

**SEMESTER-IV**

**SKILL COURSE**

**DESIGN THINKING**

**w.e.f. AY 2024-25**

<b>Year</b>	<b>Semester</b>	<b>Paper</b>	<b>Title of the Course</b>	<b>No. of Hrs./ Week</b>	<b>No. of Credits</b>
<b>2</b>	<b>IV</b>		<b>Design Thinking</b>	<b>2</b>	<b>2</b>

**SRI VENKATESWARA UNIVERSITY::TIRUPATI**  
**Common to all UG Programmes**  
**II year IV Semester**  
**Skill Enhancement Course : Design Thinking**  
**(w.e.f. 2024-25)**

**Theory**

**Credits: 2**

**2 hrs/week**

**Learning Outcomes:**

Upon successful completion of the course, the students will be able

- To understand the principles and fundamentals of Design Thinking as a problem-solving methodology.
- To foster creative thinking and ideation techniques to generate innovative solutions.
- To learn rapid prototyping methods for iterative testing and refinement of design concepts.

**UNIT - I:**

**Introduction to Design Thinking:** Definition and history of Design Thinking, Core principles and mindset, Applications in various fields (e.g., product design, service design, social innovation).

**UNIT-II:**

**Empathizing with Users:** Techniques for understanding user needs and behaviors, conducting interviews and observations, Creating user personas. **Defining the Problem:** Problem statement formulation, Identifying root causes and reframing problems, Stakeholder analysis and prioritization.

**UNIT-III:**

**Ideation and Creativity:** Brainstorming techniques and exercises, Divergent and convergent thinking, Idea selection and evaluation. **Prototyping and Testing:** Rapid prototyping methods (low-fidelity and high-fidelity), Conducting user tests and feedback collection, Iterative design and refinement. **Collaboration and Teamwork:** Effective teamwork in Design Thinking projects, Roles and responsibilities within multidisciplinary teams, Communication and presentation skills.

**Text Books:**

- "Design Thinking: A Paradigm Shift in Design" by Prateek Harne and Aman Vohra.
- "Design Thinking: An Indian Perspective" by Pooja Khati.
- "Design Thinking: A Manual for Innovation" by Joana N. Vasconcelos.
- "Design Thinking in India: The Next Big Leap" by Yatin Sethi.

**Reference Books:**

- "Design Thinking: Understanding How Designers Think and Work" by Nigel Cross.
- "Design Thinking: Process and Methods Manual" by Robert Curedale.
- "Design Thinking for Visual Communication" by Gavin Ambrose and Paul Harris.
- "Design Thinking: A Guide to Creative Problem Solving for Everyone" by Bruce Hannah.

- "101 Design Methods: A Structured Approach for Driving Innovation in Your Organization" by Vijay Kumar.

**Class Participation Activities:**

- Active engagement in discussions, exercises, and group activities.
- Individual and Group Assignments: Reflections, problem-solving tasks, and project deliverables.
- Design Thinking Project: A comprehensive project applying Design Thinking principles to address a real-world problem.
- Presentations: Presenting design concepts, prototypes, and project outcomes.

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**MODEL QUESTION PAPER**

Time: 1 ½ Hours

Max. Marks: 50

**Section-A**

Answer any **FIVE** of the following. Each Question Carries 10 marks.

(5X10=50)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.