



# Gujarat Technological University

## Centre for Industrial Design (Open Design School)

**Organizes:**

### 40<sup>th</sup> Faculty Development Program (FDP) (Level 1)

### Design Engineering (3<sup>rd</sup> + 4<sup>th</sup> + 5<sup>th</sup> + 6<sup>th</sup> Semester)

**Date:** 22<sup>nd</sup> to 25<sup>th</sup> January, 2017 (40<sup>th</sup> FDP – Level 1)

**Venue:** B0 Conference hall, GTU Chandkheda Campus, Ahmedabad. **Time:** 10.00 am to 5.00 pm; Everyday

Kindly register here: <https://goo.gl/forms/HnkQaaj1Q0NFDz3B2>

**Message for Principals/ Directors/ HODs:** For every group of 30 students, in every Branch, please see 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 3<sup>rd</sup> 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 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. From AY 2014-15, *Centre for Industrial Design – OPEN DESIGN SCHOOL* has organized total 39 Faculty Development Programs (FDPs) during the last two years, in which more than 2400 Faculty Members from 126 Engineering colleges across the state, from more than 15 branches, have been trained for Design Thinking.

Now during this even semester (AY 2016-17), 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 3<sup>rd</sup> to 6<sup>th</sup> 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 3<sup>rd</sup> to 6<sup>th</sup> semester at basic introductory level - 1, suitable for all the Faculty Members who want to acquaint with Design Engineering subject and never attended FDP before.**

Note: We are developing total 5 levels of FDPs and organizing different level FDPs for better learning and refinement, we will shortly announce level 2 workshops for those who already attended level 1 previously.

### **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)
- Reverse Engineering & 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 – **Contents of 5<sup>th</sup> Semester**

Session 16 – **Contents of 6<sup>th</sup> Semester**

**Note:**

**Certificate will be only issued to the participants upon successfully completing 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.**

**We will shortly announce advance level (level 2) FDP for those who have attended FDP earlier.**

Should you have any query, kindly write us on: [design@gtu.edu.in](mailto:design@gtu.edu.in)