

**DISCIPLINE SPECIFIC ELECTIVE**  
**DSE HP 5E2: Innovation and Design Thinking**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the Course (if any)
		Lecture	Tutorial	Practical/ Practice		
Innovation and Design Thinking	4	2	0	2	XII Pass	Appeared in Introduction to Resource Management

**Learning Objectives**

- To comprehend the Design Thinking concept for fostering innovation
- To understand concept and role of innovation in present day context
- To apply design thinking solutions individually and in team for maximizing business growth
- To instill a culture of design thinking to enhance innovation within an organization

**Learning Outcomes**

- Students will be able to :
- Overcome cognitive fixedness and develop new mindset that integrates design thinking for innovation.
- Empathize and apply human centred design for seeking innovative solutions.
- Create the optimal environment and team dynamics to steer innovation and collaboration.
- Develop the capacity to design and test cutting-edge for customer-focused prototypes

**SYLLABUS OF DSE HP 5E1**

**THEORY**  
**(Credits 2; Hours 30)**

**UNIT I: Innovation**

**10 Hours**

This unit will help students to understand the concept of innovation and types and its dimensions

- Innovation: Concept, significance, types and process
- Innovation diffusion theory
- Innovation in organizations : Drivers and barriers, bottom up and top down approach, horizontal versus vertical approach

- Dimensions of innovation: Innovation eco-system in India, social Innovation, grassroots innovation, frugal innovation and global Innovation-global innovation index framework (GII)

## **UNIT II: Design thinking approaches and processes**

**12 Hours**

The focus of this unit would be on developing the basic concepts of design thinking, business use of design thinking, mindset, approaches and processes.

- Design thinking : Concept, discipline, role and mindset
- Design Thinking Approaches: Empathy, Ethnography, Divergent thinking, convergent thinking, Visual thinking, Assumption testing, Prototyping and Time for learning and validation
- Design thinking resources: people, place, materials and organizational fit
- Design thinking processes: Double diamond process, Stanford d. school 5 stage process

## **UNIT III: Design thinking in practice**

**8 Hours**

This unit will help students to gain insights about design thinking tools, methods and its application.

- Stages of designing for growth
- Design thinking tools and methods: visualization, journey mapping, value chain analysis, mind mapping, brain storming, concept development, assumption testing, customer co creation, rapid prototyping, launching
- Design thinking applications in organizations

### **PRACTICAL (Credits 2; Hours 60)**

1. The foundation for innovation: Define users' needs and problems, identify and reframe the most game changing part of the problem and analyze the contextual environment for viable solution.
2. Ideate: Develop user focus ideas to identify new problems, and apply tools for innovative solutions, ideation through design thinking approaches and refine innovative ideas.
3. Develop an experimentation mindset: Combine ideas into complex innovation concepts, critique and strengthen concepts, guide prototyping by creating critical questions related to concept's desirability, feasibility and viability.
4. Implement : Assess developer and user perspectives for bias that may affect implementation, apply framework to strengthen communications about an innovation's value and reflect on management skills for sustaining a culture of innovation

### **Essential Readings:**

- Brown, T. (2009). *Change by design*. Harper Business.
- Drucker, P. F. (2006). *Innovation and entrepreneurship: Practice and principles*. USA: Elsevier.70
- Kahneman, D. (2011). *Thinking fast and slow*. Farrar, Straus and Giroux.
- Roy, R. (2008). *Entrepreneurship*. Oxford University Press.
- Soni, P. (2020). *Design your thinking: The Mindsets, toolsets and skillsets for creative*

*problem solving*. Penguin Random House India Private Limited.

**Suggested Readings:**

- Chesbrough, H. (2006). *Open business model: How to thrive in the new innovation landscape*. Harvard Business School Press.
- CN Prasad,(2004) *Small and Medium Enterprises in Global Perspective*. New century Publications.
- Fagerberg, J., Mowery, D. C., & Nelson, R. R. (Ed.). (2006). *The Oxford Handbook of innovation*. Oxford University Press.
- Kaplan, J. M. (.2006). *Patterns of entrepreneurship*. John Wiley & Sons.

**Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time**