Elective Course 1: Creativity & Design Thinking

Course Type:	GNE: Generic Elective	Course Credits:	2
Course Code:	C1GE408	Course Duration:	30 Hours

Course Objectives:

- To understand the core concepts of creativity, innovation, and design thinking.
- To develop practical skills in empathy, ideation, prototyping, and testing for problem-solving.
- To apply design thinking to create user-centric, impactful, and innovative solutions.

Course Outcomes:

- CO1: Demonstrate the understanding of critical theories of design, systems thinking, and design methodologies
- CO2: Demonstrate the understanding of diverse methods employed in design thinking and establish a workable design thinking framework to use in their practices
- CO3: Conceive, organize, lead and Design interdisciplinary domain while addressing social concerns with innovative approaches

Unit / Module	Content	CO Mapping	Hours Assigned
1	Creativity, innovation and design - Core concepts of creativity, design and innovation Creative people, Creative organizations, & Creativity Impact– Case Analysis & Discussions Distributed creativity How diversity and collaboration through networks support the creativity process	CO1	3
2	Design Thinking Overview: Concept of Design thinking; Importance of Design Thinking Method; Design Thinking Skills; Design Thinking Mind-set; Principles of Design Thinking; Design Think Process & Stages	CO1, CO2	3

3	General Design Thinking Practices: Listening and Empathizing Techniques; Observation. Ideation Techniques - Brainstorming, innovation heuristics, behaviour models, Unpacking; Personas; Pattern Recognition and Connecting the Dots	CO1, CO2	3
4	Visualization Techniques and Diagrams, Use of Diagrams and Maps in Design Thinking - Exercise:	CO1, CO2	6
	Create an Empathy Map; Exercise; Create an Affinity Diagram; Exercise: Create a Mind Map; Exercise: Create a Journey Map		
5	Prototype and Test Techniques; Types of Prototypes; Forms of Testing in Design Thinking	CO1, CO2	3
6	Experiments Designing and executing experiments for value creation: Empathize with the Customers and/or Users - Exercise: Engage the Customer /User; Define the Problem - Exercise: Define the Point of View; Ideate - Exercise: Develop Potential Solutions & Feedback on the Solutions; Prototype Alternate Solutions - Exercise: Create a Prototype of the Solution & Review the Prototype and Gain Feedback; Test the Solutions	CO3	6
7	Moving from ideas to impact Bring the ideas presented in this course together and show how organizations can create impact from ideas	CO1, CO2	3

8	Cautions and Pitfalls: Assumptions &, Pitfalls, Cautions in Design Thinking Workgroups – case Discussions	CO1, CO2, CO3	3

Text Books:

1. Tim Brown, Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation, Harper Collins Publishers Ltd.
2. Idris Mootee, Design Thinking for Strategic Innovation, John Wiley & Sons Inc

Reference Books:

1. Brenda Laurel, Design Research methods and perspectives MIT press
2. Terwiesch, C. & Ulrich, K.T., Innovation Tournaments: creating and identifying Exceptional Opportunities, Harvard Business Press.
3. Ulrich & Eppinger, Product Design and Development, McGraw Hill 4. Bjarki Hallgrimsson, Prototyping and model making for product design, Laurence King Publishing Ltd