



GUJARAT TECHNOLOGICAL UNIVERSITY

Programme: Master of Business Administration

Semester: 1

Branch: Innovation, Entrepreneurship and Venture Development

Subject Name: Design Thinking For Product Development

Subject Code: N2519402

Rationale:

This course is intended for an understanding of design thinking for brand, product, and service development. Students will learn a series of design thinking concepts, methods and techniques that are used to bring about innovation in business. The intent is for students to develop creativity skills, along with the strategy skills needed to identify needs, generate and visualize ideas to meet those needs, and ultimately bring these ideas to develop product for intended market.

Course Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory		Practical		
			ESE (E)	PA(M)	ESE (V)	PA (I)		
4	0	0	4	70	30	0	50	150

Course Outcomes:

Sr. No.	Course Outcomes
CO1	To understand the concept of design thinking and value proposition
CO2	To apply the design thinking approaches and value proposition to develop innovation
CO3	To examine the product-market scenario in relation to value proposition
CO4	To evaluate the product market fit and MVP for related market/business

CO should not be Unit specific but each CO needs to be made looking to the overall syllabus.

Course Content:

Unit No.	Content	No. of Hours	Marks
1	Design Thinking Background: Definition of Design Thinking, Business uses of Design Thinking, Variety within the Design Thinking Discipline, Design Thinking Mind-set, Design Thinking Approach: Empathy, Ethnography, Divergent Thinking, Convergent Thinking, Visual Thinking, Assumption Testing, Prototyping, Time for Learning and Validation	12	21
2	Design Thinking Processes: Numerous Approaches, Double Diamond Process Five Stage d.School Process, Designing for Growth Process, Role of Project Management Design Thinking Tools and Methods AEIOU Framework	12	21



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3	Basics of Value Propositions: Definition and concept The Canvas : The Customer Profile, Value Map and Fit Design : Prototyping Possibilities, Starting Points, understanding Customers, Making Choices, Finding the Right Business Model, Designing in Established Organizations Test & Evolve Value Proposition	8	14
4	Product & Market: Concept and Types of Market and Product Concept of Lean Startup Basics of Product Market Fit (PMF) PMF Pyramid, Lean Product Process: Target, Need, Value Propositions, MVP, Features & Prototype, Test MVP Minimum Viable Segment, Product & Business Model, Metrics of PMF : The 40% Rule, Analytics Metrics, Common Mistakes	8	14
5	Practical Work/Cases on Design Mapping Value Proposition canvas, Product Market Fit	-	
Total Hours/Marks:		40	70

Suggested Specification Table For Question Paper Design:

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks (Assessment as per Revised Bloom's Taxonomy Level*)						Total Marks
			RM	UN	AP	AN	EL	CR	
I	Fundamentals	12	0	14	7	0	0	0	21
II	Creativity & Innovation	12	0	7	14	0	0	0	21
III	Innovation Management	8	0	0	0	14	0	0	14
IV	Types of Innovation	8	0	0	0	4	10	0	14
V									
	Total			21	21	18	10		70

***RM: Remember, UN: Understand, AP: Apply, AN: Analyse, EL: Evaluate, CR: Create**

Note: This specification table provides general guidelines to assist student for their learning and to teachers to teach and question paper designers/setters to formulate test items/questions to assess the attainment of the UOs. The actual distribution of marks at different taxonomy levels in the question paper may slightly vary from above table.



Suggested Student Activities for PA: (50 Marks)

Assignments, Case Study Analysis, Presentations, Class participation

Suggested Learning Resources:

S. No.	Title of Book	Author	Publication with place, year and ISBN
1	“Designing for growth: A design thinking tool kit for managers”,	Jeanne Liedtka and Tim Ogilvie	Columbia University Press
2	The design thinking playbook: Mindful digital transformation of teams, products, services, businesses and ecosystems”	Michael, Patrick Link, Larry Leifer	Wiley Publishing
3	Design Thinking	Andrew Pressman	Routledge
4	Value Proposition Design: How to Create Products and Services customers Want	Alexander Osterwalder; Gregory Bernarda; Yves Pigneur; Alan Smith; Trish Papadacos	John Wiley & Sons, 2014
5	Creating and Delivering Your Value Proposition	Cindy Barnes, David Pinder, Helen Blake	Kogan Page Special Priced Titles;
6	The Lean Product Playbook: How to Innovate with Minimum Viable Products and Rapid Customer Feedback	Dan Olsen	John Wiley & Sons
7	The Lean Startup: How Constant Innovation Creates Radically Successful Businesses	Eric Ries	Penguin UK
8	The Startup Owner's Manual The Step-by-Step Guide for Building a Great Company	Steve Blank, Bob Dorf	K & S Ranch

Software / Learning Websites

<https://www.ycombinator.com/>

<https://www.strategyzer.com/>

<https://cantwait.ideo.com/>

<https://www.mitchelleva.com/work-ux/design-thinking-portal>

<https://www.startupindia.gov.in/>

<https://www.solidworks.com/>

<https://www.3ds.com/products-services/catia/>