## **Orientation to Design Thinking**

## **Course Description:**

Design thinking is a systematic method of solving problems and is different from traditional scientific or marketing focused approaches. Today industries, innovators, social entrepreneurs and leading universities across the globe are speaking and writing a lot about design thinking. It has taken a center stage in many organizations which are trying to rapidly adopt a user-centered approach and a culture in order to be more innovative. Design thinking is enabling individual and organizations to be more creative in developing new solutions that are unique in the market there by creating a large impact on the market and life of individuals. This is an introductory course that will help to understand the notions of Design Thinking along with some of the related tools, techniques and methods. Through interesting examples, case-studies and exercises the course will help to develop critical thinking and problem-solving abilities.

As part of the curriculum, an orientation to the Design Thinking course (40 to 60 hrs) is offered to all students across all programs at the university as part of the finishing school initiative. Students are required to complete the course online through the university's LMS portal (http://lms.atmiyauni.ac.in).

The course consists of a total of five modules. At the end of each module, students must complete a set of multiple-choice questions to assess their understanding.

## **Course Learning Objectives**

- Describe design thinking and its use.
- Describe the variety of approaches within the design thinking discipline.
- Explain basic elements & practices in design thinking.
- Explain the use of various tools and methods in alignment to a specific design thinking approach.
- Explain the role of project management within design thinking.
- Apply design thinking for problem solving.
   Course credential
  - 1. Dr. D.D. Vyas Registrar
  - 2. Dr. G.D. Acharya-Professor Emeritus, FoET
  - 3. Dr. Parag Rabara Associate Professor, FoPS
  - 4. Mr. Dhaval Vora Assistant Professor, FoET
  - 5. Dr. Pratik Kikani- Assistant Professor, FoET
  - 6. Mr. Piyush Kashiyani- Assistant Professor, FoET
  - 7. Mr. Bhavin Patel- Assistant Professor, FoBC



- 8. Dr. Amisha Ghelani Assistant Professor, FoBC
- 9. Dr. Alpa Joshi-- Assistant Professor, FoBC
- 10. Mr. Paras Parmar-- Assistant Professor, FoBC

Finishing School							
FS 1 to FS	FS 1 to FS 4 Compulsory to Earn Degree						
	Across I	<b>FS</b> 2:	40 to 60 Hrs	1	Evaluation	Audit	
	& II	Fundamentals of			by Remarks	course	
	Semesters	Design Thinking					
		(Online/Offline)					
		FS 5 to FS 8 Optio	ons for Advance	ed Learners			
	Any	FS 7:	-	1			
	semester	Advanced			Evaluation	Audit	
	from III to	Design Thinking			by Remarks	course	
	V/VII						



# **Course Curriculum**

FS 2:						
For the s	For the students admitted from A.Y. 2021-2022 & onwards					
Offering Department:	Offering Department:					
Semester - III						
Course Code Course Title Course Credit and Hours						
	Orientation to design thinking	1 hrs/wk(T)				

## **Course Description:**

Design thinking is a systematic method of solving problems and is different from traditional scientific or marketing focused approaches. Today industries, innovators, social entrepreneurs and leading universities across the globe are speaking and writing a lot about design thinking. It has taken a canter stage in many organizations which are trying to rapidly adopt a user-entered approach and a culture in order to be more innovative. Design thinking is enabling individual and organizations to be more creative in developing new solutions that are unique in the market there by creating a large impact on the market and life of individuals.

This is an introductory course that will help to understand the notions of Design Thinking along with some of the related tools, techniques and methods. Through interesting examples, case-studies and exercises the course will help to develop critical thinking and problem-solving abilities.

#### **Course Purpose:**

The main purpose of this course is to describe design thinking and its use, variety of approaches within the design thinking discipline and the explanation of basic elements & importance practices in design thinking. It also explain the use of various tools and methods in alignment to a specific design thinking approach, the role of project management within design thinking with application of design thinking for problem solving.

Course Outcomes: Upon completion of this course, the learner will be able to				
CO No.	CO Statement	Blooms taxonomy Level (K1 to K6)		
CO <sub>1</sub>	Describe design thinking and its use	K2		
CO <sub>2</sub>	Explain basic elements & practices in design thinking	K3		
CO <sub>3</sub>	Explain the use of various tools and methods in alignment to a specific design thinking approach	К3		
CO <sub>4</sub>	Explain the role of project management within design thinking	K2		
CO <sub>5</sub>	Apply design thinking for problem solving	K3		

Course Content	Hourse
Unit-I : Introduction to Design Thinking	2 hrs
About Course – Objective and bird view of course content	*
How this subject links in the entire curriculum?	Taikol
Definition of Design Thinking, its context and evolution	C NO

Definition of Design Thinking, its context and evolution Variety of approaches in Design Thinking discipline	
Unit-II: Basic elements & practices in Design Thinking	3 hrs
Understanding essential elements in Design Thinking – Empathy, Ethnography, Divergent & Convergent Thinking, Visual Thinking, Prototyping, Validation, etc. Popular approaches in Design Thinking - Study of any 4 - 5 approaches like Double diamond approach, 5D approach, boot camp bootlag, Designing for growth, etc	
Unit- III: Tools and Methods in Design Thinking approach based on Designing for growth approach	4 hrs
About Designing for growth approach Tools and Methods used in various stages of Designing for growth approach with Examples	
Unit- IV: Fundamentals of Project Management	3 hrs
What is a Project What is Project Management and its importance Project Life Cycle and Phases Project Planning & Overview of Project Scheduling Tools Project Execution & Performance Monitoring	
Unit- V: Design Thinking – Case studies & Success Stories	3 hrs
Healthcare Agriculture IT industry Manufacturing Environment Social innovation	

#### Text books:

Betancur, J. (2017). The Art of Design Thinking: Make more of your Design Thinking workshops. *Colombia: Brick Startup*.

#### **Reference books:**

Liedtka, J., & Ogilvie, T. (2011). *Designing for growth: A design thinking tool kit for managers*. Columbia University Press.

Liedtka, J., & Ogilvie, T. (2011). *Designing for growth: A design thinking tool kit for managers*. Columbia University Press.

#### **Pedagogic tools:**

Power point presentation Videos

## Methods of Assessment & Tools:

Components of CIE: 100 marks

Sr. No.	Component	Marks	Subal Contractor
Α	Assignment 1 MCQ	20	
В	Assignment 2 MCQ	20	20 Pajko'

11

Е	Assignment 5 case study submission	20 nd Total	20 <b>100</b>
D	Assignment 4 MCQ	20	20
С	Assignment 3 MCQ	20	20



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The great scientist and former President, Dr. APJ Abdul Kalam, torekuice on the preface of the audobiography: "Each individual content on the beauful practice of tored to the full a particular role. Established on April 13, 2018, under the Gujarat Private Using and State Sta	Follow Us Image: Constraint of the second secon
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Unit_1_Session_1_About				
Unit 1_MCG_Session 1		Announcements		
Unit 1_MCQ_Session 2		Announcements		
Unit 1_MCQ_Session 3				
Unit 1_MCG_Session 4	()	Unit 1 - Introduction to Design Thinkir	ing	
Unit_1_Session_2_About		Unit 2 - Basic elements and practice	es in design thinking	
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Unit 1_MCQ_Session 5		Unit - 3 Tools and Methods in Design	n Thinking approach based on Designing for growth approach	
Unit 1_MCQ_Session 6				
Unit 1_MCQ_Session 7		<ul> <li>Unit- 4 Fundamentals of Project Mar</li> </ul>	nagement	
Unit 1_MCQ_Session 8		Unit 5-Case study on Design Thinking	9	
Unit 1_Session 3_Design				
Unit_1_Session_3_Design				
Unit 1_MCQ_Session 9				
Unit 1_MCQ_Session 10				
Unit 1_Session 4_Design	The great scientist and former President, Dr. APJ Abdul Kalam, wrote in the preface of his autobiography: "Each individual creature on this beautiful	i Info	Contact Us	Follow Us
Unit 1_Session 4_Design	planet is created by God to fulfill a particular role." ATMIYA University bestows wisdom and knowledge upon the learner to recognize this	University Website	Atmiya University "Yagidham Guruku/" Kalawad Road, Rajkol-340005 Gujarat, India	🔽 🧿 🛅 🚹
<ul> <li>Unit 1_MCQ_Session 13</li> </ul>	particular role. Established on April 13, 2018, under the Gujarat Private University Act 11, 2018,	<u>About Us</u> Vision & Mission	Phone : +91-0281-2563445	
Unit 1_MCQ_Session 14	Read More a	VIDIT & MILLOT	E-mail : <u>admin@atmiyauni.ac.in</u>	
Unit 1_Session 5_Design     Unit 1_Session 5_Design				
<ul> <li>Unit 2 - Basic elements</li> </ul>				SP WILE O
and a " many sections		(	Copyright @ 2023 - Service by INFUBNET Centre. Powered by Moodle	
				Tajko

Facts and figures about DesignThinking course

Sr NO	Year	course offered to students	completed the course	% completed
1	2022-23	3000 +	2450 +	82 %
2	2023-24	3500 +	3000 +	85 %
3	2024-25	4000 +	In progress	In progress

