

Mechanical Engineering Department
Cultural / Co-curricular/ Extra-curricular Activities
AY 2020-2021 (EVEN Semester)

Departmental Activities Incharge: Mr. Dhiraj Bhandarkar

INDEX

Sr. No.	Activity Name	Activity Type (Workshop/ Conference/Webinar etc.)	Start & End DD/MM/YY	Page Number
1	Online Training Program on “Space Technology and its Applications”	ISRO Training Program	11 th Jan. 2021	01 – 01
2	Expert talk on “Career Opportunities in Supply Chain Management and Logistics”	Expert Talk	22 nd March 2021	02 – 02
3	One week online workshop on "ANSYS 2020 R1 (Mechanical & CFD)"	Workshop	26 th to 30 th April 2021	03 – 08
4	Expert talk on “How to apply for Jobs after B.Tech in Mechanical Engineering”	Expert Talk	02 nd May 2021	09 – 09



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



ऑनलाइन दूरस्थ अधिगम कार्यक्रम
ONLINE DISTANCE LEARNING PROGRAMME

COR101123732021

समन्वय का प्रमाणपत्र
CERTIFICATE OF COORDINATION

यह प्रमाणित किया जाता है कि श्री विले पार्ले केलवानी मंडल प्रौद्योगिकी संस्थान, धुले ने इस संस्थान द्वारा दिनांक 11 जनवरी, 2021 को आयोजित एक दिवसीय ऑनलाइन कार्यशाला, अंतरिक्ष प्रौद्योगिकी और इसके अनुप्रयोग में भाग लिया।

This is to certify that **MR. MAHESH RAJKUMAR DALWANI**, working with **Shri Vile Parle Kelvani Mandal's Institute of Technology, Dhule**, has coordinated one day online workshop on **"Space Technology and its Applications"** conducted by this institute on January 11, 2021

दिनांक/ Date: 22-01-2021
देहरादून/ Dehradun

प्रमुख,
जियोवेब सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग
Head, Geoweb Services, IT & Distance Learning Department, IIRS

समूह प्रमुख,
भू-स्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS

Shri Vile Parle Kelavani Mandal's
INSTITUTE OF TECHNOLOGY, DHULE

Department of Mechanical Engineering

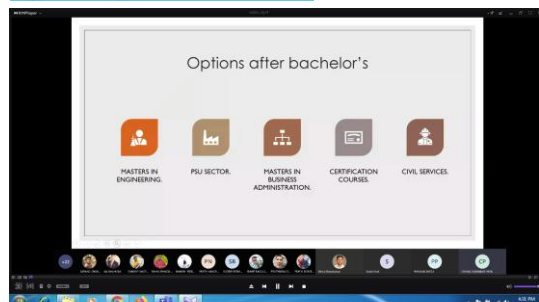
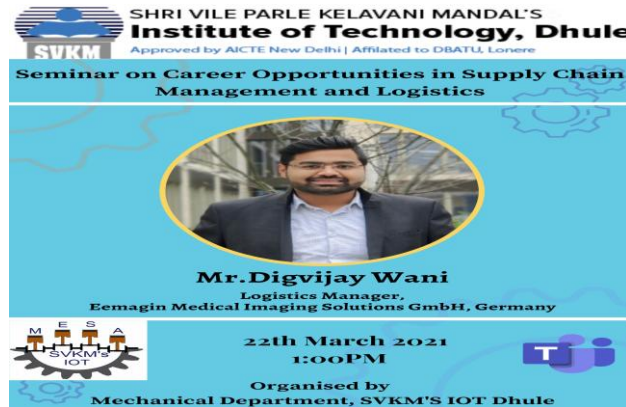
A Guest Lecture Report on

“Career Opportunities in Supply Chain Management and Logistics”

The online session was organised by Mechanical Engineering Department, SVKM's IOT, Dhule in collaboration with **Mr. Digvijay Wani** on 22th of March 2021 to know more about what are the Scope, Challenges and Skills required in Mechanical Industry.

The session started with Assistant Professor of Mechanical Engineering Department Mr. Satish Patil sir honouring to expert **Mr. Digvijay Wani**.

In the event he explained all things with help of his excellent presentation. He gave all information about the supply chain and logistics sector, after that he explained what type of opportunities are available in Mechanical Engineering field. He explained about the various terminologies of supply chain management and logistics what that are in actual manner. He focused majorly on supply chain management in whole session. He covered points about different demand in mechanical industry and then vote of thanks was concluded by the Placement Coordinator Mr. Satish Patil. Special thanks to Head of Department Prof. M. Juneduddin for arranging this nice session.





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Mechanical Engineering Department.

Report on Five Days Workshop conducted

Title of the Workshop: - **ANSYSY-2020-R1-Mechanical & CFD**

(For the design, research & development purpose)

Duration & Dates: Five Days-26th April-2021-to 30th April-2021

Total numbers of candidates registered: 93 candidates

Total number of candidates participated: 64 candidates.

About the workshop.

The five days online workshop was jointly organized by the Department of Mechanical Engineering, Shri Vile Parle Kelavani Mandal's Institute of Technology, Dhule and ARK infosolutions Pvt Ltd, Mumbai. During this workshop, the ANSYS Certified Trainers from the ARK Infosolutions, Mumbai conducted five sessions each of 2-3 hours, having one session on each day during the workshop schedule. This workshop was conducted in an online mode by using the Microsoft's Team App as a medium. At the end of the workshop, all the active participants (64) were provided the certificates of participations.

About the registration and participants:

There were 93 students and the faculties who had registered for the workshop and 64 registered candidates had actively participated. The participants included the

About the conduction of the workshop:

Day-1-26th-April-2021-10:00 AM 12:20 PM

During the first session on day-1, after opening speech from the Head of the Department Mr. Mohammed.Juneduddin, the instructor gave the presentation about the ANSYS softwares, highlighting the usage, importance and applications of the same in industries. The instructor also shown the process to download and install the ANSYS-2020-R1 students' version from its official website.

During the second session of day-1, initial the ANSYS workbench and its GUI was introduced by the trainer and thereafter the 3D-CAD MODELLING was introduced using one module of ANSYS named a "SpaceClaim" module. After discussing about the graphical user interface of the SpaceClaim, the instructor created some parts and along with that all the participants were also instructed to create the same models.

Day-2-27th-April-2021-10:00 AM 12:20 PM

During the first session of day-2, initially the procedure to access the recorded and uploaded files of the workshop, from the created MS TEAM was explained by the organizer thereafter the trainer continued some modelling by using the SpaceClaim software.



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During the second session of the day-2, another module of ANSYS named as MESHING was introduced and some parts were created and the meshing was carried out on that.

Day-3-28th-April-2021-10:00 AM 12:00 PM

During the first session of day-3, the Finite Element Methods (FEM) was introduced and some concepts related to the FEM. The basis FEM analysis process was explained in details with examples.

During the second session of day-3, the instructor talked about the engineering data collection and the engineering data applications. Thereafter another module of the ANSYS named as ANSYS-Mechanical was introduced with its it's GUI.

Day-4-29th-April-2021-10:00 AM 12:00 PM

During the first session of day-4, another module named as "Static Structure" was introduced with its GUI and thereafter the FEA analysis of some models was carried out using the same module.

During the second session of day-4, some parts were crated by using the SpaceClaim and the static structure analysis was demonstrated by using the static structure model. All steps were properly demonstrated from the geometry creation till the results plotting. Day-4-29th-April-2021-10:00 AM 12:00 PM

Day-5-30th-April-2021-10:00 AM 11:15 AM & 3:30 PM – 5:00 PM

During the first session of day-5, the computational fluid dynamics (CFD) procedure was explained by the instructor. From the ANSYS workbench, another module was demonstrated named as ANSYS-CFD with its GUI.

During the second session of day-5, CFD analysis was performed of some created CAD Models and the CFD process with its entirety was demonstrated from the problem statement till the post processing. During the ending session, some theoretical concepts related to the heat tranfer and the turbulent flow was also covered.

The ending session and the conclusion.

After the last session of day-5, the Q &A session was conducted and some raised queries and doubts of the participants were cleared. The vote of thanks was proposed by one of the participants at his own wish. It was reiteration that the contacts and the communications between the instructors and the participants will be continues after the end of the workshop.

All the active participants had received the participation certificated, jointly signed by the organizer and the program chairperson from SVKMIOT, Dhule, the trainers and the facilitators from ARK Infosolutions Pvt Ltd, Mumbai. After the execution of the workshop, feedback from the participants about the workshop was also collected. Various screen shots related to this workshop have been taken and included in next few pages of this report.



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Figure 1: ANSYS-Workshop Poster

Day	DOMAIN	MODULE	TOPICS TO BE COVERED	HANDS-ON
Day 1	MODELING	SCDM	Basics of SCDM	Sketching
			Geometry Modeling	Modeling
Day 2	MESHING	ANSYS MESHING	Geometry Cleanup & Repair Lecture	Geometry Cleanup Workshop
			Introduction to Meshing	ANSYS Meshing Basics
			Mesh Methods	Mesh Methods
			Global Mesh Controls	Using Global Mesh Controls
Day 3	FEA	Introduction to FEM	Local Mesh Controls	Local Mesh Controls
			Introduction of FEM	ANSYS Mechanical Overview
			Basic Analysis Procedure	1D, 2D and 3D Analysis
			The Engineering Data application	Adding Material Properties Creating new material data base
Day 4	Static Structural Analysis	Static Structural Analysis	Linear Structural Analysis	Static structural Analysis
			Thermal Analysis	Thermal Analysis
			Modal Analysis	Plate with hole
Day 5	CFD	Basic CFD	Eigenvalue Buckling	Buckling of column
			Introduction to CFD	
			Introduction to Fluent GUI	
			Cell Zone & Boundary Conditions	Fluid Flow & Heat Transfer in Mixing Tee
			Boundary Condition Continued	
			Solver Settings	CFD Post
Turbulence Modeling				
Heat Transfer				

Figure 2: ANSYS-Workshop Schedule



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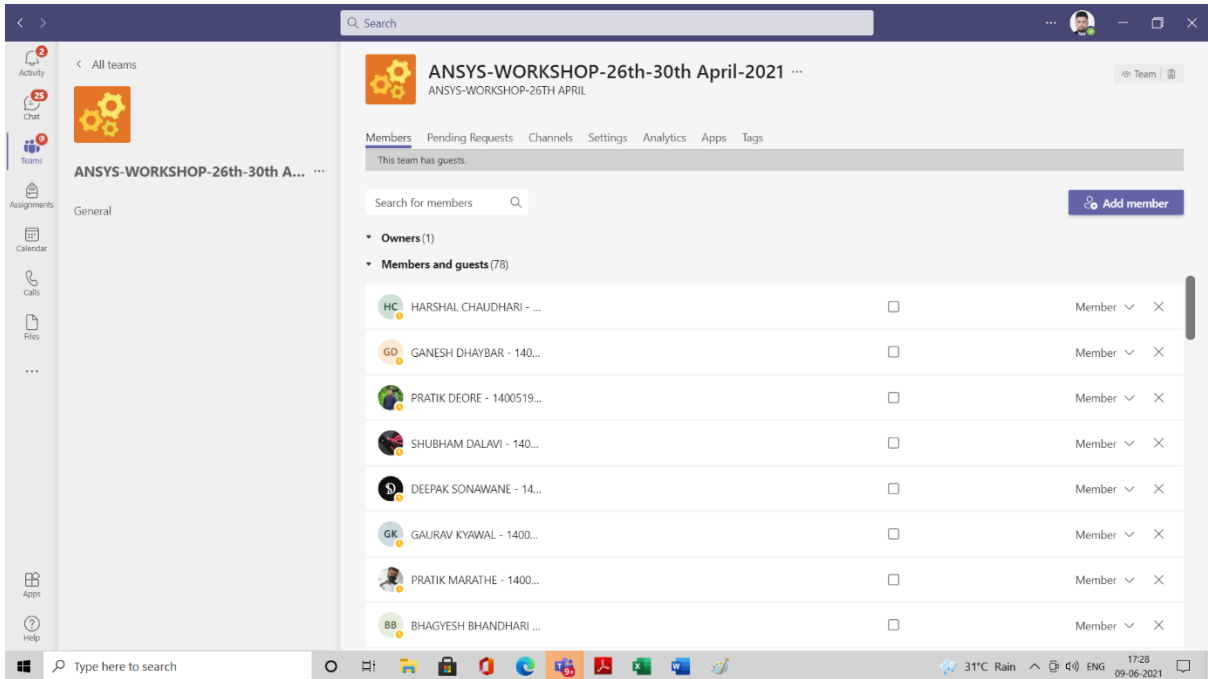


Fig3: Participants were added to MS TEAM

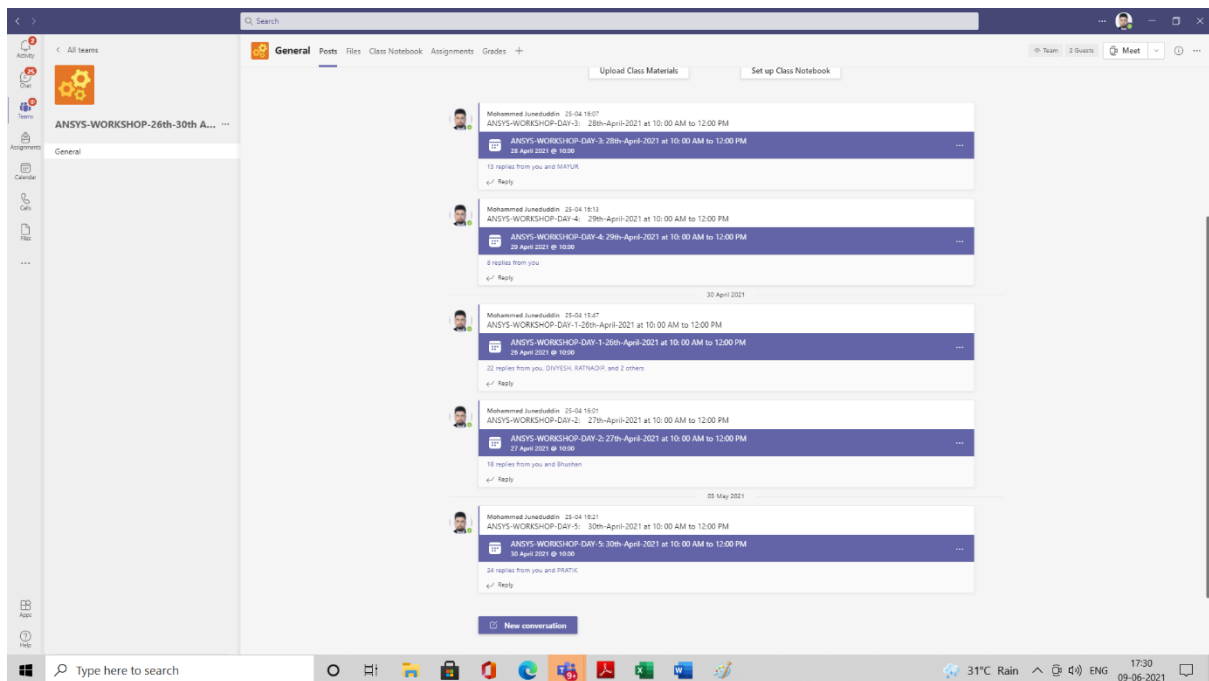


Figure4: Session were scheduled in MS TEAM



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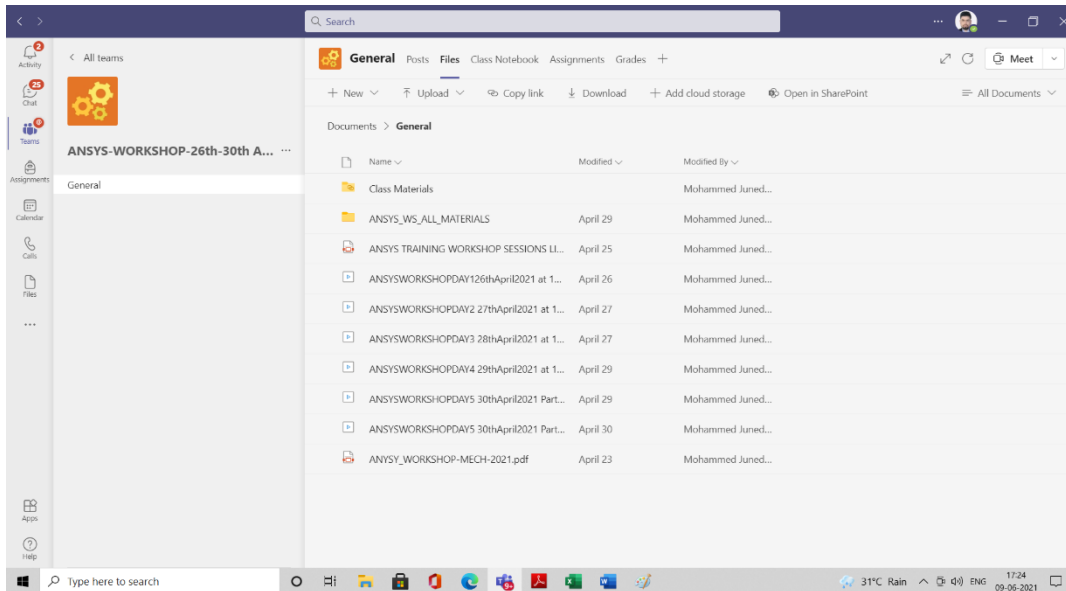


Figure5: MS-TEAM created for the Workshop and workshop contents were uploaded



Figure 6: Certificate-which was issued to all the active participants



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Mechanical Engineering Department.

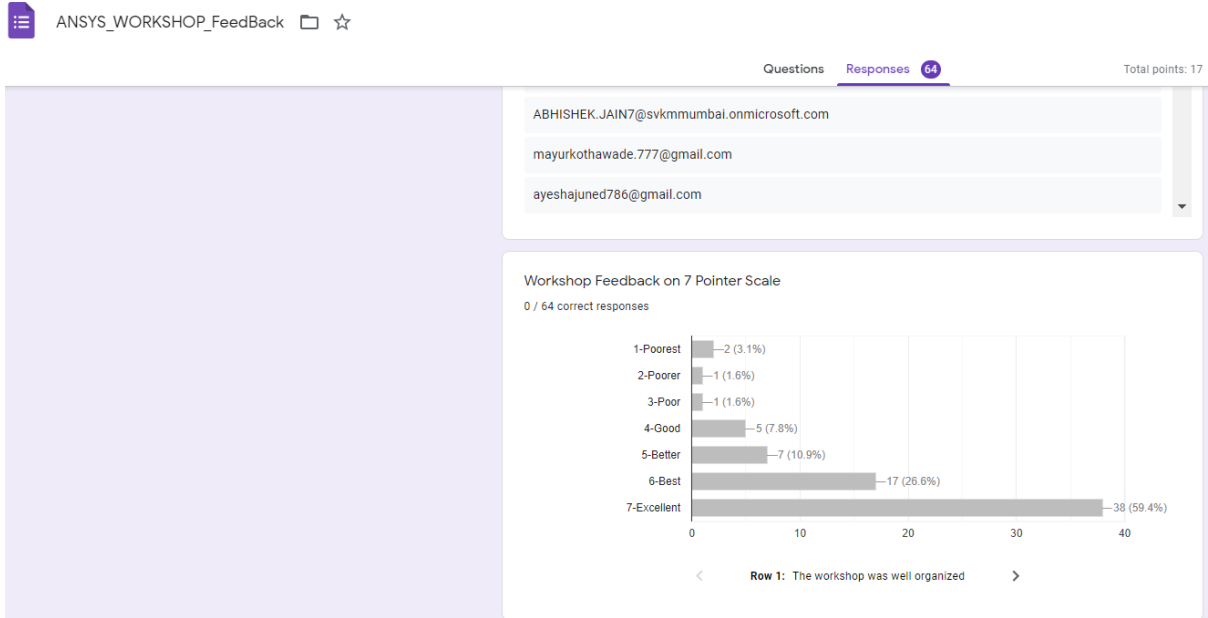


Figure 7: Feed Back Collected on after the workshop

**SVKM's Institute of Technology
Department of Mechanical Engineering**

Guest Lecture on 'How to Apply for Jobs after BTECH in Mechanical Engineering'

The guest lecture was conducted by **Mr. Shubham Jog** on **02th May 2021**, for all the students of Mechanical Department. **Mr. Shubham Jog** is working as the **Executive Engineer** in **Neptunus Power Plant Services Pvt. Ltd.**

Topics covered-

- How to write resume
- Importance of cover letter
- Different roles of Mechanical Engineer in Industry
- Job Portals
- Learning Platform
- Job Title

During two hours of session, students came to know about various competitive exams. Students were highly motivated by his guidance. Here are some snaps of session:



Guest lecture organized by: Mr. Mahesh Dalwani