



Shri Shamrao Patil (Yadravkar) Educational & Charitable Trust's  
**SHARAD INSTITUTE OF TECHNOLOGY,  
COLLEGE OF ENGINEERING**

Yadrav (Ichalkaranji), Dist.-Kolhapur (Maharashtra)  
▪ NBA Accredited Programmes ▪ NAAC 'A' Grade Institution ▪ An ISO 9001 : 2015 Certified Institute

# APEX

...A Newsletter

## Department of Mechanical Engineering

2021-22

Vol: 01 ISSUE: 01

**Autodesk Activities**

**Industrial Visit Record**

**IDEATHON Winner**

**Startup Activities**



**Hon. Dr. Rajendra Patil (Yadravkar)**  
Chairman  
Shamrao Patil (Yadravkar)  
Education & Charitable Trust



**Hon. Mr. Anil Bagane**  
Executive Director  
Shamrao Patil (Yadravkar)  
Education & Charitable Trust



**Dr. S. A. Khot**  
Principal



**Dr. P.M. Bhagwat**  
HoD, Mechanical Engineering

## EDITOR MESSAGE

From Faculty Editor Desk



Mr. Utkal S Patil  
Assistant Professor  
Dept of Mechanical Engineering

Dear Readers,

It is indeed a great honor to be the “APEX” Newsletter Editor from Department of Mechanical Engineering, SITCOE. And it is an immense pleasure to presenting you with the Volume 1 Issue 1 of AY 2021-22.

Our motto is to put forth two Issues of Newsletter in a year. A huge thank you to all for the efforts taken by the department faculty, our students who contributed in this “APEX” Newsletter, without which there wouldn’t have been this newsletter issue. Last but not least, I would like to thank Beloved Hon. Executive Director, The Principal, Head of the Department and Faculty members for their everlasting support throughout the creation of this edition.

From Student Editor Desk



Miss. Rajashree S. Shinde  
S.Y. Mechanical Engineering

Dear Readers,

We are happy to bring out the Volume 1, Issue 1 of our News Letter “APEX”. Our Faculty diligently involved in encouraging students and preparing for a bright future.

I am glad that I am part of this News Letter preparation and release. I am very much thankful to our Department Faculty members and my team members for helping me in making this “APEX” News Letter of AY 2021-2

**Publisher and Editor Name:** Diya Sanadi, Komal Patil, Rajmati Patil, Aditya Amane, Vaishnavi Bandgar, Patil Apurva, Vyas Pavan, Suraj Lal, Pallavi Patil, Rohan Mahajan, Suraj Hasure, Krishna Kupade, Omkar Chougule

## -: MESSAGES:-

### From Executive Director Desk:

I am happy and glad that Sharad Institute of Technology College of Engineering. Department of Mechanical Engineering is releasing out “APEX” Newsletter Volume 1 Issue-1. Bringing out a department “APEX” Newsletter will definitely help to showcase the activities like Autodesk, start-up, Technical events, Industrial Visits, Webinars, etc., that are happening in the department campus. It also helps in building up teamwork which is very much needed today in the world of competition. It provides a platform for exposing the merits and academic achievements of the faculty and students. This enhances the documentation culture of the institute. This newsletter includes highlights of mechanical engineering department with perspective of technical event achievements, faculty achievements, professional society events and activities, etc. I hope that this culture of releasing Newsletter continue forever and become a quoted example for all other colleges to follow.

### From Principal Desk

I am extremely delighted to know that faculties and students of Mechanical Engineering Department of Sharad Institute of Technology College of Engineering, bringing out their departmental “APEX” Volume 1 Issue-1 newsletter. This will benefit all the students as they can now be aspired for greater heights by knowing about their Department’s achievements. Students and faculties have exhibited a great zeal and enthusiasm and have contributed significantly in various technical activities. The editorial team has initiated something that will continue to help and guide present and upcoming students of the Department. Personally, I feel that students of Sharad Institute of Technology College of Engineering should set standards and create environment so that they excel in their areas of interests and accordingly guide more and more SITCOEians in future.

### From Head of the Department Desk:

I feel happy to introduce fourth issue of Apex 2021-22 Issue-1 prepared by faculty and students of Mechanical Engineering Department. Our Mechanical Engineering department has been consistently working towards the goal to produce highly skilled and scientifically oriented manpower through flexible, adaptive and progressive training programs along with cohesive interaction with the research organizations, academicians and industries. “APEX” provides good platform for student to update their technical skills. I congratulate “APEX” team for their efforts in launching second issue of year 2021-22. Wish you all a happy learning here.

# Vision and mission of the department

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## MECHANICAL ENGINEERING

### Vision

To be a centre of excellence in Mechanical Engineering education to prepare professionally competent engineers with lifelong learning attitude for the accomplishment of ever-growing needs of society.

### MISSION

- To prepare technically and professionally competent engineers by imparting quality education through effective teaching learning methodologies and providing stimulating environment for research and innovation.
- To develop professional skills and right attitude in students that will help them to succeed and progress in their personal and professional career.
- To imbibe moral and ethical values in students with concern to society and environment.

### Program Educational Objectives (PEOs)

Graduates of the programme will

**PEO I:** Demonstrate capabilities to develop optimal solution to the real world engineering problems by applying theory based practical approach of engineering and related engineering disciplines.(K)

**PEO II:** Exhibit professional skills, ethical attitude and sensitivity towards society and environment.

**PEO III:** Engage in life-long learning for successful adaptation to technological changes.

# AUTODESK ACTIVITY

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## Webinar Report 1

**Webinar Content:** Introduction to fusion 360& 3Dmodelling

**Date:** 17/04/2021

**Day:** Saturday

**Time:** - 10a.m. to 12 noon

**Targeted Group:** S.Y. Semester III

**Speaker:** Mr.A.A.Desai

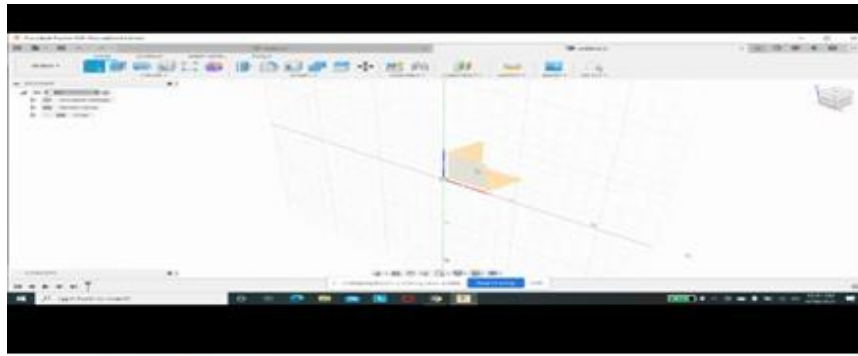
### Description about the webinar:

#### Introduction to Fusion 360& 3Dmodelling

The main motto of Introduction of Fusion 360 is a cloud-based 3D modeling, CAD, CAM, CAE, and PCB software platform for product design and manufacturing. Design and engineer products to ensure aesthetics, form, fit, and function. Reduce the impact of design, engineering, and PCB changes and ensure manufacturability with simulation and generative design tools. Directly edit existing features or model fixtures with the only truly integrated CAD + CAM software tool.

After completing this lesson, student will be able to:

- Create new projects, Open and Save models in Fusion 360.
- Use the View cube, navigation, display and orbit tools to survey and edit CAD models in Fusion 360.
- Use the browser in Fusion 360 to view and edit 2D and 3D elements such as Sketches and Bodies

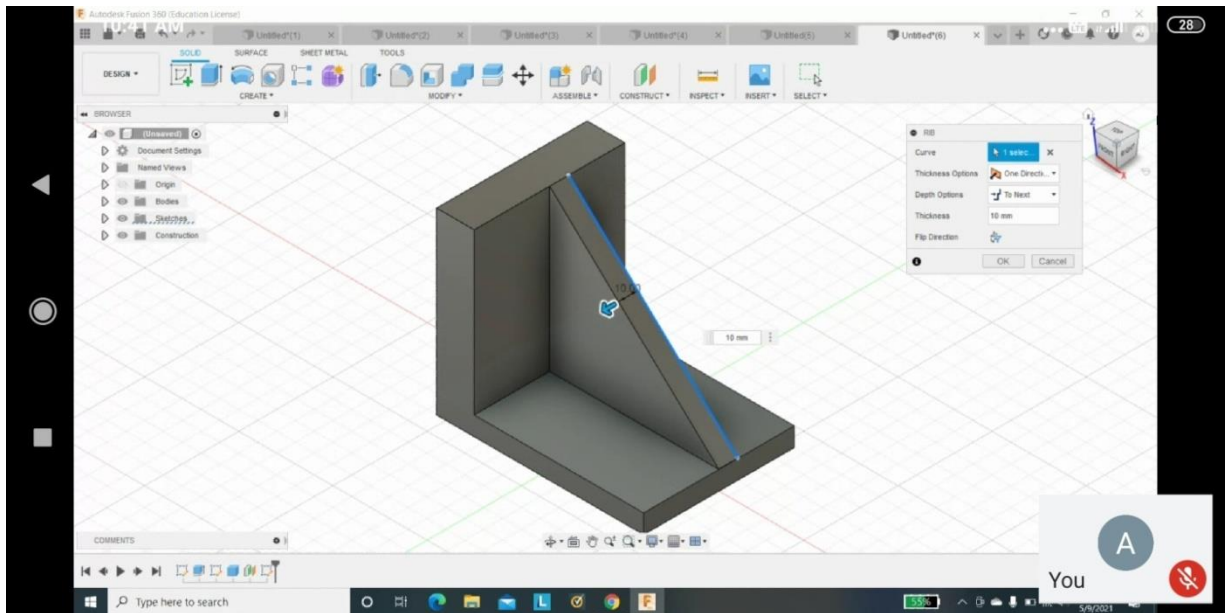


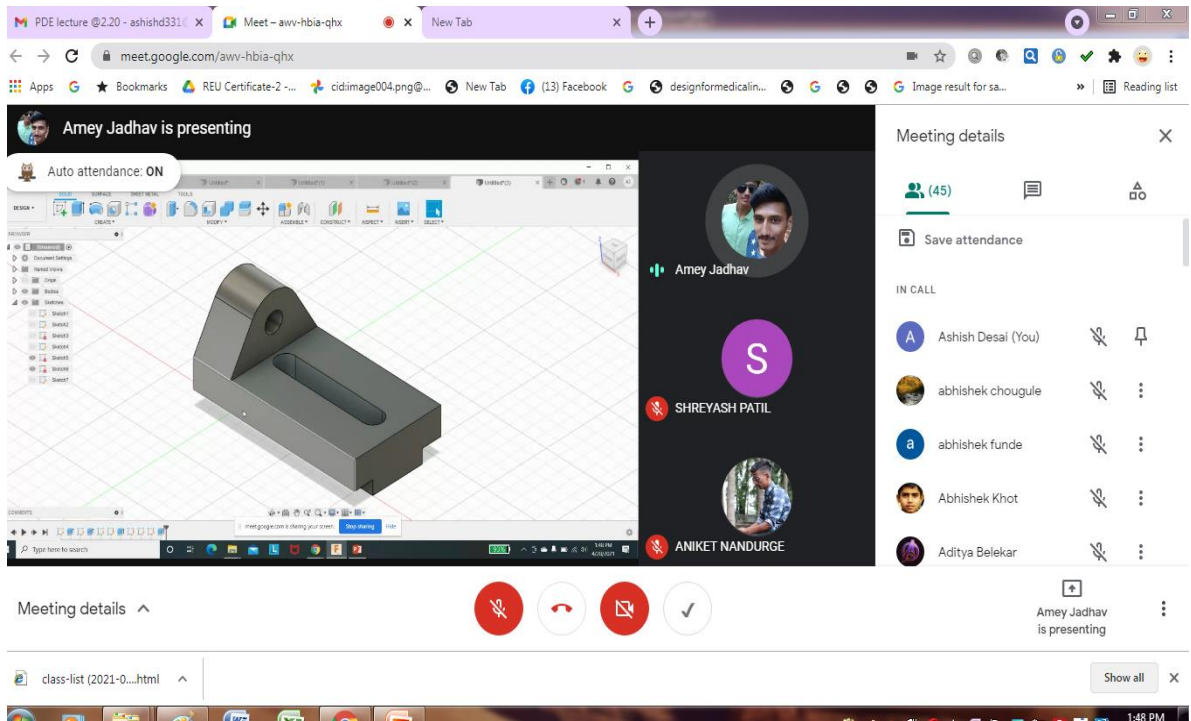
ashish desai (You)

Amey Jadhav >

Amey Jadhav >

Pankaj Patil >





In the end there was a question & answer session where number of questions was put up by the students regarding their future prospects. It was a highly interactive session this session proved to be very informative and knowledgeable for the development of student.

## Webinar Report 2

**Webinar Content:** 3D modelling in fusion 360

**Date:** 18/04/2021

**Day:** Sunday

**Time :-** 10a.m. to 12 noon

**Targeted Group:** S.Y. Semester III

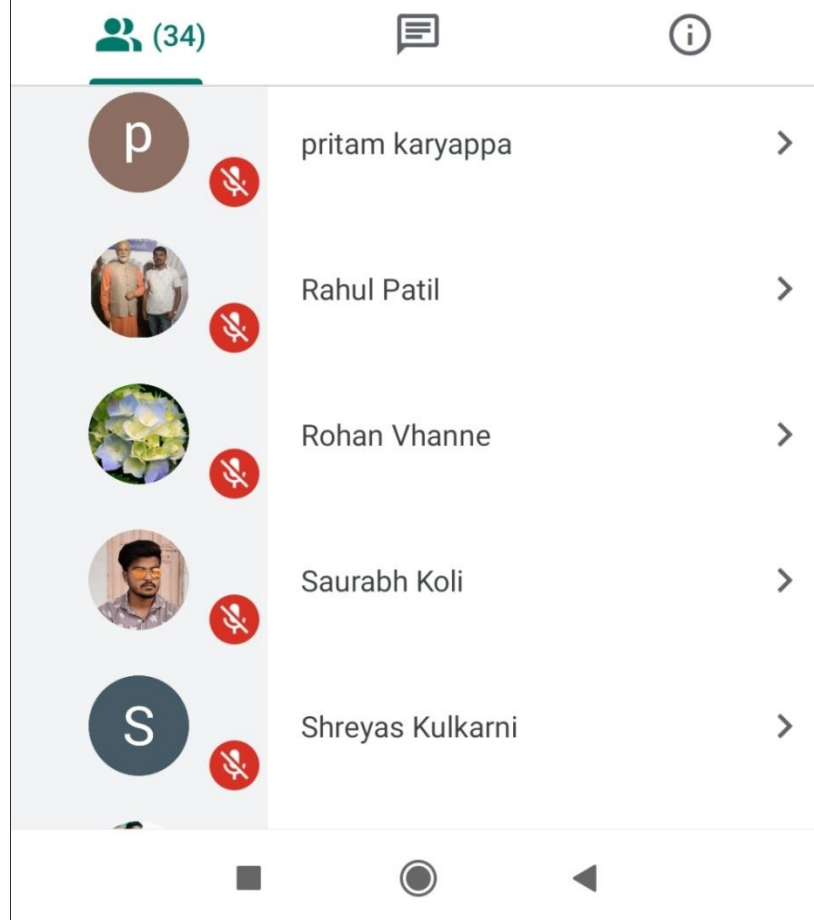
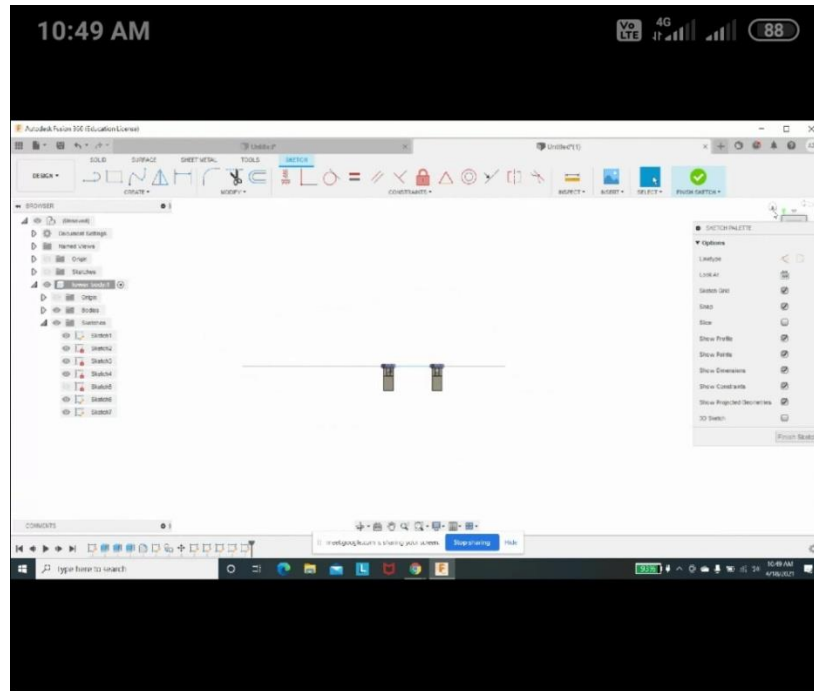
**Speaker :** Dr.Ramesh Pudale and Mr.A.A.Desai

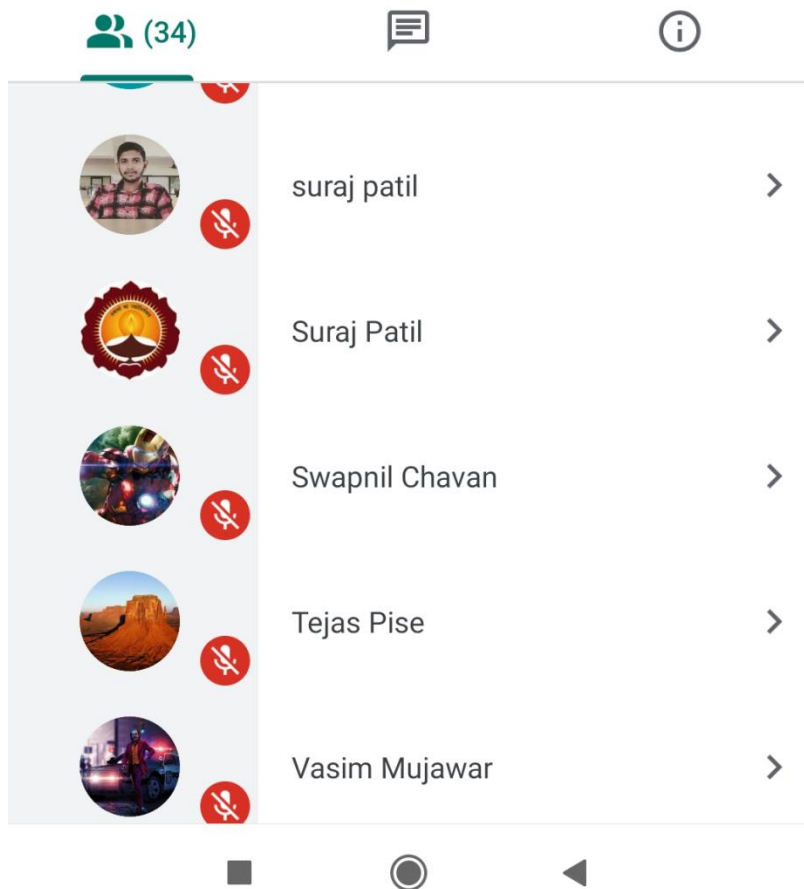
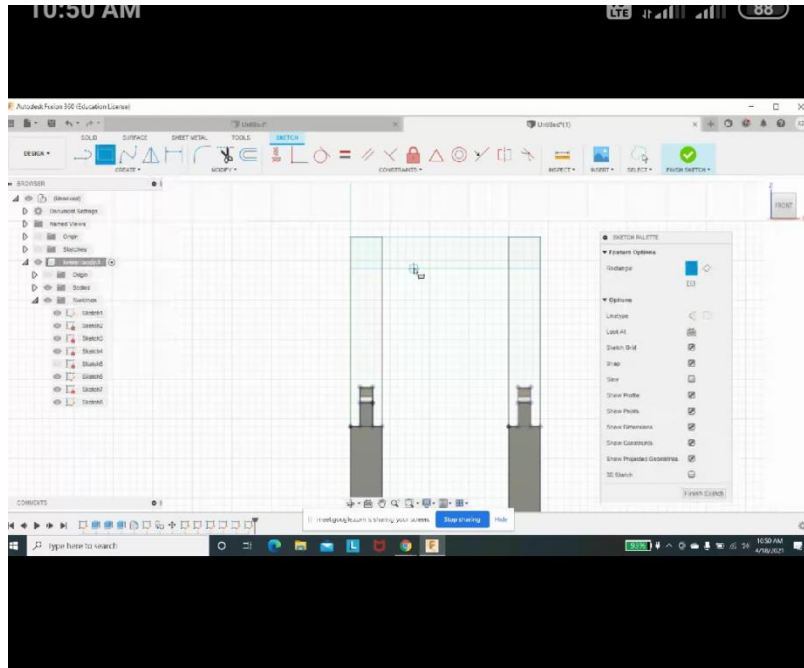
### Description about the lecture:

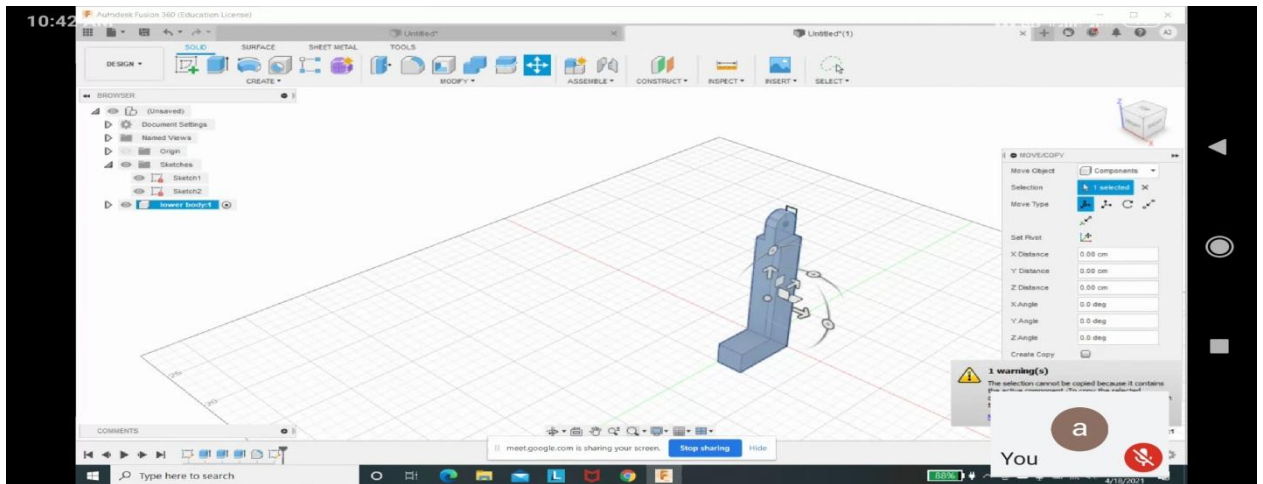
#### Introduction to 3D Modeling

The main aim of this webinar is to help ease the learning transition from 2D design to 3D modeling. 3D modeling using CAD is a superb additional skillset for any product designer, engineer, or machinist and being able to use Fusion 360 CAD/CAM will enable you to take an excellent idea from a concept, through to a working 3D CAD model for manufacture, testing and production. Fusion 360 provide extensive learning resources which make it incredibly easy to use CAD and learn how to 3D Model. Furthermore, Fusion 360 is free to students and educators, works on both Apple and PC operating systems, on multiple devices and platforms. If you are looking to make the transition from 2D to 3D modeling - this course has been developed to guide you through the process and have you up and running, developing design for professional 3D models after a few short lessons









In the end there was a question & answer session where number of questions was put up by the students regarding their future prospects. It was a highly interactive session this session proved to be very informative and knowledgeable for the development of student.

## Webinar Report 3

**Webinar Content:** Sculpting In fusion

**Date:** 20/04/2021

**Day:** Tuesday

**Time:** - 10a.m. to 12 noon

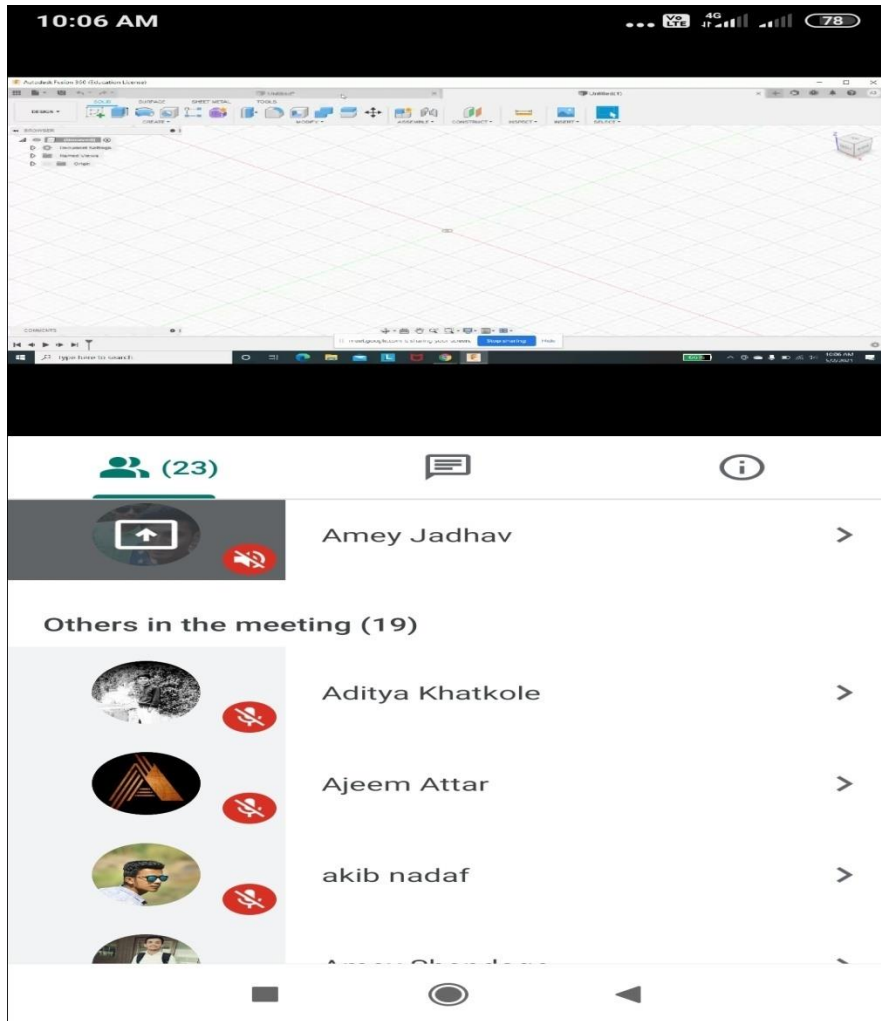
**Targeted Group:** S.Y. Semester III

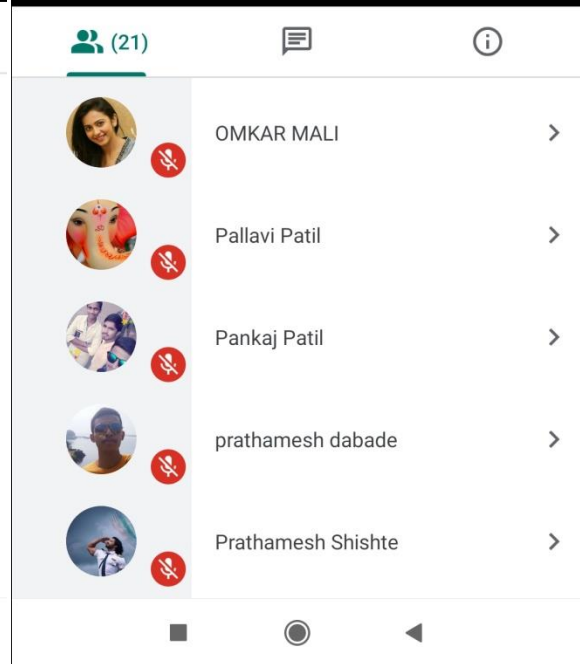
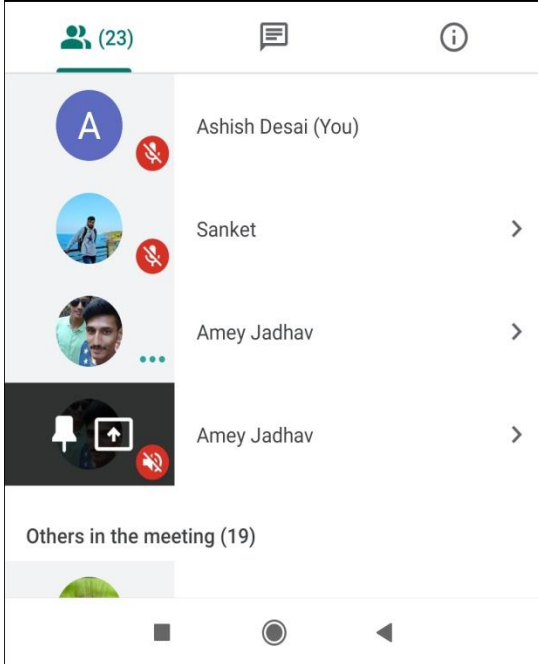
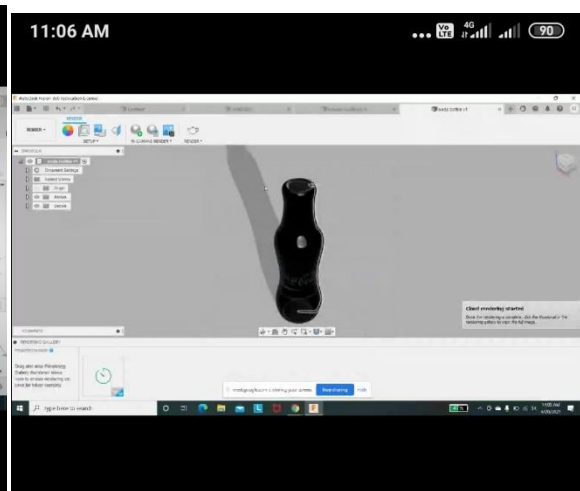
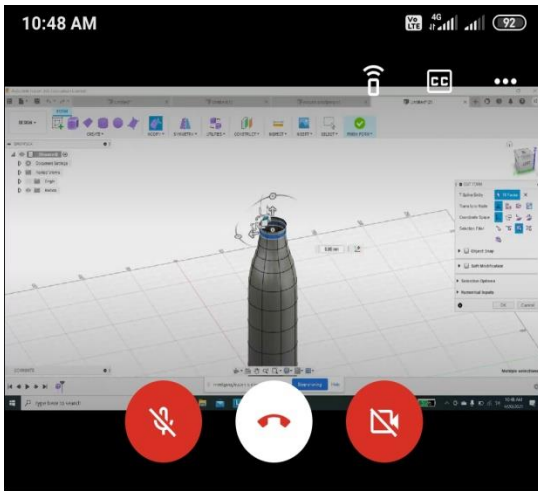
**Speaker:** Mr.A.A.Desai

### Description about the webinar:

#### Introduction to Sculpting In fusion

Sculpting in Fusion 360 allows for the intuitive freeform creation of organic solid bodies and surfaces by leveraging the T-Splines technology. In the Sculpt Workspace, you can rapidly explore forms by simply pressing and pulling on subdivided surfaces. This “hands-on” approach to 3D modeling allows for fast iteration and early stage conceptualization within Fusion 360. Sculpted forms are easily converted to solid bodies, and can be used in conjunction with Fusion 360’s solid modeling commands. Modeling with T-Splines is unlike any other sub-division modeling tool. One of the main advantages of T-Splines is the ability to add detail only where necessary - a single T-Spline surface can be incredibly smooth, while still having areas of high detail and remaining easy to manipulate.





## Webinar Report 4

**Webinar Content:** Introduction to fusion 360 & 3Dmodelling (Practice session-I)

**Date:** 28/04/2021

**Day:** Tuesday

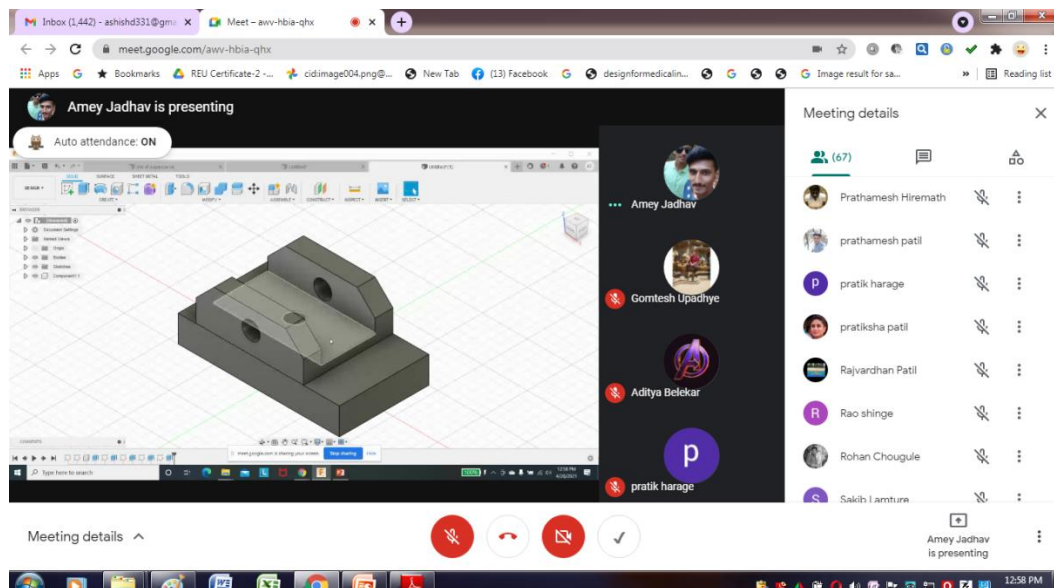
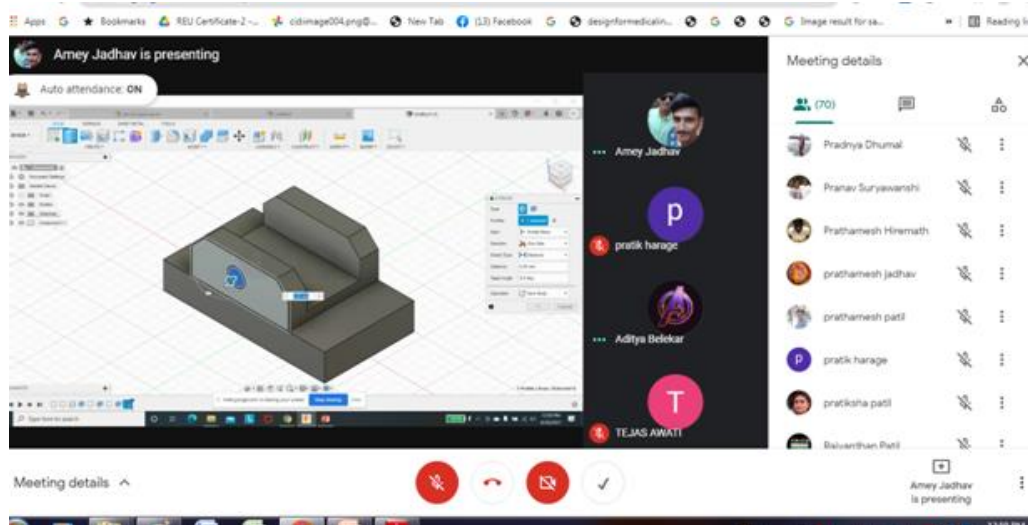
**Time:** - 10a.m. to 12 noon

**Targeted Group:** S.Y. Semester III

**Speaker:** Mr.A.A.Desai

### Description about the webinar:

In this webinar, student will Begin by simplifying the model to make it easier to reference components. Use the Isolate command to temporarily hide the geometry that you won't be referencing. From the isolated geometry, create and activate a connecting rod component. This process allows you to capture a timeline for the construction of this component outside the context of the entire assembly.



The screenshot shows a Google Meet window with a presentation slide titled "3D Model 1". The slide displays a 3D wireframe model of a mechanical part, likely a bracket or housing, with dimensions: 60 (width), 30 (depth), and 35 (height). The model is shown in a perspective view. The presentation is being shared from a CAD software interface, with the software's menu bar and toolbars visible. The meeting interface includes a list of participants on the right, with names like Aditya Belekar, Omkar Sidgonda, Amey Jadhav, and Rohan Gote. Meeting controls (mute, video, chat) are visible at the bottom. The system tray at the bottom right shows the time as 12:23 PM on 4/28/2021.



# Digital Manufacturing-2021

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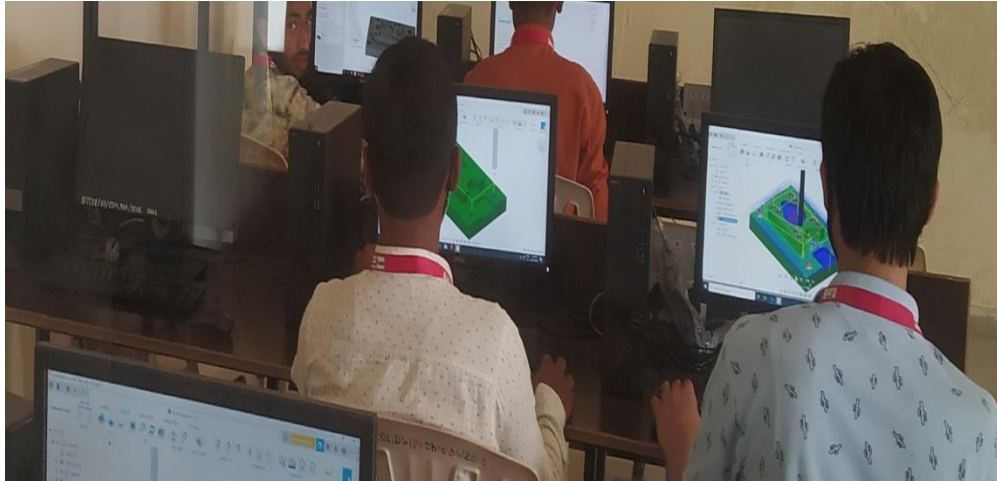
Date: 18<sup>th</sup> to 23<sup>th</sup> October 2021



## Description about the Activity:

In this event, Digital manufacturing competition is arranged on 18th to 23th October 2021. There were a total of 90 students who were from our college participated. The digital revolution is now breaching the walls of manufacturing as it continues to disrupt media, finance, consumer products, healthcare, and other sectors. Indeed, the explosion in data and new computing capabilities along with advances in other areas such as artificial intelligence, automation and robotics, additive technology, and human-machine interaction are unleashing

innovations that will change the nature of manufacturing itself. Industry and academic leaders agree that digital-manufacturing technologies will transform every link in the manufacturing value chain, from research and development, supply chain, and factory operations to marketing, sales, and service.



# Record of Industrial visit (Academic Year 2021-22 Sem - I)

Sr. No.	Class	Name of Subject	Specification of Visit	Incharge faculty	Visit Date	No of Students	Visit Place
1	SE-A	Thermal Engineering	Fundamental concepts	Mr.A.S.N. Husainy	27/12/2021	35	Saideep Traders,Ichalkaranji
2	SE-B	Thermal Engineering	Fundamental concepts	Mr.A.S.N. Husainy	27/12/2021	53	Saideep Traders,Ichalkaranji
3	SE-A	Manufacturing Processes <b>(Beyond Syllabus)</b>	Fundamental concepts	Mr.S.B.Herwade	31/12/2021	45	Pragati Foundry,Hatkanagale
4	SE-B	Manufacturing Processes <b>(Beyond Syllabus)</b>	Fundamental concepts	Mr.S.S.Patil	31/12/2021	57	Pragati Foundry,Hatkanagale
5	TE-A	Theory of machines -II <b>(Beyond Syllabus)</b>	Gear Manufacturing	Ms.V.S. Patil	1/5/22	50	Hind Gear,MIDC Shirolı,Kolhapur
6	TE-B	Theory of machines -II <b>(Beyond Syllabus)</b>	Gear Manufacturing	Ms.V.S. Patil	1/5/22	28	Hind Gear,MIDC Shirolı,Kolhapur
7	TE-A	Applied Thermodynamics -I <b>(Beyond Syllabus)</b>	Steam Turbines,Air compressor	Mr.S.G.Bardiya	29/12/2021	36	Saideep Traders,Ichalkaranji
8	TE-B	Applied Thermodynamics -I <b>(Beyond Syllabus)</b>	Steam Turbines,Air compressor	Mr.P.S.Chougule	29/12/2021	25	Saideep Traders,Ichalkaranji
9	TE-A	Machine Design-I <b>(Beyond Syllabus)</b>	Fundamental concepts	Dr. A.M.Takale	28/12/2021	52	Pragati Automation,Tardal
10	TE-B	Machine Design-I <b>(Beyond Syllabus)</b>	Fundamental concepts	Mr.P.H.Yadav	28/12/2021	30	Pragati Automation,Tardal
11	BE-A	Mechatronics <b>(Beyond Syllabus)</b>	Automation	Mr.Y.Y.Kamble	28/12/2021	38	Pragati Automation,Tardal

12	BE-B	Mechatronics <b>(Beyond Syllabus)</b>	Automation	Mr.Y.Y.Kamble	28/12/2021	42	Pragati Automation,Tardal
13	BE-A	Manufacturing Processes-II <b>(Beyond Syllabus)</b>	Different Manufacturin g Processes	Mr.V.B.Nalawade	28/12/2021	22	Pragati Automation,Tardal
14	BE-B	Manufacturing Processes-II <b>(Beyond Syllabus)</b>	Different Manufacturin g Processes	Dr.P.M.Bhagawat	28/12/2021	27	Pragati Automation,Tardal

# Winner of NETRA-RIT IDEATHON 2020.

I am very glad to announce the Result of NETRARIT IDEATHON 2020. The team of Vision Solar of Sharad Institute of Technology, College of Engineering secured 1st place and grab 50,000 Rs prize under the Ideathon title, Multicrop Solar Drye under valuable guidance of Mr. Aveshemad Sayyadnaimutulla Husainy.

This is our First step towards our own startup Zonal level Ideathon 2020 organized by Netra RIT for 4 zones Kolhapur, Sangli, Satara and Kokan. From that zone 136 different innovative startup participated and after lots of scrutinization only 2 winners got fund It's great success achieved by my student members involved are, Asiya Pendhari, Shraddha Mahadik, Shruti Navale, Snehal Hulikire.



Maharashtra  
State Innovation  
Society



## Congratulations!



**WINNER OF IDEATHON #1.0**

**PRIZE MONEY: 50,000/-**

**'VISION SOLAR'**

NETRARIT FOUNDATION (RIT-TBI)  
Rajarambapu Institute of Technology



# CERTIFICATE OF ACHIEVEMENT

## IDEATHON 1.0

PROUDLY PRESENTED TO

### Vision Solar

has successfully grabbed the winner position of Ideathon 1.0 organized by NETRARIT FOUNDATION RIT-TBI (NRIT)

IN ASSOCIATE WITH

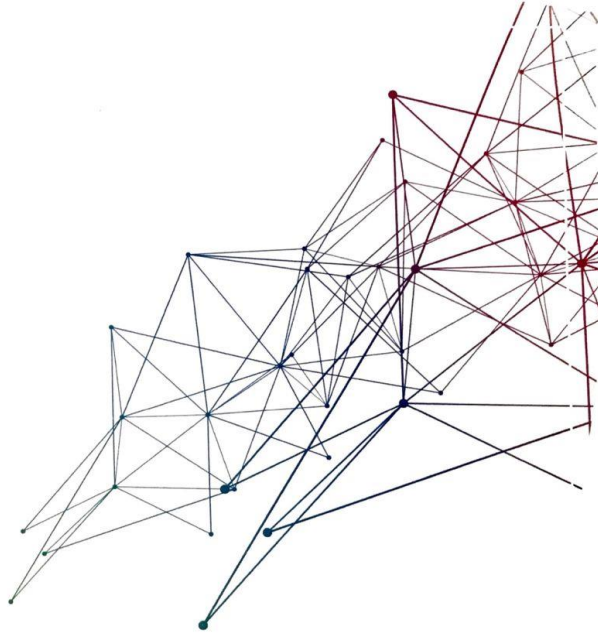


MR. HARSHAL PATIL  
INCUBATION MANAGER, NRIT

MR. SUDHIR ARAI  
CEO, NRIT

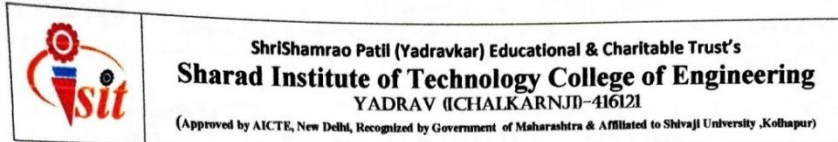
DR. A. B. KAKADE  
DEAN R&D, RIT

DR. MRS. S. S. KULKARNI  
DIRECTOR, NRIT & RIT



# START UP ACTIVITIES

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## SHARAD STARTUP CENTRE

### 3 Days Workshop on Entrepreneurship Report

Date & Time of Webinar	20-22 <sup>nd</sup> October, 2021
Number of Beneficiaries	110
Name of Expert	<b>Mrs Nirali Pandit, EDII Ahemdabad</b> <b>Mr Nikhil Padate, Jangs Industries</b> <b>Mr Suresh Umap, Reg.Mngr, MCED</b> <b>Mr Rakesh Chopra, EDII Ahemdabad</b>

#### Topics covered in Workshop

1. Why Entrepreneurship
2. How to Start SSI Unit and Financial aspects
3. Identification of Business Opportunities
4. Schemes & funding available from Govt Agencies
5. Preparation of Project Proposal
6. Factory Visit and Interaction with Successful Entrepreneur.



ShriShamrao Patil (Yadravkar) Educational & Charitable Trust's  
**Sharad Institute of Technology College of Engineering**  
YADRAV (ICHALKARNJD)-416121  
(Approved by AICTE, New Delhi, Recognized by Government of Maharashtra & Affiliated to Shivaji University, Kolhapur)

Date- 6/10/2021



## SHARAD STARTUP CENTRE

### Notice

Institute has established the state of the art "Sharad Startup Centre" with an objective to boost the economy, open up job opportunities, restarting turned off industries, encourage entrepreneurship on a large scale and leverage startups globally.

All the students are hereby informed that Sharad Start Up Center under EDC is going to organize **3 Days Workshop on Entrepreneurship** on 2<sup>nd</sup> week of October, 2021. Those who are actively interested to build career in Entrepreneurship, they can enroll their names by **paying Rs. 100** to departmental respective Coordinator.

  
**Mr S S Patil**

Head, Sharad Startup Centre

  
**Mr. S G Bardiya**

Head, Sharad Startup Centre

### Department Coordinators

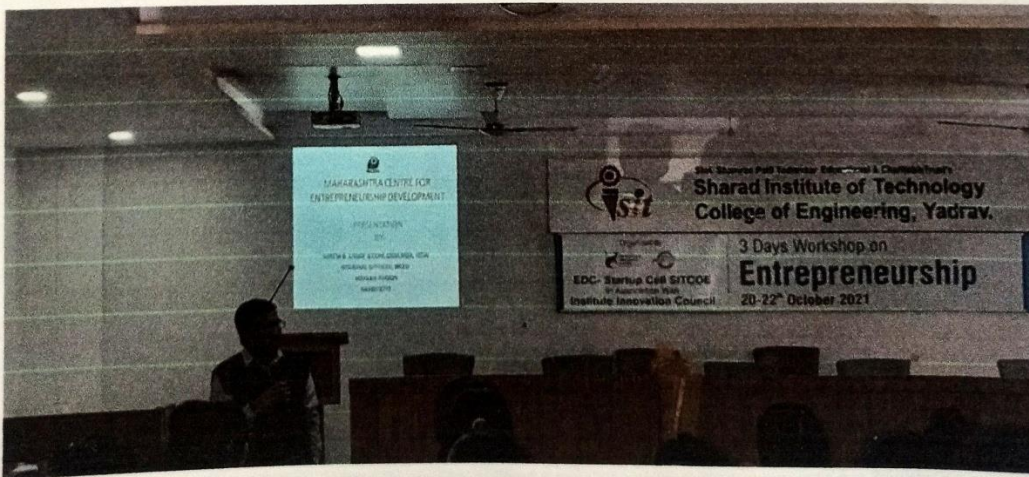
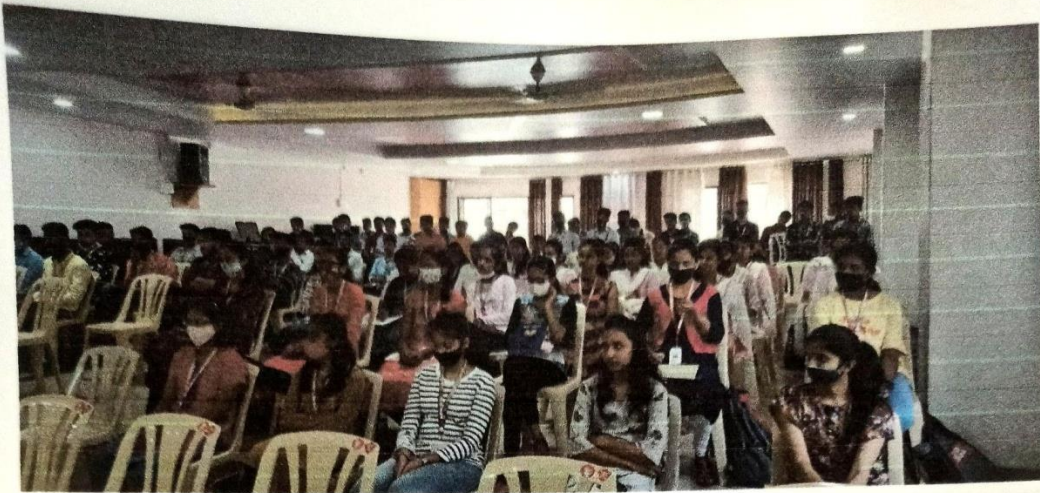
- |                                 |                               |
|---------------------------------|-------------------------------|
| 1. Computer Science & Engg & AI | Mr S B Gurav 8698305250       |
| 2. Electronics & Tele Comm Engg | Mrs Halunde Mam 7620181744    |
| 3. Civil Engg                   | Mr Sandip Chougule 9975003984 |
| 4. Electrical Engg.             | Mr Vishal Wadkar 9028400639   |
| 5. Mechanical & Mechatronics    | Mr Suyog Patil 8149623108     |

### Topics covered in Workshop

1. Why Entrepreneurship
2. How to Start SSI Unit and Financial aspects
3. Identification of Business Opportunities
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