

Course Code: ENG315
Course Name: Design Thinking

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Course Objectives

This course will enable learners to:

- recognize the importance of Design Thinking (DT)
- explain the phases in the DT process
- list the steps required to complete each phase in the DT process
- apply each phase in the DT process
- use doodling and storytelling in presenting ideas and prototypes
- create value proposition statements as part of their presentations
- examine closely how DT can help in functional work
- analyse ways in which Agile and DT complement each other to deliver customer satisfaction

Unit I: Introduction to Design Thinking

9 periods

The importance of Design Thinking (DT) for individuals and business - the steps in the DT process – How to empathise? - The steps in the 'empathize' phase of DT; Introduction to immersion activity - the steps required to conduct an immersion activity.

Unit II: Creating Personas

12 periods

Creating personas - the steps to create personas in the define phase of DT – Problem statements: Definitions - the steps to create problem statements in the define phase of DT - the steps in the ideate phase of DT – Stages in Design thinking.

Unit III: Ideation

12 periods

How to ideate? - Ideation Games – Ideate to find solutions - Doodling – how it can help in presenting ideas during ideate and prototype phases - the importance of the prototype phase in DT – Creating a prototype - Storytelling in DT.

Unit IV: Prototypes on Design Thinking

12 periods

Recognize the importance of service value proposition – Creating a value proposition statement – Recognizing the best practices of the testing phase in DT – Importance of Prototype in Design Thinking – prototype your idea – Value proposition statement - Testing a prototype created through a DT process – recognizing how DT can help in functional work - How Agile and DT complement each other to deliver customer satisfaction.

Project: Option 1: Students in group to present a Prototype of how they can apply DT in their functional work or coding.

Option 2: Students in group to apply DT to create a prototype to improve any existing product or service.

[Groups need to complete all phases of the Stanford DT model and include the outputs of each phase in their presentation.]

Textbook:

There are no prescribed texts for Semester 5 – there will be handouts and reference links shared.

Reference Books:

1. Nir Eyal. 2014. Hooked: How to Build Habit-Forming Products. New Delhi: Penguin.
2. Rod Judkins. 2015. The Art of Creative Thinking. New Delhi: Hachette Book Publishing
3. Dan Senor and Saul Singer 2009. Start-up Nation: The Story of Israel's Economic Miracle. UK. Twelve.
4. Simon Sinek. 2011. Start with Why: How Great Leaders Inspire Everyone to Take Action. Portfolio

Web References:

- 1 What is Design Thinking? Interaction Design Foundation
- 2 What are some of the good examples of design thinking? - Quora
- 3 Design thinking 101: Principles, Tools & Examples to transform your creative process

Online Resources:

- 1 Understanding Design thinking WF NEN
- 2 Design Thinking and Innovation at Apple Wei Li
- 3 Stanford Webinar- Design Thinking = Method, Not Magic
- 4 Stanford Design Thinking Virtual Crash Course
- 5 So Many Uses- activity to spark creativity and design

Course Learning Outcomes

At the end of the course learners will be able to:

Unit I	identify the steps in the DT process
Unit II	create/ develop personas and problem statements in the DT process
Unit III	examine the scope for doodling and storytelling in corresponding DT phases
Unit IV	estimate the significance of service value propositions and prototypes.