# PROPOSED CURRICULAM AND SYLLABI OF FULL-TIME DIPLOMA COURSES IN

INTERIOR DECORATION (PART – II SEMESTER-3<sup>rd</sup>) W.E.F.2019-20



# WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION

(A Statutory Body under West Bengal Act XXI of 1995)

"Kolkata Karigori Bhavan", 2<sup>nd</sup> Floor, 110 S. N. Banerjee Road, Kolkata – 7 00013

# Course Structure of 3<sup>rd</sup>Semester, Diploma in Interior Decoration

[As per guidelines of AICTE]

Sl. No	Туре	Course Title	Course code	Credit	Periods/wk	Marks
1	Theory	Evolution of Interior Design – I	ID/3/T1/EVID-I	3	3	100
2	Theory	Materials & Construction – I	ID/3/T2/MC-I	3	3	100
3	Theory	Indian Art	ID/3/T3/IA	2	2	50
4	Theory	Introduction to Structures	ID/3/T4/IST	3	3	100
5	Theory	Environmental Science	AU102	0	2	50
			Subtotal (Theory)	11	13	400
6	Sessional	Space Planning	ID/3/S1/SP	2	3	100
7	Sessional	Graphics – I	ID/3/S2/GR-I	3	4+1	75
8	Sessional	Interior Design & Drawing - I	ID/3/S3/IDD-I	3	4+1	100
9	Sessional	CAD Lab - I	ID/3/S4/CAD-I	3	4+1	50
10	Sessional	Market Study - I	ID/3/S5/MS-I	1	2	50
		ubtotal (Sessional)	12	20	375	
			Total	23	33	775

# **EVOLUTION OF INTERIOR DESIGN – I**

Subject Code	Course offered in	Duration	Periods/Week	Full Marks 100	
ID/3/T1/EVID-I	3 <sup>rd</sup> Semester	17 weeks	3 lectures	Int. Assess. 30	Examination 70

#### **OBJECTIVE**

This course aims to inculcate an awareness and appreciation among the students about the evolution of art and architecture, its growth and development through ages, with specific reference and focus on the interior spaces- for living, working, entertainment and worship. The following styles and influences would be the subject of study, in order to chart the development process.

# **MODULAR DIVISION**

Group	Module	Topic	Contact Periods
	1	Ancient Era	6
A	2	European Classical	6
	3	Medieval & Renaissance Europe	5
В	4	Europe & America (16 <sup>th</sup> Century– 19 <sup>th</sup> Century)	14
	5	Modern Era	14
Contact Periods 45		Internal Assessment 6	Total Periods 51

# **EVALUATION SCHEME**

# 1. Examination (70 marks)

		Objective Questions					Subjective Questions			
Group	Module	To be Set	To be answered	Marks/q uestion	Total Marks	To be set	To be answered	Marks / question	Total marks	
А	1,2,3	10	Any	One	1x20= 20	4	Any five (at least One from each	10	10x5=50	
В	4.5	15	Twenty	Offe		5	group)	10		

# 2.Internal Assessment (30 marks)

- a. Mid Semester: 20 marks
- b. Teacher's assessment: 10 marks (Attendance and seminar / homework / class performance etc.)

#### **DETAIL COURSE CONTENT**

Module 1 Ancient Era 6 periods

Prehistoric Civilization – Old Stone Age, Mid Stone Age, New Stone Age, Mesopotamia – The cradle of civilization- Sumerian period – Babylonian period – Assyrian period – Persian period, Chinese Civilization: Architectural styles – History of Chinese antique furniture, Egyptian Civilization: Egyptian Architecture – Egyptian furniture: Characteristics and major forms

#### Module 2 European Classical

6 periods

Greek Period: Architecture – The Classical Greek Orders, Greek furniture: Types of furniture, materials and decoration, Roman Civilization: Architecture, Roman furniture, major forms

#### Module 3 Medieval & Renaissance Europe

5 periods

Christian Periods: Gothic Architecture – Renaissance Architecture – Italian Renaissance – Renaissance in France – The English Renaissance (The Tudor Period, The Elizabethan Period)

# Module 4 Europe & America (16<sup>th</sup>Century– 19<sup>th</sup>Century)

14 periods

English Period (16th cen. To 19th cen.) – the Restoration Period – The Queen Anne Period – The Georgian Periods (Early and Middle) – The Neo-classical Periods (English Late Georgian: Adam, Hepplewhite and Sheraton, English Neo-classical, George Hepplewhite, Thomas Sheraton), French Period (17th cen. To 19<sup>th</sup>cen): Louis X11 – Louis X111 – Louis XIV – Louis XV – Louis XVI – Directoire – Empire, American Period (17th Century to 19th Century): Colonial – Federal – Victorian

Module 5 Modern era 14 periods

Late 19th century Styles Development and onwards: Art and Crafts – Art Nouveau - Colonial Revival – Eclectic - Modern – Bauhaus – Art Deco – Surrealism – Scandinavian Modern – Post Modernism – Contemporary (Parametric and Dynamic furniture).

#### **SUGGESTED READINGS**

- Architecture and Interior Design; A Basic History Through the Seventeenth Century/Victoria ClossBall/Wiley
- History of Interior Design/John Pile/Harry M Abrams, Prentice Hall, New York
- A History of Architecture (Century Edition) / Sir Banister Fletcher / Butterworth Heinemann (Hb), CBS Publishers & Distributors (Pb)
- The Story of Architecture FROM ANTIQUITY TO THEORYE PRESENT / Jan Gympel / KÖNEMANN (Pb)
- The Great Ages of World Architecture / G. H. Hiraskar / Dhanpat Rai Publication

# **MATERIALS & CONSTRUCTION – I**

Subject Code	Course offered in	Duration	Periods/Week	Full Marks 100	
ID/3/T2/MC-I	3 <sup>rd</sup> Semester	17 weeks	3 lectures	Int. Assess. 30	Examination 70

#### **OBJECTIVE**

The course aims to provide knowledge of basic structural components of a Building, idea of materials, their properties and construction techniques, which enables students to prepare scaled drawings of the sectional details as a whole or part of the building depicting various necessary layers of materials, mix and dimensions.

#### **MODULAR DIVISION**

Group	Module	Topic		Periods	Group	Module	Topic	Periods
	1	Stones		2		5	Masonry	9
Δ	2	Bricks & Other clay products		4	В	6	Lintels and Arches	9
^	3	Mortars and concrete		6	Ь	7	Doors& Windows	9
	4	Wood and Wood Products		6		-	-	-
Contact Periods 45				Internal Assessment 6 Total Pe			Total Periods 51	

#### **EVALUATION SCHEME**

# 1. Examination (70 marks)

	Objective Questions					Subjective Questions			
Group	Module	To be Set	To be answered	Marks/qu estion	Total Marks	To be set	To be answered	Marks / question	Total marks
Α	1-4	15				6	Any five (at		
В	5-7	10	Any Twenty	One	1x20= 20	3	least One from each group)	10	10x5=50

#### 2.Internal Assessment (30 marks)

a. Mid Semester: 20 marks

b. Teacher's assessment: 10 marks (Attendance and seminar / homework / class performance etc.)

#### **DETAIL COURSE CONTENT**

GROUP A	MATERIALS	18 periods
Module 1	Stones	2 periods

Definition of stones, Geological, Physical & Chemical classification of stone-Suitability of uses of different stones Characteristics of good building stones, Dressed surfaces of stones, Artificial Stones-Definition, different types and their uses, Deterioration of stone - Preservation of stones

# Module 2 Bricks & Other clay products

Materials for bricks - Classification of Bricks - Sizes of bricks, Orientation of bricks , Properties and uses of bricks - Advantages and Disadvantages of bricks , Burnt-clay hollow brick, Fire clay brick, Fly-ash brick, Autoclaved aerated concrete bricks (Definitions & Uses) - Clay-tiles: Flat & curved pan tiles - Half-round country tiles - Mangalore tiles (Definitions & uses) , Terracotta - Porcelain - Stoneware- Earthenware - Glazing (Definitions & uses) - Vitrifying (Definitions & uses)

#### Module 3 Mortars and Concrete

6 periods

Definition of Concrete - Concrete making materials: Cement, Lime, Aggregates - Water-their types, properties & functions - Storage of cement - Properties of concrete - Strength, Durability-Water - cement ratio-Workability, Principal types of concrete: P.C.C-R.C.C-Definitions, Advantages, Disadvantages and Uses, Non-conventional Concrete: Pre-cast, Prestressed, Ferrocement-FRC (Definitions and uses), Mortar-Definition-Classification of mortars on the basis of binder materials-Cement, Lime, Mud, Surkhi, Gypsum - Functions and suitability of uses: Cement mortar - Lime mortar - Mud mortar - Composite mortar-Gypsum mortar

#### Module 4 Wood and Wood Products

6 periods

Classification of trees: Exogenous & Endogenous – Structure of timber - Characteristics of good timber – names of commonly used good quality timber - Defects in timber, Preservation & Seasoning of timber, Wood products: Veneer – Plywood – Laminated Board – Block Board – Batten board – Composite boards – Fiber board – Particle board (Definitions & uses)

# GROUP B CONSTRUCTION 27 periods Module 5 Masonry 9 periods

Technical terms associated with Stone masonry- General principles to be followed in Stone Masonry, Types of Stone masonry: Rubble work & Ashlar work(Concept and Uses only). Technical terms associated with Brick masonry - General Principles to be followed in Brickwork - Bonds in Brickwork: English, Flemish, Rat-trap, CBRI

#### Module 6 Lintels and Arches

9 periods

Definitions – Spanning of Openings- Post & Lintel opening, Arch Opening, Limitation in masonry opening - Typical detail of a masonry window opening showing sill, lintel &chajja projection – Types of Lintel: Based on Material (with or withoutchajja), Typical detail of an arched opening showing various parts of arch – Types of Arches based on material and geometrical shapes.

# Module 7 Doors& Windows

9 periods

Types of Doors based on operation &material: Swing door – Revolving door – Sliding door – Folding door – Collapsible door – Rolling shutter – Fire door – Detail of Timber Doors: Paneled door – Flush door – Rolling Shutter door - Details of Aluminum Doors: Swing door – Sliding door

Types of Windows based on operation (Concepts and Uses only): Fixed Window – Casement Window – Sliding window – Pivoted Window – Louvered (or Venetian) Window – Bay Window – Clerestory Window – Corner Window – Dormer Window Windows of Timber (in detail): Paneled & Glazed timber casement window - Windows of Steel (in detail): Glazed fixed & Casement steel window - Windows of Aluminium(in detail): Sliding Aluminium Window

#### SUGGESTED READINGS

- Building Construction Volume, I, II, III & IV (Metric Ed.) / J. K. McKay & W. B. McKay / Orient Longman
- The Construction of Buildings Volume 1, 2, 3, 4 & 5 / R. Barry / English Language Book Society
- A Text Book of Building Construction / S. P. Aurora & S. P. Bindra
- Building Construction/Sushil Kumar/Standard Book House
- Building Construction/P.C.Varghese/Prentice Hall of India, New Delhi
- Building Materials /S.K. Duggal/New Age International

# **INDIAN ART**

Subject Code	Course offered in	Duration	Periods/Week	Full Marks 50	
ID/3/T3/IA	3 <sup>rd</sup> Semester	17 weeks	2 lectures	Int. Assess. 15	Examination 35

#### **OBJECTIVE**

The course aims to inculcate an awareness and appreciation among the students about variety of Indian Art forms that has developed through ages. On its way to modern times, Indian Art has had cultural influences as well as religious influences. The course specifically focuses on paintings, relief work and sculpture, their origin, characteristics, different styles and eminent artists.

#### **MODULAR DIVISION**

Group	Topic	N	Module	Contact Periods	
		1		6	
А	Paintings		2	6	
			3	3	
В	Relief	4		3	
6	Carring		5	6	
C	Sculpture	6		6	
Contact Periods 30	Internal Assessi	Internal Assessment 4		Total Periods 34	

#### **EVALUATION SCHEME**

# 1. Examination (35 marks)

		Objective Questions					Subjective Questions			
Group	Module	To be Set	To be answered	Marks/qu estion	Total Marks	To be set	To be answered	Marks / question	Total marks	
Α	1,2,3	9				3	Any five (at			
В	4	3	Any Ten	One	1x10= 10	2	least One from each	5	5x5=25	
С	5,6	6				4	group)			

#### 2. Internal Assessment (15 marks)

a. Mid Semester: 10 marks

b. Teacher's assessment: 5 marks (Attendance and seminar / homework / class performance etc.)

#### **DETAIL COURSE CONTENT**

GROUP A PAINTINGS 15 periods Module 1 6 periods

Royal: Evolution and history, Characteristics, Themes/Schools, Pioneers and Artists of Mughal Painting, Rajput Painting, Thanjavur Painting and Miniature Art.

Module 2 6 periods

#### INTERIOR DECORATION | SYLLABUS | THIRD SEMESTER

Folk: Origin, Characteristics, Process flow of making, Themes/ Style, Use of colors and Prominent artists of Madhubani Art, Kalamkari Art, Warli Art and Pattachitra.

Module 3 3 periods

Mural Painting: Definition, Difference between a painting and a mural, Purpose of mural, Mural paintings in India.

GROUP B RELIEF 3 periods
Module 4 3 periods

Relief: Definition, Types- Low-relief or Bas-relief, Mid-relief, High relief, Sunk relief, Counter-relief, Small objects.

GROUP C SCULPTURE 12 periods
Module 5 6 periods

Sculpture: Definition, Types of sculpture, Difference between "Monumental sculpture" and "Relief sculpture", Techniques and Materials, Types of Indian Sculpture: Wooden sculptures, Bronze sculptures, Stone sculptures, Sand sculptures.

Module 6 6 periods

Indian Sculpture: Types of Indian Sculpture: Wooden sculptures, Bronze sculptures, Stone sculptures, Sand sculptures; Study on five prominent sculptures of India: The Ashoka Pillars, Sanchi Stupa, Ajanta Caves, Kailasa Temple, Dancing Girl of Mohenjodaro.

#### SUGGESTED READINGS

- History of Art /H.W. Janson/ Prentice Hall and Harry Abrams; 5Theory Revised & enlarged edition (1995)
- Indian Art/Roy. Craven/ Themes & Hudson
- The Arts of India/Basil Gray/Phaidon (1981)
- Indian Art/ParthMitter/Oxford University Press
- History of Indian Art/ Kajal Kanjilal/ Saraswati House Pvt Ltd

# INTRODUCTION TO STRUCTURE

Subject Code	Course offered in	Duration	Periods/Week	Full Marks 100	
ID/3/T4/IST	3 <sup>rd</sup> Semester	17 weeks	3 lectures	Int. Assess. 30	Examination 70

#### **OBJECTIVE**

The subject aims at imparting the students the concept of different types of loads acting on the structural members like beams, columns and tension members. It includes the concept of the properties and behavior of such structural members against bending, shear and deflections under loaded condition. It also includes the concept of utility of specific structural parts of frame or truss in industrial practice.

#### **MODULAR DIVISION**

Module	Topic	Topic		Module		Topic	Periods
1	Introduction		2	5	Ben	ding Stress	6
2	Beams & Supports		3	6	Slop	es and Deflections	6
3	Shear Force & Bending Moment		8	7	Colu	ımns and Struts	6
4	Centre of Gravity and Moment of Inertia		6	8	Trus	ses and Frames	8
Contact Periods 45			Internal Asse	essment 6		Total Periods 51	

#### **EVALUATION SCHEME**

#### 1. Examination (70 marks)

	Objective Questions					Subjective	e Questions	
Module	To be Set	To be answered	Marks/qu estion	Total Marks	To be set	To be answered	Marks / question	Total marks
1,2,3,4	12	Any Twonty	One	1,20- 20		A my five	10	10,45-50
5,6,7,8	13	Any Twenty	One	1x20= 20	8	Any five	10	10x5=50

# 2.Internal Assessment (30 marks)

a. Mid Semester: 20 marks

b. Teacher's assessment: 10 marks (Attendance and seminar / homework / class performance etc.)

#### **DETAIL COURSE CONTENT**

# Module 1 Introduction 2 periods

Concept of different types of loads, like Point Load (vertical & inclined), UDL, UVL, Shear, Bending, Torsion, Tension, Compression, etc. & their action with effects.

#### Module 2 Beams and Supports

3 periods

Different Types of Beams (Simply Supported, Continuous, Over Hang, Cantilever etc.) & different types of support conditions (Fixed, Hinged, Roller, Propped etc.) simple problems

#### Module 3 Shear Force & Bending Moment

8 periods

Computing support reactions & drawing Shear Force & Bending Moment Diagrams of different types of loaded beams (simply supported, cantilever, & overhang)

#### Module 4 Centre of Gravity and Moment of Inertia

6 periods

Concept of C.G. & Moment of Inertia, & to calculate them for different beams & column sections. Concept of Radius of Gyration

# Module 5 Bending Stress

6 periods

Concept of Bending Stress & Flexural Rigidity of loaded beams. Simple problems

#### Module 6 Slopes and Deflections

6 periods

Introductory knowledge for Slopes & Deflections. Simple problems (Simply Supported Beam, Cantilever & Overhang)

#### Module 7 Columns and Struts

6 periods

Columns & Struts with different support conditions. Concept of Long Column & Short Column. Simple problems using Euler's Theory & Rankine's Theory

#### Module 8 Trusses and Frames

8 periods

Concept of Static Determinacy & Indeterminacy. Concept of Perfect, Deficient & Indeterminate Frames. Analysis of simple truss or frames by Method of Joint & Method of Section. Overview of Structural Arrangement & their different parts with their nomenclature (e.g. Rafter, Tie, Sling, Purlin, Gutter, Gable End, Ridge-Cover, Eaves End etc.)

#### SUGGESTED READINGS

- Strength of Materials / S. Ramamurtham& R. Narayanan / Dhanpat Rai & Sons, Delhi
- Strength of Materials / M. Chakraborty / S. K. Kataria& Sons, Gurunanak Market, Delhi
- Theory of Structures / R. S. Khurmi
- Treatise of Structural Mechanics / SOME MUKHERJEE
- Analysis of Structures Vol I / V. N. Vazirani& M. M. Rathwani / Khanna Publishers, Delhi
- Basic Structural Analysis / Reddy / Tata McGraw-Hill

# **SPACE PLANNING**

Subject Code	Course offered in	Duration	Periods/Week	F	Full Marks 100
ID/3/S1/SP	3 <sup>rd</sup> Semester	17 weeks	3 Practical Classes	Int. Assess. 50	Ext. Assess. 50

#### **OBJECTIVE**

The subject intends to apply basic design acumen and enhancethe skills of the students in planning of residential as well as other public and private activity based interior spaces with appropriate usage of basic furniture, knowledge of circulation spaces, movement pattern and services required for design project. The students shall also learn to represent intellectual and creative skills, implement processes of Design and detailing of design.

#### **MODULAR DIVISION**

Module	Topic	Contact Periods	No. of Sheets
1	Residential Spaces	9	2
2	Office Spaces	12	2
3	Hospitality Spaces	12	2
4	Shops	12	2

#### **EVALUATION SCHEME**

Name of the course	Marks Allotted
	a. <b>Continuous internal assessment of 50 marks</b> is to be carried out by the teachers throughout the semester
Space Planning	b. <b>External assessment of 50 marks</b> shall be held at the end of the Semester on the entire syllabus

#### **DETAIL COURSE CONTENT**

#### Module 1 Residential Spaces

9 periods

Living rooms, Dining rooms, Bed rooms, Bathrooms, Kitchens, Library / Study / Family recreation rooms, Laundry / Sewing rooms, Closet/Storage areas

#### Module 2 Office Spaces

12 periods

General offices and multiple workstations, Private offices, Electronic workstations, Conference rooms, Reception areas; Furniture, Furnishings & Equipment.

# Module 3 Hospitality Spaces

12 periods

Eatery (Restaurant, Snack bar, Cafeteria, Coffee shop, Specialty restaurant), Hotels

Module 4 Shops 12 periods

Showroom of a Jewelry Shop – Boutique – Garment's Shop – Leather goods' shop – Banks – Department stores – Public restrooms – Toilets and Coatrooms - Restrooms

# **ASSIGNMENT**

Description	Details
Students are required to make Furniture Facilitation Sheet learning all necessary data of space planning of the related module.	Assignments are to be carried out in a journal-form on large size square grid pad and/or drawn to scale on A2 size drawing sheet as per instructions.

#### **SUGGESTED READINGS**

- Human Dimension and Interior Space: A Source Book of Design Reference Standards/Julius
- Panero, MartinZelink/ Watson-Guptill Publications
- Time Saver Standards for Interior Design and Space Planning/Joseph De Chiara, Julius Panero and Martin Zelink/ Mcgraw-Hill(Tx); 1st edition (1991)
- Space Planning Basics/Mark Karlen, RobFleming/John Willey& Sons
- Time Saver Standards for Building Types/Joseph De Chiara, and John Hancock Callender/Mcgraw-Hill

# **GRAPHICS - I**

Subject Code	Course offered in	Duration	Periods/Week	Ful	ll Marks 75
ID/3/S2/GR - I	3 <sup>rd</sup> Semester	17 weeks	4Practical & 1 tutorial	Int. Assess. 50	Ext. Assess. 25

#### **OBJECTIVE**

This subject aims that the students learn the graphical language which is used extensively in communicating design thought; constructional methods and techniques in the form of technical drawings presentation to a definite proportion and scale by using 3D views with Perspective Projections. It also intends to equip the students to visualize the design in an effective and realistic manner by incorporating landscape elements and human figure in the drawing.

#### **MODULAR DIVISION**

Group	Module	Topic*	Contact Periods#	No. of sheets
Α	1	Axonometric Projection Systems (Dimetric, Trimetric and Isometric) of simple solids; learning of scales	10	1
	2	Isometric View of interior of a residential unit	10	1
В	3	Two-point perspective projections of Lamina & Solid	8	1
	4	Two-point perspective projection of Interiors of Residential space	8	1
С	5	One-point perspective projection of Interiors of Residential space	12	2
D	6	Perspective view of Interiors of other than residential like commercial, office etc.	12	1

<sup>\*</sup>Assignments are be carried out in a journal-form on large size square grid pad and/or drawn to scale on A2 size drawing sheet as per instructions.

#The periods exclude tutorials

#### **EVALUATION SCHEME**

Name of the course	Marks Allotted
Graphics - I	<ul> <li>a. Continuous internal assessment of 50 marks is to be carried out by the teachers throughout the semester</li> <li>b. External assessment of 25 marks shall be held at the end of the Semester on the entire syllabus</li> </ul>

#### SUGGESTED READINGS

- Geometrical Drawing for Students / L. H. Morris /Longman, Green&Co.
- Manual of Rendering with Pen and Ink / Robert W. Gill / Thames and Hudson
- Art of Perspective Drawing / Simon Graco /Walter Brooks
- Engineering Drawing /N.D.Bhat/Charotar Publishing House Pvt. Ltd

# **INTERIOR DESIGN & DRAWING - I**

Subject Code	Course offered in	Duration	Periods/Week	Full M	larks 100
ID/3/S3/IDD - I	3 <sup>rd</sup> Semester	17 weeks	4Practical & 1 tutorial	Int. Assess. 50	Ext. Assess. 50

#### **OBJECTIVE**

This subject aspires to acquaint the students with basic terminologies related to interior design for representing intellectual and creative skills in simple activity based residential space. It also aims at the development of professional designacumen among students in appropriate use of building materials, construction techniques, common services and consideration of climatic aspect.

#### **MODULAR DIVISION**

Module	Topic	Contact Periods
1	Definitions of Basic terminologies	2
2	Design	28
3	Drawing	30
-	Tutorials	15

#### **EVALUATION SCHEME**

Name of the course	Marks Allotted
_	a. <b>Continuous internal assessment of 50 marks</b> is to be carried out by the teachers throughout the semester
Interior Design& Drawing-I	b. <b>External assessment of 50 marks</b> shall be held at the end of the Semester on the entire syllabus

#### **DETAIL COURSE CONTENT**

#### Module 1 Definitions of Basic Terminology

2 periods

Definitions of terms like Balcony, Chajja, Chowk or Courtyard, Chowk, Inner, Chowk, Outer, Covered Area, Garage, Private, Garage, Public, Mandatory Open Space, Parking Space, Partition, Plinth, Plinth Area, Storey, Storey- Topmost, Verandah, Water-Closet, Window, Carpet Area, False Ceiling, Loft, Niche, Alcove, Arch, Column, Beam, Slab, Strutetc. as per the National Building Code of India.

Module 2 Design 28 periods

While evolving the design, ideas should be given regarding: Site analysis highlighting 'location', 'orientation' and 'access'; Influence of materials on interior space; Grouping of furniture and circulation; Consideration of services for effective utilization of space; Learning of theme based interior design; Preparing Case studies, Observations and Analysis of Space

Module 3 Drawing 30 periods

Students are required to prepare and present scaled plan/s, sectional elevations, technical representations, (minimum 1:25 scale) and proportionate 3D visuals all drawn and colour rendered manually that depict concept design and case studies.

#### **ASSIGNMENT**

Description	Details
A residential space not more than 50 sqm will be provided by the	Scaled drawings will be presented by the students on 6 nos.
teacher indicating openings and structural members (beams.	of A1/ A2 size drawing sheets
columns, struts etc.).	

#### **SUGGESTED READINGS**

- The Interior Design Reference & Specification Book/Linda O'Shea, Chris Grimley, Mimi Love
- Interior Design Course: Principles, Practices and Techniques for Aspiring Designer/TomrisTangaz/Barron's
- Neufert Architect's Data/EmstNeufert/Wiley-Blackwell
- National Building Code
- Time Saver Standards for Interior Design and Space Planning/Joseph De Chiara, Julius Panero and Martin Zelink/Mcgraw-Hill (Tx)
- Time Saver Standards for Building Types/Joseph De Chiara, and John Hancock Callender/Mcgraw-Hill Subsequent Edition

# CAD LAB - I

Subject Code	Course offered in	Duration	Periods/Week	Full	Marks 50
ID/3/S4/CAD - I	3 <sup>rd</sup> Semester	17 weeks	4Practical & 1 tutorial Int. Assess. 30 Ext. Assess.		Ext. Assess. 20

#### **OBJECTIVE**

The course aims to inculcate the knowledge of basic commands along with tools necessary for professional 2D drawing, design and drafting using AutoCAD software. It also aims at enabling the students in competency of plotting their drawings in printed form.

#### **MODULAR DIVISION**

Module	Topic	Contact Periods		Module	Topic	Contact Periods	
		Lecture	Sessional			Lecture	Sessional
1	Getting Started	1	5	7	Raster Commands	1	2
2	Drawing & Editing Commands	2	10	8	Hatching	1	2
3	Drawing Aids	1	3	9	Blocks	1	2
4	Creating Text	1	2	10	Practice with Complete Drawing	5	20
5	Inquiry Commands	1	2	11	Plotting Drawings in AutoCAD	2	5
6	Dimensioning	2	4		-	-	-

# **EVALUATION SCHEME**

Name of the course	Marks Allotted
	a. <b>Continuous internal assessment of 30 marks</b> is to be carried out by the teachers throughout the semester
CAD Lab - I	b. <b>External assessment of 20 marks</b> shall be held at the end of the Semester on the
	entire syllabus

#### **DETAIL COURSE CONTENT**

#### Module 1 Getting Started

#### 1 Lecture and 5 Sessional periods

Starting AutoCAD – AutoCAD screen components – Starting a drawing: Open drawings, Create drawings (Start from scratch, Use a template & Use a wizard) – Invoking commands in AutoCAD – Drawing lines in AutoCAD – Co-ordinate systems: Absolute co-ordinate system, Relative co-ordinate system – Direct distance method – Saving a drawing: Save & Save As – Closing a drawing – Quitting AutoCAD file – Concept of Object – Object selection methods: Pick by box, Window selection, Crossing Selection, All, Fence, Last, Previous, Add, Remove – Erasing objects: OOPS command, UNDO / REDO commands – ZOOM command – PAN command, Panning in real time – Setting units – Object snap, running object snap mode – Drawing circles

# Module 2 Drawing & Editing Commands

# 2 Lecture and 10 Sessional periods

L command - ARC command - RECTANG command - ELLIPSE command, elliptical arc - POLYGON command (regular polygon) - PLINE command - DONUT command - POINT command - Construction Line: XLINE command, RAY command - MULTILINE command - MOVE command - COPY command - OFFSET command - ROTATE command - SCALE command - STRETCH command - LENGTHEORYEN command - TRIM command - EXTEND command - BREAK command - CHAMFER command - FILLET command -

#### INTERIOR DECORATION | SYLLABUS | THIRD SEMESTER

ARRAY command – MIRROR command – MEASURE command – DIVIDE command – EXPLODE command – MATCHPROP command – Editing with grips: PEDIT- Breaking line into specific divisions: BREAK command – Scale of drawings: SC command

#### Module 3 Drawing Aids

1 Lecture and 3 Sessional periods

Layers – Layer Properties Manager dialog box – Object Properties: Object property toolbar, Properties Window – LTSCALE Factor – Auto Tracking – REDRAW command, REGEN command

#### Module 4 Creating Text

1 Lecture and 2 Sessional periods

Creating single line text – Drawing special characters – Creating multiline text – Editing text – Text style

#### Module 5 Inquiry Commands

1 Lecture and 2 Sessional periods

AREA - DIST - ID - LIST - DBLIST - STATUS - DWGPROPS

#### Module 6 Dimensioning

3 Lecture and 2 Sessional periods

Fundamental dimensioning terms: Dimension lines, dimension text, arrowheads, extension lines, leaders, centre marks and centerlines, alternate units – Associative dimensions – Dimensioning methods – Drawing leader Editing dimensions by stretching – Editing dimensions by trimming & extending – Editing dimensions: DIMEDIT command – Editing dimension text: DIMTEDIT command – Updating dimensions – Editing dimensions using the properties window – Creating and restoring Dimension styles: DIMSTYLE

#### Module 7 Raster Commands

1 Lecture and 2 Sessional periods

Explaining Raster – Importing JEPG file in Auto-cad – Access to Raster Design toolset

# Module 8 Hatching

1 Lecture and 2 Sessional periods

BHATCH, HATCH commands – Boundary Hatch Options: Quick tab, Advance tab – Hatching around Text, Traces, Attributes, Shapes and Solids – Editing Hatch Boundary – BOUNDARY command

#### Module 9 Blocks

1 Lecture and 2 Sessional periods

The concept of Blocks – Converting objects into a Block: BLOCK, \_BLOCK commands – Nesting of Blocks – Inserting Blocks: INSERT, MINSERT commands – Creating drawing files: WBLOCK command – Defining Block Attributes – Inserting Blocks with Attributes – Editing Attributes- Breaking block: X command

#### Module 10 Practice with Complete Drawing

5 Lecture and 20 Sessional periods

Each student is required to prepare a set of orthographic projections of a Furniture/ plan of Interior space designed by himself / herself or of any other design approved by the teacher-in-charge.

#### Module 11 Plotting Drawings in AutoCad

2 Lecture and 5 Sessional periods

PLOT command – Plot Configuration – Paper Size & Orientation Area – Plot Rotation & Origin – Plotting Area – Scale – Plotting in PDF file – Plotting in direct plotter

#### SUGGESTED READINGS

- Inside AutoCAD/ H.Rice, Daniel Racker/New Riders Publishing
- Mastering AutoCAD and AutoCAD LT/George Omura Brian C.Benton/Wiley
- Advanced Techniques in AutoCAD/Robert Thomas/Wiley, John& Sons Incorporated

# **MARKET STUDY - I**

Subject Code	Course offered in	Duration	Periods/Week	Full M	1arks 50
ID/3/S5/MS - I	3 <sup>rd</sup> Semester	17 weeks	2Practical	Int. Assess. 25	Ext. Assess. 25

#### **OBJECTIVE**

This subject intends the student to understand Professional and Practical aspects of Interior Design through Workshops, Market Surveys, Case studies & Site visits related to the Subject: Materials & Construction – I and Indian Art.

#### **MODULAR DIVISION**

Module	Торіс	Contact Periods
1	Individual analytical reports on case studies & site-visits	12
2	Compilation of data on market surveys	18

#### **EVALUATION SCHEME**

Name of the course	Marks Allotted	
	a. Continuous internal assessment of 25 marks is to be carried out by the teachers	
Market Study - I	throughout the semester	
	b. External assessment of 25 marks shall be held at the end of the Semester on the	
	entire syllabus	

#### **DETAIL COURSE CONTENT**

#### Module 1 Individual analytical reports on case studies & site-visits

12 periods

Case Studies and Site- Visits are to be done in Residential Interiors for studying different masonry construction, carpentry, false ceiling & primary services based on activities, recording measurements, preparing measured drawing, learning & observing design.

#### Module 2 Compilation of data on market surveys

18 periods

- Market surveys are to be conducted for types, availability, sizes, colour, rates, etc. of:
- a.Materials and products like-common building materials-stone, stone- cutting & polishing, types of bricks, tiles, pottery making, Plywoodmanufacture etc.
- b. General & decorative hardware fittings & fixtures, awnings, weather sheds, terrace furniture, etc.
- c. Functional & decorative accessories (Calendars, clocks, ashtrays, lampshades, waterfalls, curios, statues, murals, paintings, posters, art & artifacts, etc.)
- d. Appliances & Gadgets (Mixers, juicers, ovens, cooking ranges, geysers, boilers, refrigerators, washing machines, dish washers, audio & video systems, computers, inverters, etc.

#### **ASSIGNMENT**

Description	Detail
To be carried out in neatly hand-written or typed (Preferably	Scaled drawings will be presented on 4 nos. (2 nos.
computer typing) well composed write-ups along with drawings in a single booklet form.	for each module) A2 size drawing sheets.