



GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Bachelor of Architecture

Level: UG

Branch: Architecture

Subject Code : BA01050011

Subject Name : Architectural Design - I

w. e. f. Academic Year:	2026-2027
Semester:	1 st
Category of the Course:	Professional Core Courses (PCC)

Prerequisite:	Students should have basic drawing skills and fundamental understanding of shapes, forms, and observation techniques.
Rationale:	This studio introduces students to the fundamental concepts of shelter, human scale, and spatial relationships. Through observation, exploration, and hands-on exercises, students develop an understanding of the built environment and its relationship with human activities, context, and culture. The course emphasizes learning by doing through model making, sketching, and field studies.

Course Outcome:

After Completion of the Course, Student will able to:

No	Course Outcomes
01	Understand the concept of basic shelter and its types.
02	Relate human body dimensions and comfort to spatial requirements.
03	Use geometrical forms to generate spatial compositions.
04	Analyze the relationship between architecture, context, and culture.

Teaching and Examination Scheme:

Teaching Scheme (in Hours)			Total Credits L+T+P	Assessment Pattern and Marks				Total Marks
L	T	P	C	Theory		Tutorial / Practical		
				ESE (E)	PA / CA (M)	PA/CA (I)	ESE (V)	
2	0	8	10	00	00	50	50	100

Legends: L-Lecture; T – Tutorial/Teacher Guided Theory Practice; P -Practical; C – Credit, CA - Continuous Assessment; ESE -End Semester Examination.

Course Content: Theory

Unit No.	Content	No. of Hours	% of Weightage
1.	Study of Human Body Sizes, Movements and Comfort in relation to Spatial Requirements 1.1 Introduction to Anthropometry:	10	34



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	<ul style="list-style-type: none"> • Understanding and studying human body sizes, • Studying and analyzing different body movements <p>1.2 Understanding the Spatial Requirements:</p> <ul style="list-style-type: none"> • Observing and studying basic day to day activities by analyzing and drawing different spaces. <p>Examining / reviewing the comfort required for different human body sizes in a particular space.</p>		
2.	<p>Use of Geometrical Volumes: Scaled Model Making Exercises supported by 2D/3D Drawings and Sketches</p> <p>2.1 Introduction to Geometrical Volumes:</p> <ul style="list-style-type: none"> • Understanding basic geometrical volumes. • Understanding abstract geometrical volumes. <p>2.2 Introduction to Scale:</p> <ul style="list-style-type: none"> • Explanation of scale with respect to different sizes of models. • Analyzing the human scale in context to the different volumes (examples of live buildings). 	10	34
3.	<p>Understanding Basic Shelter and its Types</p> <p>3.1 Basic Shelter:</p> <ul style="list-style-type: none"> • Explanation of a basic shelter, its different types. • Explanation of the simplest / primitive form of a shelter (use of branches, leaves, use of huts / caves) <p>3.2 Documentation of any space / a single room:</p> <ul style="list-style-type: none"> • Understanding the method of documenting a space. • Transferring the same onto a drawing sheet, in the form of a basic plan, section and elevation. 	6	20
4.	<p>Exploring Relationship between Architecture, Context, People and Culture through Field Trips</p> <p>4.1 Live Sketching:</p> <p>4.2 Understanding Architecture, context, people, and culture:</p>	4	12
Total		30	100

Suggested Specification Table with Marks:

Distribution of Theory Marks (in %)					
R Level	U Level	A Level	N Level	E Level	C Level
15%	20%	65%	0	0	0

Where R: Remember; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create (as per Revised Bloom's Taxonomy)



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Suggested Course Practical List:

Unit No.	Content	Unit No.	No. of Hours
1.	Study of Human Body Sizes, Movements and Comfort in relation to Spatial Requirements <ul style="list-style-type: none">• Introduction to Anthropometry:<ul style="list-style-type: none">▪ Exercises of sketching human body parts through measurements.▪ Exercises of understanding body movements through live on-site sketches, through 1:1 study of body movements.• Understanding the Spatial Requirements:<ul style="list-style-type: none">▪ Exercises to understand the different spaces required for day to day activities.	1	38
2.	Use of Geometrical Volumes: Scaled Model Making Exercises supported by 2D/3D Drawings and Sketches <ul style="list-style-type: none">• Introduction to Geometrical Volumes:<ul style="list-style-type: none">▪ Model making exercises of basic Geometrical Volumes▪ Model making exercises of abstract Geometrical Volumes• Introduction to Scale:<ul style="list-style-type: none">▪ Making of different sizes of models.▪ Exercises of different volumes with respect to human scale.• 2D/3D drawings and sketches:<ul style="list-style-type: none">▪ Integrating both the exercises of model making with the size of a human scale.▪ Preparation of 2-dimensional / 3-dimensional / perspective drawings and sketches of the model and the human scale.▪ Drafting exercises to study basic plan, elevation and section of the same.	2	38
3.	Understanding Basic Shelter and its Types <ul style="list-style-type: none">• Basic Shelter<ul style="list-style-type: none">▪ Literature Study exercises to understand basic shelter types.▪ Making models of primitive shelter types / model making exercises.• Documentation of any space / a single room:<ul style="list-style-type: none">▪ Live exercises of documenting a space.▪ Drafting the same onto a sheet in the form of a plan, elevation and section.	3	30
4.	Exploring Relationship between Architecture, Context, People and Culture through Field Trips <ul style="list-style-type: none">• Live Sketching trips:<ul style="list-style-type: none">▪ Live Sketching of humans from different aspects of life.• Understanding Architecture, context, people, and culture:	4	14



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	▪ Sketching of Historic / contemporary buildings. Sketching of different contextual spaces used by people.		
	Total		120

References/Suggested Learning Resources:

(a) Books:

S. No.	Title of Book	Author	Publication with place, year and ISBN
1	Form Space & Order	Francis D. K. Ching	John Wiley & Sons, United States. ISBN-10 : 9781118745083, ISBN-13 : 978-1118745083 , 4th Edition (September 2014)
2	Visual Dictionary of Architecture	Francis D. K. Ching	John Wiley & Sons, United States ISBN-10 : 8126535644, ISBN-13 : 978-8126535644, Second edition (23 April 2012)
3	Building Drawing	Shah, Kale, Patki	Tata Mcgraw Hill Publishing, India. ISBN-10 : 9389538122, ISBN-13 : 978-9389538120, Sixth edition (28 October 2019)
4	Neufert, Architects' Data	Ernst Neufert	Wiley-Blackwell, United Kingdom ISBN-10 : 111928435X ISBN-13 : 978-1119284352, 5th edition (12 July 2019)
5	Building Construction	Rangwala S.C.	Charotar Publishing House, Anand, Gujarat. ISBN-10 : 9385039040 ISBN-13 : 978-9385039041, 33rd Edition (1 January 2016)

(b) Open source software and website:

1. www.greatbuildings.com
2. www.architecturalrecord.com
3. www.archdaily.com
4. www.dezeen.com
5. www.archpaper.com
6. www.architectmagazine.com
7. www.archello.com
8. www.designboom.com

List of Laboratory/Learning Resources Required: NA

Suggested Project List:

Exercises on shelter studies with sketches and models.

- Anthropometric study and activity-space relationship analysis.
- Geometrical abstraction and spatial composition models.



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- Field trip documentation with sketches and photographs.

Suggested Activities for Students:

Lectures, studio work, field trips, sketching, model making, presentation techniques, group discussions, and exercises to develop observation and analytical skills. Faculty may adapt methodology based on student group and institutional philosophy.

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