

**N. K. Orchid College of Engineering and Technology, Solapur**  
**One-week Students/ Faculty/ Industry Internship Program**  
**by**  
**Mechanical Engineering Department**

**Title:** “Product Design - Design Thinking/Innovation/Autodesk Fusion 360”

**Duration:** 21<sup>st</sup> July 2020 to 25<sup>th</sup> July 2020

**Mode:** Online sessions organised using Zoom app

**No. of Participants attended:** 75 students from Polytechnic institutes

**Faculty Coordinators and Experts:** 1. Prof. V.P. Kulkarni

2. Prof. A.S. Dhobale

**Programme Objectives**

By the end of this programme, participants will:

- Understand the philosophy and process of design thinking, and be able to practise it in specific settings.
- Understand the importance of the design thinking mindset, and the roadmap to building it as an element of organisational culture.
- Be able to derive and structure relevant insights for unstructured problem situations.
- Enhance and practise skills of rapid prototyping.
- Uncover their own creative potential, through both divergent and convergent techniques.
- Use Autodesk Fusion 360 effectively for Product Design

**Course Schedule:**

<b>Day and Date</b>	<b>Time</b>	<b>Topic</b>
<b>Day 1 21/07/2020</b>	<b>3.30 pm to 3.45 pm</b>	Inaugural Ceremony
	<b>3.45 pm to 4.45 pm</b>	Importance of Design and What is Design Thinking: How does it differ from conventional approaches to problem solving? Writing the Problem Statement: How can creative approaches like storytelling, visualization and journey mapping enable solutions to often intractable problems?
	<b>4.45 pm to 5.45 pm</b>	Autodesk Fusion 360 fundamentals
<b>Day 2 22/07/2020</b>	<b>03.30 pm to 4.30 pm</b>	Understanding Users: How can the Design Thinking process address complex problems across a wide spectrum? Personas, Empathy Maps Current Scenarios to identify pain points
	<b>4.30 pm to 5.30 pm</b>	Sketching

Day 3 23/07/2020	03.30 pm to 4.30 pm	Ideation and Storyboarding Deriving Goals from Ideas
	4.30 pm to 5.30 pm	3D Modelling
Day 4 24/07/2020	03.30 pm to 4.30 pm	Future Scenarios and Moments of Max Impact Prototyping
	4.30 pm to 5.30 pm	Rendering, Animation
Day 5 25/07/2020	03.30 pm to 4.30 pm	Innovation versus creativity. Rapid prototyping The DT mindset- barriers and roadmap
	4.30 pm to 5.30 pm	Drawings
	5.30 pm to 6.00 pm	Valedictory

On 8th July 2020 we inaugurated the online internship program on “Product Design - Design Thinking/Innovation/Autodesk Fusion 360” Hon. HOD Mechanical Engg. Dept. Dr. S. S. Metan sir gave opening remarks on the session.

Prof. V.P. Kulkarni and Prof. A.S. Dhobale conducted the sessions for students making them learn various aspects of product design. During the entire course 3 competitions were conducted for students in which almost all students participated.

On 25th July 2020 the Course was completed and Online Valedictory Function was conducted in the gracious presence of Dr. Shriniwas S. Metan HOD Mech. Dept. Prizes were given to the winners of competitions conducted during course.

The entire course was coordinated by **Prof. V. P. Kulkarni, Prof. A. S. Dhobale.**



