one-week national workshop for Lab Instructors on “**Engineering Graphics using AutoCAD Software**” from 07th to 11th September-2020 at Dayananda Sagar University School of Engineering, Bengaluru-560 114.
4. **Mr.P.K Ramurthy,Foreman,** participated in one day Webinar on “**Manufacturing Intelligence**” held on 18th September 2020, under SAMARTH Udyog Bharat 4.0 Platform.CMTI,Bengaluru.
5. **Mr.P.K Ramurthy,Foreman,** participated in International Webinar on “**Current metrology trends and importance of computerized data acquisition**” in Mechanical Engineering at UVCE on 3rd August -2020.
6. **Mr.P.K Ramurthy,Foreman,** participated in Webinar on “**Smart Manufacturing and the Pandemic**” held on 28th June-2020 at UVCE,Bengaluru.
7. **Mr.Ananda.R,Instructor,** participated in two-day online workshop on “**Modelling & Analysis using Ansys Software**” Under VTU TEQIP -1.3 from 06th to 07th August-2020 at Biluru Gurubasava Mahaswamiji Institute of Technology, Mudhol.
8. **Mr.Ananda.R,Instructor,** participated in one-week national workshop for Lab Instructors on “**Engineering Graphics using AutoCAD Software**” from 07th to 11th September-2020 at Dayananda Sagar University School of Engineering,Bengaluru-560 114.
9. **Mr.Umashankar.S,Assistant Instructor,** participated in two-day online workshop on “**Modelling & Analysis using Ansys Software**” Under VTU TEQIP -1.3 from 06th to 07th August-2020 at Biluru Gurubasava Mahaswamiji Institute of Technology, Mudhol.

10. **Mr.Srinivasa, Assistant Instructor,** participated in two-day online workshop on “**Modelling & Analysis using Ansys Software**” Under VTU TEQIP -1.3 from 06th to 07th August-2020 at Biluru Gurubasava Mahaswamiji Institute of Technology, Mudhol.
11. **Mr.Srinivasa, Assistant Instructor,** participated in one-week national workshop for Lab Instructors on “**Engineering Graphics using AutoCAD Software**” from 07th to 11th September-2020 at Dayananda Sagar University School of Engineering, Bengaluru-560 114.
12. **Mr.Ashok.G.C, Mechanic,** participated in one-week national workshop for Lab Instructors on “**Engineering Graphics using AutoCAD Software**” from 07th to 11th September-2020 at Dayananda Sagar University School of Engineering, Bengaluru-560 114.
13. **Mr.Pradeep.C, Mechanic,** participated in the National Level Webinar on Future of Higher Education in India- Turning Challenges into Opportunities at BMSIT&M from 25th September 2020.
14. **Mr.Srinivasa K.A, Mechanic,** participated in two-day online workshop on “**Modelling & Analysis using Ansys Software**” Under VTU TEQIP -1.3 from 06th to 07th Aug-2020 at Biluru Gurubasava Mahaswamiji Institute of Technology, Mudhol.
15. **Mr.Srinivasa K.A, Mechanic,** participated in one-week national workshop for Lab Instructors on “**Engineering Graphics using AutoCAD Software**” from 07th to 11th September -2020 at Dayananda Sagar University School of Engineering, Bengaluru-560 114.



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.

