

COURSE TITLE : PRINCIPLES OF DESIGN
COURSE CODE : 2181
COURSE CATEGORY : B
PERIODS/WEEK : 4
PERIODS/SEMESTER : 60
CREDITS : 4

TIME SCHEDULE

MODULE	TOPICS	PERIODS
1	Elements of Architecture	18
2	Principles of architecture	12
3	Architectural space and design process	15
4	Analysis of build forms	15
TOTAL		60

Course Outcome :

Sl.	Sub	Student will be able to
1	1	Understand the various elements of architecture, their characteristics ,properties and their applications in different contexts.
	2	Understand the principles of architecture and their importance in building compositions.
	3	Understand the concept of space in architecture and the various spatial organisations that can be followed in design of buildings.
2	1	Learn the process of architectural design starting from the analysis of given problem to its solution and presentation in terms of rendered drawings.
	2	Understanding the formative ideas, concepts, spatial characteristics and massing in famous buildings

MODULE I : ELEMENTS OF ARCHITECTURE

1.1.0. Understand the primary elements of design.

1.1.1 Explain the characteristics of point, line, plane and volume.

1.2.0. Understand form

1.2.1 Explain the visual and relational properties.

1.3.0. Understand Colour

1.3.1 Identify the qualities of colour

1.3.2. Identify the classification of colours on the colour wheel

1.3.3. Explain the colour schemes.

1.4.0. Familiarise with texture

1.4.1. Identify rough and smooth texture and their properties.

MODULE II : PRINCIPLES OF ARCHITECTURE

2.1.0. Understand the principles of composition.

2.1.1. Explain balance, rhythm, proportion, scale, contrast, unity and character.

2.2.0. Understand the creative principles of design

2.2.1. Explain function, strength and aesthetics.

MODULE III : ARCHITECTURAL SPACE AND DESIGN PROCESS

3.1.0. Understand Exterior and Interior spaces in Architecture

3.1.1. Know the characteristics of interior space.

3.1.2. Explain the various spatial organisations.

3.2.0. Understand the steps involved in architectural design process

3.2.1. Explain program analysis, preliminary studies, intermediate studies and presentation drawings.

MODULE IV : ANALYSIS OF BUILDINGS

4.1.0. Understand the design concept and spatial characteristics in the design of famous buildings

4.1.1. Identify the features of Falling Water with respect to spatial organisations

4.1.2. Identify the features of Guggenheim Museum with respect to spatial organisations

4.1.3. Identify the features of Villa Savoy with respect to spatial organisations

4.1.4. Identify the features of Chapel of Notre dame Du Haut with respect to spatial organisations

4.1.5. Identify the features of Sydney Opera House with respect to spatial organisations

CONTENT DETAILS

MODULE I : ELEMENTS OF ARCHITECTURE

Primary elements of design- point, line, plane and volume- characteristics and uses

Form- Definition, visual and relational properties, regular and irregular forms.

Colour- Definition, Qualities- hue, value and intensity; Tint and shade; Classification of colours on the colour wheel- primary, secondary and tertiary colours; Warm and cool colours, light, dark and dull colours; Colour schemes- Related colour scheme- Monochromatic, analogous and neutral colour schemes; Contrasting colour scheme- complementary, double complementary, split complementary; triad.

Texture- Definition and explanation of rough and smooth textures.

MODULE II : PRINCIPLES OF ARCHITECTURE

The basic principles of composition such as Balance, Proportion, Scale, Rhythm, Contrast, Harmony and Character - Brief explanation with examples of buildings.

Creative principles of design namely Function, Strength and Aesthetics or Appearance.

MODULE III : ARCHITECTURAL SPACE AND DESIGN PROCESS

Definition of space, Explanation of interior and exterior spaces; Characteristics of interior space- Quantity and Quality; Spatial organizations- Centralized, Linear, Radial, Clustered and Grid organizations- Brief explanation only.

The steps involved in architectural design process- program analysis, preliminary studies, intermediate studies, presentation drawings- brief explanation only.

MODULE IV : ANALYSIS OF BUILDINGS

Design concept and overall features with respect to spatial organizations along with a sketch view of the following famous buildings:

Falling Water, Guggenheim Museum – FL Wright

Villa Savoye, Chapel of Notre dame Du Haut – Le Corbusier

Sydney Opera House – Jorn Utzon- Louvre – I M Pei – Tube house – Charles Correa – Hagia Sophia at Istanbul – Hussain Dhoshi Gufa at Ahmedabad

REFERENCES:

Francis DK Ching - Architecture Form, Space and Order

Sabine Thiel Siling - Icons of Architecture - The twentieth century

Ahmed A Kasu - Interior Design