

IMAGIN_xP
Design Thinking and UX Design

**Course Name : PG Certificate Programme in Design Thinking
& Innovation**

About the Course

The overall goal of this design thinking course is to help you design better products, services, processes, strategies, spaces, architecture, and experiences. Design thinking helps you and your team develop practical and innovative solutions for your problems. It is a human-focused, prototype-driven, innovative design process. Through this course, you will develop a solid understanding of the fundamental phases and methods in design thinking, and you will learn how to implement your newfound knowledge in your professional work life. We will give you lots of examples; we will go into case studies, videos, and other useful material, all of which will help you dive further into design thinking.

Learning Outcomes of the Course

1. How to make use of practical design thinking methods in every stage of your problem, with the help of method templates
2. How to apply design thinking to your problems in order to generate innovative and user-centric solutions
3. How to initiate a new working culture based on a user-centric approach, empathy, ideation, prototyping, and playful testing
4. How to employ ethnographic and analysis methods, such as interviews, focus groups, and surveys
5. How to prototype early and fast, as well as test your prototypes so as to reduce risks and accelerate organizational learning

Eligibility Criteria

This course is open to every working professional and graduates from any Bachelors or Masters or Equivalent degree course with a minimum requirement of 50% in previous degree.

Benefits of Design Thinking & Innovation

1. Provides a formal method of creative solution of a problem.
2. It provides creative solution leading to innovation.
3. It teaches you to think differently i.e., out of the box.
4. Design Thinking questions assumptions.
5. The process focuses on end users i.e., human centred process.
6. Design Thinking leverages collective expertise.
7. It employs empathy (i.e., understanding needs & Challenges of people)
8. It is an iterative process
9. Design Thinking creates value while solving problems.

Course Contents

Semester – 1

Subject 1: Innovation & Creativity

CREDITS: 2 | HOURS: 30

Learning Outcomes:

1. Understand the roles of skill, experience, motivation and culture in creative endeavour
2. Appreciate how the perspective taken on creativity affects the policy used to engender it
3. Differentiate between radical and incremental innovation
4. Identify some potential disruptive innovations and take advantage of 'open' innovation
5. Reflect on experiences of creativity and innovation at work.

What is Innovation? What is creativity? Difference between innovation and creativity, Role of creativity and innovation in organizations, dynamics of creative thinking, becoming creatively fit as an individual, creative insight, idea generation, idea evaluation, creativity in teams, team's environment and creativity, creating climate for creativity and an enterprise, creating an environment that keeps creative people creating, managing creative employees, leading for creativity and innovation, creativity to innovation

Minor project on Innovation and creativity

References Books:

1. How to kill creativity - Amabile, T. (2006)
2. Creativity in Context - Amabile, T. (1990)
3. Autonomy founder Mike Lynch to leave Hewlett-Packard - Arthur, C.
4. Disruptive technologies: catching the wave - Bower, J. L. and Christensen
5. Business Stripped Bare - Branson, R.
6. LEDS emerge as popular green lights - Cardwell, D.
7. The era of open innovation - Chesbrough, H.

Subject 2: Fundamentals of Design

CREDITS: 2 | HOURS: 30

Learning Outcomes:

- Be able to understand elements and principles of design
- Able to grasp stage model of action cycle
- Be able to understand design laws and their importance in design field
- To comprehend various rules of composition of design
- To gain hands-on experience of fundamentals of design

Introduction to elements and principles of design. Learning basics of design – dot, line, shape, form as fundamental design components. Principles of design – simplicity, unity, proportion, emphasis, rhythm and balance. Learning design laws such as Gestalt's law.

Project work on elements and principles of design

Reference Books: -

1. Universal principles of Design - William Lidwell, Kritina Holden, Jill Butler
2. Design of Everyday life – Don Norman
3. Universal methods of design – Brus hanignton
4. Hundred things every designer needs to know about people – Susan Weins Chenk

Subject 3: Empathy & Understanding Problem

CREDITS: 2 | HOURS: 30

Learning Outcomes:

- To understand the concept of empathy and empathizing with users effectively
- Discern the facts after dully analyzing the information received from the user
- To learn how to define the problem on the basis of facts
- To grasp various empathy techniques and tools
- To practice various tools to comprehend root cause of the problem leading to correct definition

Learn how to understand users, techniques to empathize with users and identify key user problems. Learn how to gain insights from empathy and define problems statements.

Empathy tools – techniques for getting empathy insights through interviews empathy maps, emotional mapping, observation,

Project submissions empathy mapping

Reference Book:

1. Empathy: Why it matters, how to get it - Roman Kizanie
2. The Art of Empathy: A complete Guide to life's most essential skill - Karla McLaren

Subject 4: Design Thinking Process

CREDITS: 2 | HOURS: 30

Learning Outcomes:

- Be able to understand elements and principles of design
- Able to grasp stage model of action cycle
- Be able to understand design laws and their importance in design field
- To comprehend various rules of composition of design
- To gain hands-on experience of fundamentals of design

Introduction to design thinking, history of design thinking, wicked problems, case studies in design thinking, design thinking process, implementing the process in driving innovation, design thinking in social innovations

Tools of design thinking – persona, customer journey map, AS-IS, TO-BE Processes, product lockdown workshops

An exercise in design thinking– implementing design thinking for making the process of a user better. Student to choose one industry segment to implement design thinking process

Reference Books: -

1. Universal principles of Design - William Lidwell, Kritina Holden, Jill Butler
2. Design of Everyday life – Don Norman
3. Universal methods of design – Brus hanignton
4. Hundred things every designer needs to know about people – Susan Weins Chenk

Subject 5: Minor Project – A Minor Project Based on Paper I, II, III, and IV.

CREDITS: 3 | HOURS: 45

Subject 6: Ethnography & People Design

CREDITS: 2 | HOURS: 30

Learning Outcomes:

- Ethnography immerses the project team in participants' lives and enables a relationship to develop with research participants over the period of study;
- Ethnography provides a rich source of visual data and helps to reveal unarticulated needs;
- Ethnography captures behavior in the different contexts of everyday life;
- Ethnography places a human face on data through real-life stories that teams can relate to and remember;
- Ethnography provides understanding behind 'statistics';
- Ethnography allows emotional behavior to be captured;
- By carrying out research in the everyday life environments of participants it helps to identify discrepancies between what people say they do and what they actually do.

Understand the users, user's interaction with the environment, people and culture, UX and societies, creating ethnography mood boards, user scenarios, storyboard, ethnography and user research, understanding research problems, data gathering techniques

Perform field study to understand people design

Reference Books:

1. For Ethnography Paul Atkinson - Cardiff University, UK
2. Ethnography for Designers 1st Edition by Galen Cranz (Author)

Subject 7: User Research & Applications

CREDITS: 2 | HOURS: 30

Learning Outcomes:

- To understand user through heuristic analysis
- To learn the creation of user segmentation
- To comprehend user research methodologies
- To understand cognitive psychology and behaviors of users.
- To understand the concept of empathy and empathizing with users effectively
- Discern the facts after dully analyzing the information received from the user
- To learn how to define the problem on the basis of facts
- To grasp various empathy techniques and tools
- To practice various tools to comprehend root cause of the problem leading to correct definition

User research importance, KPIs in User Experience, user research goals, heuristics analysis, user segmentation, user personas, identifying and recruiting users for the research, preparing a questionnaire for user research, user research methodologies – Qualitative and Quantitative analysis, user interviews, focused group discussion, expert reviews, tools for user research.

Understanding cognitive psychology and user behavior.

Performing a user research with 20 users on a chosen problem

Reference Books:

Measuring the User Experience: Collecting, Analyzing, and Presenting Usability Metrics (Interactive Technologies)

1. It's Our Research: Getting Stakeholder Buy-in for User Experience Research Projects
2. Observing the User Experience, Second Edition: A Practitioner's Guide to User Research

Subject 8: Design Thinking in Various Sectors (Health sector, Finance, Education, Infrastructure)

CREDITS: 2 | HOURS: 30

Learning Outcomes:

1. To learn the problem solving techniques
2. To understand use of design thinking in various sectors
3. To comprehend various case studies and applications in different sectors

Design thinking case studies in retail, design thinking case studies in banking, design thinking case studies in management decisions

Design thinking process and implementing it for a digital product

Reference Books:-

1. 101 Design Methods: A Structured Approach for Driving Innovation in Your Organization by Vijay Kumar
2. This is Service Design Thinking: Basics, Tools, Cases by Marc Stickdorn and Jakob Schneider
3. Design of Business: Why Design Thinking is the Next Competitive Advantage by Roger L. Martin

Subject 9: Major Project on Design Thinking

CREDITS: 4 | HOURS: 60

Industry project to be completed in semester 2 as an internship. Projects reports are to be submitted in a set format and mentors are assigned to each student for guidance through the project. The project is evaluated as the end-term examination in the form of a jury conducted by an industry and academic panel.

PG Certificate Programme in Design Thinking & Innovation - Course Structure			
Year 1	Subjects	Credit	Hours
Subject 1	Innovation & Creativity	2	30
Subject 2	Fundamentals of Design	2	30
Subject 3	Empathy & Understanding Problems	2	30
Subject 4	Design Thinking Process	2	30
Subject 5	Minor Project - Based on subjects 1, 2, 3 , 4	3	45
Subject 6	Ethnography & People Design	2	30
Subject 7	User Research & Applications	2	30
Subject 8	Design Thinking in various sectors	2	30
Subject 9	Major Project on Design Thinking	4	60
	Total	21	315

