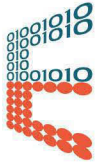MENA
Centre for Investment

INSOFE
Inspire...Educate...Transform.

# Certified Programme in Design Thinking

1st – 3rd December, 2019

## Program Overview

**Driving Innovation with Design Thinking**

This 3 day course discusses business aspects that help in mastering Design Thinking. Design Thinking is a powerful approach to new product development that helps to develop business at a faster pace. With applied design thinking, the success rate for innovation has been seen to improve substantially.

It provides a new way to approach business and tailored solution to business problems. Design Thinking is a cognitive, strategic and practical process centered around understanding the specific needs of clients.

## Modules

### Module 1
**(3 hours)**

**Translating a business problem:** In this module, we will develop a systematic framework that addresses all aspects that are important in aligning a technology solution with business. They analyze the business problem in 3 different dimensions to define it fully.

- Business and impact perspective
- Data perspective
- Infrastructure perspective

### Module 2
**(3 hours)**

**Square pegs in a round hole:** The paradigm of problem-solving in technology is changing from science to engineering. More and more engineers try to use existing APIs and libraries to concoct business solutions and not spend too much time in building systems from the ground up. This "Lego Block" approach requires a different mindset and unlearning that the practitioners must adapt and develop. This module focuses on that.

### Module 3
**(3 hours)**

**Defining a data strategy:** In this module, the participants learn to think about data systematically. They learn frameworks to do the following correctly

- Feature engineering and target definition
- Checking for biases within the data
- Augmenting and synthesizing data in the world of transfer learning
- Tagging the data: Importance and techniques

### Module 4
**(3 hours)**

**Defining perfomance strategy:** In this module, the participants learn to define performance metrics and feedback loops that align with the business. They see the limitation of just the statistical metrics. They learn to identify sufficient and necessary conditions for technology solutions. They learn to define what the systems should not learn and how to design them within performance metrics.

### Module 5
**(3 hours)**

**Defining production strategy:** The participants learn how to define what charts and graphs to plot systematically to inform business users of the progress and accomplishments of technology models. Where visualizations cannot be done, they learn the other strategies that can be used. They then move on to analyze machine and human-related aspects that play important roles in the production. Learn frameworks and strategies to build a production.

# PROGRAM FOOTPRINT

**Upon completion of the program, you will be able to:**

- Master Design Thinking

- Align a technology solution with business increasing productivity & efficiency of business

- Evaluate data using a Systematic approach

- Generate new product and service concepts through applied creativity

- Learn to identify sufficient and necessary conditions for technology solutions

- Analyse machine and human-related aspects that play prime roles in production

- This program uses Real-world application and Evaluation

# WHO SHOULD ATTEND

**This program is for decision makers and individuals in the upper and middle management level in private & public sector who are responsible for driving innovation, change and growth.**

**Roles can include:**

- Entrepreneurs

- Change Managers

- Business persons

- Innovation Managers

- Design Thinking Managers

- Strategy Specialists

- Risk Managers

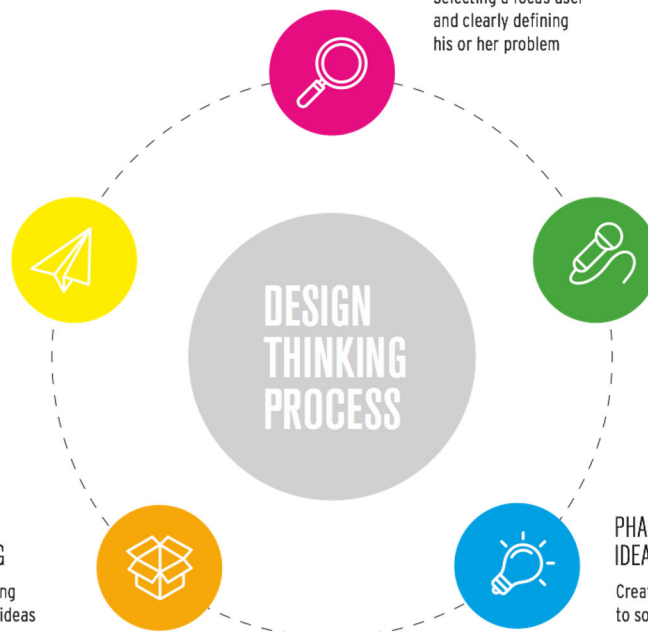- Growth Managers

- R&D Managers

**PHASE I:**
**PROBLEM DEFINITION**
Selecting a focus user and clearly defining his or her problem

**PHASE II:**
**NEED FINDING**
Building up empathy by interviewing and observing the user

**PHASE III:**
**IDEATION**
Creating many ideas to solve the problem

**PHASE IV:**
**PROTOTYPING**
Rapid prototyping of one or more ideas

**PHASE V:**
**TESTING**
Getting feedback on the first prototype to improve it

**DESIGN THINKING PROCESS**

Source: Medium.com

| Mentor | Dr. Dakshinamurthy V Kolluru |
|---|---|
| Total Lecture Hours | 15 |
| Date | 1st - 3rd Dec,2019  9:30am to 4pm |
| Venue | Swiss Bel Hotel |
| Program Fees | 200 BD |

## To Register, Please Contact:

MENA Centre for Investment

✉ menaoecd.bh@menacentre.org    📞 +973 39158369

## Mentor Profile

### Dr. Dakshinamurthy V Kolluru

Ph.D. & M.S. in Material Science from Carnegie Mellon University, USA

With over 17 years of experience in training, consulting and research in Data Science, Dr. Dakshinamurthy along with his highly skilled team steered INSOFE into being the globally acclaimed School of Applied Engineering it is today.

Awarded the Binani Gold Medal for working under the guidance of Dr. A P J Abdul Kalam to indigenously develop Radome, a critical component for Agni Missile (ICBM).

**He is a Pioneer in:**

• Machine Learning
• Optimization
• Artificial Neural Networks
• Deep Learning
• Text Mining
• Mathematical Algorithms
• Pattern Extraction

## About INSOFE

• We are Asia's largest Data Science Institute in terms of Faculty, Students and Corporates we train, that makes us one of the world's largest too.
• 12 full-time and 4 adjunct faculty.
• 45 full-time Data Scientists.
• All are Practicing Academicians (they split their time equally between Research & Consulting) and bring all that knowledge to the classroom.

**Rankings.** CIO.com listed **INSOFE** 3rd in their list of "16 Big Data Certification That Will Pay Off" consecutively from 2013-2016. Silicon India Magazine listed **INSOFE** in their list of "Top 5 Big Data Training Institute 2016