

# Certificate Programme in **Design Thinking and Innovation**



IIT Delhi is Ranked # 2 amongst Engineering Colleges in India (NIRF 2024)

# **Programme Overview**

Design Thinking is a human-centred approach to problem-solving that fosters innovation across businesses, organisations, and society. It is an iterative process that involves understanding challenges, brainstorming solutions, prototyping, testing, and refining ideas to develop effective outcomes. By encouraging creativity and structured problem-solving, Design Thinking has become a powerful tool for driving meaningful innovation and accelerating the development of new concepts.

The **IIT Delhi Design Thinking and Innovation (DTI) Programme** is a 20-week online programme designed to provide a comprehensive understanding of Design Thinking principles and their real-world applications. Taught by esteemed faculty from IIT Delhi and industry experts, and complemented by GenAI masterclasses, the programme covers key methodologies, tools, and frameworks to help professionals develop innovative solutions in dynamic business environments.

Participants will also gain hands-on experience through real-world projects with industry partners, applying structured problem-solving techniques to practical challenges. Whether you aim to enhance your creative problem-solving skills, drive innovation within your organisation, or develop user-centric solutions, this programme equips you with the expertise to make a meaningful impact.



Watch the programme video here.



Starts on: **July 18, 2025** 



Duration: **20 Weeks** 



Programme fee: INR 1,10,000 + GST

The global design thinking market was valued at approximately **USD 6.9 billion** in 2021 and is projected to reach around

# USD 14.9 billion

by 2032, growing at a compound annual growth rate (CAGR) of 7.25%.

Business Research Insights

# Who is this programme for?

This programme is specially curated for:

- Designers & Design Engineers, Creative
   Managers, Art Directors & UX Designers
   wanting to gain expertise in developing innovative customer-centric solutions
- Entrepreneurs and Business Owners who aim to scale their businesses and create social impact through customer-centric innovations
- Innovation and Growth Consultants keen on enhancing their clients' business with design thinking and innovation



# **Programme Highlights**



150+

**Engaging Video Lectures** 



**15**+

Innovative Assignments



10+

**Short Quizzes** 



1

Capstone Adventure Project



2

Generative Al Masterclasses



2

Optional Campus Immersion

#### Note:

- -The final number of quizzes, assignments, case studies and live lectures will be confirmed closer to the programme start. Details of Weekly Office Hours with Faculty (Online) would be sent to selected participants as part of Academic Orientation.
- -The primary mode of learning for this programme is via online sessions with faculty members. Post session video recordings will be made available until the duration of the programme.
- -The programme highlights presented above are approximate, and subject to change depending on the availability and expertise of the teaching faculty, as well as the programme's desired outcomes.

# **Programme Modules**



#### Module 01

### **Introduction to Human-Centred Design (HCD)**

- The Paradox of Our Age
- The Principles of Co-Learning
- A Shift in Being
- What Design is Not?
- What is Design?
- Key Concepts of Design
- A Simplified Understanding of Design
- A Simplified Process of Design



#### Module 02

### **HCD** and Innovation

- Understanding Purpose
- Letting Go of What Holds Us Back
- What is Creativity?
- Thinking Differently
- Basic Rules of Design Thinking
- The Creativity Heart Set
- Everyone is a Designer
- Double Diamond Framework and Abstract-Tangible Cycle



#### Module 03

### **Context, Environment and Users**

- Review Double Diamond and Abstract-Tangible Cycle
- Ethnographic Research
- Participatory Research
- Evaluative Research
- Clean Team Case Study
- Effective Research for HCD
- Design in the World
- User Context
- Mis-design Around Us
- Who are your Users?
- Visible and Invisible Users
- Hybrid Model of Research
- Redefining the Problem



### **Identifying User Needs**

- Empathy Map Canvas
- Hearing the Unsaid
- Designing for Extreme Users
- Why is Creativity Becoming More Important?
- PLATOS Case Study
- Understanding Uncommunicative Users
- Waterless Urinal Case Study
- The Changing Wishlist
- The User Value Proposition
- Doing the Homework Ecosystem
- Needs vs. Wants



#### Module 05

### **Ideation and Immersion**

- Creative Ideation and Pattern Recognition
- Developing Creative Habits
- Creative Thinking Techniques
- SCAMPER
- Brainstorming Tools
- The Importance of True Immersion
- Immersive Learning
- Immersive Experience in the Design Process
- Mindful Design
- Automobile Design Process
- Design DNA and Mood Boards



#### Module 06

### **Storytelling and Visualisation**

- Stories vs Narrations
- Storytellers Across Time and Cultures
- Experimental Storytelling
- Storytelling in Research
- Rural Storytelling Case Study
- Storytelling in Design
- Brand Stories
- The Importance of Visuals and Visualisation
- Visualising Human Experiences
- Storyboarding or Image Boarding



### **Iterative Design and Sustainability**

- Why Iterative Design?
- Iterative Design Process
- Waterless Urinal Cubicle Case Study
- Research as a Tool
- Handloom Case Study
- Types of Sustainability
- Sustainability in Action
- Immersive Research Case Study
- Nonimmersive Research Case Study



### Module 08

### **MVP and NPD**

- What is Minimum Value?
- Identifying the MVP
- Rural ATM Case Study
- Prototyping as a Tool
- Critical Stages in Prototypng
- Stages in New Product Development
- Types of Prototypes
- Case Study Children during the COVID-19 Lockdown



#### Module 09

### **Agile Design and Data-Driven Innovation**

- What is Lean and Agile?
- Agile within Design
- Designing Agile Processes
- Electric Motor Case Study
- What is Data-Driven Innovation
- Data-Driven Innovation and Design
- ML Lifecycle vs. Design Lifecycle
- Generative Design and Nature-Inspired Computing



### **Integrating Design, Technology and Business**

- Project Management Methodologies
- Scrum, Kanban, and Scrumban
- Example from UI/UX Industry
- Example from Finance Industry
- Customer Segmentation and Innovation
- Design and Systems Thinking
- Design and Systems Thinking Working Harmoniously
- Business Design
- Contributions of a Business Designer



#### Module 11

# **Innovation Project Lifecycle and Innovation Management Tools**

- Lean Management Principles
- Logical and Creative Thinking
- Product Implementation Lifecycle
- Types of Innovation
- Roadblocks to Idea Generation and Implementation
- Strategies for Whole Brain Thinking
- Design Management



#### Module 12

### **Innovation Strategies and Taking Ideas to Market**

- Entrepreneurship in Organisations
- Innovation Strategies
- Frugal Innovation Strategies
- Challenging Assumptions
- Safeguarding Your Innovation



### **Designing for Change**

- Elements of Organisational Culture
- Organisational Change Through Design
- Storytelling for Organisational Transformation
- Context Canvas
- Defining the Challenge Technical vs Adaptive
- What are Rituals?
- Co-designing Rituals
- Celebrating Rituals and Sustaining Rituals



#### Module 14

### **Design for Leading**

- What Leadership is Not
- Leadership and Commitment
- The Triad of Leadership
- Operating from your Being
- Leading with Purpose
- Inspiring People
- The World is Your Playground

### Note:

- Modules/ topics are indicative only, and the suggested time and sequence may be dropped/ modified/ adapted to fit the total programme hours. Case studies, real world examples and numerical illustrations are an integral part of multiple modules included in the course.
- The primary mode of learning for this programme is via online sessions with faculty members. Post session video recordings will be made available until the completion of the programme.



# Live Masterclasses on Generative Al

### Gen AI in Design Thinking I

- Intro to Al and Gen Al
- Overview of Al and Gen Al in Design Thinking
- Gen Al in Product and Process Innovation
- Gen Al for Product Road Maps
- Gen Al for Designing Business Models
- Applications and Use Case of Gen Al in Design Thinking
- Gen Al and Ethical Issues

### Gen AI in Design Thinking II

- More to Al and Gen Al
- Deep Dive in Al and Gen Al in Design Thinking
- Al for Market Research and User Needs
- Gen Al in Customer Engagement and User Experience
- Gen Al and the Service Sector
- Tool Demos on Gen Al in Design Thinking
- Gen Al and Employment Opportunities



# **Learning Outcomes**



Develop a human-centric mindset while designing, innovating, developing, and testing solutions for new products, services and processes.

Understand the role of innovation in the digital era, and drive disruptive innovation.





Create a design thinking culture to drive innovation in an organisational set-up.

Effectively integrate GenAl into the design thinking process to enhance creativity, streamline prototyping, and produce innovative solutions.





Develop the ability to create and test prototypes that are customer-centric and innovative.

# **Programme Certificate**

Participants will be awarded a successful completion certificate from IIT Delhi upon scoring a mark of at least 60% in each of the evaluation components (Assignments, Quizzes & Capstone) and upon completion of the capstone project. Participants who are unable to score a mark of at least 60% in each of the evaluation component (Assignments, Quizzes & Capstone) will only be eligible for a participation certificate.





#### Note:

- All certificate images are for illustrative purposes only and may be subject to change at the discretion of IIT Delhi.
- Only e-certificates will be issued by CEP IIT Delhi.
- The organising department for this programme is the CRDT, IIT Delhi.

# **Programme Coordinator**

Prof. Vijayaraghavan M. Chariar has worked in diverse areas including Design for Sustainability, Frugal Innovation, Traditional Knowledge Systems, and Joyous Leadership. He has been awarded the Teaching Excellence Award by IIT Delhi and has taught and conducted research at the Arizona State University as a Fulbrighter. Prof. Chariar is the author of several patents and publications on innovative technologies. A passionate entrepreneur, he serves as the chairman of the IIT Delhi partnered venture Ekam Eco Solutions, and serves as a mentor and advisor to many start-ups, incubators, and accelerators.

Dr Vijayaraghavan M. Chariar

Professor, Centre for Rural Development & Technology Indian Institute of Technology Delhi



Design-led companies are also significantly more likely to outperform their peers, with some reporting a **1.5 times greater market share** and a **50% increase in customer loyalty** due to advanced design practices.

Adobe Experience

# **Participant Testimonials**



The five-month journey of pursuing the Design Thinking and Innovations course from IIT-Delhi has been nothing short of transformative for me. As a Qualitative Researcher, this immersive program helped shift my perspective in ways I never imagined. I entered the course to enhance my skills, but I left with a newfound confidence in my ability to create and design, thanks to the thoughtfully crafted assignments and Capstone Project. However, the true heart of the course is Mr. Vijayaraghavan Chariar (VJ). His passion and approach to teaching instilled in me the importance of deep empathy and curiosity, shaping how I approach problems today.

### Sohini Hazra

Qualitative Research and Design Thinking Consultant

I am excited to have continued my learning journey with a certificate in Design Thinking and Innovation from IIT Delhi. This experience has equipped me with valuable insights, and I'm eager to apply these new skills to drive ongoing growth in my creative field. It's been an incredible opportunity to expand my understanding and push the boundaries of innovation.



UX/UI Specialist Amdocs





Watch a video testimonial from DTI Alumni, Nekram Upadhyay

# **Participant Testimonials**

I am thrilled to have earned my Design Thinking and Innovation certification from IIT Delhi. This journey has been immensely rewarding, equipping me with valuable skills such as developing a human-centric mindset, empathizing deeply, and creating innovative, user-centric solutions. I am deeply grateful to my mentors, Vijayaraghavan Chariar and Jignesh Upadhyay, for their invaluable guidance, and to my wonderful batch mates for their collaboration and support throughout this enriching experience.



## Shweta Choudhary

UI/UX DesignerUI/UX Designer
Corient Business Solutions Limited



Attending the IIT Delhi Design Thinking & Innovation Batch 7 immersion meet was an incredible experience! It was wonderful to connect with the entire cohort and fellow co-learners in person. A special highlight was the fantastic cultural performance by VJ's talented kids, Rukmini and Sudarshan, along with other children. This journey has been truly memorable, and I'm grateful for the opportunity to be part of such an inspiring community.

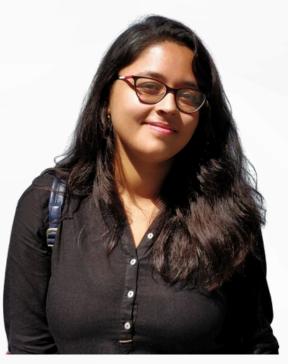
### Hemlata Tiwari

Technical Delivery Manager American Express



# **Participant Testimonials**

I'm excited to complete the Design Thinking & Innovation programme at IIT Delhi! This transformative journey taught me that "Design is a heart set, not just a mindset," helping me see challenges as opportunities. I'm grateful to my peers, especially Tarun Patra & Prabhat Kumar Yadav, for their support, and to Vijayaraghavan Chariar for his inspiring belief in us as co-learners. Proud to be a certified Design Thinker, ready to approach challenges with empathy, creativity, and joy.



## **Snehal Bhargava**

Freelance Experience Designer



I'm thrilled to share that I've completed the "Design Thinking and Innovation" programme at IIT Delhi! It's been a dream come true, and the past six months have been an amazing journey of learning and collaboration with a diverse group of talented individuals. Special thanks to Vijayaraghavan Chariar for his outstanding programme design. I'm excited to apply these insights to future projects.

Prathamesh Joshi

UI/UX DesignerUI/UX Designer Wai technologies



# **Programme Details**

### **Programme Schedule**

Duration	20 Weeks  Online Sessions
Technical Orientation	July 18, 2025
First Academic Session	July 19, 2025
Programme Fee	INR 1,10,000 + GST

### **Instalment Schedule**

	Date	Amount
Instalment 1	Within 7 days from selection	INR 55,000 + GST
Instalment 2	July 25, 2025	INR 55,000 + GST

#### Note:

- The actual programme schedule will be announced closer to the programme start.
- GST (currently @ 18%) will be charged extra on these components.
- Loan and EMI services are provided by Eruditus Learning Solutions Pte Ltd, and IIT Delhi is not responsible for the same.



### **Programme Schedule**

Last Date to Apply	July 17, 2025
Shortlisted Candidates Will Be Informed by	July 19, 2025
Last Date to Submit the Fee	Within 5 days post selection

#### Note:

- Applications will be reviewed based on eligibility, and the subsequent shortlisting process will be conducted by the Programme Coordinators.
- \*Two campus meetups (optional) are scheduled on August 23, 2025 and October 11, 2025 at IIT Delhi Campus.

To join the meetup(s), participants would bear travel and accommodation cost and make their own arrangements.

All fees should be submitted in the IIT Delhi CEP account only, and the receipt will be issued by IIT Delhi CEP account for your records.

### **Eligibility**

Graduates (10+2+3) or Diploma holders (only10+2+3) from a recognised university in any discipline.

A minimum of 50% marks in a most recent qualification.

Minimum 1 year of work experience (Private Sector / Government / NGO / Entrepreneur / Self Employed) as on July 18, 2025.

#### **Selection Process**

Screening and Selection will be done by IIT Delhi



# **Application Requirements**

### **Graduation and Post-Graduation Education:**

 Consolidated Graduation Marksheet or Post Graduation Marksheet as applicable (All Semesters)

### **Experience Documents:**

- For Previous Organisation(s): Relieving letters
- For Current Organisation: Current Salary Slip or Bonafide Certificate from the HR department on company letterhead

#### **ID Proof:**

- Any Government-issued photo ID like PAN Card/ Driving License/ Passport, etc.
- Submission of passport-size photo during application is mandatory

# System Requirements

This programme includes online learning classes conducted on Zoom. To attend a online learning class you will need to have a PC/ Laptop/ Mac with:

- Speakers and microphone: built-in or a USB plug-in or wireless Bluetooth
- Webcam: built-in or USB plug-in
- Processor: with Dual Core 2Ghz or higher (i3/ i5/ i7 or AMD equivalent)
- RAM: 4 GB or higher
- OS: Either MacOS 10.7 or higher OR Windows 8 or higher
- An internet connection: Minimum bandwidth of 3.0 Mbps (up/ down)
- Browser: IE 11+, Edge 12+, Firefox 27+, Chrome 30+
- Zoom software client installed on your PC/ Laptop/ Mac

We use the Zoom software application to conduct online learning classes. Zoom works on a variety of PCs/ Laptops/ Mac systems and also on phones and tablets. You can join your online learning class from a phone or tablet if it supports the Zoom client. We recommend that you attend classes from a PCs/ Laptops/ Mac.

# Withdrawal and Refund from Programme

- Candidates can withdraw within 15 days from the Programme Start Date. A total of 80% of the total fee received will be refunded. However, the applicable tax amount paid will not be refunded on the amount paid.
- If you wish to withdraw from the programme, you must email cepaccounts@admin.iitd.in and <a href="mailto:iitd.execed@emeritus.org">iitd.execed@emeritus.org</a>, stating your intent to withdraw. The refund, if applicable, will be processed within 30 working days from the date of receiving the withdrawal request.

### About IIT Delhi

The Indian Institute of Technology Delhi (IIT Delhi) is one of the 5 initial IITs established for training, research and development in science, engineering and technology in India. Established as College of Engineering in 1961, the Institute was later declared as an Institution of National Importance under the "Institutes of Technology (Amendment) Act, 1963" and was renamed as "Indian Institute of Technology Delhi". It was then accorded the status of a Deemed University with powers to decide its own academic policy, to conduct its own examinations, and to award its own degrees. Since its inception, over 48000 have graduated from IIT Delhi in various disciplines including Engineering, Physical Sciences, Management and Humanities & Social Sciences. Of these, nearly 5070 received PhD degrees. The rest obtained a Master's Degree in Engineering, Sciences and Business Administration. These alumni today work as scientists, technologists, business managers and entrepreneurs. There are several alumni who have moved away from their original disciplines and have taken to administrative services, active politics or are with NGOs. In doing so, they have contributed significantly to the building of this nation, and to industrialisation around the world. For more details, please visit: <a href="https://www.iitd.ac.in">www.iitd.ac.in</a>

# **About Continuing Education Programme**

Executive Education is a vital need for the organisations to build a culture that promotes newer technologies and solutions and builds a workforce that stays abreast of the rapidly transforming needs to the technological, business and regulatory landscape. Committed to the cause of making quality education accessible to all, IIT Delhi has launched Online Certificate Programmes under eVIDYA@IITD (ई-विद्या@IITD): enabling Virtual & Interactive-learning for Driving Youth Advancement@IITD for Indian as well as international participants. These outreach programmes offered by the Indian Institute of Technology Delhi (IIT Delhi) are designed to cater to the training and development needs of various organisations, industries, society and individual participants at national and international level with a vision to empower thousands of young learners by imparting high-quality Online Certificate Programmes in cutting-edge areas for their career advancement in different domains of engineering, technology, science, humanities and management. For more details, please visit: <a href="http://cepqip.iitd.ac.in">http://cepqip.iitd.ac.in</a>

### **APPLY NOW**

For any feedback, please write to CEP IIT Delhi at <a href="mailto:contactcep@admin.iitd.ac.in">contactcep@admin.iitd.ac.in</a>

**WhatsApp an Advisor On +91 86570 38243\*** 

\*This number does not accept any calls. Please message your queries.



Online Certificate Programmes are offered by the Indian Institute of Technology Delhi under the aegis of Continuing Education Programme (CEP) so that the Institute can realise its vision of serving as a valuable resource for industry and society, and fulfil its mission to develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.