### LUMINARES & FIXTURES

Definition, different luminaries for lighting, lighting control system- benefits & application,

Impact of lighting, fixture types - free standing or portable, fixed, light fixture control. Lighting accessories- switches, sockets, fused connection units, lamp holders, ceiling roses etc. CASESTUDY

Study of projects based on different lighting concepts used in interiors and exteriors

#### **Third Year**

#### Semester V

### 27. Interior Design – V

Lecture / Studio Hours – 10 periods per week

Total work hours per semester =  $10 \times 15 = 150$  periods

Contents:

One Interior Design problems of complete species with creative outlook (Hotels, Resorts, Hospitals, Educational buildings etc. – service industries)

Drawings include – presentation drawings, Enlarge detail drawings, Service layout drawings, views etc to understand clearly concept of design.

Area of Interior project should be @ 300.00 sq.mt. minimum

One Interior Design problem of any one type – Hotels, resorts, Hospitals, education building with proper. Concept sketches.'

Presentation drawings

Enlarged details, elevation, sections, views, service layouts One time bound problem of Hotels, Resorts, Hospitals etc. – Service industries.

## 28. Working Drawing – I

Lecture / Studio Hours – 8 periods per week

Total work hours per semester =  $8 \times 15 = 120$  periods Contents:

Working drawing & details of Interior Design II project. All furniture, flooring, ceiling, electrical, water supply, drainage layouts with details. In details of furniture, doors, windows etc. of all types with specifications. The drawings shall be sufficient to understand the design & fulfill the details required for estimation, tender form.

### 29. Interior Services – III

Lecture / Studio Hours – 4 periods per week

Total work hours per semester =  $4 \times 15 = 60$  periods Contents:

- Air Conditioning : Functions temp control, ventilation, dust control.
  A.C. systems window unit, vertical/horizontal package units, split systems, ducting installation, precaution to prevent sound travel & water outlets.
- Acoustics: Functions, Sound, Sound transmission, acoustics in enclosed spaces reflection, reverberation, sound abstraction, Noise & Noise control – Noise Absorption, Acoustical materials.
- 3) Landscaping : Introduction Indoor landscaping, Outdoor landscaping related to interior surrounding spaces. Ekebana, flower, arrangement, potting, Bed preparation, Artificial & natural landscaping. Services for landscaping. Maintainance of landscaping, Different types of materials, plants etc.

# **30.** <u>Estimation & Costing</u> – I

Lecture / Studio Hours – 4 periods per week

Total work hours per semester =  $4 \times 15 = 60$  periods

Contents:

Estimate & estimation

- 1. Quantity aspect 2. Quality aspect
- Types estimate Approximate, detailed.
- Principle of approximate methods of costing.
- Approximate methods of costing of various items.
- Prepare of rate analysis
- Factors affecting rate analysis
- Importance of rate analysis
- Estimation of rate analysis
- Schedule of rates
- Method of taking our Quantity
- Rate analysis for different I.D. items
- General rates for measurement Studio Work:
- Preparation of measurement rates & Quantities of different materials.

## Specifications

Objects of specifications Importance of specifications Types of specifications Brief specifications Detailed specifications Principles of specification costing Specification of different items Abstract or work

Contract & contract documents

Tender, Types of tender, Contract, Billing, Certificates of payments, clerk of works. Studio work – Estimation of residential interior scheme, minimum one multi itemed project based on Interior Design II

## 31. Design Elective I

Lecture / Studio Hours – **3 periods per week** 

Total work hours per semester =  $3 \times 15 = 45$  periods

Contents:

To study a particular subject of students liking in greater details. Students have to choose any on subject from the following & submit data collection & given assignment for the same. Any one.

## a) Presentation technique.

COLORING STUDY

Introduction of colors, Usage of water colors, poster colors, pen & ink, rendering techniques, etc.

DRAWING AND SKETCHING INTERIOR ENVIRONMENTS

Drawing and sketching interior environments, one point interior perspective, two point interior perspective, refined linear perspective methods, two point plan projection method, and perspective traced from photographs.

RENDERING WITH PEN AND INK

Introduction to pen and ink rendering, materials, media and tools, rendering orthographic projection drawings, rendering perspective drawings.

RENDERING WITH COLOUR PENCILS AND SKETCH PENS

Rendering of interior perspectives with colour pencils and sketch pens – stroke effects, smudge effects – use of schoeller and kent sheets – leather cartridge etc. RENDERING WITH POSTER/WATER COLOURS

Use of kent/ cartridgde sheets for poster colours and waterman/cartridge sheets for

water colours – transparency effects in water colours – block effects in poster colours.

## b) Adaptive reuse and recycling

NEED FOR ADAPTIVE REUSE

Cultural inheritance – heritage buildings and old structures – ascertaining the structural stability – estimation of the prolonged life of the building – strategies of adaptive reuse – investigation into material finishes etc.

NEED FOR RECYCLING OF MATERIALS

The logic behind recycling – recycling of steel, wood, glass etc - estimation of the quality of recycled timber – criteria for recycling of steel, glass etc. CONCEPT OF SUSTAINABILITY

Earth summit declaration – definition of sustainability – economic, social and environmental issues – green rating of buildings – criteria for LEED rating. RECYCLING OF WASTE WATER

Sullage and sewage – techniques of water purification for sullage – treatment plant for sewage – techniques of biological and chemical purification. NEED FOR CONSERVATION

Architectural conservation - conservation of heritage and important buildings -

levels of intervention - structural, construction related, finishes etc. Revival of old

building techniques and finishes.

# 32. Contemporary Interior Design

Lecture / Studio Hours – 3 periods per week

Total work hours per semester =  $3 \times 15 = 45$  periods

Contents:

EARLY PIONEERS

Art nouveau, the post Industrial era works of Charles Renée Mackintosh, Antonio Gaudi, Gerrit Rietveld and their expressionist interior design.

BAUHAUS AND POST WAR MODERNISTS

Walter Gropius/ Bauhaus, De Stijl, Mies Van Der Rohe, Art Deco, Postwar Modernism. MODERNISM

Interiors of Le Corbusier, Frank Llyod Wright, Louis Khan, Kenzo Tange and Oscar Niemeyer

INTERNATIONAL STYLE

The works of Alvar Alto, Phillip Johnson, Charles and Ray Eames, Eero Saarinen, Eero Arnio, Arne Jacobsen.

POST MODERNISM AND MINIMALISM

Interiors of Zaha Hadid, Santiago Calatrava, Frank Gehry and Peter Eisenmann.

## 33. Furniture Construction and Detailing

Lecture / Studio Hours – 3 periods per week

Total work hours per semester =  $3 \times 15 = 45$  periods

Contents:

INTRODUCTION TO WOOD and Substitute

Wood as a building material: Identification, selection, application, types of wood, commercial Classification, nomenclature, structure Anatomy and Ultra structure, Conversion figure and natural defects, availability of wood products, wood based panels such as plywood, MDF, HDF, Particle board, pre laminated boards etc.

THE BASICS OF FURNITURE CONSTRUCTION & TOOLS

Measurement and measurement systems, Furniture Construction: Drawers, Cadenza, dining chairs, sofa, settee, cots detail. Preparation for finishing, Furniture Materials Specifying timber, finishes etc .

Detailed construction drawings & explaining construction and material finishes. PLYWOOD CONSTRUCTION TECHNIQUES

Plywood as a building material, Layout techniques and machining plans. \_

Fabrication techniques - stapling, gluing.

Furniture Joinery - screw joinery, nail joinery, Mortise & tenon joints, Dovetail joints, Dowel joints, Edge joints.

MODULAR KITCHENS

Modular kitchens, components basis of Construction involving, layouts, carcase, hardware selection, fixing details finishes and special types such as tall units, grain trolleys, and carousels fold outs etc.

A detailed project involving the design of a small kitchen using modular components. FURNITURE MODEL MAKING

Preparation of block models of furniture using wood, boards, leather, fabric, thermacol, clay, soap/wax etc.

### Semester VI

### Internship training for Period of 15 weeks.

Internship experience of working in the professional Interior Designers / Architects / Interior Office, duly enclosed by the principal of the college.

The candidates shall have to produce to the college the certificate, documents of completing the internship from the firm where they worked during training site visit details, documents, drawings, photographs, bills etc. duly signed by trainer for time.

### **Fourth Year**

**Semester VII** 

### 34. <u>Interior Design</u>– VI

Lecture / Studio Hours – 10 periods per week

Total work hours per semester =  $10 \times 15 = 150$  periods Contents:

 One Interior Design problem of complete species with creative outlook (Theatres, corporate offices, computer centres, electronic offices, Industrial Adm. Offices, Shopping malls etc.)