

**Mukesh Patel School of
Technology Management and Engineering
(Shirpur Campus)**

3-Day Training conducted on

'CAD-CAM AND 3D PRINTING'

from 27th to 29th Jan 2020

Report

Mechanical Engineering Department of MPSTME, Shirpur has organised a 3-Days training program specifically for the diploma level students on “CAD, CAM and 3D printing” from 27th to 29th January, 2020. The objective of training workshop was to open the doors of knowledge and the facility of NMIMS to the diploma level students, so that they can effectively understand the level and scope of the subject in there undergraduate course. To maintain the good of pace of understanding only 30 students were allowed to participate which results into good understanding and the hands-on practice of related machineries.

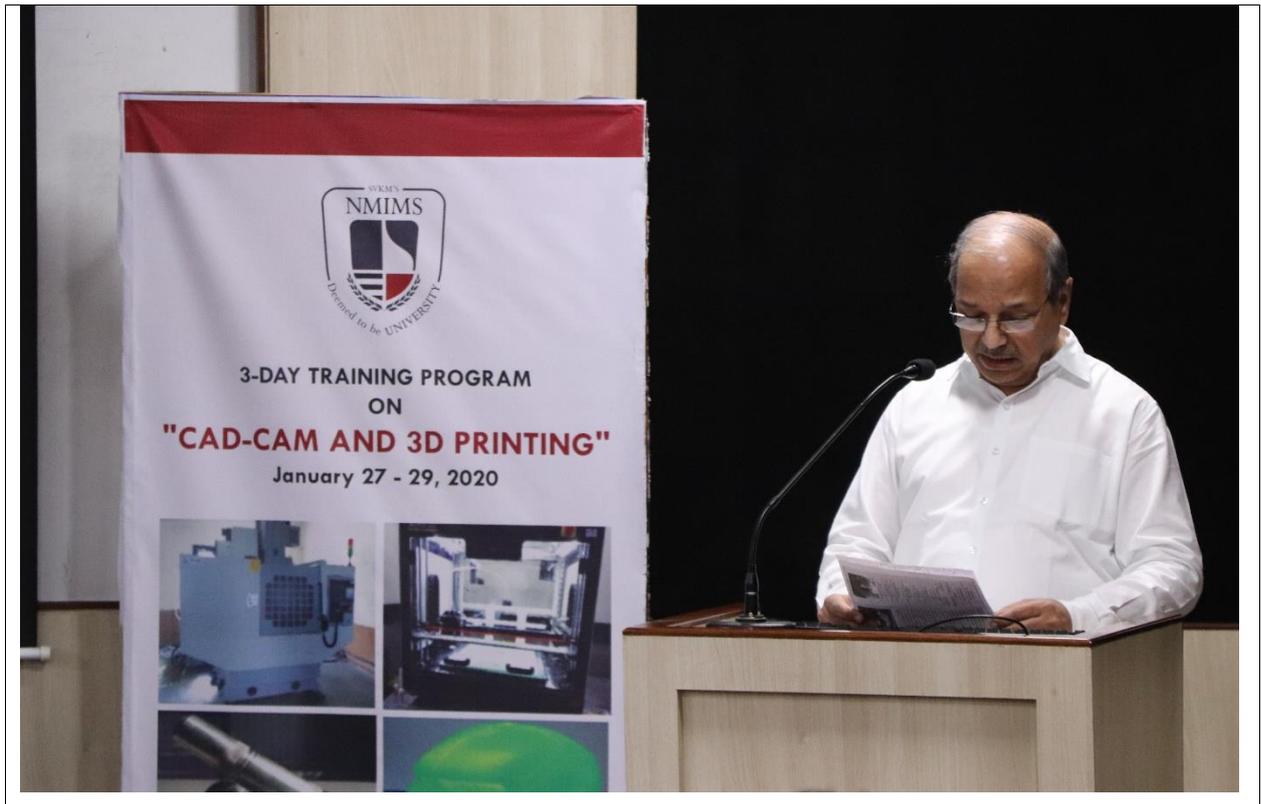
The training program was the combination of three very vital streams of Mechanical Engineering and the part actual manufacturing that required in the industries. Computer Aided Design includes the understanding of design with the help of computer which helps the students to convert their ideas into virtual reality. Computer Aided Manufacturing is the use of computer to control the machinery through a high level of automation helps to speed up the process. 3D printing is the new form of manufacturing and has wide scope in almost every field of engineering as well as pharmacy, jewellery design and medical applications. This technique helps to convert virtual reality into an actual physical model of the object.

The training program is co-ordinated by Prof. Rushikesh Dandagwhal and Prof. Sudhir Chaurey. For this training workshop, 30 students have been participated from the various colleges of Maharashtra as well as Madhya Pradesh.

Day 1: 27th Jan 2020

Inauguration function

Training program was inaugurated at 11.00 am in the presence of Dr. R. S. Gaud, Director, MPTP, Shirpur campus and Mr. Rahul Dande, Chief Accountant and Administrator, MPTP campus. After Goddess Saraswati Vandana, Dr. Rakesh Chaudhari, Head, Mechanical Engineering Department has briefed about the training workshop and the available facilities in the campus to the participants.





1st Session: Introduction to CAD at CAD Lab

In the first session, Prof. Rushikesh Dandagwhal had a brief introduction on “Introduction on CAD” which covered the introduction, importance and role of Mechanical engineers in the

mechanical and software industries. This was followed by step by step understanding of solid modelling in SolidWorks CAD modelling tool.



2nd and 3rd Session: Hands-on SolidWorks at CAD Lab

In post lunch session, all the participants were practised on the SolidWorks modelling tool. Prof. Rushikesh Dandagwhal, Prof. Nishant Dhengre and Prof. Gajanan Jadhav guided the students for better understanding of the modelling tool. Participants exercised on SolidWorks till the end of the session.



Day 2: 28th Jan 2020

1st Session: Introduction to CAD at CAD Lab

On the second day, training session started at 10.00 am at the CNC lab, workshop building. Prof. Sudhir Chaurey and Prof. Jeevan Kittur has briefed the participants on “CAM Introduction – CNC Lathe, CNC Milling & tooling” and “CNC Lathe Programming Basics”. This included the importance of CNC system, introduction to coding and automation.



2nd Session: Hands-on “CNC Lathe” and “Introduction to 3D printing”

In post lunch session, participants has been divided into two batches to perform practise session at CNC lathe and 3D printing. Batch-A with 15 participants started hands-on practise in CNC lab under the guidance of Prof. Sudhir Chaurey and Mr. Naval Patil. While other batch-B, started the introduction and practise session in 3D printing lab at BOSCH lab. Prof. Jeevan Kittur briefed the students about 3D printing and Prof. Rushikesh Dandagwhal and Mr. Sunil Patil guided the students on 3D printer.



3rd Session: Hands-on “CNC Lathe” and “3D printer”

In the third session of the day two training, participants exercised the various jobs on CNC lathe and 3D printer. At the same time, participants those freed from above two, practised modelling on SolidWorks at CAD lab under the guidance of Prof. Gajanan Jadhav. Due to this participants were highly satisfied in the utilization of time in more learning.



Day 3: 29th Jan 2020

1st Session: Hands-on “CNC Lathe” and “3D printer”

Batches of the day-2, were swapped into the 3D printing and CNC lab for hands-on practise. At the end of the session, Dr. Rakesh Chaudhari guided the students on the career opportunities and the need of interdisciplinary understanding for the mechanical engineers in LR-22, D-wing. After the session, students made the mechanical department lab visit and other facilities available in the campus.

Valedictory function

Valedictory function chaired by Prof. Narayan Chandak, Associate Dean, MPSTME, Mr. Rahul Dande, Administrator and Chief Accountant, MPTP Shirpur and Dr. Rakesh Chaudhari, Head, Mechanical Engineering Department. Prof. Rushikesh Dandagwhal presented the report of the three days of the training to the dignitaries and the participants. Followed by the certificate distribution to the participants by the dignitaries. Prof. Sudhir Chaurey delivered the vote of thanks to Management, administrators of SVKM's NMIMS, faculties, staff and the participants. Program is concluded with group photograph.





Prepared by

Prof. Rushikesh Dandagwhal

Prof. Sudhir Chaurey

Coordinators