Gujarat Technological University

Centre for Industrial Design (Open Design School)

Organizes:

50th Faculty Development Program (FDP) (Level 1)

Design Engineering (3rd + 4th + 5th + 6th Semester)

{ Exclusively for Zone 5 – Surat }

Date: **6th to 9th October, 2018 (50th FDP – Basic Level 1)**

Time: 9.00 am to 5.00 pm; Everyday

Venue: 1st Floor Amenities Block,
Dr. S & S. S. Gandhy Government Engineering College, Majura Gate, Surat

Kindly register here: https://goo.gl/forms/auhv7kDPgsikTSuh1

Message for Principals/ Directors/ HODs: For every group of 30 students, in every Branch, please make sure that at least one Faculty Member participated in the FDPs at GTU.

GTU introduced courses of Design Engineering through Design Spine, during the academic year 2014-15, beginning from the 3rd semester. Design Engineering is a very unique and pioneering initiative of GTU and it is based on **"Design Thinking"** methodologies developed and used by engineers and designers all over the globe. One of the key objectives of this initiative is to infuse the methodology of Design Thinking into the mind-set of the students and the faculty members for enhancing problem solving skills so that it is used in the study of all the core subjects of every branch. Other core objectives include; To stimulate thought process and creativity among the students, To learn problem-solving techniques, To lessen the copy-paste in the Project work etc.

GTU's Centre for Industrial Design – OPEN DESIGN SCHOOL has taken up the challenge of implementing this course in all the affiliated engineering colleges of GTU. Since AY 2014-15, *Centre for Industrial Design* – OPEN DESIGN SCHOOL has organized total 49 Faculty

Development Programs (FDPs) since 2014, in which more than 3500 faculty members from 139 Engineering colleges across the state, from more than 15 branches, have been trained for Design Thinking at various level.

Now during this odd semester (AY 2018-19), the Centre is bringing a new set of FDPs for faculty members with new hands-on exercises, presentations, examples and techniques of Design Thinking. The revised guidelines published on the website (Link: http://goo.gl/xZ2L1S) talk about little change in the approach for projects that students will take from 3rd to 6th semester, but the Design Thinking process would remain same.

This FDP will cover the whole Design Thinking process and approach to be taken in the 3rd to 6thsemester at basic introductory level, suitable for all the Faculty Members who want to acquaint with Design Engineering subject and never attended FDP before.

Exclusive features of FDP:

- New set of learning material including PPTs, Videos, Case Studies, Examples etc.
- Hands on exercises designed exclusively for FDPs to understand Design Thinking approach
- Experts session during FDP (Physical interaction or Skype)
- Sketching & Prototyping techniques

Workshop Program: (Level 1 – Basic)

Day 1:

Session 1 -**Welcome & Orientation session**– Introduction to Design Engineering Course

Session 2 – **Introduction** – What is Design Thinking? Its importance, socio-economic relevance

Session 3 – **Learning Tools to better Learn Design Thinking** – Bio Mimicry, Analogy, Gestalt Model and Heuristic Approach – All with examples

Session 4 – **Hands on Exercises** – Team Building and Log book

Day 2:

Session 5 - **Empathy** – Observation techniques & Field work

Session 6 – **Field Visit** – To gather observation data

Session 7 – **Summarization of Data** - Analysis of Data gathered during Observations

Session 8 – **Empathy Mapping** – Canvas Preparation

Day 3:

Session 9 – **Ideation** – Brainstorming techniques to Innovation

Session 10 – **Ideation Canvas** – Canvas Preparation

Session 11 – **Product Development** – Form, Function, Features

Session 12 – **Product Development Canvas** – Canvas Preparation

Day 4:

Session 13 – **Reverse Engineering** – Selection of Branch Specific artefact/component/product

Session 14 – **Disassembly & Identify Technical aspects**

Session 15 – **Prototyping techniques**

Session 16 – **Building rough prototype (Hands-on activity)**

Recap on FDP and certificate distribution

Note:

Certificate will be only issued to the participants upon successfully completion of training for all four days. University will not entertain anyone in any case for any institute related or personal work during the period of FDP.

For more information, kindly visit: http://www.de.gtu.ac.in

Should you have any query, kindly contact-

- Mr. Darshan Mehta, Asst. Prof. GEC Surat: 94289 59910
- Mr. Pancham Baraiya, Coordinator, GTU Innovation Council - Surat: 90331 83126

Sd/-
(I/C) Registrar, GTU