

Sl. No.	Sub. Code	Theory	Contact Hours			Credit
			L	T	P/S	
4.	22AR143	Theory of Architecture-I	3	0	0	3

**Course Objective** To emphasize on the theoretical framework for architecture; Introducing design elements in three-dimensional forms and space leading to classical methods of architectural form development, theory and application.

**Anticipated Learning Outcomes:** Ability to appreciate the beauty of form, space and order in Architecture to identify and analyse the elements, principles and vocabulary of three-dimensional design; Proficiency in understanding the language of architecture; ability to utilise the theoretical principles in architectural design to produce designs that are timeless; to grasp and develop unique thinking from the principles that govern architecture.

**Module 1** Definition of architecture- elements of architecture - Concept of space, Articulation of form and space (Primary forms, properties of form, transformation of forms - dimensional transformation, subtractive, additive forms, organization of additive forms), Organisation of spaces, sense of enclosure, openings in space defining elements.

**Module 2** Perception in Architecture: Visual, Audio, Olfactory, Tactile, and Taste. Visual and tactile understanding of inter-relationship of form, structure and materials.

Elements of composition- Point, Line, Plane and form, the development/ transformation of all these and their association with the physical entities we see in our daily living, in architecture and planning.

Principles of architectural composition eg unity, balance, proportion, scale, rhythm, contrast, harmony, accentuation, restraint, definition, repose, vitality, strength and their application to endow a quality to spaces and forms.

Understanding the various organizing principles of composition e.g., Axis, Symmetry, Rhythm, Harmony, Contrast, Balance, Datum, Hierarchy or Dominance, Transformation, etc.

Form and its attributes: Shape, size, colour, texture and lighting.

Platonic forms

### Module 3

Parameters of design, anthropometrics, human activity and the use of space; Circulation and Flow Aspects of architecture (Bubble diagram or Relationship study)

Area and Space aspects of uses in architectural spaces; Making and Breaking of spaces.

Understanding different types of spatial organizations of masses e.g., linear, centralised, radial, clustered, grid organization through illustrations of buildings both historical and contemporary with respect to Building approach, building entrance, Configuration of path, Path space relationship, Form and Space, Space and Place.

### Module 4

Introduction to Proportional Systems in Architecture e.g.

- The Greek and Roman proportion system; The renaissance proportions;
- The Golden Ratio in Art and Architecture; Le Corbusier's Modular System;
- The Indian Proportioning system- "Vastupurusha Mandala";
- The Japanese proportion system- "The Ken".

### Module 5

Good Design & its examples. Architectural Theories - definitions and explanations; sources of architectural theories - historical & contemporary; examples of architectural projects based on theories.

Design thinking - definitions of creative thinking techniques - convergent, lateral thinking, interactive thinking, graphic thinking, etc.

**Note: Most Architectural subjects do not have Textbooks. The Reference books mentioned below are for reference only and University question paper should be prepared from the Syllabus descriptions.**

### References

1. Francis D. K. Ching, *Architecture - Form, Space and Order*, Van Nostrand Reinhold Company, 1979

2. Roger H. Clark, Michael Pause, *Precedents In Architecture*, Van Nostrand Reinhold Company, 1996
3. K. W. Smithies, *Principles of Design in Architecture*, Van Nostrand Reinhold Company, 1981.
4. Sam F. Miller, *Design Process - A Primer for Architectural and Interior Design*, Van Nostrand Reinhold Company, 1995
5. Ernest Burden, *Elements of Architectural Design – A Visual Resource*, Van Nostrand Reinhold Company, 1994
6. V. S. Parmar, *Design Fundamentals in Architecture*, Somaiya Publications, New Delhi, 1973. 7. Vitruvius, *Translation: Morris, H. M.* (1960).