



GUJARAT TECHNOLOGICAL UNIVERSITY

Bachelor of Design Syllabus (Industrial Design)

Subject Code : 1130301

Subject Name : Product Visualization

WEF Academic Year :	2024-25
Semester :	3
Category of the Course :	Core

Prerequisite :	Industrial Product Design Sketching
Rationale :	The Product Design Sketching module is essential for developing core skills in visual communication, creative exploration, and technical proficiency. Sketching acts as the primary language in design, enabling rapid ideation and clear concept communication among team members and stakeholders. This module fosters creative thinking and innovation, allowing designers to quickly explore and iterate on multiple solutions. It also builds crucial drawing skills such as perspective, proportion, and shading, necessary for accurate three-dimensional representation. By familiarizing students with both traditional and digital sketching tools, it enhances their versatility. Additionally, sketching aids in visual problem-solving, breaking down complex issues and facilitating continuous refinement. Aligning with industry practices, this module prepares students for professional success in product design.

Course Scheme :

Teaching Scheme			Total Credits	Assessment Pattern and Marks				Total Marks
L	T	PR	C	ESE (E)	PA(M)	ESE (V)	PA (I)	
0	2	4	4	0	30	50	20	100

Continuous marking based on classroom assignments pertaining to different aspects of visual Design Elements. Final internal presentation in form of course documentation. End semester evaluation by external jury to evaluate extent and quality of explorations, initiative, originality of visual ideas and overall understanding of various visual elements of form and aesthetics.



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Course Content:

Sr. No.	Course Content	No. of Hours	% of Weightage
1	Unit I: Introduction to Product Design Sketching Course Overview and Objectives: Introduction to the course structure, goals, and learning outcomes. Importance of Sketching in Product Design: Exploration of why sketching is a crucial skill in product design. Basic Sketching Tools and Materials: Introduction to the essential tools and materials used in sketching.	30	35
2	Unit II: Fundamentals of Drawing Basic Drawing Techniques: Introduction to drawing lines, shapes, and basic forms. Perspective Drawing: Understanding one-point and two-point perspective for creating realistic sketches. Proportion and Scale: Techniques for maintaining correct proportions and scale in sketches. Light and Shadow: Shading techniques to create depth and realism through light and shadow.	24	30
3	Unit III: Sketching for Different Product Categories Consumer Electronics: Sketching for ergonomics and form factors in electronics. Furniture Design: Focus on structure, comfort, and aesthetics in furniture. Automotive Design: Sketching for aerodynamics and style in automotive design. Fashion Accessories: Designing stylish and functional fashion accessories.	30	35
Total		84	100

Reference Book:

- Norman, Don, The Design Of Everyday Things: Edition 2013
- Norman, Don, Emotional Design: Why We Love (or Hate) Everyday Things 2005
- Eyal, Nir, Hooked: How to Build Habit-Forming Products 2014
- Kolko, Jon, Well-Designed: How to Use Empathy to Create Products People, 2014

Course Outcome:

After Completion of the Course, Student will able to:

No	Course Outcomes	RBT Level*
01	Provide understanding of products sketching and form understanding.	
02	Build confidence about their own capabilities to develop new products as a structured approach.	
03	Develop skills of documenting their designs with clarity and content treatment to articulate their journey in the form of an effective communication with optimal use of visuals, composition and text.	



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

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