

Branch Name:	Management
Program Code:	MS101
Course Title:	Design Thinking and Innovation
Course Code:	24-SEC165-2C
Pre-requisite Course:	Basic Management Knowledge, Fundamentals of Marketing, Problem-Solving Skills, Communication Skills

Course Objectives:

Operating under turbulent and uncertain business environment, ‘innovation’ has become the key driver of organizational success for all companies. Managers are expected to be leading this change by navigating companies into rapid evolution of new products/services and business models.

The primary focus of DTI is to help learners develop creative thinking skills and apply design-based approaches/tools for identifying and implementing innovation opportunities into implementable projects.

Following a learning-by-doing approach, the

1. Introduce students to design-based thinking approach to solve problems
2. Observe and assimilate unstructured information to well framed solvable problems
3. Introduce student to templates of ideation
4. Understand the importance of prototyping in the innovation journey
5. Implementing innovation projects

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
01	01	-	02	25	25	-	-	50

Course Contents:

Unit No	Topic	Total Hours	Weightage (%)
1	Basics of Design Thinking & Problem Identification • Concept of Innovation and its Significance in Business • Creative Thinking Process and Problem-Solving Approaches • Design Thinking Approach and its Objectives • Design Thinking and Customer Centricity • Enhancing Customer Experience and Product Experience Parameters • Alignment of Customer Expectations with Product • Global Success Stories: Airbnb, Apple Inc., IDEO, Netflix • Stages of Design Thinking: Empathize, Define, Ideate, Prototype, Implement • Importance of Empathy in Innovation • Observation and Information Assimilation • Individual Differences and Understanding Uniqueness • Concept of Wicked Problems • Identification of Wicked Problems and Impact Analysis	15	50%
2	Ideation, Prototyping, Implementation & Re-Design • Ideation Techniques (Brainstorming, Systems Thinking) • Reaching Consensus on Wicked Problems • Customer Experience Mapping • Methods and Purpose of Rapid Prototyping	15	50%

	• Implementation Strategies • Feedback Loop in Design Thinking • Focus on User Experience (UX) • Addressing Ergonomic and User-Focused Design Challenges • Re-Design and Iteration Process • Final Concept Testing • Final Presentation: Innovative Design and Creative Solution		
	Total Hours	30	100%

Text Books:

- E Balaguruswamy , Developing Thinking Skills (The way to Success), Khanna Book Publishing Company
- Tim Brown, "Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation", Harvard Business Review
- 8 steps to Innovation by R T Krishnan & V Dabholkar, Collins Publishing

Reference Books:

- Design Thinking by Nigel Cross, Bloomsbury

List of Open-Source Software/learning website:

- <https://swayam.gov.in/>
- <https://nptel.ac.in>

Course Learning Outcomes (CLO):

By the end of the course, students will be able to:

1. Propose real-time innovative product designs and choose appropriate frameworks, strategies, techniques during prototype development.
2. Know wicked problems and how to frame them in a consensus manner that is agreeable to all stakeholders using appropriate frameworks, strategies, techniques during prototype development.
3. Analyze emotional experience and inspect emotional expressions to better understand users while designing innovative products

Mapping of CLO with PO and PSO

Course Learning Outcomes	Program Outcomes (POs)							Program Specific Outcomes (PSOs)
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1
CLO1	H		L	H		H		L
CLO2		M	H		L		M	H
CLO3	L			M		M		

H: High, M: Medium, L: Low