



SOUTH EAST ASIAN EDUCATION TRUST (R)
SEA COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by All India Council for Technical Education (AICTE), New Delhi)

ACCREDITED By NAAC: Grade: B++

Affiliated to Visvesvaraya Technological University (VTU), Belagavi, Recognised by Government of Karnataka)



Webinar details

Date:07/04/2024 Time:10.30 am to 12.30pm

GOOGLE MEET LINK: <https://meet.google.com/mqz-zpus-gfa>

Resource person: Mr. NITHISH NAGARAJA

Webinar presided by: Dr. Bhagvanth K Despande(Director-Engineering)

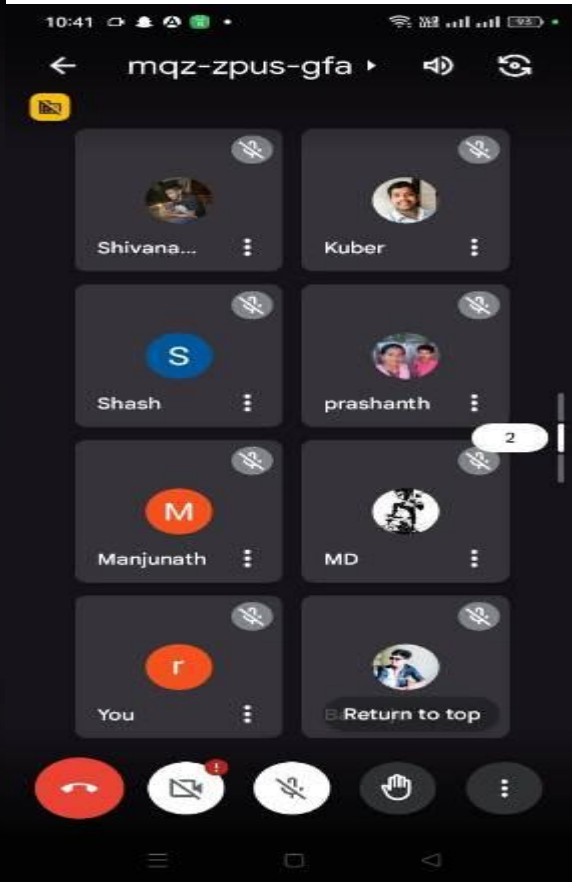
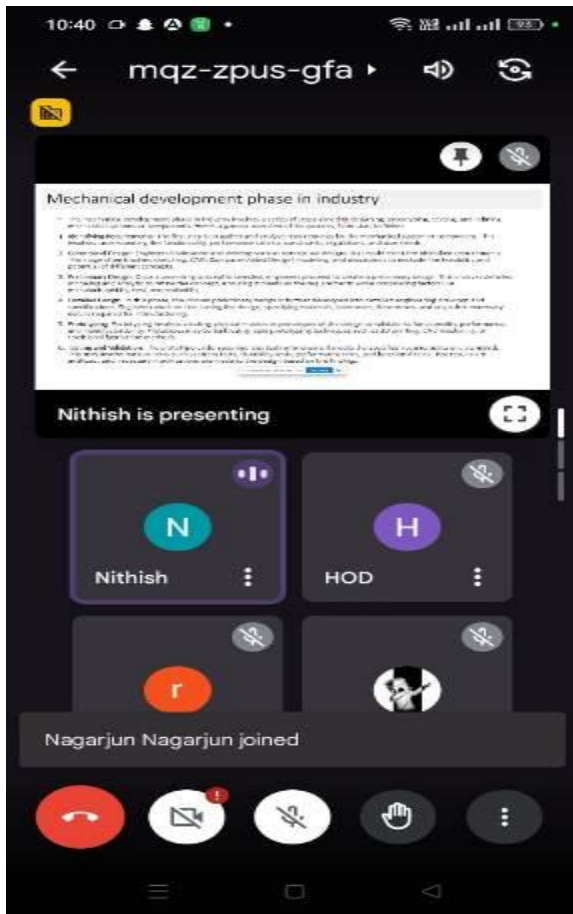
Dr. B Venkata Narayana(Principal)

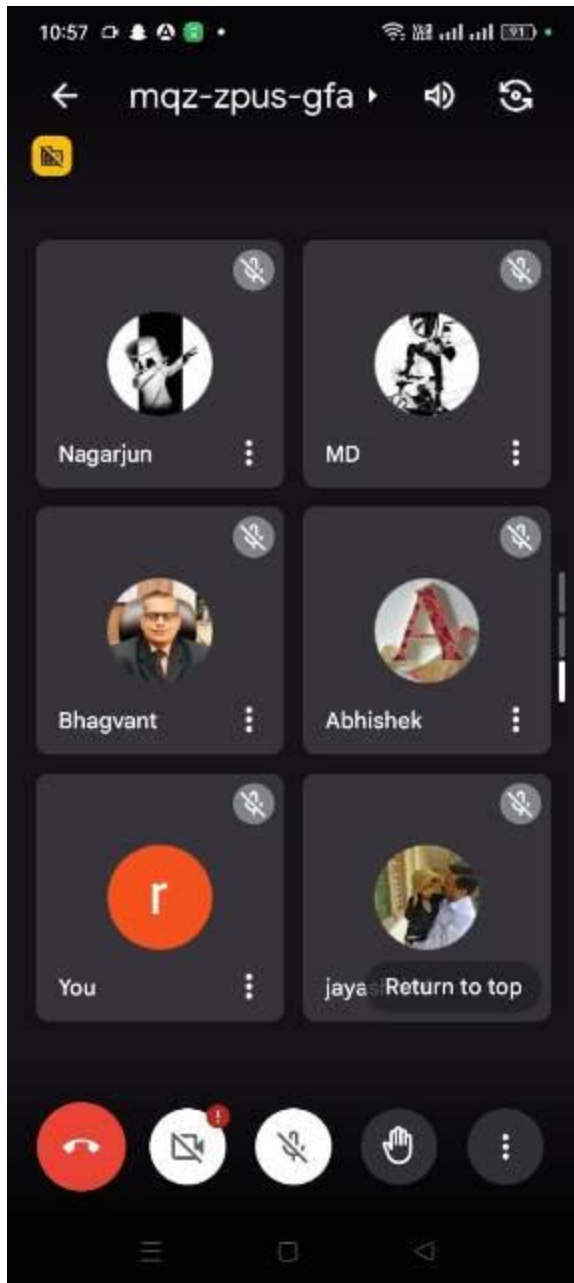
Dr. Suresha P(HoD- Mechanical Engineering)

Introduction of the Resource person given by: Mr. Ramesh S Bujari

Conclusion of the webinar given by: Mr. Ramesh

Anchoring done by: Mr. Kuberagouda S B





Mechanical development phase in industry

What is Mechanical Development? Mechanical development is one of the areas in which we work the most in our prototyping team. As its name suggests, we carry out the development of parts or components from scratch or improve existing ones, in order to adapt them to the manufacturing processes of different industries

Overview: The capstone design project has become an integral part of the mechanical engineering (ME) program at Cal Maritime. Students in the program take three courses in sequence starting in the spring semester of their junior year. The first course, Engineering Design Process, introduces the students to the ten tasks involved in the design process. These tasks are introduced and taught in five stages as follows:

The systematic methodology of the evolutionary engineering design process consists of five stages as follows

1. **Problem Definition:** In this stage the objectives, constraints, and the functional requirements of the designed objects are clarified through qualified terms by the customers, which in turn are converted into measurable engineering parameters
2. **Conceptual Design:** In this stage using brainstorming method and morphological tool, from information compiled in prior phase, concepts are created, evaluated, and design alternatives are selected.
3. **Preliminary Design:** In this stage the product architecture (form and shape) is performed, materials are selected, and engineering analysis is carried out
4. **Detailed Design & Prototyping:** In this stage the preliminary design is refined through design for manufacturing, design for assembly, and design for safety & reliability. Detailed drawings, bill of materials and final design review are executed.
5. **Communication Design:** This is the last stage of the design process that includes the final written report and oral presentation. Each stage has been itemized into instructional tasks as set of languages that we can use to describe how those designed objects came to be.

Conclusions: This paper discussed in details the engineering design process that the Cal Maritime mechanical engineering students go through in order to successfully finish, complete, construct, test and evaluate, manage, and present their capstone design. The various tasks discussed offer a systematic way to initiate and complete a design project.

Total No. Of students attended(Participated)-33Students

Students list attended the session.

SL No	USN	Student Name	SL No	USN	Student Name
1	1SP21ME402	Kiran	23	1SP21ME407	Vasanth kumar
2	1SP22ME414	Yathish K	24	1SP21ME406	Shivaraj
3	1SP20ME001	Arjun	25	1SP21ME405	Santhosh
4	1SP20ME002	Ullas	26	1SP21ME404	Sanjay
5	1SP21ME400	Dhanush	27	1SP21ME403	Manjunath
6	1SP21ME401	Hemanth	28	1SP21ME001	Abin
7	1SP21ME008	Mohammed Jassin	29	1SP21ME002	Akshai
8	1SP21ME009	Nahid	30	1SP21ME003	Alberto
9	1SP22ME400	Ashok S S	31	1SP21ME005	khalid Ahamed
10	1SP22ME401	Chandan S	32	1SP21ME006	Litto
11	1SP22ME402	Gagan Dev K N	33	1SP21ME007	lokesh
12	1SP22ME403	Harshit Singh J			
13	1SP22ME404	Jeevan M R			
14	1SP22ME405	Lalu Prasad R B			
15	1SP22ME406	Manjunatha S			
16	1SP22ME407	Prasanna B			
17	1SP22ME408	Praveen Kumar .N			
18	1SP22ME409	Ratan R Barker			
19	1SP22ME410	Sagar Mutturaj Katapur			

20	1SP22ME411	Shivanagendra P			
21	1SP22ME412	Srikanth Y			
22	1SP22ME413	Thirumala yadav G T			