

AIMS:

To be able to develop knowledge, skill and attitude in the field of the graphical representation of architectural design & drafting with special emphasis on:

- Creativity
- Elements of design.
- Principles of Design
- Proportion and scale
- Composition
- Color
- Rendering and presentation

SHORT DESCRIPTION:

Creativity; creative process and theories; rhythm; emphasis; proportion; appearance; unity; variety; repetition; opposition; transition; Form; shape & space; transformation of forms; balance; rule of thirds; scale and Proportion; golden section; composition; color; rendering and presentation.

THEORY:**1. Understand the Creativity in Architecture**

- 1.1 Define Creativity.
- 1.2 Describe two stages of creation.
- 1.3 Describe three points of working definition of creativity.
- 1.4 State creative thinking theories.
- 1.5 State creative process theories.
- 1.6 Mention different creative process.
- 1.7 Explain the environment for creativity.
- 1.8 Mention the guidelines to encourage creativity.

2. Understand the Primary elements of Design.

- 2.1. Define Point, Line, Plane, Volume as a drawing element and its application.
- 2.2. Define Form, shape & space.
- 2.3. Describe the primary shapes i.e. circle, triangle & square and regular, irregular forms and platonic solids.
- 2.4. Describe the transformation of forms.
- 2.5. Describe the subtractive and additive forms.
- 2.6. Explain the centralized, linear, radial, clustered and grid forms.

3. Understand the principles of Design.

- 3.1 Explain the term rhythm, emphasis, proportion, appearance, unity, variety, repetition, opposition, transition etc.
- 3.2 Discuss the Emphasis factors in design.
- 3.3 Describe balance.
- 3.4 Discuss Rule of Thirds

4. Understand the scale and Proportion.

- 4.1. Define the term scale in different sector (scale in measurement, scale in weight, scale in Architecture).
- 4.2. Describe different types of Scale use in Architectural drawing.
- 4.3. Discuss scale sense in Architecture and Interior space.
- 4.4 Define Proportion.
- 4.5 Describe Proportion in composition and form.
- 4.6 Describe Golden ratio and Golden section.

5 Understand the necessity and importance of Composition.

- 5.1 Describe composition.
- 5.2 Describe types of composition.
- 5.3 Distinguish between different forms and composition.
- 5.4 Explain necessity of composition in Architectural design.
- 5.5 Describe composition in different media.

6. Understand the necessity of Color in Architectural Design.

- 6.1 State the Color.
- 6.2 Discuss the necessity of color use in Architectural Design.
- 6.3 List the different types of color.
- 6.4 Describe value weight and warmth of color.
- 6.5 State pigment, tone and shade in color.
- 6.6 Describe the language of color.
- 6.7 Discuss of lights and its effects in interior environment.

7. Understand the concept of rendering and presentation.

- 7.1 Define rendering.
- 7.2 Describe the necessity and importance of rendering.
- 7.3 State the technique of rendering.
- 7.4 Describe the necessary material required for rendering.
- 7.4 Define shade , shadow and texture.
- 7.5 Describe the technique of shade and shadow.

PRACTICAL:

1. Prepare Origami.

- 1.1 Make an origami by paper.
- 1.2 Make origami by board/Transparent sheet.
- 1.3 Make origami by stick.
- 1.4 Make an origami by composite materials.

2. Composition with design elements.

- 2.1 Make composition with design elements (dot,line,plane,volumn).
- 2.2 Make composition with 2-dimensional geometric elements.
- 2.3 Make composition with 3-dimensional(platonic solids) geometric elements.
- 2.4 Make composition of different objects with color.

3. Form Transformation.

- 3.1 Make form transformation of block.
- 3.2 Make form transformation of cylinder.
- 3.3 Make transformation of prism.
- 3.4 Make form transformation of pyramid.

4. Prepare composition applying color concept.

- 4.1 Prepare a color wheel and color charts.
- 4.2 Make composition with color tone.
- 4.3 Make composition with color shade.
- 4.4 Make composition with color grade.

5. Prepare render and presentation.

- 5.1 Draw a two dimensional object and make rendering with pencil using texture.
- 5.2 Draw a three dimension step and apply shade, shadow .
- 5.3 Draw shade and shadow of a given object from different angle light source.
- 5.4 Draw free hand sketch of foliage and human figure.

Reference Books:

1. Architecture Form, Space & Order - Francis D.K. Ching.
2. Design in Architecture - Geoffrey Broadbent.
3. Conceptual Blockbusting - J. L. Adams.
4. Rendering with pen and ink-Robert W.Gill
5. Understanding Color: An Introduction for Designers, Fourth Edition-william stout
6. Architectural Rendering-Albert O Halse
7. Professional Architectural Graphics- C. Leslie Martin
8. LIGHT, SHADE AND SHADOW-E.L Koller