



# **BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT**

Yelahanka, Bengaluru-560 064

## **DEPARTMENT OF MECHANICAL ENGINEERING**

### **About Mechanical Engineering Department:**

Mechanical engineering is a diverse subject that derives its breadth from the need to design and manufacture everything from small individual parts and devices to large systems. The role of a mechanical engineer is to take a product from an idea to the marketplace. In order to accomplish this, a broad range of skills are needed. One skill that is the mechanical engineer's exclusive domain is the ability to analyze and design objects and systems with motion.

The Department of Mechanical Engineering, headed by Dr. K M Sathish Kumar, was established in the year 2002-03 with an approved intake of sixty 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 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.

Department has 19 well qualified and dedicated faculty members with 10 faculty holding Doctoral Degree and 9 faculty pursuing their doctoral degree. The Department is supported by 09 well trained Technical staff.

Department of Mechanical Engineering is happy to inform that Mr. Arun D (1BY16ME010) has secured I Rank and 7 Gold medals in the Mechanical Engineering. He was topper among 14803 mechanical engineering graduated students under VTU Belagavi.

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.

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

### **VISION**

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

### **MISSION**

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

### **PROGRAM EDUCATIONAL OBJECTIVES (PEO's)**

#### **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

## **PROGRAM OUTCOMES (PO's)**

**PO-1-** Apply knowledge of mathematics and science in solving mechanical engineering problems.

**PO-2 -** Identify, formulate and solve mechanical engineering problems.

**PO-3:** Design and conduct experiments to get solutions for mechanical engineering problems.

**PO-4:** Analyze data and interpret the experimental data for complex mechanical engineering problems.

**PO-5:** Use the techniques, skills and modern engineering tools necessary for engineering practice.

**PO-6:** Understand the impact of engineering solutions in environmental and societal circumstances.

**PO-7:** Understand the legal and cultural aspects relevant to mechanical engineers.

**PO-8:** Understand professional and ethical responsibilities for engineering practice

**PO-9:** Work independently and also to work in a team

**PO-10:** Communicate effectively with superiors and subordinates.

**PO-11:** Apply the management and engineering principles to work effectively and to reduce cost.

**PO-12:** Change according to latest technical developments.

## Report of E-Students Induction Pogramme, 2020-21 Even Semester

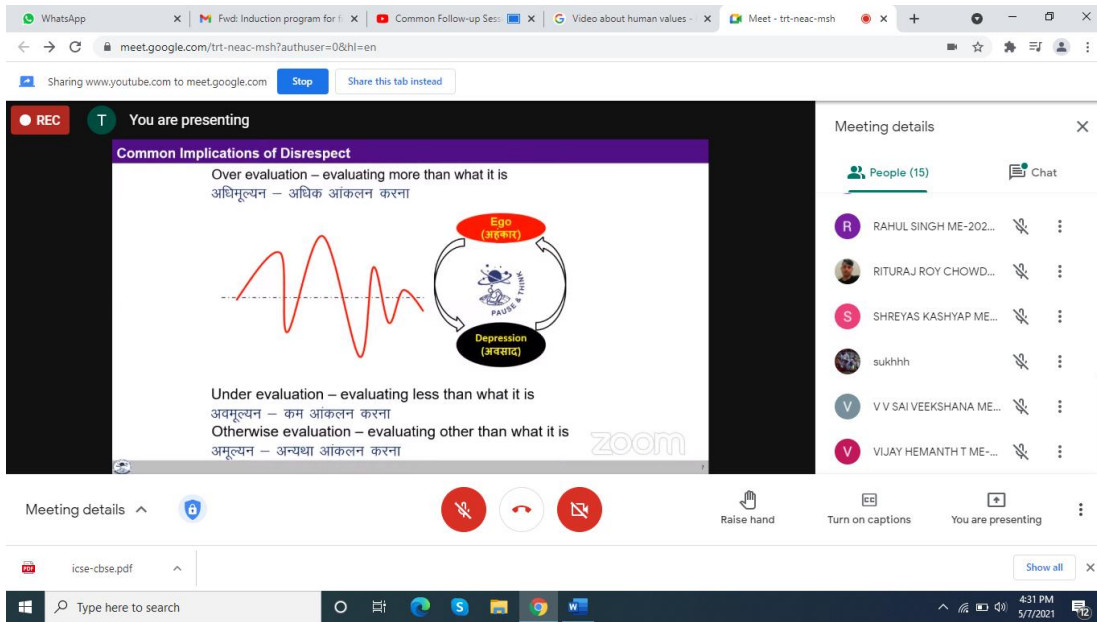
An Eight day E- Students Induction Programme was conducted for the 2<sup>nd</sup> semester students of Mechanical engineering from 5<sup>th</sup> May 2021 to 17<sup>th</sup> May 2021. The programme covered sessions on Universal Human Values, Literature, Physical Health, Yoga, Awareness on COVID19, SOP to be followed, importance of vaccination, managing good mental health, importance of academics and career guidance by alumni, Creativity and Innovation, Scope of Mechanical engineering and role of physical exercises and nutritional food in maintaining good health.

Universal Human Values Sessions: Two Videos of UHV sessions conducted by AICTE as part of E-SIP activity was played for the students and were also asked to deliberate on the same topics on 7<sup>th</sup> and 17<sup>th</sup> May 2021. The Topics covered were Society and Respect.

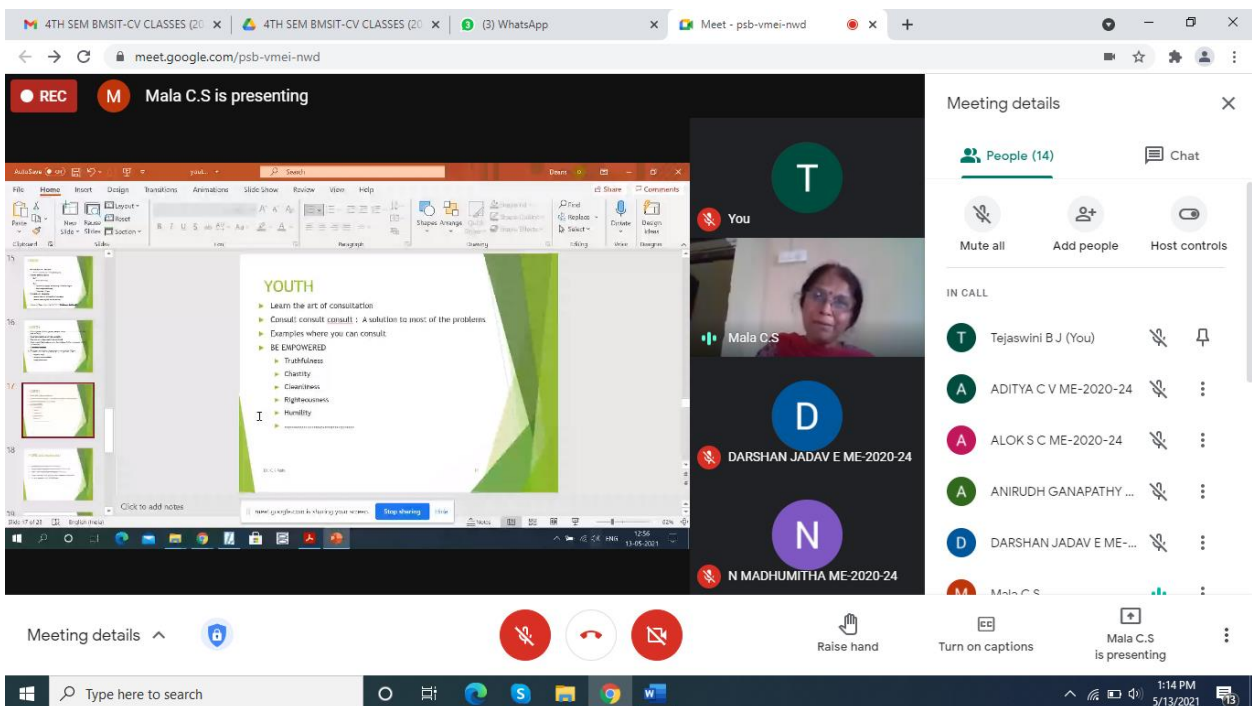
The screenshot displays a Zoom meeting interface. The main content is a presentation slide titled "Harmony in the Society (समाज में व्यवस्था)". Below the title, it lists "Human Goal (मानव लक्ष्य)" with four categories, each leading to a specific outcome:

- Right Understanding & Right Feeling leads to Happiness in Every Individual.
- Prosperity leads to In Every Family.
- Fearlessness (Trust) leads to In Society.
- Co-Existence (mutual fulfillment) leads to In Nature/Existence.

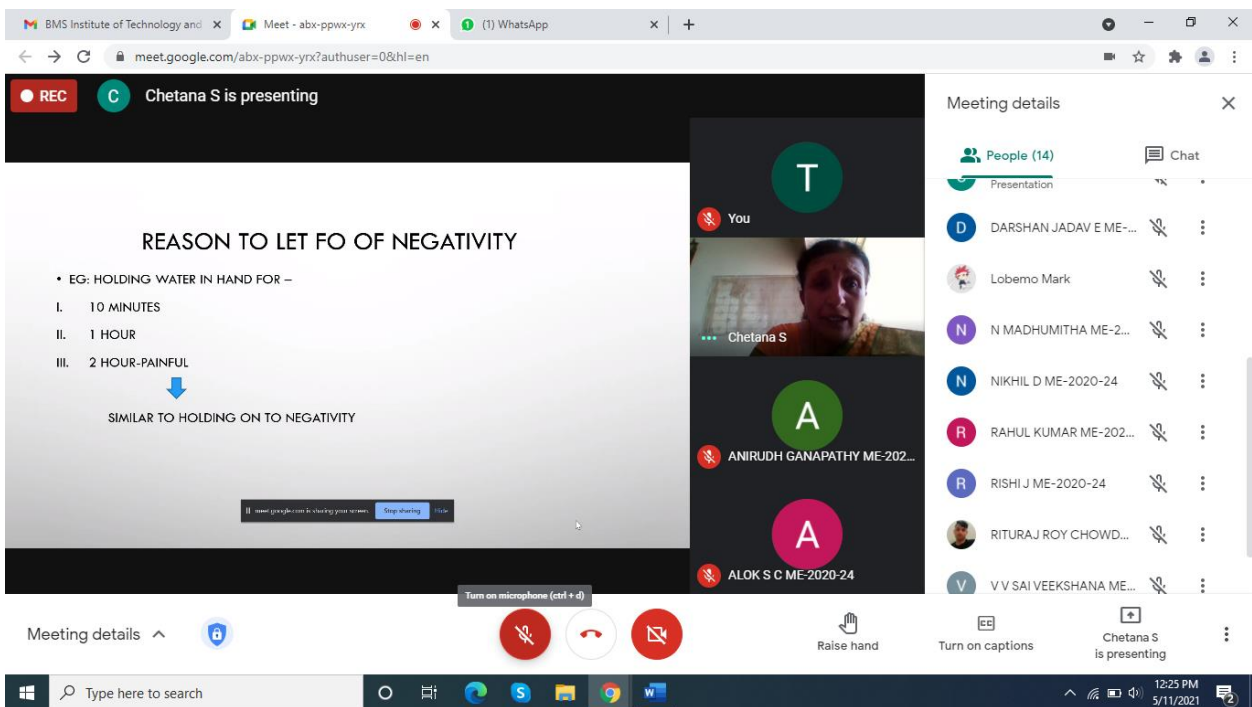
The meeting interface includes a "Meeting details" panel on the right showing 15 people, with the presenter Tejaswini B.J. (You) at the top. The bottom of the screen shows the Windows taskbar with the time 11:33 AM on 5/17/2021.



Dr.C.S.Mala, Dean-Students Welfare and Professor, Dept. of ECE, BMSIT&M delivered a talk on Youth empowerment on 13<sup>th</sup> May 2021. She briefed the students about the potential of youth and motivated them to develop positive thinking.

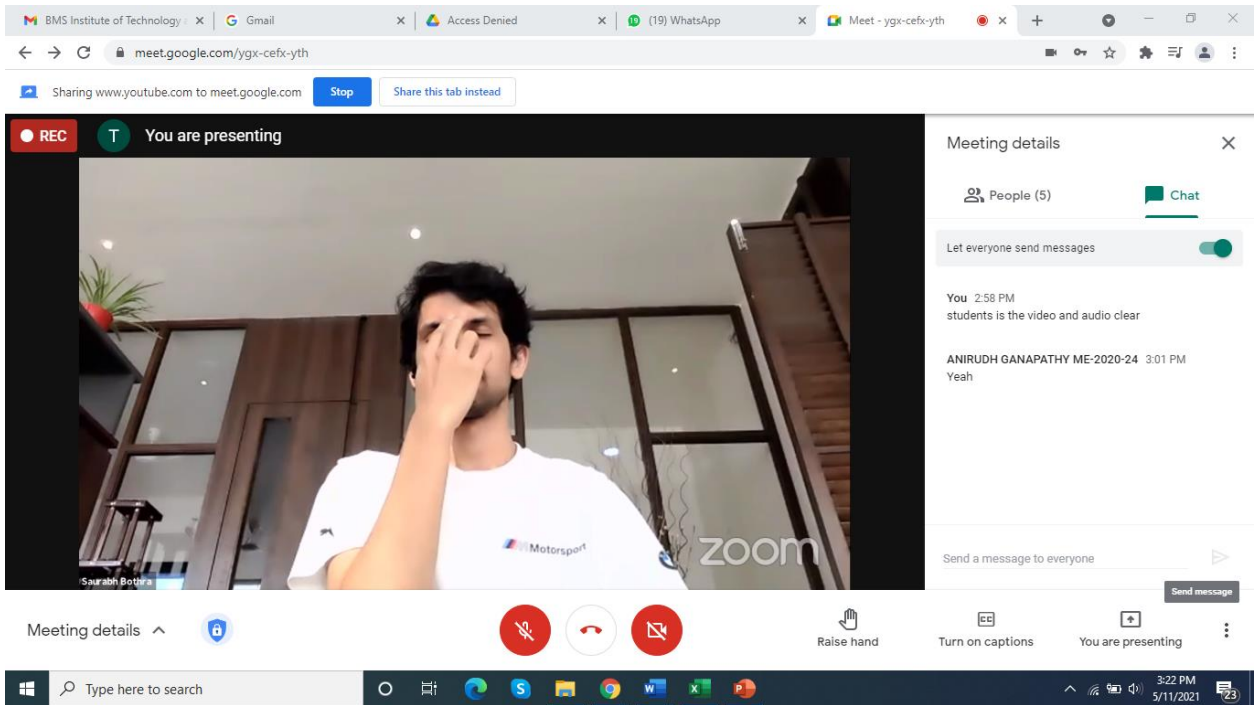


Mrs. Chethana Srinivas, Professional Counsellor of BMSIT&M briefed the students on 11<sup>th</sup> May 2021 about SOP to be followed during COVID19 and also spoke on maintain good physical and mental health during the pandemic. She advised the students to practice yoga and to have a proper plan to achieve their goals and succeed in life. Students were advised to make a note of things planned and also execution of their plans on day to day basis.

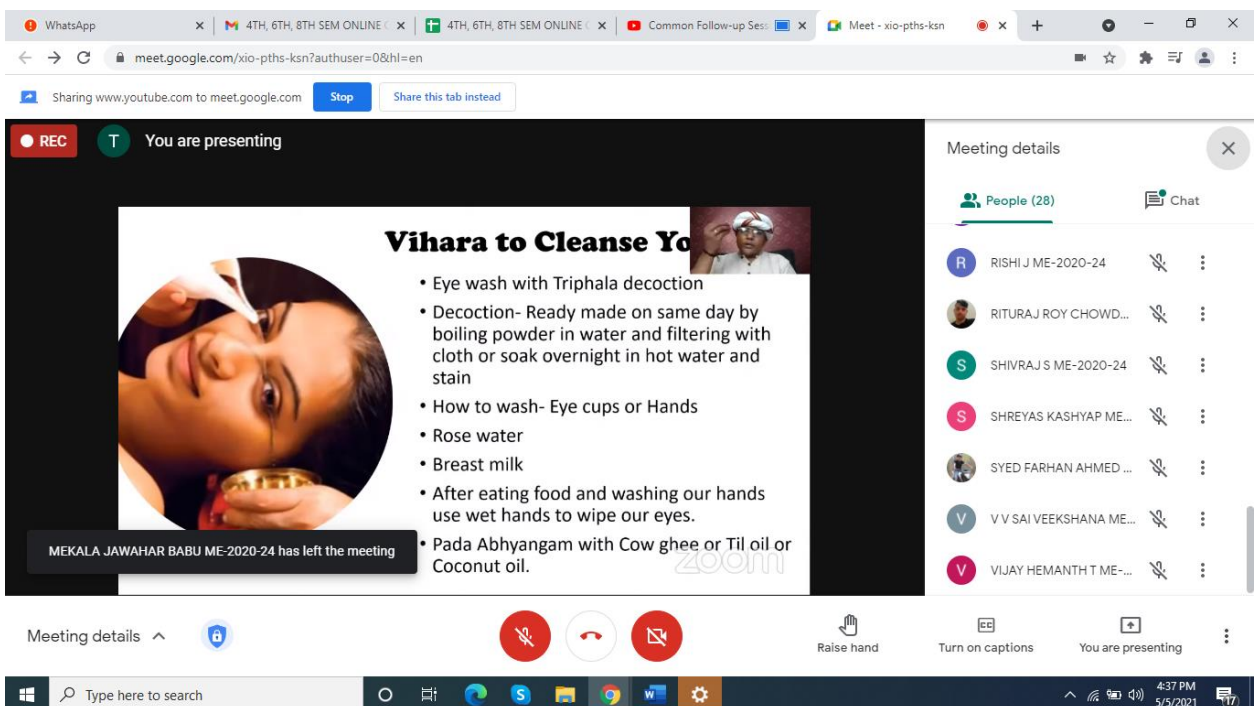


Literature Session: An AICTE video on analysis of Ramayana by an IIT Professor was shown to the students on 7<sup>th</sup> May 2021. Students gave their perceptions of various events in Ramayana.

Yoga Sessions: Students were briefed about various asanas in Yoga and its benefits for better physical health and management of stress through the AICTE videos on Yoga and physical health on 10<sup>th</sup> and 11<sup>th</sup> May 2021.



Physical Health Sessions: Students were educated about some best practices to enhance the functioning of their sense organs through the AICTE video on Holistic health on 7<sup>th</sup> May 2021. This session gave inputs on using Ayurveda and other home products ensuring balance in nature.

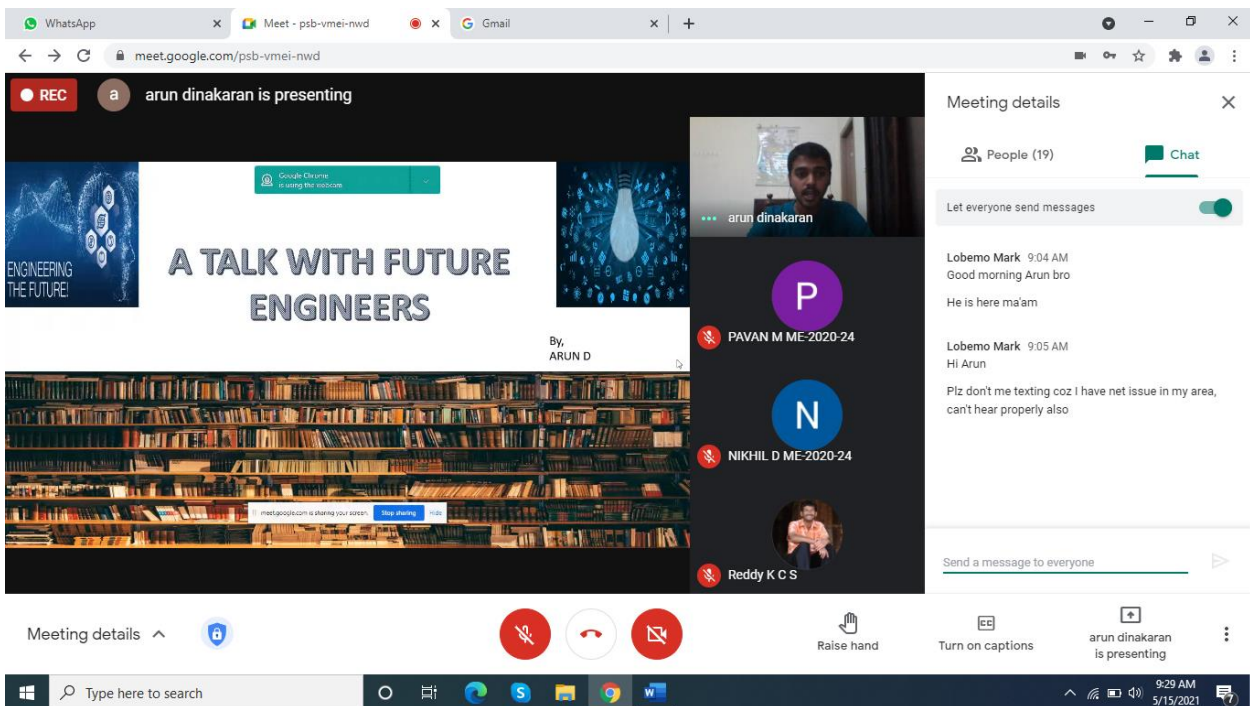




Dr. G. Avinash, Assistant Professor and Department sports coordinator gave a talk on maintain good health during the pandemic on 13<sup>th</sup> May 2021. He taught simple exercises to the students which can be practiced at home without any equipment's. He also spoke on balanced diet and how to maintain obesity and weight management.

Career Guidance and Scope of Mechanical Engineering Sessions: Dr. Santhosh, Assistant Professor, Department of ME, briefed the students about the latest avenues in the department of Mechanical Engineering on 11<sup>th</sup> May 2021. He gave inputs on job opportunities in government sector, IT companies and core companies.

Arun D, Alumnus of the department, 2016-20 batch, VTU 1<sup>st</sup> rank holder briefed the students about the importance of various courses which students will be studying from 1<sup>st</sup> to 8<sup>th</sup> sem on 15<sup>th</sup> May 2021. He motivated the students to excel in academics and also take part in all club activities.



Creativity and Innovation session: Dr. Sangamesh, Assistant Professor, Department of ME and Innovation club in charge addressed the students on 11<sup>th</sup> May 2021 about how to think creatively. He guided the students on different types of projects which can be carried out by students and significance of carrying out a good technical project.



All the sessions were well received and appreciated by the students. Around 29 students attended the Induction Programme. The students were asked to upload the individual report on the programme in GCR. The programme was coordinated by Mrs.Tejaswini.B.J, Assistant Professor, Dept. of ME under the guidance and support of Dr. K.M.Sathish Kumar, Professor & HoD, Dept of ME.