

## SEMESTER – IV , YEAR – II

### DESIGN STUDIO – III

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION									TOTAL MARKS	EXAM DURATION HRS
								THEORY					TOTAL	STUDIO		TOTAL		
								M ST	M ST	AVG MST	SS	ESUE		IA	EV			
1	BDES 401	STUDIO	DESIGN STUDIO - III	-	-	8	8	0	0	0	0	0	0	200	200	400	400	

### INTRODUCTION

The subject has the main objective to focus on Commercial zone Interiors , to make student understand functional requirements of the retail space.

### GUIDELINES

The course should incorporate the methodology of planning with analytical thinking, conceptualization , Problem -inquiry and the solution cycle for small and larger scale commercial space.

### CONTENTS:

#### 1. SMALL SCALE RETAIL SPACES

Circulation pattern , anthropometric standards , Lighting & colour scheme – use of natural & artificial light ,various possible Shop layouts , furniture requirements , types of suitable furniture , materials, techniques and finishes for floor, walls, furniture. Such as counters, shelves, worktops, their comparative study.

#### 2. DISPLAY UNITS

Design of display units for boutiques, showrooms , Art galleries , Toy shops etc. Concepts , planning materials & finishes – colour, light , texture & patterns.

#### 3. LARGE SCALE COMMERCIAL SPACES

Design of large scale spaces such as Malls, Shopping Arcades, departmental stores Etc . Circulation pattern , linkages , display counters , showroom elevations , effects of color, light and textures, visual communication , exhibition spaces , materials and finishes etc.

### REFERENCE BOOKS

1. Designs for 20<sup>th</sup> century Interiors – Fiona Leolie, VH Publications, London.
  2. Interior Design; The New Freedom, BarbaralecDiamondstein, Rizzoli International Publications, New York, 1982.
  3. Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.
- Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987

## ADVANCED MATERIALS AND CONSTRUCTION – I

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION									TOTAL MARKS	EXAM DURATION HRS
								THEORY					TOTAL	STUDIO		TOTAL		
								MST	MST	AVG MST	SS	ESUE		IA	EV			
2	BDES 402	THEORY CUM STUDIO	ADVANCED MATERIALS AND CONSTRUCTION - I	1	1	4	6	20	20	20	20	50	90	60	50	110	200	3

### INTRODUCTION

This subject is designed to make student aware about advance construction materials and technologies.

### GUIDELINES

Study should be based on practical aspects, market survey , and advanced detailed drawings.

### CONTENTS:

#### 1. STAIRCASES

Introduction to Staircase, technical terms, types of staircases, designing considerations, anthropometrics , innovative detailing

- Functional requirements
- Timber stairs
- Concrete stair
- Metal stairs
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#### 2. MEZZANINE FLOORS

Design of Mezzanine Floors with materials such as wooden / steel / RCC and its installation details.

Mezzanine Floors different Materials Finishes

- Leather
- Wooden
- Ceramic Tiles
- Carpeting

### MATERIALS

Ferrous & nonferrous metals and alloys – pig iron-cast iron-wrought iron-mild steel-high carbon steel-copper-aluminum-brasses-bronze- metal-uses of above mentioned

Role of technologies and its impact on design ,Sustainable alternatives for materials. metals, alloys, & their properties.

### REFERENCE BOOKS

1. S. C. Rangwala - Engineering materials - Charotar Publishing, Anand
2. Francis D. K. Ching - Building Construction Illustrated, VNR, 1975,
3. W.B.Mckay –Building construction Vol1 –Longmans, UK 1981
4. W.B.Mckay –Building construction Vol 3,5 –Longmans, UK 1981
5. Construction and Detailing for Interior Design by Drew Plunkett
6. The Codes Guidebook for Interiors by Sharon K. Harmon and Katherine E. Kennon

## FURNITURE DESIGN - II

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION									TOTAL MARKS	EXAM DURATION HRS
								THEORY					TOTAL	STUDIO		TOTAL		
								MST	MST	AVG MST	SS	ESUE		IA	EV			
3	BDES 403	THEORY CUM STUDIO	FURNITURE DESIGN-II	1	1	2	4	20	20	20	20	50	90	60	50	110	200	3

### INTRODUCTION

The main aim of the course is to provide knowledge of constructional details for different types of furniture.

### GUIDELINES

Detailing of Modular Kitchens

Understanding elements of furniture used in a commercial interiors .

### CONTENTS:

#### 1. MODULAR KITCHENS

Modular kitchens, components basis of Construction involving, layout , 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.

#### 2. FURNITURE IN COMMERCIAL SPACES

Forms of display units and its design, materials, finishes, various options

Elements of furniture including shop front-its lighting, window display etc. Presentation by detailed drawings, understanding of construction techniques

Commercial furniture – Showcases, Counters, Display units, Restaurant furniture, Bar furniture

### REFERENCE BOOKS

1. Designs for 20th century Interiors – Fiona Leolie, VH Publications, London.
2. Interior Design; The New Freedom, BarbaralecDiamonstein, Rizzoli International Publications, New York, 1982.
3. Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.
4. Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.

## WORKING DRAWING – I ( MANUAL )

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION								TOTAL MARKS	EXAM DURATION HRS	
								THEORY					TOTAL	STUDIO				TOTAL
								MST	MST	AVG MST	SS	ESUE		IA	EV			
4	BDES 404	STUDIO	WORKING DRAWINGS - I (MANUAL)	-	-	2	2	0	0	0	0	0	0	50	50	100	100	

### INTRODUCTION

The course is designed to give knowledge about technical representation of designs.

### GUIDELINES

Main focus should be given to make student understand co-relation of proper Technical representation of drawing and reading of technical drawing.

### CONTENTS:

#### 1. SYMBOLS AND BUILDING ELEMENTS

Working drawing of different types of building elements such as doors, windows, roof, floor, partitions, staircases, parapet, chajja, sill, lintel etc. knowledge about different types of lines , textures and symbols and their

#### 2. INTERIOR ELEMENTS

Working drawing of wall murals, reflected ceiling plans and flooring patterns, partitions.  
Working drawing of furnitures such as work station, living room furniture, bedroom furniture and dining tables. Wardrobes, TV cabinet and showcase, crockery shelves, cadenza, chest of drawers, dressing table, etc

#### 3. PROJECT

Detailed Set of Working drawings to be prepared of any Interior project with proper detailing of furniture, false ceiling , Floor patterns, wall elevations, toilets etc.

### REFERENCE BOOKS

1. De Chiara et al – Time Saver standards for interior design and space planning, McGraw Hill, 1982.

## SERVICES – I ( PLUMBING)

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION								TOTAL MARKS	EXAM DURATION HRS	
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5	BDES 405	THEORY	SERVICES - I (PLUMBING)	2	1	-	3	10	10	10	40	50	100	0	0	0	100	3

## INTRODUCTION

To impart the knowledge of basic principles of water supply and sanitation.

## GUIDELINES

Market survey and site visits should be the main part of course to make students aware about the latest technologies and materials available for the purpose.

## CONTENTS

### 1. SANITARY FIXTURES

**Introduction to Sanitary fixtures.**

Ablution fixtures - wash basins - sinks- Kitchen , Bathroom fixtures – shower trays - Bathtubs

Water Closets - WC - floor & wall mounted - Indian water closet – Anglo – Indian water closets – Urinals Bowl, Stall ,

Aqua free - Squatting plate - Bidet – Slop sinks

Accessories - Bathroom Accessories.

### 2. BASIC PRINCIPALS OF LAYOUT

Introduction - principle of drawing - system of plumbing – One pipe, two pipe etc - Comparison of systems - systems commended - Vent pipes - symphonic action - traps for appliances - Bottle traps, Nahani traps , gully traps etc - Air lmittance value, Pipes & their joints - study of kitchen & toilet areas - septic tanks- etc..

### 3. BUILDING WATER SUPPLY SYSTEM

Introduction - Impurities in water - Effect of impurities - Treatment Of water - storage of water – Storage tanks for residences Typical water supply layout from service main to building- etc..

#### **Hot Water Supply**

water heaters systems - Geysers – central hot water system - hot water piping layout ,Principles of design , - use of solar thermal energy

### 4. SERVICES STUDIO

Preparation of plumbing layout of a single storey building & working drawings of various fittings and fixtures of water supply and sanitary installations

## REFERENCE BOOKS

1. Charangth shah, Water supply and sanitary engineering ,Galgotia Publishers
2. A Kamala & DL KanthRao, Environmental Engineering, Tata McGraw – Hill publishing Company Limited
3. Technical teachers Training Institute (Madras), Environmental Engineering, Tata McGraw – Hill publishing Company Limited
4. publishing Company Limited
5. Marrimuthu, Murugesan, Padmini, Balasubramanian, *Environmental Engineering* , Pratheeba publishers

## ADVANCED COMPUTER SKILLS

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION									TOTAL MARKS	EXAM DURATION HRS
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6	BDES 406	LAB	ADVANCED COMPUTER SKILLS	-	-	2	2	0	0	0	0	0	0	50	0	50	50	

## INTRODUCTION

The course is intended to provide knowledge of Advanced 3-D software for Interior design students.

## GUIDELINES

Google Sketchup to model Interiors of buildings.

## CONTENTS :

### 1. INTRODUCTION TO SKETCHUP

Starting a drawing – Concepts –Principal tools for drawing, modification, construction, camera, walkthrough, sandbox etc – breaking edges, google toolbar.

### 2. RENDERING TECHNIQUES

Model setting and managers – colours and materials – entities – making input & output – technical information– common tasks – applications.

## EXERCISES FOR INTERIOR DESIGN PROJECTS

## TEXT BOOKS

1. User manual & tutorials of Google Sketch Up software.
2. User manual & tutorials of 3D Home Architect software

## INTERIOR LANDSCAPE DESIGN

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION									TOTAL MARKS	EXAM DURATION HRS
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7	BDES 407	STUDIO	INTERIOR LANDSCAPE DESIGN	-	-	2	2	0	0	0	0	0	0	50	0	50	50	

### INTRODUCTION

Interior landscaping is the major element in Interior Design, the course is intended to impart skills of landscape designing With the knowledge of various types of plants , shrubs and trees.

### GUIDELINES

Site visits , case studies and Nursery visits to understand actual physical requirements of the plants.

### CONTENTS :

#### 1. INTRODUCTION TO INTERIOR LANDSCAPE

Definition, classification of plants, indoor plants and their functions, layout & components, Floriculture – commercial, ornamental, Selection of plants & pest control.

#### 2. REQUIREMENTS AND CARE

Understanding the requirements of different plants, its care need of light , air , water. Preferable indoor or outdoor Positions . weight of plants, soil issues , acclimatization & maintenance.

#### 3. INTERIOR LANDSCAPING ELEMENTS & PRINCIPLES

Soft landscape , hard landscape , water bodies fountains, pools etc, rocks , sculptures & artifacts, lighting design , paving . pots decoration . textures , weight and size, height of plants , spacing , arrangement .

Roof and deck design , drainage , water system , pipe layouts , water proofing , irrigation , maintenance

#### 4. INTERIOR LANDSCAPE DESIGN

Courtyard design & Terrace Garden

Landscape in Residence

Landscape in public areas such as restaurants ,Hotels, Exhibition spaces etc.

### REFERENCE BOOKS

1. Time saver standards for landscape architecture.
2. Planting design by Theodore D.Walker,VNR Publications New York.
3. Landscaping Principles and Practices by Jack E.Ingels,Delmar Publishers.

## WORKSHOP – ART AND ARTIFACTS

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION									TOTAL MARKS	EXAM DURATION HRS
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8	BDES 408	LAB	WORKSHOP - ART AND ARTIFACTS	-	-	2	2	0	0	0	0	0	0	50	0	50	50	

### INTRODUCTION

To enhance the art and craft skills in students , for the purpose of using accessories in Interior Design.

### CONTENTS :

Study and analysis of different regions and its art and craft , Indian and other countries . Hands on exercises and installations for various art and craft ideas such as paintings, wall hangings, pot decorations , murals , sculptures etc. For theme based interiors used in different kind of functional area residential , retail , restaurants , café . Innovative design Skills of working with materials like jute, thread , stones , clay , metal etc.

### REFERENCE BOOKS

1. Francis D.K.Ching, Interior Design Illustrated VNR Publication, New York 1987
2. Edith Thomory, A History of fine arts in India and the west, Orient Longmann publishers Pvt Ltd, New Delhi.
3. Publication on Traditional arts and crafts on india, Ministry of Handicrafts Development, Government of India.
4. JohhanesItten, The Art of colour, John Wiley and Sons, USA, 1973.

## SEMESTER TOUR PROJECT

SR. NO.	COURSE CODE	COURSE TYPOLOGY	NAME OF THE COURSE	L	T	S	CREDIT	EVALUATION							TOTAL MARKS	EXAM DURATION HRS		
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9	BDES 409	SEMINAR	SEMESTER TOUR PROJECT	-	-	1	1	0	0	0	0	0	0	50	0	50	50	

## INTRODUCTION

Semester Break Tours will be conducted in winter semester vacations, documentation of tour will help student to understand various styles and great designer's work of different regions.

## GUIDELINES

- A tour report of A-3 size sheets with proper sketches, photographs, and theory documentation of the topic.
- Videos or any other supporting documentation can also be a part of submission as per the requirement.