

# CURRICULUM FOR DIPLOMA IN INTERIOR DESIGNING AND DECORATION (ID)

(State Government Approved Short Term Diploma Course)

DURATION	Two Years
SCHEME	I
PATTERN	Full Time - Yearly

(To be implemented from the Academic Year 2017 – 2018)



**MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI**  
(AUTONOMOUS)

*ISO 9001-2013 Certified*

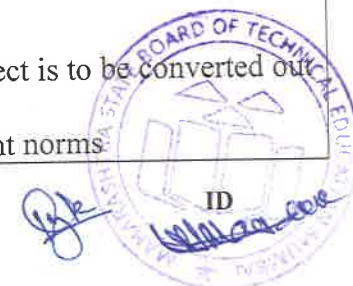
49, Kherwadi, Bandra (East), Mumbai – 400 051



MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI																			
TEACHING AND EXAMINATION SCHEME																			
COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION																			
COURSE CODE : ID																			
DURATION OF COURSE : TWO YEARS											WITH EFFECT FROM 2017-18								
YEAR : FIRST											DURATION : 32 WEEKS								
PATTERN : FULL TIME - YEARLY											SCHEME : I								
SR. NO.	SUBJECT TITLE	SUB CODE	Abbreviation	TEACHING SCHEME			EXAMINATION SCHEME												
				TH	TU	PR	PAPER HRS.	TH		PR		OR		TW		TOTAL	SW (23100)		
								MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN				
1	Basic Design	23023	BAD	1	--	2	--	--	--	--	--	50#	20	50@	20	100			
2	Interior Design	23136	IND	1	--	3	6	100	40	--	--	50#	20	50@	20	200			
3	Construction Techniques - I	23052	COT	1	--	2	--	--	--	--	--	--	--	50@	20	50			
4	Construction Techniques - II	23138	CNT	1	--	3	4	100	40	--	--	--	--	25@	10	125			
5	Materials, Products & Market Survey	23139	MPM	3	--	1	3	100	40	--	--	--	--	50@	20	150		100	
6	Primary Services	23140	PRS	1	1	--	2	50	20	--	--	--	--	--	--	50			
7	Communication & Personality Skills	23024	CPS	1	--	2	--	--	--	--	--	25#	10	25@	10	50			
8	Paraline & Perspective Projections	23025	PPP	1	--	3	--	--	--	--	--	--	--	100@	40	100			
9	2D CADD & 3D Modelling	23026	CAM	1	--	2	--	--	--	--	--	--	--	25@	10	25			
<b>TOTAL</b>				<b>11</b>	<b>1</b>	<b>18</b>	<b>--</b>	<b>350</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>125</b>	<b>--</b>	<b>375</b>	<b>--</b>	<b>850</b>	<b>100</b>		

**Student Contact Hours Per Week: 30 Hrs.**  
**THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH.**  
**Total Marks : 950**  
**Note – Internship during Summer vacation for minimum Six Weeks at the end of First Year.**  
 @ Internal Assessment, # External Assessment, Ø Common to All Conventional Diploma, #\* Online Examination,            No Theory Examination.  
 Abbreviations: TH-Theory, TU- Tutorial, PR-Practical, OR-Oral, TW- Term work, SW- Sessional Work

➤ Conduct two class tests each of 25 marks for theory subject having theory exam. Sum of the total test marks of all subject is to be converted out of 100 marks as sessional work.  
 ➤ Progressive evaluation is to be done by subject teacher as per the prevailing curriculum implementation and assessment norms.



**MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI**  
**TEACHING AND EXAMINATION SCHEME**

**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION**

**COURSE CODE : ID**

**DURATION OF COURSE : TWO YEARS**

**YEAR : SECOND**

**WITH EFFECT FROM 2017-18**

**PATTERN : FULL TIME - YEARLY**

**DURATION : 32 WEEKS**

**SCHEME : I**

SR. NO.	SUBJECT TITLE	SUB CODE	Abbreviation	TEACHING SCHEME				PAPER HRS.	EXAMINATION SCHEME								TOTAL	SW (23200)
				TH	TU	PR	TH		PR		OR		TW					
							MAX		MIN	MAX	MIN	MAX	MIN	MAX	MIN			
1	Internship*	23044	INT	--	--	--	--	--	--	--	--	25#	10	25@	10	50	100	
2	Advance Interior Design	23214	AID	1	--	5	8	150	60	--	--	25#	10	50@	20	225		
3	Speciality Interior Design	23045	SID	1	--	5	--	--	--	--	--	25#	10	100@	40	125		
4	Interior Working Drawing	23215	IWD	2	--	6	4	100	40	--	--	25#	10	50@	20	175		
5	Interior Professional Practice	23216	IPP	1	--	2	2	50	20	--	--	25#	10	50@	20	125		
6	Secondary Services & Market Survey	23217	SSM	1	1	1	2	50	20	--	--	--	--	50@	20	100		
7	Communication Skills	23046	COS	1	--	1	--	--	--	--	--	25#	10	25@	10	50		
8	CADD Presentation	23047	CAP	1	--	1	--	--	--	--	--	--	--	50@	20	50		
<b>TOTAL</b>				<b>08</b>	<b>1</b>	<b>21</b>	<b>--</b>	<b>350</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>150</b>	<b>--</b>	<b>400</b>	<b>--</b>	<b>900</b>	<b>100</b>	

Student Contact Hours Per Week: 30 Hrs.

**THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH.**

Total Marks : 1000

\*Internship during Summer vacation for minimum Six Weeks at the end of First Year.

@ Internal Assessment, # External Assessment, Ø Common to All Conventional Diploma, #\* Online Examination,

 No Theory Examination.

Abbreviations: TH-Theory, TU- Tutorial, PR-Practical, OR-Oral, TW- Term work, SW- Sessional Work

➤ Conduct two class tests each of 25 marks for theory subject having exam sum of the total test marks of all subject is to be converted out of 100 marks as sessional work.

➤ Progressive evaluation is to be done by subject teacher as per the prevailing curriculum implementation and assessment norms

**Important Instructions for Examiners**

1. External examiner to conduct the orals giving 80% to designing acumen and 20% to technical skills of the individual student who is to be assessed on all design practical assignment portfolio.
2. Assessment of the term work is to be carried out continually by the subject teacher giving weightage of 50% towards designing acumen and 50% towards technical skills gained by the individual student.
3. Guest lectures, Seminars, Industry Visits, Workshops, Market Survey related to subject are to be conducted by subject faculty and it's record is to be maintained.
4. Internship shall be completed by the students for a duration of minimum six weeks at the end of First Year during the vacation. The student must submit the Log book, Certificate from the Organization and the training report. The same shall be assessed by the Internal Examiner for term work & external examiner for oral, at the beginning of the Second Year and the marks shall be submitted to MSBTE at the end of Second Year.
5. Internship shall be arranged in Industry / Company / Offices of Interior Designer and Architect (Builder's firms, Corporate firms and 3D Visualisation firms, etc.) where interior design work is in progress. The following are the sectors where the internship shall be conducted.
  - Furniture Designing / Product Designing Firms
  - Kitchen Design Firms
  - Colour Manufacturing Companies
  - Firms Likè Modular Furniture Making, Modular False Ceiling, Drywall Systems etc.

**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION**  
**COURSE CODE : ID / IN**  
**YEAR : FIRST**  
**SUBJECT TITLE : BASIC DESIGN**  
**SUBJECT CODE : 23023**

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	02	--	--	--	50#	50@	100

**RATIONALE**

The subject is the primary core of the total course and forms the spine of interior design profession that intends to equip the students with thorough knowledge about basic concepts of interior design.

The students shall also learn planning processes and develop intellectual and creative skills required for Interior Design & Advance Interior Design.

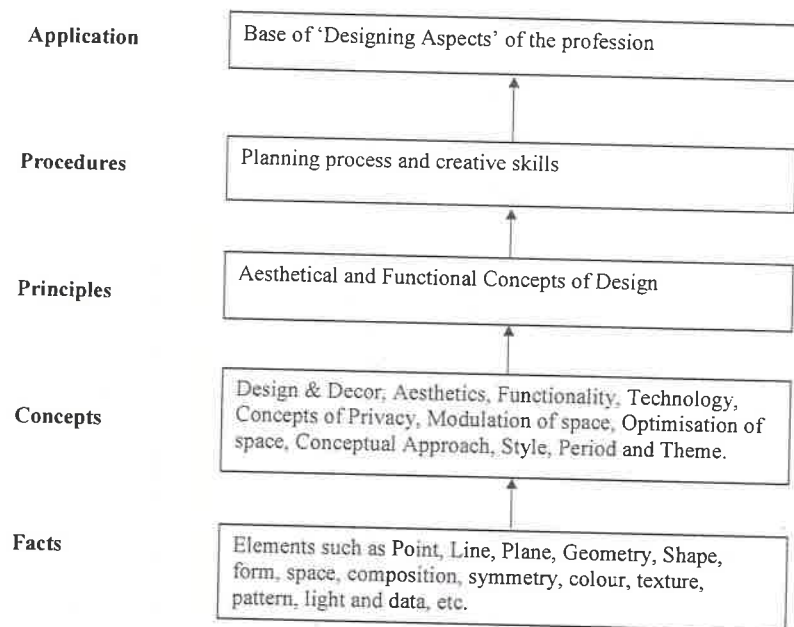
**OBJECTIVES**

The student will be able to:

1. Understand the role and importance of interior designer and differentiate between design and decoration.
2. Use tools of interior design based on Aesthetical and Functional aspects.
3. Identify Concepts with approach; Styles & Historical Periods and Themes.
4. Implement Processes of Design.



## LEARNING STRUCTURE



## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS
1	<b>Interior Design and Decoration</b> Understanding Interior Design and Decoration, it's Purpose and Role of Interior designer. <b>Aesthetic design considerations:</b> status symbol, emotional, comfort, pleasure, environmental and nostalgic. <b>Functional Design considerations:</b> Circulation, standard sizes of furniture, space utilization and zoning.	02
2	<b>Tools of Interior Design</b> <b>Aesthetical tools</b> Elements of design - Point, Line, Shape, Form, Colour and colour theory, Texture, Pattern, light Principles of Design - Balance, Emphasis, Rhythm, Harmony, Scale repetition & Proportion Aesthetical design consideration: Physical such as touch, smell, hearing; Social such as interactive, status symbol, Psychological such as derivable pleasure from use, emotional comfort; Ideological such as environmental, patriotic, socialistic; and Opinions influenced by associations such as newness, nostalgic, thrill, risk involved, safety, reliability <b>Functional tools</b> Ergonomics- Its study - Postures, Anthropometrics, Biomechanics. Zoning, Grids, Modulation of space within and without, enveloping space within the room and furniture	12
3	<b>Design Notions</b> <b>Concepts</b> Manifestation of realisation through contemplative germination and evolution of thought that gives design approach, although with clear understanding that the concept can be explained but not defined. <b>Period &amp; Styles</b> Historical & Cultural approach with stress on ability to identify Occidental Periods and Oriental styles and with special focus on Contemporary Indian period and styles. Occidental - Classical, Medieval, 19th Century AD, special mention of classical orders, Contemporary, Modern, Post Modern, special mention of school of Bauhaus and work of renowned architects and interior designers of the world viz. Le Corbusier, Ludwig Mies Van der Rohe, Marcel Breuer. Oriental - Japanese, Chinese, and Indian. <b>Themes</b> The common thread that binds the entire design in a story line such as Beach, 'Mela', Dessert, Village.	14
4	<b>Planning Process of Interior Design</b> Design Brief - simple and clear description about what is to be designed Relevant Data collection such as location & condition of site, Client profile & requirements, Materials. Data Analysis - analysing and forming alternative schemes based on personal interpretations of design brief and relevant data using design tools and design concepts. Selection- finalising the best scheme through personal justifications. Presentation- representing the final scheme in graphical manner using Technical Drawings.	04

TOTAL 32

**SKILLS TO BE DEVELOPED****INTELLECTUAL SKILLS**

Student should identify and select appropriate aesthetic and functional tools.

Student should suggest combination of aesthetic and functional tools as per requirement.

**MOTOR SKILLS**

Student should use the basic instruments of drawing.

**LIST OF PRACTICAL/ASSIGNMENTS**

• **Sketch / Draw to scale on A1 size Drawing paper.**

SR. NO.	DESCRIPTION	HOURS	NO.OF SHEETS
<b>Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain</b>			
1	Elements of design at conceptual as well as contextual level.	06	01
2	Principles of design at conceptual and at interior design level.	06	02
3	Prepare following on A1 size sheet (manually) colour wheel, intensity and value of colour, warm and cool colour	04	02
4	Application of colour schemes in interior spaces in the form of pictures or blank printout of 3D views of different rooms by rendering them in any colour media (colour pencils, water colours, cutting pasting or combinations)	08	02
<b>Collect, generate and record static (Human dimensions) and dynamic (Activity wise) dimensions related to the following postures:</b>			
5	Standing (cooking, bar tending, working at shop counters, opening doors, using urinals, bathing, using overhead units, using wardrobe for adult and child etc.)	08	02
6	Sitting (working on computer table, study table, office working table, dressing table, dining, relaxing, general sitting, using European water closets, etc.)	08	03
7	Squatting (using Indian pan, squats, using storages below counters, manual sweeping & mopping, etc.)	08	01
8	Sleeping (sleeping, resting, etc.)	08	01
<b>Sketches of elements such as entablatures, cornices, base, capital, relief work, sculptures, furniture of different period and styles - to be carried out in separate sketch book</b>			
9	Occidental periods from Classical to 19 <sup>th</sup> Century	08	20 sketches
	Oriental - Japanese, Chinese styles		
	Contemporary Period, Modern period.		
	Indian styles		
<b>TOTAL</b>		<b>64</b>	<b>14 + sketches</b>

External examiner to conduct the orals giving 80% to designing acumen and 20% to presentation skills of the individual student who is to be assessed on basic design practical assignment portfolio and sketch of elements and furniture's of periods and styles assigned on the sketch book size A3.

**SUGGESTED LEARNING RESOURCES**

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Time Saver Standard for Interior Design & Space Planning	Joseph De Chaira Jullius Panero Martin Zelnik	Mcgraw Hill New York
2	Interior Design	John Pile	Harry N. Adry Publishers
3	Interior Design	Ahmed Kasu	TWAIN Pub. Bombay
4	Human Dimensions and Interior Spaces	Jullius Panero Martin Zelnik	Whitney Library New York
5	Beginning of Interior Environment	Phillis Sleen Allen	New York
6	Basic Design of Anthropometry	Shirish Bapat	Bela books Publishers
7	Living Area (Interior Space)	Shirish Bapat	Bela books Publishers
8	Interior Design Illustrated	Francis D K Ching	Van Norstrund, New Delhi
9	Design Fundamental in 1 <sup>st</sup> architecture	V. S. Parmar	Somaiya Pub. Pvt. Ltd.
10	Interior Design Principles & Practices	M. Prataprao	Standard Publisher & Distributor, New Delhi
11	Sanskriti - A Manual of Interior Design Vol-1	Sudhir Diwan	Interior Affairs, Mumbai

**SUGGESTED E-LEARNING RESOURCES**

1. [freshome.com/2007/07/12/7-most-important-interior-design-principles](http://freshome.com/2007/07/12/7-most-important-interior-design-principles)
2. [www.dummies.com](http://www.dummies.com)
3. [www.rentaldecorating.com](http://www.rentaldecorating.com)
4. [www.apartmenttherapy.com](http://www.apartmenttherapy.com)



**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : FIRST  
**SUBJECT TITLE** : INTERIOR DESIGN  
**SUBJECT CODE** : 23136

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME				EXAMINATION SCHEME				
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	03	06	100	--	50#	50@	200

**NOTE**

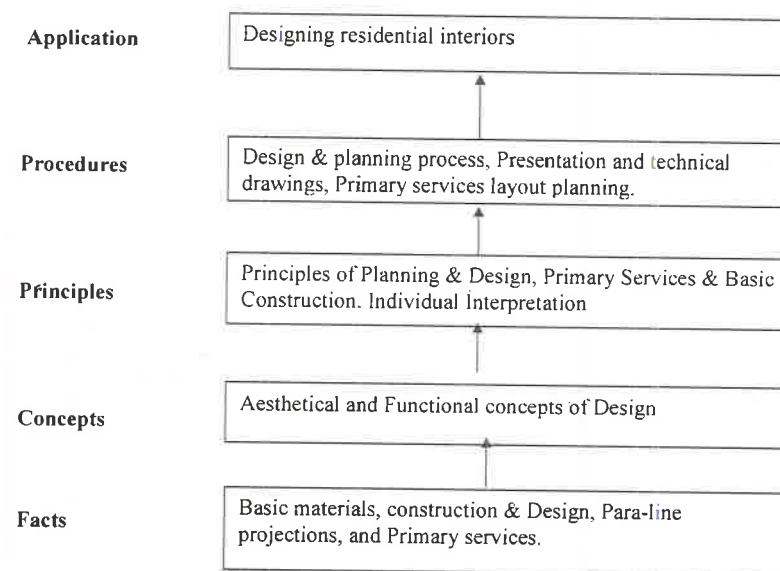
- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

**RATIONALE**

The subject intends to apply basic design acumen and also enhance the skills in planning of residential interior spaces with appropriate usage of basic materials, construction and services required for design project. The students shall also learn to represent intellectual and creative skills.

**OBJECTIVES**

The student will be able to design residential interiors ranging from simple activity based such as Individual Rooms i.e. Living, Dining, Living Cum Dining, Kitchen, Bed Room, Children Bed Room to complex activity based large-scale residence of about 300 Sq. M. (1-room unit to independent bungalow).

**LEARNING STRUCTURE**

## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS	MARKS
I	<b>Residential Interior Design and Drawing</b>	32	100
	Instructions regarding <b>Design brief</b> ; Relevant aspects of Materials, Construction, Design and Services; Special Guidance towards <b>Case studies, Observations, Analysis</b> ; and towards achieving individual interpretations manifested through <b>Client Profile and requirement framing</b> .		
<b>TOTAL</b>		<b>32</b>	<b>100</b>

## NOTE

Theory examination to be strictly based on a compulsorily design project of simple activity based small-scale residential space of about 30 Sq. M. to 45 Sq. M., consisting of preparing Plan, Two Sectional elevations to suitable scale; and a 1-Point Perspective to suitable size, and assessed at 50%, 30%, and 20% weightage respectively.

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

Application of knowledge of all the subjects

Analysis skill

## MOTOR SKILLS

Instrument Setting skill, Handling skill, Maintenance skill

## LIST OF PRACTICAL/ASSIGNMENTS

To be drawn to suitable scale on A1 size drawing paper

SR. NO.	DESCRIPTION	HOURS
<b>Prepare and present -scaled plan, sectional elevations and proportionate 3-D visuals all drawn and colour rendered manually that depict Case-studies, manifestations, concepts, schematics, presentation and technical drawings</b>		
I	3 BHK Residence with Technical representation of Furniture layout, Flooring layout, Reflected Ceiling layout, Electrical layout of the total area, with colour rendering and presentation. Also detail layouts, dimensional layout, all the four sectional elevations, views, for individual rooms on the enlarged scale.	96
<b>TOTAL</b>		<b>96</b>

## SUGGESTED LEARNING RESOURCES

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Living large in small spaces	Thames & Hudson	Thames & Hudson
2	New small homes	Aurora Cuito	Loft Publications.S.L.
3	The Ultimate Interior designer	Ruth Pretty	Ward Lock
4	Making the most of small spaces	Stephen Crafti	Images Pub. Group, Pvt. Ltd
5	Studio Apartments	J Grayson Trulove	James Grayson Trulove
6	Design 02 Residential Space I	--	Juzhu Kongjan
7	Design 09 Residential Space III	--	Juzhu Kongjan
8	RS 03 Residential Space III	Shenzen Nanhair Art Design Co.	Juzhu Kongjan
9	Time Saver	--	McGraw-Hill, US

## SUGGESTED E-LEARNING RESOURCES

1. <http://designerspeak.com>
2. <http://visual.ly/interior-design>
3. [www.homestylor.com](http://www.homestylor.com)
4. [www.roomsketcher.com](http://www.roomsketcher.com)
5. [www.smartdraw.com](http://www.smartdraw.com)





**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : FIRST  
**SUBJECT TITLE** : CONSTRUCTION TECHNIQUES - I  
**SUBJECT CODE** : 23052

#### TEACHING AND EXAMINATION SCHEME

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	02	--	--	--	--	50@	50

#### RATIONALE

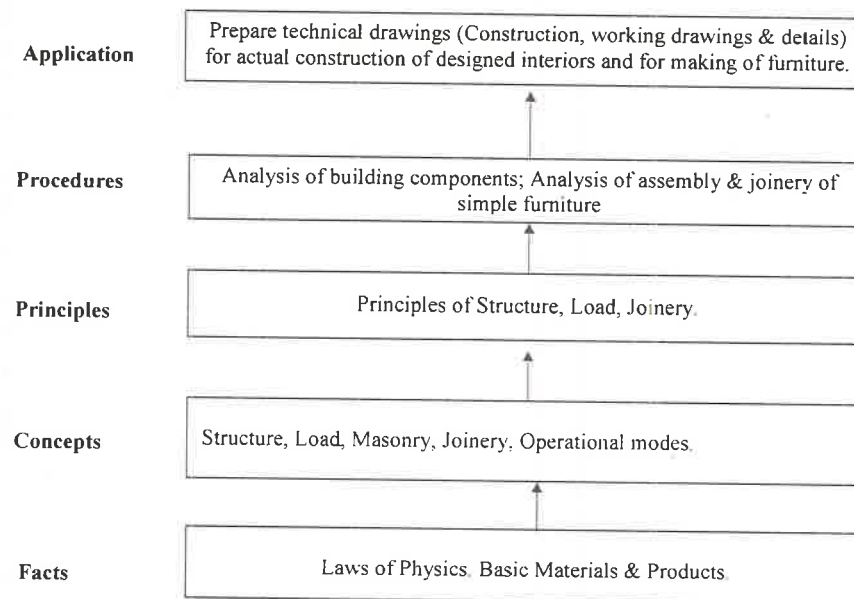
The subject intends to equip the students with knowledge and understanding of construction of structures and components of building such as footing, foundation, super-structure, column, beam, slab, wall, floor, ceiling, steps, stairs, ladders, door, window, openings and projections. It also intends to equip the student with thorough knowledge about methods of assembly and joinery of doors, windows, ventilators focussing on jamb treatments and operational aspects.

#### OBJECTIVES

The student will be able to:

1. Understand and Define - Structures, systems, elements, components; focussing on fundamentals of load transfer; and assembly of doors and windows focussing on the mode of operation.
2. Select or Design and Detail - Doors, windows and openings using appropriate hardware and material focussing on detailing the jambs and mode of operation as per the requirements in interior spaces.

#### LEARNING STRUCTURE



## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS
1	<p><b>Introduction to structure and building components</b>  <b>Types of Structures</b>            Natural and man-made structural systems in such as load bearing, framed, composite, tensile, shell structures.</p> <p><b>Components &amp; Elements of Built Structure</b>            Introduction to foundations, footings, columns, beams, plinth, slabs, floors, structural and non-structural walls, Dry wall, fenestrations (Doors, windows, ventilators &amp; openings), lintels, arches, steps, stairs, ladders.</p>	04
2	<p><b>Construction techniques of building components</b>  <b>Masonry &amp; Installations</b>            Bricks masonry - Types of Bricks; bonds in ½ brick &amp; 1 brick; header, stretcher English &amp; Flemish bonds.            Stone masonry - Types of masonry; random rubble, polygonal, &amp; dry rubble works.            Non-structural masonry installations constructed on-site such as stone seating, kitchen platform, with focus on design, construction, material to be used for structure, cladding or surfacing wet and dry such as ACP and glass fixing and the provisions to be made for services such as plumbing, drainage, and electrification.</p> <p><b>Opening, Lintels, Projections and Arches</b>            Openings - Doors, windows, ventilators, and other openings focussing on different modes of operation and their affects on the jambs.            Lintels - Types of Lintels in different materials such as wood, metal, &amp; concrete            Projections - Different types of weather sheds &amp; awnings; lofts in rooms;            Arches - Types of arches, classification according to centre, shape. ( No theory questions for the topic Arches)</p>	12
3	<p><b>Joinery</b>            Introduction to concepts of joinery and joints; study of material specific limitations of joinery and study of structural joints focussing on load transfers based on use of different materials including types of joints such as lengthening, widening, bearing, framing in different materials such as wood, glass, metals</p>	04
4	<p><b>Openings</b>  <b>Jambs, Frames &amp; Casings</b>            Formation based on various modes of operation, materials, &amp; techniques</p> <p><b>Doors, Windows &amp; Ventilators</b>            Basis of modes of operation, positioning, placing of hardware; detailed study of modes of operation (Horizontal, vertical &amp; inclined movement) such as swinging (folding-hinged, pivoted), sliding (Between or side of wall), combination (sliding-folding), and others such as collapsible, rolling; and study of types of shutters such as framed, panelled, flush, glazed, and composite focussing on different materials wood, metal, glass, &amp; plastics</p>	12
<b>TOTAL</b>		<b>32</b>

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- To understand and state the functions of components of Structures

## MOTOR SKILLS

- To study and apply joinery, hardware in assembling of doors and windows

## LIST OF PRACTICAL

To be carried out in a journal-form on large size square grid pad or drawn to scale on A1 size drawing.

SR. NO.	DESCRIPTION	HOURS	SHEETS	REPORT & SKETCHES
<b>Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain</b>				
1	Types of structure, components & elements of built structure.	02		1
2	Types of Bricks	06	1	
3	½ brick thick Wall & 1 brick thick Walls	06	1	
4	Stone masonry	02		1
5	Lintels	02		1
6	Arches	02		1
7	Joinery (T.W. and Plywood)	06	2	1
8	T.W. casement window with ventilator, louvered, pivoted and other types of windows, UPVC windows	04		1
9	Aluminium sliding window	06	1	
10	Types of T.W. Panel doors, sliding door, PVC doors, composite doors. Glass swing door.	02		1
11	Details of T.W. Double panel partly glazed and partly panelled door.	06	1	
12	Flush door with self closing and locking arrangements.	06	1	
13	Hardware for interior carpentry.	04		1
14	Seminars, guest lectures & Industry visits	10		6
<b>Total</b>		<b>64</b>	<b>07</b>	<b>14</b>

## SUGGESTED LEARNING RESOURCES

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Time Saver Standard for Interior Design & Space Planning	Joseph De Chaira Jullius Panero Martin Zelnik	Mcgraw Hill New York
2	Interior Design	John Pile	Harry N. Adry Publishers
3	Interior Design	Ahmed Kasu	TWAIN Pub. Bombay

4	Human Dimensions and Interior Spaces	Jullius Panero Martin Zelnik	Whitney Library New York
5	Beginning of Interior Environment	Phillis Sleen Allen	New York
6	Basic Design of Anthropometry	Shirish Bapat	Bela books Publishers
7	Living Area (Interior Space)	Shirish Bapat	Bela books Publishers
8	Interior Design Illustrated	Francis D K Ching	Van Norstrund, New Delhi
9	Design Fundamental in 1 <sup>st</sup> architecture	V. S. Parmar	Somaiya Pub. Pvt. Ltd.
10	Technology of interior construction-part-1	Vasudeo Channapattan	Mrs. Vidya Channapattan Pune.(vidya.vvc@gmail.com)

**SUGGESTED E-LEARNING RESOURCES**

1. [www.basicconstructionco.com](http://www.basicconstructionco.com)
2. [www.understandconstruction.com](http://www.understandconstruction.com)
3. [www.basiccarpentrytechniques.com](http://www.basiccarpentrytechniques.com)

**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : FIRST  
**SUBJECT TITLE** : CONSTRUCTION TECHNIQUES -II  
**SUBJECT CODE** : 23138

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME				EXAMINATION SCHEME				
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	03	04	100	--	--	25@	125

**NOTE**

- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

**RATIONALE**

The subject intends to equip the students with knowledge and understanding of construction of ceiling, floors & floorings, steps, stairs, ladders & residential furniture.

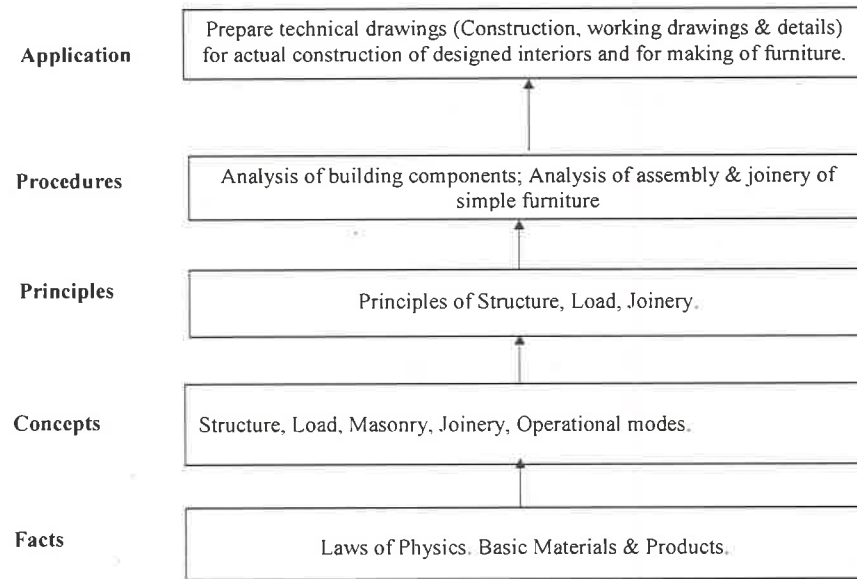
**OBJECTIVES**

The student will be able to:

1. Understand and Define – Construction Of steps, stairs, ladders, Ceilings, floors & floorings in different materials.
2. Select or Design and Detail - Appropriate joinery to be used while designing furniture items; and appropriate joinery, assembly and construction of stable, functional and aesthetic furniture for use in residence interior spaces.



## LEARNING STRUCTURE



## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS	MARKS
1	<p><b>Construction techniques of building components</b>  <b>Ceilings, Floors &amp; Floorings:</b>            Concept of structural ceiling of buildings such as flat, sloping, sunk &amp; technique of structural framing for Loft, Mezzanine, Floors, Cavity &amp; False Floor, sunk slab, etc.            Provisions, care and process of flooring &amp; laying natural &amp; artificial materials on existing slab and floors; and fixing of tiles - clay, cement, stone, glass, metals; junctions; tile-on-tile; patterns, inlays; etc.</p> <p><b>Steps, Stairs Ladders: (No theory Questions on this topic)</b>            Study of steps, stairs &amp; ladders, their elements such as tread, riser, etc.            Study of typical forms such as straight, dog-legged, half turn, quarter turn, geometric (helical or spiral) with respect to load transfer.            Study of different materials used in construction of stairs.</p>	08	20
2	<p><b>Residential Furniture -I</b>  <b>Focussing on need, requirement, options, form, finish, materials, construction, and hardware; learning to design &amp; prepare construction drawings of: -</b>            Different types of shelves &amp; storages such as wardrobe, overhead, display &amp; showcases, etc. including understanding different options for carcass, shutters, drawers and internal shelves.            Kitchen storages such as trolley type, shelved .Modular kitchen storages.</p>	12	32
3	<p><b>Residential Furniture -II</b>            Different types of seats such as stools (low &amp; high), puffy (For living, dressing, bed-end, etc.), chairs (For living, dining, bed, desk-work, sofas (1, 2 &amp; 3-seater).            Different types of tables such as side &amp; centre tables (For living, dining, bed, terrace, garden), work-tables (Dressing, study. Different types of bed such as 'divan', single-bed, double-bed, bunk-bed, combination-bed, etc; with and without storage.</p>	12	48
<b>TOTAL</b>		<b>32</b>	<b>100</b>

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- To understand and state the functions of components of Structures

## MOTOR SKILLS

- To study and apply joinery, hardware in assembling of doors, windows and simple furniture.



## LIST OF PRACTICAL

To be carried out in a journal-form on large size square grid pad or drawn to scale on A1 size drawing.

SR. NO.	DESCRIPTION	HOURS	SHEETS	REPORT & SKETCHES
<b>Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain</b>				
1	Steps, Stairs Ladders and designing of comfortable staircase.	06		01
2	Floors with respect to span viz: Single floor, Mezzanine Floor / Double floor & triple floor	09		01
3	Mezzanine floor in timber and structural steel.	09	02	
4	Details of Carcases, Hinging methods of fixing shutters to boxed furniture, drawer fixing details, fixed and adjustable shelves.	12	01	
5	Wardrobe	09	01	
6	Double bed	06	01	
7	Study table / Dressing Table	06	01	
8	T V unit	06	01	
9	Civil details for Kitchen platform and carpentered or modular storage.	09	01	
10	Upholstery details of sofa chair.	06	01	
11	Dining Table with dining chair	09	01	
12	Civil details for Vanity counter with counter sunk / top wash basins and under carriage.	09	01	
<b>Total</b>		<b>96</b>	<b>11</b>	<b>02</b>

## SUGGESTED LEARNING RESOURCES

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Time Saver Standard for Interior Design & Space Planning	Joseph De Chaira Jullius Panero Martin Zelnik	Mcgraw Hill New York
2	Interior Design	John Pile	Harry N. Adry Publishers
3	Interior Design	Ahmed Kasu	TWAIN Pub. Bombay
4	Human Dimensions and Interior Spaces	Jullius Panero Martin Zelnik	Whitney Library New York
5	Beginning of Interior Environment	Phillis Sleen Allen	New York
6	Basic Design of Anthropometry	Shirish Bapat	Bela books Publishers
7	Living Area (Interior Space)	Shirish Bapat	Bela books Publishers
8	Interior Design Illustrated	Francis D K Ching	Van Norstrund, New Delhi
9	Design Fundamental in 1 <sup>st</sup> architecture	V. S. Parmar	Somaiya Pub. Pvt. Ltd.

SR. NO.	TITLE	AUTHOR	PUBLICATION
10	Technology of interior construction-part-I	Vasudeo Channapattan	Mrs. Vidya Channapattan Pune (vidya.vvc@gmail.com)

## SUGGESTED E-LEARNING RESOURCES

1. [www.basicconstructionco.com](http://www.basicconstructionco.com)
2. [www.understandconstruction.com](http://www.understandconstruction.com)
3. [www.basiccarpentrytechniques.com](http://www.basiccarpentrytechniques.com)



**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION**  
**COURSE CODE : ID / IN**  
**YEAR : FIRST**  
**SUBJECT TITLE : MATERIALS, PRODUCTS & MARKET SURVEY**  
**SUBJECT CODE : 23139**

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
03	--	01	03	100	--	--	50@	150

**NOTE**

- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

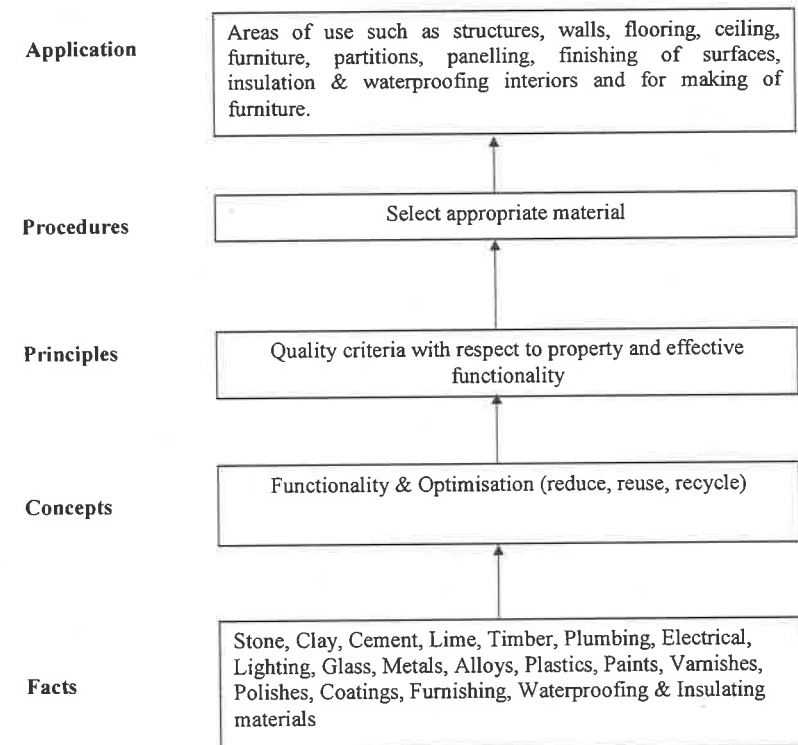
**RATIONALE**

The knowledge of materials and products shall help the learner to enable their use, through methods of construction, for designing Interior spaces. The knowledge of such materials & products along with various construction techniques & knowledge of services enable students to achieve desired design outcome. It also intends the student to understand professional and practical aspects of Interior design through Market surveys & Site visits related to the material study.

**OBJECTIVES**

The student will be able to understand and select:

Common building materials based on their properties; plumbing, electrical and Lighting materials as per requirements; floor coverings as per requirements; glass, finishes & treatments based on the application & use; metals, alloys, polymers, composites, paints, varnishes, polishes, coatings and speciality materials based on their properties & requirements.

**LEARNING STRUCTURE**

## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS	MARKS
1	<b>Common Building Materials</b>	48	34
	<b>Stone</b> Geological, Physical and Chemical classification; types, properties and use of Igneous, Sedimentary and Metamorphic stones		
	<b>Clay and products</b> Types, Properties & Applications of clay and Clay products: Earthenware, stoneware, porcelain, ceramic, tiles – Drain, floor and roof. Types, shapes, Properties and uses of Bricks. Types, Properties, advantages, disadvantages and uses of Terracotta.		
	<b>Cement, Lime, Sand And Gypsum</b> Types, Properties and uses of Cement, Lime, sand. Types, Properties & Applications of Concretes, Mortars and Plasters. Properties & Applications of Gypsum & its products.		
	<b>Timber</b> Classification and growth of trees and types of Timber. Properties and uses of Timber, Defects in Timber. Uses of Hardwood and Softwood such as Teak, Rose, Deodar, Sal, Silver, Mahogany, Market forms of Timber, Uses of cane, bamboo.		
	<b>Wood Products</b> Types, properties & Uses of Veneers and Plywood. Types, Quality & Uses of Block Board, Particle Board, Fibre Board, Chip Board, Hard Board, Laminate and its use.		
2	<b>Glass</b> Classification of Glass Special varieties, Properties, sizes, thicknesses and uses of glass. Post processing of glass such as etching, acid washing, toughening, back painting, staining, bending, edge polishing, film application (sun control and decorative)	06	08
3	<b>Metals and Non metals</b> Types, Properties and uses of Ferrous, Non Ferrous Metals and Alloys such as wrought iron, Aluminium, Copper, Zinc, Brass and Stainless steel. Polymers and Allied Composites Classification, Properties of Plastics, Uses of thermo-set and thermo-plastics such as Nylon, Acrylic-solid surfaces, PVC, Poly-butylene and Poly-Urethanes, Uses of composites such as Polycarbonates, Glass reinforced plastic, Fibre reinforced plastic and Metal reinforced plastic. Composite Boards: Types, Qualities And Uses (ACP, WPC and HPL Exterior board-not for exam)	12	20
4	<b>Paints, Varnishes, Polishes and Coatings</b> Constituents –Base, Pigment and Thinner. Classification -	12	14

CHAPTER	CONTENTS	HOURS	MARKS
	Water, Oil and acrylic based, Lime wash, Distemper and its application. Types of paints, Textural quality - Matt, Gloss, Satin and Lustre. Process of painting - preparation of surface, primer coat & application of paint with brush, roller, spray on old, new and different surfaces. Constituents, Types & uses of Varnishes, Polishes & Coatings - French, Melamine, Lacquer, Polyurethane and Powder coating, colour and transparent lamination.		
5	<b>Floor Coverings</b> Rugs, durries and carpets of natural and synthetic fibres, PVC floors, wooden flooring types, natural fibre matting, linoleum, rubber	06	04
6	<b>Speciality Materials</b> Soft Furnishing Materials- Manmade and synthetic fabrics used for furnishing Types, and uses of Curtains, Screens and Blinds, Upholstery materials, Wall paper, leather, Coir, Foam, Rubber. Waterproofing Materials Waterproofing materials such as Bitumen, Mastic asphalt, Asphalt sheets, Waterproofing powder, Gels and Liquids Insulating Materials. Types and properties of Thermal insulation and Sound insulation materials in granular, fibrous, rolled, sheeting and panel forms. Uses of Sound insulating and Thermal insulating materials such as sand, Glass wool, Rock wool, Foam, polyurethane foam, Cork, Quilt, Jute, Coir, Particleboard, Hollow bricks. Eco friendly Materials Definition and Importance	12	20
<b>TOTAL</b>		<b>96</b>	<b>100</b>

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- To know various materials used in Interior Design

## MOTOR SKILLS

- Data collection and Presentation

## LIST OF PRACTICAL/ASSIGNMENTS

To be carried out in neatly typed (Preferably computer typing) by each student in well composed form.

SR. NO.	DESCRIPTION	HOURS	NUMBER OF ASSIGNMENTS
	Prepare individual report on data collection on market surveys, guest lectures, seminars and site visits conducted for types, availability, sizes, colour, rates, etc. of materials		

1	Materials and products (common building materials, glass, metals & alloys, polymers & allied composites, natural & synthetic floor coverings, paints, varnishes, polishes & coatings, thermal & acoustical insulations, waterproofing, general & decorative hardware fittings & fixtures, awnings, weather sheds, terrace furniture, composite boards, solid acrylic surfaces. Market survey and site visit for plumbing, water supply, electrification, seminar & workshops to the related topics are to be carried out) (Procedure of Market survey – Student should visit the shops/ sites/ showrooms of related material / services. Collect the related data like sizes, prices, applications, types and materials. Submit the report along with the photographs.)	32	10
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**SUGGESTED LEARNING RESOURCES**

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Materials of constructions	D.N.Ghosh	Tata McGraw Hill
2	Building Materials	Gurucharan Singh	Standard Pub, & Dist
3	Engineering Materials	S.C. Rangawala	Charottar Pub. Anand (India).
4	Engineering Materials	K.P Roy Choudhary	Oxford Press, New Delhi
5	Water Supply & Sanitary Engineering	S.C. Rangawala	Charottar Pub. Anand (India).
6	Construction Materials of Interior Design	William Rupp	Whitney Library
7	Building Construction materials	M.V. Naik	Nirali Publication
8	Building Construction	Sushil Kumar	Standard Pub, & Dist
9	Materials of civil and interior constructions	V.N.Channapattan	Vidya V. Channapattan Vidya.vvc@gmail.com

**SUGGESTED E-LEARNING RESOURCES**

1. [www.interiordezine.com/finishes/](http://www.interiordezine.com/finishes/)
2. [www.surfaces.in](http://www.surfaces.in)
3. [www.onlinedesignteacher.com/2016/02/interior-design-materials-finishes](http://www.onlinedesignteacher.com/2016/02/interior-design-materials-finishes)
4. [www.contractdesign.com/products](http://www.contractdesign.com/products)
5. [www.alliedinteriorproducts.com](http://www.alliedinteriorproducts.com)
6. [www.alliedbuilding.com](http://www.alliedbuilding.com)

**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : FIRST  
**SUBJECT TITLE** : PRIMARY SERVICES  
**SUBJECT CODE** : 23140

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME			EXAMINATION SCHEME					TOTAL
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	
01	01	--	02	50	--	--	--	50

**NOTE**

- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

**RATIONALE**

The subject intends to equip the students with concept and principles of basic services. It will develop their skills in understanding the function of services and help optimise the resources such as water, electricity, etc. It will also develop the analytical skills in designing appropriate services layout and schemes.

**OBJECTIVES**

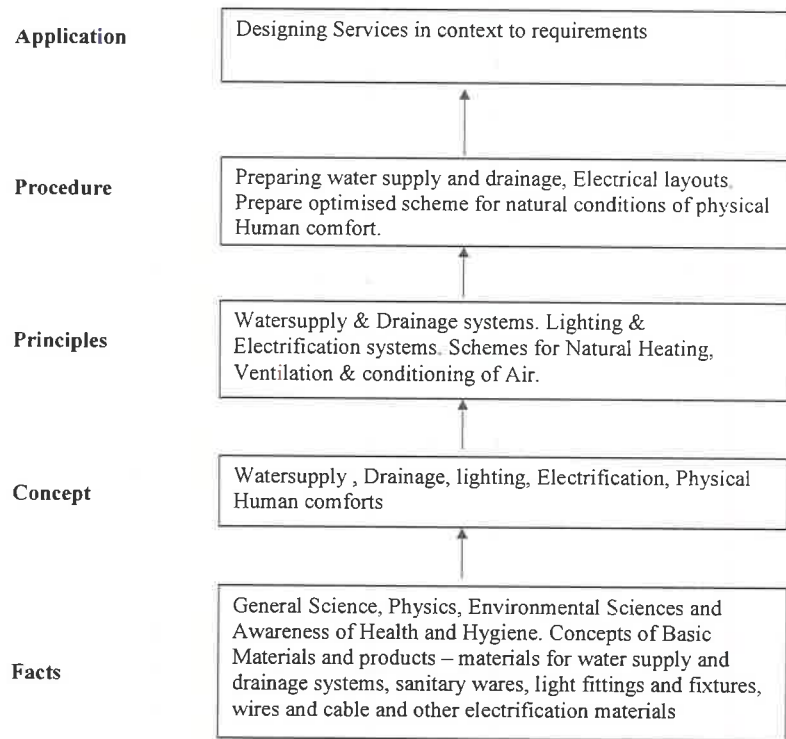
The student will be able to:

1. Apply concepts of primary services
2. Use appropriate resources including optimisation
3. Design layouts for services





**LEARNING STRUCTURE**



**DETAILED CONTENTS**

CHAPTER	CONTENTS	HOURS	MARKS
1	<p><b>Water Supply, Sanitation And Drainage</b> Introduction to principles of Water Supply, Sanitation &amp; Drainage. <b>Types, Sizes &amp; Quality of Pipes used for water supply and drainage systems</b> Types &amp; Sizes of Sanitary wares such as wash hand basins, sinks, Pans, Urinals, Bidets, Water Closets, Flushing Cisterns, Bath tubs, Shower cubicles Types &amp; Sizes of accessories such as roll-holders, soap dishes, towel rods, napkin holders, and other racks, hooks &amp; rings. <b>Cold and Hot water distribution &amp; mixing systems using loft tanks, geysers, boilers, mixers, diverters.</b> Waste and Soil Disposal systems with Focus on trap - principles of Siphoning, Anti-Siphoning, Venting Open and Concealed Distribution &amp; Disposal systems for the following Cooking and Drinking – Focus on Kitchen and Pantry areas Washing – Manual and Machine based Bathing – Modes such as shower, pressure jets and tubs Flushing – Urinal, Water Closet and Toilet areas <b>Miscellaneous - Gardening, Indoor Fountain, Falls, Cascades</b> Understanding Distribution and Disposal layouts in context with appropriate gradients , Sizes, waterproofing, appropriate use of joints &amp; junctions.</p>	10	14
2	<p><b>Electrification</b> Types of wires and Cables – Stranded Wire, Sheathed, Armoured Types of Electrical fixtures such as roses, holders, switches, sockets, switchboards, Safety devices - MCB, ELCB. Types &amp; Sizes of fans, light fittings, Lamp fittings, Chandeliers. Introduction (single and three phase, earthing, neutral, volts, amps and wattage relation), loading requirements Principles of Distribution, and limitations of electrification (leakage, fluctuations, safety, excess loading, interferences. Wiring standards ,specifications, sizes and their types Sheathing, shielding, cross-section area, colour coding, Circuit wiring &amp; installation systems - open and concealed Understanding distribution layouts in context with appropriate loading use, wire sizing, sheathing consideration and appropriate use of joints &amp; junctions.</p>	9	12



CHAPTER	CONTENTS	HOURS	MARKS
3	<p><b>Light and Lighting</b> Introduction to Light - Natural &amp; Non-natural light, Illumination, Lux, Lumens and their calculation for a given space. Maintenance, Utility factors and Glare. Calculating the requirements according to the required levels of illumination.</p> <p>Quality of light - Incandescent, Fluorescent, vapour lamps, halides &amp; halogen, gas-filled - neon, argon, LED, lasers and Fibre optics.</p> <p>Principles of Light - Transmission, reflection, distortion, refraction. Types of lighting - i.e. Direct, Indirect - diffused, reflected.</p> <p>Selection of activity based types of illumination - Ambient, Task, Ascent, Focus, Information lighting - Step, Pathways, Aisles, Signage. Selection of systems of lighting - up, down, cove lighting, track lighting.</p>	8	12
4	<p><b>Natural - Heating, Ventilation and Conditioning of Air</b> Physical Human comforts - Climate based - Quality of Air, Temperature, Humidity</p> <p>Quality of Air - Composition, causes and effects of change in composition, Temperature - Causes and effects of change in Temperature, Humidity - effects of change in Humidity</p> <p>Principles of Ventilation; Natural Ventilation, Transmission of Heat; Control by natural means.</p>	5	12
<b>TOTAL</b>		<b>32</b>	<b>50</b>

**SKILLS TO BE DEVELOPED****INTELLECTUAL SKILLS**

- To understand and apply concepts of primary services

**MOTOR SKILLS**

- To design layouts for services

**LIST OF ASSIGNMENTS**

SR. NO.	DESCRIPTION
<b>Draw Sketches in Journal, Large size Square grid pad or A3 size Drawing Sheet.</b>	
1	Preparing water supply and drainage layout for: Cooking and drinking areas, Washing areas- washing machine, dishwasher. Bathing areas- shower/shower cubical, bath tub, Flushing areas, Ancillary areas - water Fall, Fountain in Balcony, Terrace Garden.
2	Preparing distribution and disposal for given layout with consideration of gradients, pipe sizes, water proofing with use of specials along with legend & nomenclatures, dimensions.
3	Preparing Electrical layout for given interior space with consideration of loading use, specials along with legend & nomenclatures, dimensions.

SR. NO.	DESCRIPTION
4	Calculating required illumination for given activities and room layouts
5	Preparing ambient illumination layout selecting necessary fittings, fixtures & systems.
6	Preparing accent and/or task illumination layout selecting necessary fittings, fixtures & systems.
7	Case Study of Residential Primary services and related material survey.
8	Study of Gadgets - Mixers, juicers, ovens, cooking ranges, geysers, boilers, refrigerators, washing machines, dish washers, audio & video systems, computers, inverter from services point of view.
9	Study of automated sensory device based applications - Wash Basins Taps, Flushes, Lighting Systems, Curtains, HVAC.

**SUGGESTED E-LEARNING RESOURCES**

- [www.aquantindia.com](http://www.aquantindia.com)
- [www.jaquar.com](http://www.jaquar.com)
- [www.johnsonbathrooms.in](http://www.johnsonbathrooms.in)
- [www.polycab.com/www.ajitpspl.com](http://www.polycab.com/www.ajitpspl.com)

**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION**  
**COURSE CODE : ID / IN**  
**YEAR : FIRST**  
**SUBJECT TITLE : COMMUNICATION & PERSONALITY SKILLS**  
**SUBJECT CODE : 23024**

**TEACHING AND EXAMINATION SCHEME:**

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	02	--	--	--	25#	25@	50

**RATIONALE**

The subject intends to enhance Verbal and Non-verbal Communication Skills of students with an intention to improve the language and conversational ability through different media such as face to face, presentations, written, graphic, audio etc. It aims at making students understand how the different types and forms of communication are suited and selected for differing situations.

The student also needs to learn personality enhancement to manage tasks and to become successful in life. It includes self-appraisal; ability to form correct and effective group or team; manage successfully and in time; and use ethical principles.

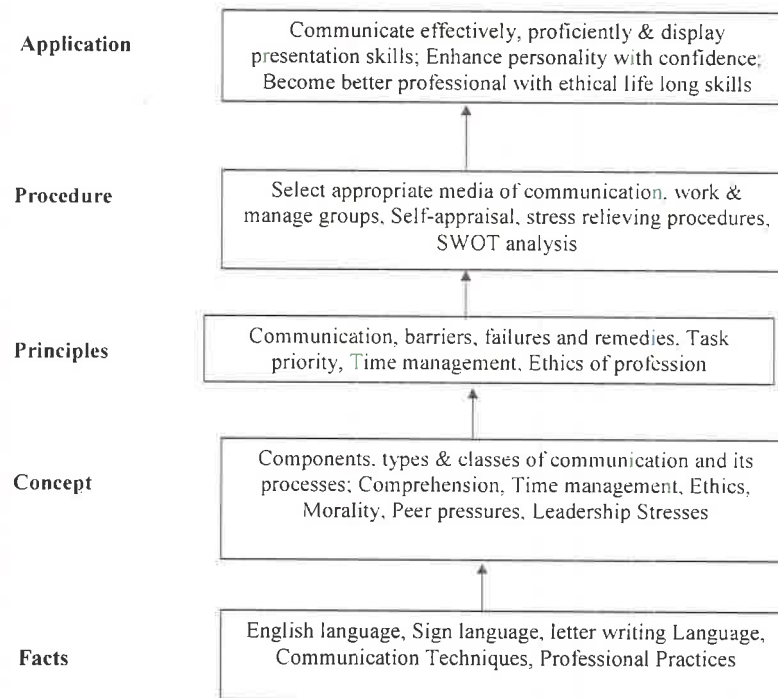
**OBJECTIVES**

The student will be able to:

1. Understand concepts, principles, procedures and components of communication; interpret reasons of communication failure and source respective remedies.
2. Classify communication and select appropriate media; draft business letters and reports pertinent to interior designing profession.
3. Work in groups and teams; demonstrate leadership quality; make use of group skills to achieve goals.
4. Minimize stress level and work in harmony; Understand frustration and take appropriate action.
5. Enhance personality, learn self-grooming, and carry out self-appraisal.



**LEARNING STRUCTURE**



## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS
1	<p><b>Communication Skills</b>            Definition of communication: Process of communication - Defining context, Knowing audience, Designing message, Encoding, Selecting proper channel, Transmitting, Receiving, Decoding and Feedback, Scope of communication and personality skill in interior designing and decoration field. Areas of communication in Interior design and decoration field.            Elements of communication - Sender, Receiver, Message, Channel, Feedback &amp; Context            Various people and agencies in interior designing profession to communicate with like civil engineer, Architect, contractors, mason, carpenter, plumber, decorators.            Principles of communication - Definition, Purpose, 7Cs, Effective messaging, Vocabulary related to aesthetic and jargons related to architecture and engineering.            Effective Communication and barriers.            Types of communication - Formal, Informal, Forms of communication - Verbal, Non-Verbal &amp; Written ; Direction of communication - Lateral, Vertical [upward/downward], Diagonal; Different media of communication - Audio, Video, Graphic, Written, Print, Electronic            The scope and importance of English in interior designing study and profession.            Types of communication related to interior designing.</p>	06
2	<p><b>Voice Culture &amp; Body language</b>            Introduction to voice culture - Designing messages, preparation, practice and presentation of written and graphic contents ; International phonetic script.            Various types of Verbal communication viz. telephonic conversations, counselling, suggesting, requests, orders, presentations, public speaking and seminars.            Aspects of speech - tone, emphasis, pitch, volume, pauses, undulations, timbre, Presentation skills for an individual and in a group            Codes of communication - Body language - Kinesics- eye contact, gesture, posture, body movements &amp; facial expression; Proxemics - Using space, Physical Appearance; Haptics- touch; Chronemics - managing time. Artefacts -environment &amp; objects            Use of body language during presentations, seminars, meetings, conferences, conventions and interviews.            These types of nonverbal codes are to be presented with practical application in informal verbal presentations.            Using combination of non-verbal and verbal communication and interpreting visuals - tables, graphs, charts for formal presentation related to interior study like construction of furniture, ceiling, mezzanine floor, decorative articles</p>	06
3	<p><b>Presentation Skills</b>            Introduction of topic and suitable Language for presentations.</p>	06

CHAPTER	CONTENTS	HOURS
	<p>Designing message outline - Organizing ideas, determining the general and specific purpose of communication, analysing the written messages, context and scope. Ways of writing topic sentences, paragraphs, function paragraphs, summary, information text .Note making, precise and editing the text.            Drafting reports - short reports, concept and contents of long reports, effective sentence construction, punctuation and presentation of the text.            Monthly and annual report presentation. How to write effective emails.            Spoken English: Introducing yourself , formally greeting someone, giving directions to a place.</p>	
4	<p><b>Debate and Groups Discussions</b>            Groups - Introduction, formation, thought, pitfalls, dynamics; Teams - Types, team building, problem of resistance, stuck teams, difference between team and group. Team work in profession. Group communication and meetings (cooperation &amp; collaboration); Leadership (Society, Structure, changes in society &amp; interpersonal relations.) Topics for discussion. Language used in group discussions. Leadership and decision making. Practical inputs in social causes like public disclaimers, counselling, personal views about social mores and norms.            Some group activities could be involved for the social participation by the students like, tree plantation, visit to an orphanage/ old age homes, clean city workshops, pollution free environment activities, watershed management, decoration and maintenance of public places and gardens etc. this will help students to learn duties and responsibilities towards our society.</p>	04
5	<p><b>Manners &amp; Etiquettes, Grooming &amp; Confidence Building</b>            Interpersonal skills - Conflict, resolution, transactional analysis, Defence mechanism for Frustration; Personality-analysis; Stress - stress in group work, controlling emotions; Practical session on stress management - meditation, yoga, gym activity, nature walk and music therapy.            Social behaviour-etiquettes and mannerism, Dining Etiquette, Four magical words: Please, Excuse me, Thank you, Sorry. Office decorum - general code of conduct and social behaviour.</p>	06
6	<p><b>Time Management and Success Mantra</b>            Punctuality, Self-Discipline, Delegation of work, Precision, Maintenance of Database, Prioritisation, Systemization and Standardization; SWOT analysis (Concept &amp; process) Goal Setting. Time loss and utility.</p>	04
<b>TOTAL</b>		<b>32</b>



**SKILLS TO BE DEVELOPED****INTELLECTUAL SKILLS**

- Understanding the situations, Improving vocabulary

**MOTOR SKILLS**

- Presentation and Public Speaking

**LIST OF PRACTICAL/ASSIGNMENTS**

To be carried out in neatly hand-written or typed (Preferably computer typing), well composed and in individual write-ups presented at the end in a single, well composed booklet form.

SR. NO.	DESCRIPTION	HOURS
<b>Prepare in Graphical and Print media form</b>		
1	Description - elements, principles, types & barriers in communication.	04
2	Communication process in relation to interior designing profession.	04
3	Overall observations and details of visit to site/factory/exhibition with diagrams, pictures and explanations relevant to interior design.	06
4	Case study :- Visit to residential/ commercial site for technical and communicative explanations to be done by the students.	04
5	Book review of any interior works from interior designing magazine.	04
6	Critical review of interior work carried out by any professional interior designer.	04
7	SWOT analysis	04
8	Self-appraisal including personal grooming, confidence building	04
<b>Collecting, recording and presenting information in verbal form through</b>		
9	Individual presentation of interior design work in classroom	06
10	Individual presentation of interior design work in front of jury	06
11	Group seminar on any relevant interior trend & style	06
12	Debate on any topic related to interior design	06
<b>Practical Session on Stress Management</b>		
13	Meditation, yoga, gym/sport activity, nature walk and music therapy	06
<b>TOTAL</b>		<b>64</b>

**NOTES**

External examiner to conduct the orals giving proportionate weightage to: -a. communication ability, b. value & depth of content, c. manners & etiquettes exhibited, and d. overall professional attitude of the student displayed through appearance & presentation of the practical assignments in booklet form.

Assessment of the term work is to be carried out continually by the subject teacher giving similar weightage as above.

**SUGGESTED LEARNING RESOURCES**

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Learning to learn	K K Nelson, F Dubor	Allyn & Bacon
2	Basic Managerial Skills for all	E. H. McGrath	Prentice hall of India
3	Independent Study Techniques	P D Kulkarni & B B Sharma	TTTI, Chandigarh
4	101 Ways to Better Communication	Elizabeth Hierney	Kogan Page
5	Communication Skills	Malvika Nagarkar	MSBTE
6	English Grammar	Wren & Martin	Chand Books
7	Human Communication	Burgoon Michael	London: Sage Pub
9	A Communicative grammar of English	G Leech & Jan Svartvik	ELBS
10	Technical writing and Professional communication	Thomas Huckin & Leslie Olson	London William Collins & Sons Co.
11	Business English & Communication	Lyn Clark & Zimmer	New York Mcgraw Hill
12	Excellence in Business communication	John Thill & Courtland	New York Mcgraw Hill
13	Spoken English for India	R K Bansal & J B Harrison	New York: Mcgraw Hill
14	Better English Pronunciation	J D O'Conner	N Delhi: Orient Longman
15	Organizational Behaviour	Fred Luthans	McGraw Hills
16	Basic Managerial Skills for all	E H Megram	Prentice Hall of India
17	Team Building	Glenn Parker	Viva Books Pvt Ltd
18	Leadership Training	Elizabeth M Christopher	Viva Books Pvt Ltd

**SUGGESTED E-LEARNING RESOURCES**

- www.mindtools.com
- www.samcerto.com
- www.stress.org.uk
- www.coopcomm.org/workbook.com
- www.mapnp.org/lib/grpskll/theory.htm

## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS
1	<p><b>Communication Skills</b>            Definition of communication; Process of communication - Defining context, Knowing audience, Designing message, Encoding, Selecting proper channel, Transmitting, Receiving, Decoding and Feedback, Scope of communication and personality skill in interior designing and decoration field. Areas of communication in Interior design and decoration field.            Elements of communication - Sender, Receiver, Message, Channel, Feedback &amp; Context            Various people and agencies in interior designing profession to communicate with like civil engineer, Architect, contractors, mason, carpenter, plumber, decorators.            Principles of communication - Definition, Purpose, 7Cs, Effective messaging, Vocabulary related to aesthetic and jargons related to architecture and engineering.            Effective Communication and barriers.            Types of communication - Formal, Informal, Forms of communication - Verbal, Non-Verbal &amp; Written ; Direction of communication - Lateral, Vertical [upward/downward], Diagonal; Different media of communication - Audio, Video, Graphic, Written, Print, Electronic            The scope and importance of English in interior designing study and profession.            Types of communication related to interior designing.</p>	06
2	<p><b>Voice Culture &amp; Body language</b>            Introduction to voice culture - Designing messages, preparation, practice and presentation of written and graphic contents ; International phonetic script.            Various types of Verbal communication viz, telephonic conversations, counselling, suggesting, requests, orders, presentations, public speaking and seminars.            Aspects of speech - tone, emphasis, pitch, volume, pauses, undulations, timbre, Presentation skills for an individual and in a group            Codes of communication - Body language - Kinesics- eye contact, gesture, posture, body movements &amp; facial expression; Proxemics - Using space, Physical Appearance; Haptics- touch; Chronemics - managing time. Artefacts -environment &amp; objects            Use of body language during presentations, seminars, meetings, conferences, conventions and interviews.            These types of nonverbal codes are to be presented with practical application in informal verbal presentations.            Using combination of non-verbal and verbal communication and interpreting visuals - tables, graphs, charts for formal presentation related to interior study like construction of furniture, ceiling, mezzanine floor, decorative articles</p>	06
3	<p><b>Presentation Skills</b>            Introduction of topic and suitable Language for presentations.</p>	06

CHAPTER	CONTENTS	HOURS
	<p>Designing message outline - Organizing ideas, determining the general and specific purpose of communication, analysing the written messages, context and scope. Ways of writing topic sentences, paragraphs, function paragraphs, summary, information text .Note making, precise and editing the text.            Drafting reports - short reports, concept and contents of long reports, effective sentence construction, punctuation and presentation of the text.            Monthly and annual report presentation. How to write effective emails.            Spoken English: Introducing yourself , formally greeting someone, giving directions to a place.</p>	
4	<p><b>Debate and Groups Discussions</b>            Groups - Introduction, formation, thought, pitfalls, dynamics; Teams - Types, team building, problem of resistance, stuck teams, difference between team and group. Team work in profession. Group communication and meetings (cooperation &amp; collaboration); Leadership (Society, Structure, changes in society &amp; interpersonal relations.) Topics for discussion. Language used in group discussions. Leadership and decision making. Practical inputs in social causes like public disclaimers, counselling, personal views about social mores and norms.            Some group activities could be involved for the social participation by the students like, tree plantation, visit to an orphanage/ old age homes, clean city workshops, pollution free environment activities, watershed management, decoration and maintenance of public places and gardens etc. this will help students to learn duties and responsibilities towards our society.</p>	04
5	<p><b>Manners &amp; Etiquettes, Grooming &amp; Confidence Building</b>            Interpersonal skills - Conflict, resolution, transactional analysis, Defence mechanism for Frustration; Personality-analysis; Stress - stress in group work, controlling emotions; Practical session on stress management - meditation, yoga, gym activity, nature walk and music therapy.            Social behaviour-etiquettes and mannerism, Dining Etiquette, Four magical words: Please, Excuse me, Thank you, Sorry, Office decorum - general code of conduct and social behaviour.</p>	06
6	<p><b>Time Management and Success Mantra</b>            Punctuality, Self-Discipline, Delegation of work, Precision, Maintenance of Database, Prioritisation, Systemization and Standardization; SWOT analysis (Concept &amp; process) Goal Setting. Time loss and utility.</p>	04
<b>TOTAL</b>		<b>32</b>



**SKILLS TO BE DEVELOPED****INTELLECTUAL SKILLS**

- Understanding the situations, Improving vocabulary

**MOTOR SKILLS**

- Presentation and Public Speaking

**LIST OF PRACTICAL/ASSIGNMENTS**

To be carried out in neatly hand-written or typed (Preferably computer typing), well composed and in individual write-ups presented at the end in a single, well composed booklet form.

SR. NO.	DESCRIPTION	HOURS
<b>Prepare in Graphical and Print media form</b>		
1	Description - elements, principles, types & barriers in communication.	04
2	Communication process in relation to interior designing profession.	04
3	Overall observations and details of visit to site/factory/exhibition with diagrams, pictures and explanations relevant to interior design.	06
4	Case study :- Visit to residential/ commercial site for technical and communicative explanations to be done by the students.	04
5	Book review of any interior works from interior designing magazine.	04
6	Critical review of interior work carried out by any professional interior designer.	04
7	SWOT analysis	04
8	Self-appraisal including personal grooming, confidence building	04
<b>Collecting, recording and presenting information in verbal form through</b>		
9	Individual presentation of interior design work in classroom	06
10	Individual presentation of interior design work in front of jury	06
11	Group seminar on any relevant interior trend & style	06
12	Debate on any topic related to interior design	06
<b>Practical Session on Stress Management</b>		
13	Meditation, yoga, gym/sport activity, nature walk and music therapy	06
<b>TOTAL</b>		<b>64</b>

**NOTES**

External examiner to conduct the orals giving proportionate weightage to: -a. communication ability, b. value & depth of content, c. manners & etiquettes exhibited, and d. overall professional attitude of the student displayed through appearance & presentation of the practical assignments in booklet form.

Assessment of the term work is to be carried out continually by the subject teacher giving similar weightage as above.

**SUGGESTED LEARNING RESOURCES**

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Learning to learn	K K Nelson, F Dabor	Allyn & Bacon
2	Basic Managerial Skills for all	E. H. McGrath	Prentice hall of India
3	Independent Study Techniques	P D Kulkarni & B B Sharma	TTTI, Chandigarh
4	101 Ways to Better Communication	Elizabeth Hierney	Kogan Page
5	Communication Skills	Malvika Nagarkar	MSBTE
6	English Grammar	Wren & Martin	Chand Books
7	Human Communication	Burgoon Michael	London: Sage Pub.
9	A Communicative grammar of English	G Leech & Jan Svartvik	ELBS
10	Technical writing and Professional communication	Thomas Huckin & Leslie Olson	London William Collins & Sons Co.
11	Business English & Communication	Lyn Clark & Zimmer	New York: Mcgraw Hill
12	Excellence in Business communication	John Thill & Courtland	New York: Mcgraw Hill
13	Spoken English for India	R K Bansal & J B Harrison	New York: Mcgraw Hill
14	Better English Pronunciation	J D O'Conner	N Delhi: Orient Longman
15	Organizational Behaviour	Fred Luthans	McGraw Hills
16	Basic Managerial Skills for all	E H Megram	Prentice Hall of India
17	Team Building	Glenn Parker	Viva Books Pvt Ltd
18	Leadership Training	Elizabeth M Christopher	Viva Books Pvt Ltd

**SUGGESTED E-LEARNING RESOURCES**

- www.mindtools.com
- www.samcerto.com
- www.stress.org.uk
- www.coopcomm.org/workbook.com
- www.mapnp.org/lib/grpskll/theory.htm



**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : FIRST  
**SUBJECT TITLE** : PARALINE & PERSPECTIVE PROJECTIONS  
**SUBJECT CODE** : 23025

#### TEACHING AND EXAMINATION SCHEME

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	03	--	--	--	--	100@	100

#### RATIONALE

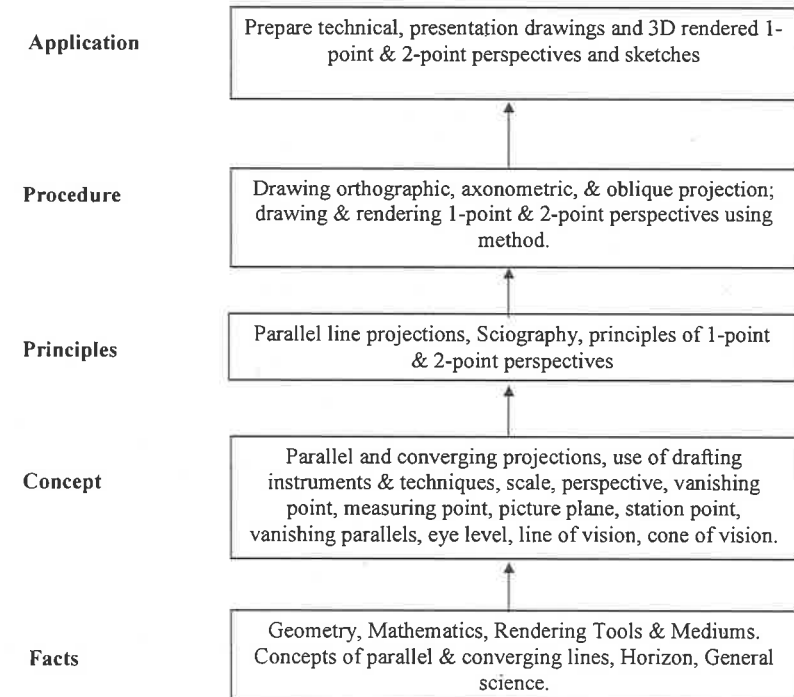
The students learn the graphical language that is used extensively in communicating design thought; constructional methods and techniques in the form of presentation and technical drawings to a definite proportion and scale by using Paraline Projections and 3-D views using Perspective Projections. It also intends to equip the students in communicating with clients, consultants and contractors in the profession, to visualize the sketch in an effective manner.

#### OBJECTIVES

The student will be able to:

1. Use drafting instruments, develop drafting skills; use graphical language & lettering techniques; and learn the use of scale and its importance.
2. Represent 3-D objects in 2-D & 3-D views using parallel lines and converging lines.
3. Graphically represent annotations, symbols, colour, shades and shadows of objects.
4. Prepare technical and presentation drawings.
5. Represent 2D and 3D sketches of objects, furniture and rooms

#### LEARNING STRUCTURE





## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS
1	<b>Basics of Graphical Representation</b> Study of line, shape and form; pattern, texture, weight, gradation & value; material indication, annotation, nomenclature, importance to interpretation of lines and lettering techniques. Principles of representation of volumes, solids and objects using Static & Dynamic Visualisation as well as using Imagery Perception	02
2	<b>Basics of Technical Drawing</b> Study of scales, explanation and use. Study of drafting techniques and use of drafting tools; methodology of representing Lines and Shapes; Scale and Proportion. Principles of parallel line Projection	04
3	<b>Parallel Line Projections</b> Orthographic Projections - Plans, Elevations and Sections; Oblique Projections -Cavalier and Cabinet; Axonometric, Isometric	10
4	<b>Rendering &amp; Presentation Techniques</b> Rendering techniques using Graphite & Colour Pencils, Pen & Ink, Watercolours, Photo colours - 'Fuji', Composites - Inks with water colours, Inks with colour pencils. Study of rendering effects - Sciography, Light, reflection Study of preparing Presentation & Technical Drawings	04
5	<b>Principles of Perspective &amp; Technical methods of drawing perspective</b> Methods of sketching proportionate 2D and 3D of objects, furniture and rooms. Study of picture plane, horizon, standing point, converging (vanishing) lines. Principle of one, two and three major axis convergence to form 1-point, 2-point perspective Technique of drawing 1-point perspective assuming the picture plane in front; behind; & in-between the object - Explained as combination of front & behind Technique of drawing 2-point perspective assuming the picture plane in front; behind; & in-between the object - Explained as combination of front & behind	12
<b>TOTAL</b>		<b>32</b>

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- Visualizing and drawing 2D and 3D objects

## MOTOR SKILLS

- Making use of drafting instruments
- Sketching



## LIST OF PRACTICAL/ ASSIGNMENTS

To be carried out to scale on A2 size drawing as per instructions.

SR. NO.	DESCRIPTION	HOURS	NO. OF SHEETS
<b>Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and/or proportionate free-hand sketches/pencil drawings of:</b>			
1	Linear/Curvilinear axial orientations & the notional mood, emotion or feelings generated by each; regular/irregular shapes & their perceptive associations; and singular/composite forms & their association with geometric, organic & abstract objects.	05	02
2	Different patterns and textures with variation in terms of weight, gradation and value. Conventional indications for various constructional materials and standard annotations.	05	02
3	Static (one position) and dynamic (different stills in motion about X, Y, Z axis) of volumes and solids (cube, pyramids, prisms, cone).	05	04
4	Oblique, isometric & axonometric views of furniture objects.	09	04
<b>Prepare drawings of the following:</b>			
5	Plans, elevations, section & isometric of 6 furniture objects (different geometric forms).	06	06
6	Fully detailed technical plan & sectional elevations of any interior space including toilets with rendering.	06	02
7	1-point perspectives with relevant block furniture with the condition of Picture plane - <b>a. In front, b. Behind, &amp; c. In between the room.</b>	12	03
8	2-point perspectives with relevant block furniture with the condition of Picture plane - <b>a. In front, b. Behind, &amp; c. In between the room.</b>	12	03
9	1-point perspective using best rendering medium skills acquired by the individual student.	12	03
10	2-point perspective using best rendering medium skills acquired by the individual student.	12	03
11	Assignments on sketches in 3D of different objects, furniture and interior spaces of rooms to be prepared on A3 size sketch book. 1 or 2 sketches per week	09	Minimum 50 sketches
<b>TOTAL</b>		<b>96</b>	<b>32 + sketches</b>

## SUGGESTED LEARNING RESOURCES

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Engineering drawing- Plane & Solid Geometry	N D Bhatt	Charotrar Pub. Anand, Gujrat
2	Interior Graphics and Design Standards	S. C. Rein Koff	Whitney Library, New York
3	The Thames and Hudson Manual of Rendering with pen and ink	Robert W. Gill	Thames & Hudson Ltd. London
4	Interior Perspectives to Architectural Designs	Graphic Shaw	Graphic Shaw
5	A Text Book of perspectives and graphics	Shankar Mulik	Allied Pub. Bombay
6	Perspective Drawing	F D K Ching	--

**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION**  
**COURSE CODE : ID / IN**  
**YEAR : FIRST**  
**SUBJECT TITLE : 2D CADD & 3D MODELLING**  
**SUBJECT CODE : 23026**

**TEACHING AND EXAMINATION SCHEME:**

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	02	--	--	--	--	25@	25

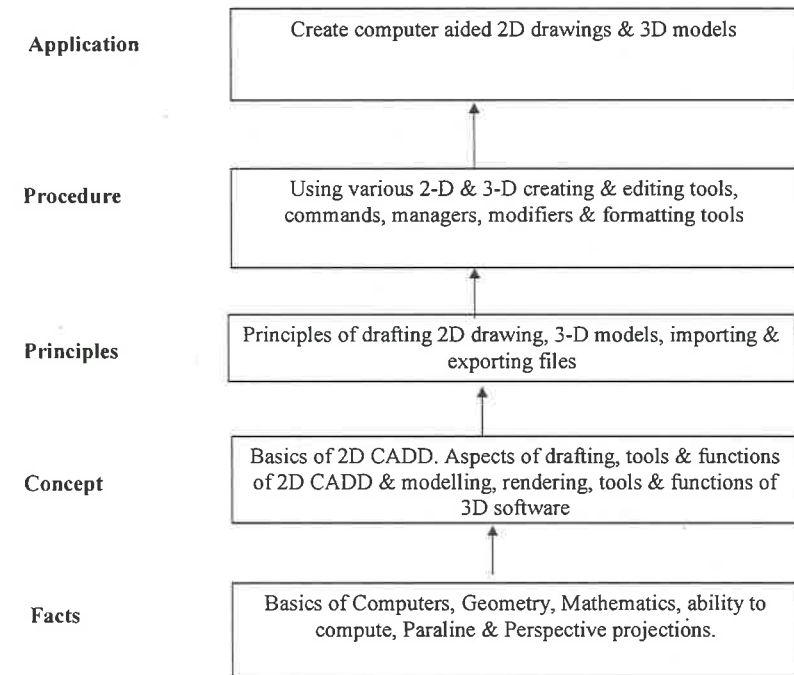
**RATIONALE**

This subject intends the student to understand the importance of 2D CADD & 3D Modelling for designing, preparing and exchanging drawings. The use of CADD software will increase productivity and lessen rework of drawings thereby saving time.

**OBJECTIVES**

The student will be able to use:

1. Basic computer interface.
2. 2-D CADD interface, various drafting and editing techniques, and plotting and printing.
3. 3-D interface, basic modelling techniques, application on materials, maps, lights, camera & rendering.

**LEARNING STRUCTURE**

## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS
1	<b>Introduction to Computer Interface</b> Windows interface, left & right click significance; Explorer-creating/deleting folders, saving in folders, managing files creating icons, etc; Introduction to drawing and rendering software; & Introduction to 2D CADD interface.	02
2	<b>Setting up a drawing</b> Units, Limits, Zoom commands, Layer manager & standard, Status bar	05
3	<b>2-D Drafting Techniques</b> <b>Drafting commands</b> <ul style="list-style-type: none"> <li>Line- Line, Construction Line, Polyline, Polygon, Arc, Boundary, Revision Cloud</li> <li>Shape-Polygon, Rectangle, Triangle, Circle, Ellipse, Hexagon</li> </ul> <b>Modify command</b> Erase, Copy, Mirror, Offset, Array, Move, Rotate, Scale, Stretch, Hatch, Lengthen, Trim, Extend, Break, Chamfer, Fillet, Explode, make a block, insert block, Table, multiline text. <b>Inquiry toolbar</b> - distance, list, area. <b>Dimensioning Commands</b> - liner, angular, diameter, Continue, Angular. <b>Creating text using text style, text edit.</b> -Formatting text and dimension <b>Application of LAYER command</b> in Interior Design. Layer command with its all sub commands, Line type, Colour, line weight, on/off, freeze, lock/unlock.	05
4	<b>Plotting And Printing:</b> Plot style manager, Using Internet for storing & exchanging drawings	04
5	<b>Introduction To 3-D Interface:</b> Compatibility of units with other CAD software, Importing and linking 2D CAD drawings	02
6	<b>Main toolbar &amp; modelling techniques:</b> Rectangle, Circle, Line, Arc, Paint bucket, Pull/push, Follow me, Rotate, Move, Pan, Zoom, Zoom extend, Eraser, Make component, Offset, Orbit, Polygon, Free hand, Scale, Dimension, Protractor, Text, Axes, 3D text., Section plane., Views ( Top, Front, Back, Bottom., Left, Right ), Insert component, Hidden geometry, Face style, Edge Style, Shadow & settings, Fog, Layers.	04.
7	<b>Materials &amp; Mapping:</b> Create Material, Use of Texture image, Change opacity, Texture image editing ( Size, Colour, Opacity )	03
8	<b>Lights &amp; Camera:</b> Types of light in S.U.Podium ( Spot light & Omni light), Intensity & colour of lights, set camera angle ( Create Scene), one point perspective, two point perspective, Parallel projection, plugin-S.U.Podium	02

CHAPTER	CONTENTS	HOURS
9	<b>Rendering &amp; Walk Through:</b> Types of rendering ( All styles- Assorted, Sketchy edges, Colour sets, Default style, Photo modelling, Podium, Straight line ), Saving rendered image, creating scenes, Export file to JPEG & AVI, Export drawing as 2D graphic & 3D model	05
<b>TOTAL</b>		<b>32</b>

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- Visualizing and drafting 2D and 3D objects with the help of software

## MOTOR SKILLS

- Analytical and Computer Aided Drafting

## LIST OF PRACTICALS/ASSIGNMENTS

To be carried out in computerised printed format on A-3 size sheets (Landscape orientation)

SR.NO.	DESCRIPTION	HOURS
<b>Design, prepare, render, generate &amp; print</b>		
1	Use of zoom, pan, view, command in a drawing and setting drawing limits.	04
2	Draw basic forms and shapes in CAD (Rectangle, triangle, Circle, Ellipse, pentagon, hexagon)	04
3	Creating plans of various objects and use of modification tools such as erase, copy, move, scale, rotate, trim, extend, array, offset, mirror, break and stretch	04
4	Creating text using text style, text edit, line type, and weight	04
5	Draft plan and elevations of a T.W table.	04
6	Draft plan, sections and elevations of a <ul style="list-style-type: none"> <li>Double bed with storage below,</li> <li>Sofa set</li> <li>Wardrobe</li> <li>T.V unit</li> </ul>	04
7	Make and insert blocks of 3 seater sofa, 2 seater sofa, 2 to 6 sitter dining table, center table, refrigerator, cooking gas, W.C., Kitchen sink, etc. Copy furniture objects from design center and make use of scale command.	04
8	Draft plan, sectional elevations of a 2BHK Flat	04
9	Render the plan, sectional elevations of a 2 BHK Flat.	04
10	Draw 2D basic geometrical forms in 3D.	04
11	Apply materials to the previously modelled furniture objects. (6 to 8 objects).	04
12	Prepare model interiors of a living room, apply materials and assign lights and camera.	04



SR.NO.	DESCRIPTION	HOURS
13	Applying rendering effects to 3D objects and save the images.	04
<b>Prepare a completely formatted portfolio of a design project containing</b>		
14	<ul style="list-style-type: none"> <li>• Furnished plans</li> <li>• Sections</li> <li>• 3D views</li> </ul>	12
<b>TOTAL</b>		<b>64</b>

**SUGGESTED LEARNING RESOURCES**

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Mastering Auto cad 2000	George Omura	BPB publication
2	Aotucad for Interior Design and space planning using Autocad 2005	Beverly L. Kirkpatric & James M. Kirkpatric	Pearson Education Inc.,
3	Autocad 2004 Reference guide	Santhi Marappan & others	CADD center
4	Auto Cad 2005 Instant Reference	George Omura B. Robert Callori	BPB Publications
5	Auto Cad 2007 L T	Fred Bery	Wiley
6	Working With AutoCAD	Ajit singh	Tata McGraw Hills
7	Auto CAD 2007 for Engineering & Designing	Sham Titkoo	Dramtas Press, 19/A, Ansari Road, Dariya Ganj, New Delhi

**SUGGESTED E-LEARNING RESOURCES**

1. <http://www.apache.org>
2. <https://www.autocad360.com/>
3. [www.autodesk.in](http://www.autodesk.in)
4. [www.cadcorner.ca](http://www.cadcorner.ca)
5. [www.autodesk.com](http://www.autodesk.com)
6. [www.cadtutor.net](http://www.cadtutor.net)
7. Authentic AutoCAD version 2006 or Higher can be down loaded from AICTE website
8. Autodesk web site

**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION****COURSE CODE : ID****YEAR : SECOND****SUBJECT TITLE : INTERNSHIP****SUBJECT CODE : 23044****TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME			EXAM SCHEME & MAXIMUM MARKS					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
--	--	--	--	--	--	25#	25@	50

**NOTE**

- Internship shall be completed by the students for a duration of minimum Six weeks at the end of First Year during the vacation. The student must submit the Log book, Certificate from the Organization and the training report. The same shall be assessed by the Internal Examiner for term work & external examiner for oral, at the beginning of the Second Year and the marks shall be submitted to MSBTE at the end of Second Year.

**RATIONALE**

The subject intends to apply the knowledge, gained in all the subjects learnt in first year.

**OBJECTIVES**

The student will be able to design residential interior spaces, generate 2D and 3D drawings, including services layout as well as working drawing. They should be able to apply appropriate materials also.

Internship shall be arranged in Industry / Company / Offices of Interior Designer and Architect (Builder's firms, Corporate firms and 3D Visualisation firms, etc.) where interior design work is in progress. The following are the sectors where the internship shall also be conducted.

- Furniture Designing / Product Designing Firms
- Kitchen Design Firms
- Colour Manufacturing Companies
- Firms Like Modular Furniture Making, Modular False Ceiling, Drywall Systems etc.



**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION**  
**COURSE CODE : ID / IN**  
**YEAR : SECOND**  
**SUBJECT TITLE : ADVANCE INTERIOR DESIGN**  
**SUBJECT CODE : 23214**

#### TEACHING AND EXAMINATION SCHEME

TEACHING SCHEME				EXAMINATION SCHEME				
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	05	08	150	--	25#	50@	225

#### NOTE

- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

#### RATIONALE

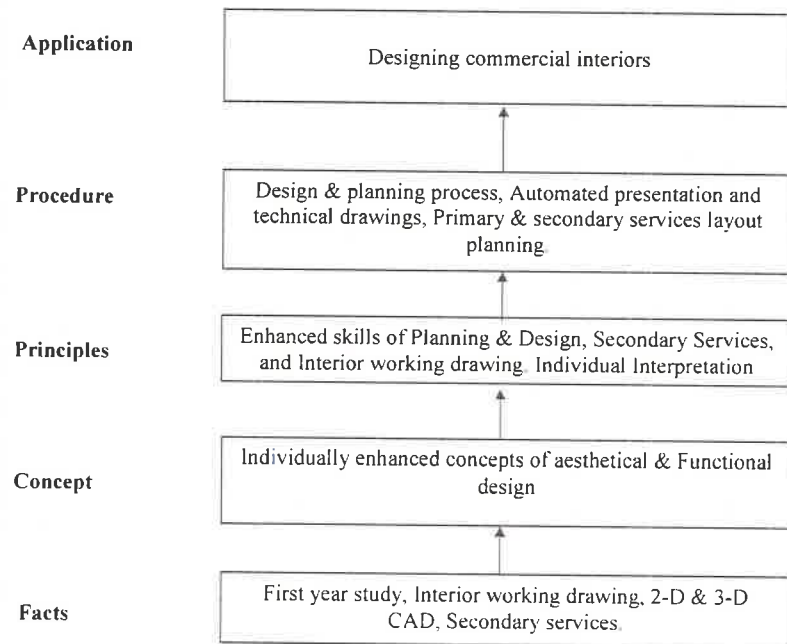
The subject intends to apply professional design acumen while enhancing skills to planning of commercial interior spaces with appropriate usage of basic materials, construction and services required for design project.

Students shall also learn to represent intellectual & creative skills with enhanced professionalism.

#### OBJECTIVES

The student will be able to design commercial interiors ranging from simple activity based small-scale commercial space of about 50 - 100 Sq. M. to complex activity based large-scale commercial space of about 500- 600 Sq. M. (Shop to Corporate office)

#### LEARNING STRUCTURE



## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS	MARKS
1	<b>Commercial Interior Design and Drawing</b> Instructions regarding design brief; relevant aspects of materials, construction, design and services; Special Guidance towards case studies, observations, analysis; and towards achieving individual interpretations manifested through client profiling and requirement framing.	32	150
<b>TOTAL</b>		<b>32</b>	<b>150</b>

## NOTE

Theory examination to be compulsorily based on any design project of multiple activity based medium-scale commercial space of about 100 Sq. M. to 150 Sq. M, consisting of preparing Plans, Two Sectional elevations to 1: 50 scale; and a 2-Point Perspective to suitable size, and assessed at 50%, 30%, and 20% weightage respectively.

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- To Understand and design commercial interior spaces

## MOTOR SKILLS

- Designing and Drafting

## LIST OF PRACTICAL/ ASSIGNMENTS

To be drawn to scale on A1 size drawing papers

Note - One Project compulsorily in CAD presentation.

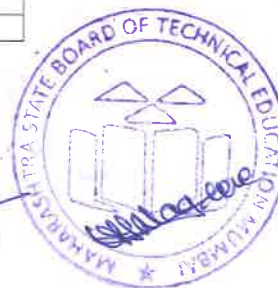
SR. NO.	DESCRIPTION	HOURS	NO. OF ASSIGNMENTS
<b>Prepare and present scaled plan, sectional elevations, technical representations, and proportionate 3-D visuals all drawn and colour rendered manually/computer aided that depict case-studies, manifestations, concepts, schematics, presentation and technical drawings</b>			
1	Small scale commercial project space about around 100 sq.m. Any Shops, Boutique, Salon, Parlours	70	01
2	Large scale commercial space about 500-600 sq.m.- Complete activity based project - Corporate Office, Government office.	90	01
<b>TOTAL</b>		<b>160</b>	

## SUGGESTED LEARNING RESOURCES

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	The best exhibition Stand Design 2	Stafford Cliff	Roto vision Sa Switzerland
2	Stores: Retail Display and Design	Vilma Barr Katherine Field	PBC International Inc.
3	New shop Design	Carles Broto	Arian Mostaedi
4	Exhibition Design	Rolshoven Martin	Rockport Publishers
5	Interior Design Bar and Restaurant	Jeong JI Seong ed.	Jeong JI Seong
6	Design for Shopping New Retail Interiors	Nanuelli Sara	Laurence King Publishing Ltd.
7	Interior design boutique, hotel & spa (Motel & hotel)	Jeong JI Seong	Jeong JI Seong
8	New shop Design	Carles Broto	Arian Mostaedi

## SUGGESTED E-LEARNING RESOURCES

- <http://designerspeak.com>
- <http://visual.ly/interior-design>
- [www.homestylor.com](http://www.homestylor.com)
- [www.roomsketcher.com](http://www.roomsketcher.com)
- [www.smartdraw.com](http://www.smartdraw.com)



**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : SECOND  
**SUBJECT TITLE** : SPECIALITY INTERIOR DESIGN  
**SUBJECT CODE** : 23045

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	05	--	--	--	25#	100@	125

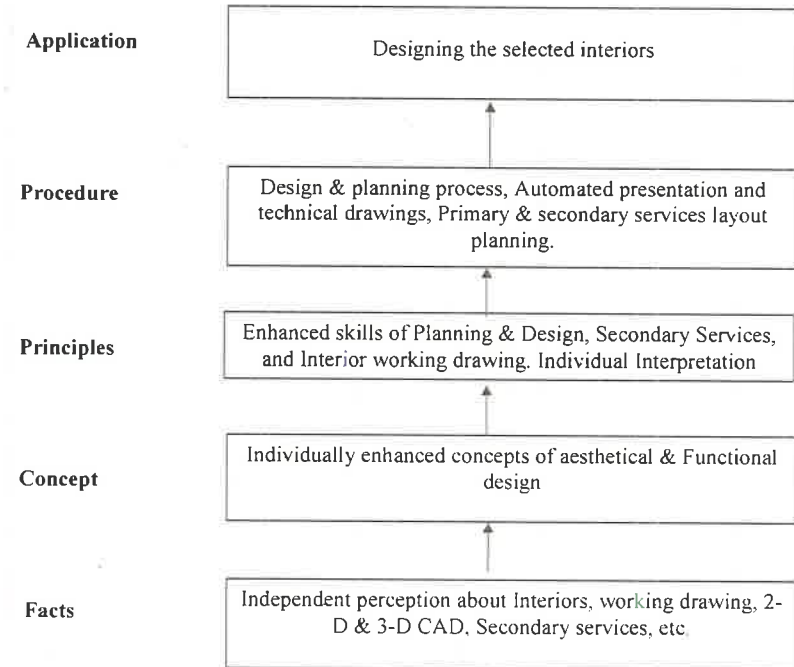
**RATIONALE**

The subject intends to apply individual professional design acumen with enhanced skills of planning interior spaces with appropriate usage of materials, construction and services required for design project.

Students shall also learn to represent intellectual & creative skills with enhanced professionalism.

**OBJECTIVES**

The student will be able to identify an interior project ranging between modification of existing to newly proposed specialised activity based space of about 600 to 700 Sq. M. (Institution, Banks, Sound recording studio, Multiplex lobby, Five-star Hotel lobby, Multi-speciality Hospital Lobby, Supermarket, Spa, Theme restaurant)

**LEARNING STRUCTURE**

**DETAILED CONTENTS**

CHAPTER	CONTENTS	HOURS
1	<b>Speciality Interior Design and Drawing</b> Self-instruction with guide regarding design brief; relevant aspects of materials, construction, design and services; Guidance towards case studies, observations, analysis; and towards achieving individual interpretations manifested through client profiling and requirement framing.	32
<b>TOTAL</b>		<b>32</b>

**SKILLS TO BE DEVELOPED****INTELLECTUAL SKILLS**

- To Understand and design commercial interior spaces

**MOTOR SKILLS**

- Designing and Drafting

**LIST OF PRACTICAL/ ASSIGNMENTS**

Presentation of report on A 4 size paper with presentation of supporting drawings drawn to scale on A1 size drawing papers

SR. NO.	DESCRIPTION	HOURS	NO. OF PROJECT
1	Prepare and present computer aided synopsis, analytical report, scaled plan, sectional elevations, technical representations, and proportionate 3-D visuals that depict case-studies, manifestations, concepts, schematics, presentation and technical drawings.	160	1
<b>TOTAL</b>		<b>160</b>	

**SUGGESTED LEARNING RESOURCES**

- Individual, in relation with the subject selected by the student.
- Reference material could be collected through Internet as well as books, as per the guidance given by the Guide concerned.

**SUGGESTED E-LEARNING RESOURCES**

- <http://designerspeak.com>
- <http://visual.ly/interior-design>
- [www.homestyler.com](http://www.homestyler.com)
- [www.roomsketcher.com](http://www.roomsketcher.com)
- [www.smartdraw.com](http://www.smartdraw.com)

**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION**

**COURSE CODE : ID / IN**

**YEAR : SECOND**

**SUBJECT TITLE : INTERIOR WORKING DRAWING**

**SUBJECT CODE : 23215**

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME				EXAMINATION SCHEME				
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
02	--	06	04	100	--	25#	50@	175

**NOTE**

- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

**RATIONALE**

The subject intends to equip the students with knowledge and skills using advance interior construction techniques for preparing working drawing and details of various commercial furniture and furniture systems. It also intends to equip student with individualistic approach towards design, construction, assembly and joinery of activity based readymade or designed furniture used in commercial interior spaces. This subject also makes student to understand future trends in furniture design & techniques.

**OBJECTIVES**

The student will be able to:

- Select appropriate - modular & knockdown furniture & furniture systems; modular kitchen systems; methods of construction, detailing, storage, materials, soft furnishings, etc required for designing furniture systems in commercial Interiors.
- Select or design and detail - Openings systems, furniture & furniture systems using appropriate hardware and material focussing on detailing & requirements in commercial interior spaces; - to-exact quantities of various materials required and do rate analysis of material & labour required to estimate the project cost of designed interior spaces.





## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS	MARKS
1	<p><b>Knockdown &amp; Modular furniture</b> Types of knockdown &amp; modular furniture such as seats &amp; seating; tables &amp; counters; storage units, trolleys, partitions &amp; other furniture systems. Principles of optimisation, structure, assembly components and services provision focussing on readymade or customized need including suitability of material and effective use. Analysing need &amp; selecting and/or designing &amp; detailing appropriate knockdown or modular furniture suitable for commercial requirement.</p>	08	12
2	<p><b>Automated furniture systems</b> Introduction to need of automation of furniture and identification such as movable partitions, storages. Working principles of automated movements of furniture such as hydraulic, pneumatic, remote-controlled, etc including identification of types of sensors used such as visual, laser, thermal, touch Analysis of need &amp; selection of automation systems based on - capacity, size, shape, form, essential clearances and other technical data standards.</p>	06	08
3	<p><b>Automated &amp; stationary movement systems</b> Introduction to need of mass/bulk movement - horizontal, inclined, vertical of persons and materials. Working principles of lifts/elevators, escalators, conveyors and identification of use in passenger, service &amp; special lifts; hydraulic &amp; scenic elevators; belt, chain, pneumatic conveyors; revolving discs, platforms; moving stairs &amp; escalators. Study of movement systems based on - capacity, size, shape, form, essential clearances and other technical data standards. Conceptualisation of designer steps, stairs &amp; ladders using appropriate materials like timber, metals, plywoods, glass, stones, plastics, RCC and their technique, assembly, ornamentations and working out designer details.</p>	08	12
4	<p><b>Ordinary &amp; Speciality openings, panelling &amp; partitions</b> Types of Partitions like Sandwich, panelled, Aluminium framed Special formations of jambs, frames &amp; casings based on heat, fire, &amp; sound insulating needs. Special study of doors, windows &amp; ventilators based on heat, fire, &amp; sound insulating needs including study of special hardware, modes of operation, materials &amp; techniques, types of shutters Designing &amp; preparing working details for thermal &amp;</p>	12	20

CHAPTER	CONTENTS	HOURS	MARKS
	sound insulating panelling & partitions including using appropriate material and techniques.		
5	<p><b>Commercial Furniture</b> Designing &amp; preparing working drawings focussing on need, requirement, options, form, finish, materials, construction, and hardware: - Special types of displays &amp; storages such as bulk filing, books, &amp; materials, bar overhead storage, shop front display &amp; showcases Commercial seating - visitor chairs, sofa seating (With/without armrests), executive &amp; conference chairs with low &amp; high back. Special types of worktops - side &amp; rear credenza, executive table, conference table. Single &amp; multi-level counters (With/without storage) such as bank, reception counter, ticket booking, service counter.</p>	24	40
6	<p><b>False ceiling</b> Designing &amp; preparing working drawings focussing on need, requirement, options, form, finish, materials, construction, services and hardware of: - • POP/Gypsum, timber, glass, acrylic false ceiling • Modular false ceiling</p>	06	08
<b>TOTAL</b>		<b>64</b>	<b>100</b>

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- Student should able to visualise the design and decide its working details including appropriate hardware and materials

## MOTOR SKILLS

- Student should able to identify different hardware and material required for making working drawing with suitable specification

## LIST OF PRACTICAL/ ASSIGNMENTS

To be carried out in a journal-form on large size square grid pad or drawn to scale on A1 size drawing.

SR. NO	DESCRIPTION	HOURS	REPORT & SKETCHES	NUMBER OF SHEETS
	<b>Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain:</b>			
	Individual analysis of design & details of existing knockdown & modular furniture based on principles of optimisation, structure, assembly components & services provision	18	02	



2	Analysis of design & details of existing automated furniture based on individual observations.	18	02	
3	Automated & stationary movement systems	18	02	
4	Commercial seats & seating	18	02	
<b>Prepare to-the-scale working drawings and details of:</b>				
5	Special types of displays & storages	24		02
6	Speciality openings, panelling & partitions	24		02
7	Special types of worktops	24		02
8	Single & multi-level counters	24		02
9	False ceiling	24		02
<b>TOTAL</b>		<b>192</b>		<b>10</b>

**SUGGESTED LEARNING RESOURCES**

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Building Construction Illustrated	F D K Ching	Van Nortrand
2	Furniture & Cabinet Construction	William P. Spence L. Duane Griffith	Prentice Hall Inc. New Jersey
3	How To Build Modern Furniture	Mario Dal Fabro	McGraw Hill Book Company, New York
4	Cabinet making, design & construction	William P. Spence L. Duane Griffith	Prentice Hall Inc. New Jersey
5	Architects' Working Detail Vol. I	D.A.C.A. Boyne	The Arch. Press Ltd. London
6	Architects' Working Detail Vol. III	D.A.C.A. Boyne	The Arch. Press Ltd. London
7	Architects' Working Detail Vol. IV	D.A.C.A. Boyne	The Arch. Press Ltd. London
8	Architects' Working Detail Vol. V	D.A.C.A. Boyne	The Arch. Press Ltd. London
9	Architects' Working Detail Vol. VIII	D.A.C.A. Boyne	The Arch. Press Ltd. London

**COURSE NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION**  
**COURSE CODE : ID / IN**  
**YEAR : SECOND**  
**SUBJECT TITLE : INTERIOR PROFESSIONAL PRACTICE**  
**SUBJECT CODE : 23216**

**TEACHING AND EXAMINATION SCHEME:**

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	02	02	50	--	25#	50@	125

**NOTE**

- **Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.**
- **Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)**

**RATIONALE**

The subject intends to equip the students with knowledge & skills of estimating, costing, analysing rates; and processes of tendering. It also intends to make them aware towards management of interior design office along with current practices, and codes of conduct required to enhance skills and techniques of handling residential and commercial interiors.

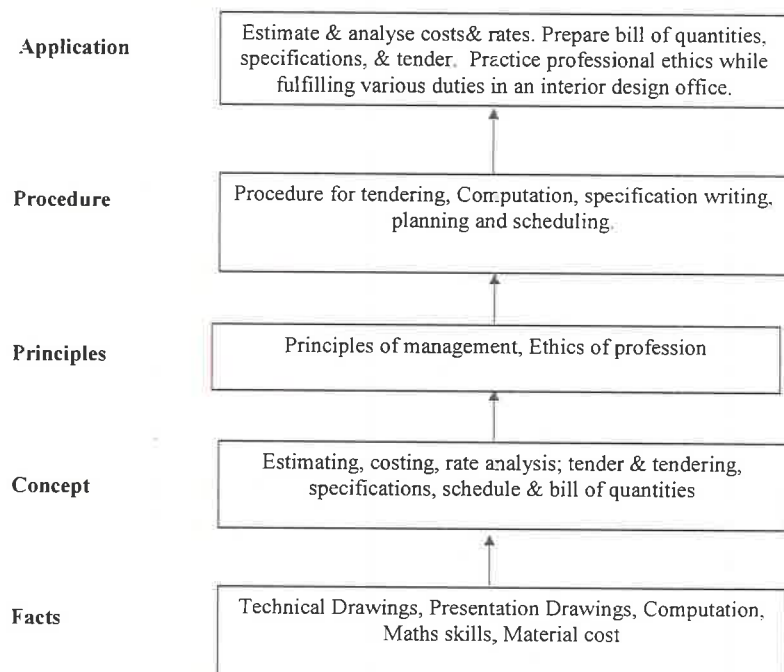
**OBJECTIVES**

The student will be able to learn about:

Standardized units & modes of measurement of materials, labour & items of interior works; estimating, costing & analysing rates; codes of conduct for ethical practice; practices of tendering and contracting; various functional aspects of an interior design office/studio.



## LEARNING STRUCTURE



## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS	MARKS
1	<b>Estimating, Costing &amp; Analysing Rates</b> Introduction to concepts of guesswork, estimation, costing & rate analysis. Need for estimating, costing & rate analysis. Components of estimation, costing & analysing rates - Drawings & specifications, units & modes of measurements, work out put, material & labour cost, contingencies, profit margins, indirect costs. Methods of estimating - lump-sum, work specific, area of use, per number of user, day-work, item-rate; costing - percentage basis, item rate basis & rate analysis - Primarily item rate basis.	08	10
2	<b>Tender &amp; Tendering</b> Introduction & Definitions Tendering Procedure: Tender Document Preparation, Types of Invitations Public Notice, Private Invitation, Negotiation Floating of Tender, Opening and award of tender Aspects of Tender: Units of measurement & modes of measurement; Specifications of raw materials; Specifications and Schedule writing. Contents of Tender Document: Undertaking from Contractor, Pre-qualification of tender, General conditions of tender, Bill of Quantities, General Specifications, Material specification, Special Specification, Set of working drawings, E-Tendering process. Contractual Procedures: Work order letter and acceptance letter, Interim bills and final bills, Bills certifications	12	20
3	<b>Career Opportunities &amp; Professional ethics</b> Avenues for professional practice including advantages and limitations Professional ethics & Codes of conduct and responsibility towards client, fellow professionals, profession, contractors, suppliers, other consultants and the society, health and safety issues.	04	08
4	<b>Office &amp; Project Management</b> Working of Interior Design Studio & ideal office structure; Distribution of work, authority, duties & responsibilities, Reporting. Work ethics: Acts applicable; Basis for Professional Fees & Scales of fees; Physical workplaces in the office; Accounting, maintenance of book of accounts and records. Financial implications, different taxes and acts applicable Basic principles of management and application to interior designing projects Introduction to Bar Charts, Gantt Chart, PERT/ CPM <b>*Introduction to LEED(Leadership in Energy and Environmental Design), GRIHA(Green Rating for</b>	08	12



CHAPTER	CONTENTS	HOURS	MARKS
	Integrated Habitat Assessment), IGBC(The Indian Green Building Council * Not for Exams.		
	<b>TOTAL</b>	<b>32</b>	<b>50</b>

**SKILLS TO BE DEVELOPED****INTELLECTUAL SKILLS**

- Visualization

**MOTOR SKILLS**

- Observational, Analytical and Sketching

**LIST OF PRACTICAL/ ASSIGNMENTS**

To be carried out on A-4 size white papers well composed & presented in a booklet form.

SR. NO.	DESCRIPTION	HOURS	NUMBER OF ASSIGNMENTS
<b>Design, draw neat and proportionate sketches &amp; workout:</b>			
1	Detail Rate analysis of 4 residential furniture - 1 each of shelves & storages, seats, tables & bed.	08	05
2	Detail Rate analysis of 4 commercial furniture - 1 each of displays & storages, seats & seating, worktops, counters and partition/panelling.	08	05
3	Specification for any non-structural masonry installations, kitchen trolleys, 2 speciality panelling & partitions.	08	04
4	Specification for flooring in a living room & false-ceiling for a conference room.	08	04
5	Prepare estimate for any two modular furniture items(based upon unit area/length rates)	08	02
6	Prepare a set of item rate tender for any one residential or commercial project.	08	01
7	A Bar chart or a Gantt chart for the works.	08	01
8	Letters and certifications in contractual procedures - work order letter, acceptance letter, interim certificates, final certificates.	08	02
	<b>TOTAL</b>	<b>64</b>	

**SUGGESTED LEARNING RESOURCES**

SR.NO.	TITLE	AUTHOR	PUBLICATION
1	Professional Practice (Estimation & Valuation)	Roshan Namavati	Lakhani Book depot
2	Architectural Detailing in Residential Interiors	Roshan Namavati	Lakhani Book depot
3	Professional Practice in Interior Design	C M Pitrowski	Van Nostrand Reinhold
4	A Guide to Business Principle and Practices for Interior Designers	Harry Siegel, CPA, Alan Siegel	Whitney library of design
5	Contract Interior Finishes	William R. Hall	Whitney library
6	Construction Materials of Interior Design	William Rupp	Whitney Library



**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : SECOND  
**SUBJECT TITLE** : SECONDARY SERVICES & MARKET SURVEY  
**SUBJECT CODE** : 23217

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME				EXAMINATION SCHEME				
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	01	01	02	50	--	--	50@	100

**NOTE**

- > Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- > Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

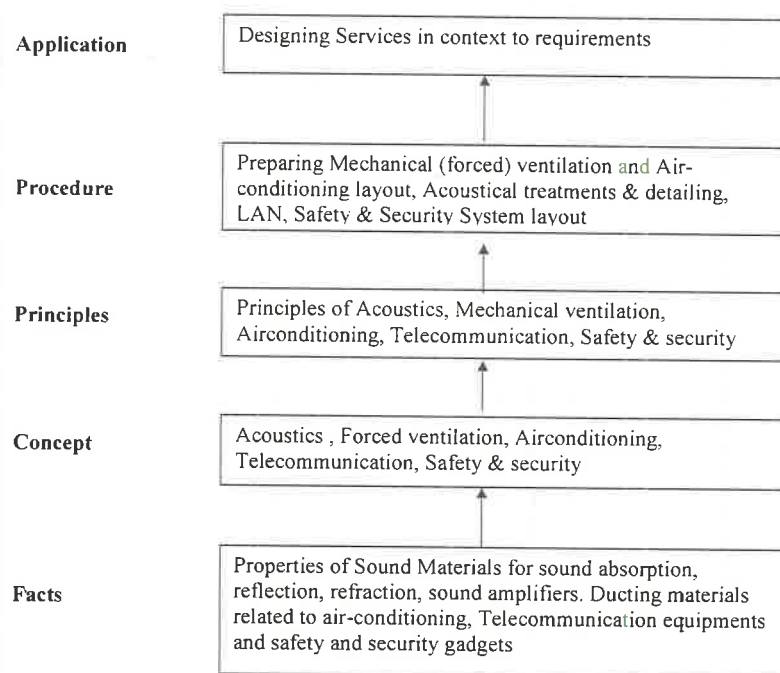
**RATIONALE**

The subject intends to equip the students with concepts and principles of mechanical (forced) ventilation and air-conditioning, acoustics, safety and security systems, telecommunication and LAN. It will also develop the analytical skills in designing appropriate services layout and schemes. It also intends to understand the practical aspects of interior design through market surveys, case studies, site visits etc.

**OBJECTIVES**

The student will be able to:

1. Apply concepts of secondary services
2. Use appropriate resources including optimisation
3. Design layouts for services

**LEARNING STRUCTURE**

## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS	MARKS
1	<p><b>Heat and Sound</b> Principles of heat and effects of heat, Purpose of thermal insulation, advantages of insulation, general principle of thermal insulation and modes of insulation Introduction of Sound and properties and propagation of Sound, Types of Sound and effects, objective of Acoustics Terminologies, Sound intensity level based on decibels (Desirable and undesirable of sound) Strengthening, insulating, and eliminating of sound, Defects of sound. Applications: Strengthening of sound, Insulating, and elimination of sound for various activity spaces such as Sound recording studio, Conference hall, Open office and small auditorium.</p>	10	16
2	<p><b>Mechanical Ventilation and Air conditioning</b> Principles of forced ventilation: Mechanical Ventilation, Principles of Ducting and distribution for ventilation and conditioned air, Types of Fans: propeller, Auxiliary, Mechanical modes of ventilation Principles of Air conditioning, Refrigeration Cycle Systems of Air-conditioning: Non-ductable and Ductable Non-ductable - Window unit, Split units - Floor, Wall, Ceiling mounted Ductable - Split, Packaged (Air-cooled duct, Floor standing air &amp; Water-cooled units, Central air-conditioning, DX systems, Chilled water systems etc according to criteria of Volumetric load, occupancy and various activities, Variable Refrigerant Volume (VRV) and Variable Refrigerant Flow (VRF) systems. Applications: According to various criteria of Volumetric load, Occupancy and various activities.</p>	10	16
3	<p><b>Communication systems</b> Types of communication systems- telephone, public address, facsimile, PBX, EPABX, Internet, Wifi, etc. Different types of telecommunication equipments LAN, WAN systems, Installation norms.</p>	06	08
4	<p><b>Safety and Security Systems</b> Introduction to fire triangle and causes of fire, Fire prevention and Fire alarm systems such as proprietary, central system, Auxiliary, Remote station system, Fire detection such as smoke detectors, heat detectors, flame detectors and their installations norms. Systems for suppression of fire such as dry risers, wet risers, sprinklers &amp; their installation norms. Systems for fire extinguishers – dry chemical powders, carbon dioxide, water type and their installation norms, Fire retarding treatments – coating and adding of fibres.</p>	06	10

CHAPTER	CONTENTS	HOURS	MARKS
	Introduction and principles of security (as per situations) Types of security systems, field devices such as switches, sensors, card-readers, locks, cameras. Access controls Installation norms, Uses and applications.		
	<b>TOTAL</b>	<b>32</b>	<b>50</b>

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- Observation skill
- Analytical skill

## MOTOR SKILLS

- Data collection

## LIST OF PRACTICAL/ ASSIGNMENTS

SR. NO.	DESCRIPTION	HOURS
1	Air-conditioning layout for an interior plan along with distribution, ducting & VRV System calculating the sizes.	08
2	Acoustical arrangement for given layout including drawing sectional elevations.	05
3	LAN layout for an interior plan including drawing typical details.	07
4	Security layout for an interior plan.	06
5	Fire Fighting system layout for an Interior Plan	06
	<b>TOTAL</b>	<b>32</b>

## NOTE

Above mention Tutorial must be submitted by the students as term work. Market Survey Report on Case Studies, Site visit for related materials should be included in the Term work.

## SUGGESTED LEARNING RESOURCES

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Architectural Acoustics, Principles and Design	Madan Mehta & James Johnson	Library of congress Cataloguing in Publication Data
2	Noise and vibration	Frank and John Walk	British Library Cataloguing in Publication Data
3	Heating, cooling, Lighting Design	Norbert Lechner	Library of congress Cataloguing in Publication Data
4	Building services and equipments	Donald Hoff	Library of congress Cataloguing in Publication Data
	ABC of Air-conditioning	Ernest Tricomi	D. B. Taraporevala & sons

**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : SECOND  
**SUBJECT TITLE** : COMMUNICATION SKILLS  
**SUBJECT CODE** : 23046

#### TEACHING AND EXAMINATION SCHEME

TEACHING SCHEME			EXAMINATION SCHEME					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	01	--	--	--	25#	25@	50

#### RATIONALE:

The subject intends to enhance Verbal and Non-verbal Communication Skills of students with an intention to improve the language and conversational ability through different media such as face to face, presentations, written, graphic, audio etc. It aims at making students understand how the different types and forms of communication are suited and selected for differing situations.

The student also needs to learn personality enhancement to manage tasks and to become successful in life. It includes self-appraisal; ability to form correct and effective group or team; manage successfully and in time; and use ethical principles.

#### OBJECTIVES:

The student will be able to:

1. Understand concepts, principles, procedures and components of communication; interpret reasons of communication failure and source respective remedies.
2. Classify communication and select appropriate media; draft business letters and reports pertinent to interior designing profession.
3. Work in groups and teams; demonstrate leadership quality; make use of group skills to achieve goals.
4. Minimize stress level and work in harmony; Understand frustration and take appropriate action. Enhance personality, learn self-grooming, and carry out self-appraisal.



#### LEARNING STRUCTURE

##### Application

Communicate effectively, proficiently & display presentation skills; Enhance personality with confidence; Become better professional with ethical life long skills

##### Procedure

Select appropriate media of communication, work & manage groups, Self-appraisal, stress relieving procedures, SWOT analysis

##### Principles

Communication, barriers, failures and remedies, Task priority, Time management, Ethics of profession

##### Concept

Components, types & classes of communication and its processes; Comprehension, Time management, Ethics, Morality, Peer pressures, Leadership Stresses

##### Facts

English language, Sign language, letter writing Language, Communication Techniques, Professional Practices

## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS
1	<b>Oral Communication</b> Object, concept and design elaboration/ explanation. Basic presentation of Material and Products with services. Making catalogue of Products and services. Spoken English- Using Grammar in verbal presentations (verb formations, adjectives, adverbs, conjunctions and gerunds.)	06
2	<b>Electronic Communication</b> Introduction to use of computer software's facilitating interior designing Like M.S. word/excel/PowerPoint, 3D modelling, 2D presentation software, etc. Making self-profile. Drafting and printing effective resume. Presentation and jury of the work done in the above mentioned software	06
3	<b>Grooming and Interview skills</b> Questionnaire about grooming and confidence building. Public speaking Different types of Interviews (personal, telephonic, media, face to face and panel interview) Tips and observations while appearing for an interview as an intern. Mock interviews.	06
4	<b>Medium of Social Awareness</b> Different streams of social awareness developing positive attitude. Posters and graffiti Street plays and talk shows Motivational Art.	04
5	<b>Written Communication</b> Business Writing: Business letter writing: parts of business letters and their standards, letter of application, <b>leave application</b> , inquiry, reply to inquiry, complaint, reply to complaint, persuasive, apology in profession. Use of effective and grammatically correct language. <b>Resume writing, Interview tips and answers to common interview questions.</b>	06
6	Analytical writing, Language of specification writing, Technical writing, literary writing, Reports generation including graphs, pie charts, Bar charts, comparatives, etc. Writing and understanding Advertisements, circulars, write-ups, and technical reviews.	04
<b>TOTAL</b>		<b>32</b>

## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- Understanding the situations, Improving vocabulary
- Preparing Letter, Reports

## MOTOR SKILLS

- Presentation and Public Speaking
- Oral and Written communication

## LIST OF PRACTICAL/ ASSIGNMENTS

To be carried out in neatly hand-written or typed (Preferably computer typing), well composed and in individual write-ups presented at the end in a single, well composed booklet form.

SR. NO.	DESCRIPTION	HOURS
1	Catalogue presentation used in interior design and decoration. Informal presentations on current affairs.	04
2	Making self-profile with first year and present years interior designing projects.	04
3	Power Point presentation of the work done by a Professional Interior Designer and Decorator.	04
4	Group seminar on any one topic of Construction Technique.	04
5	Writing agenda, notice, circular, minutes and report on any general, weekly or monthly meeting.	04
6	Public speech on any social issue.	04
7	Interviewing an intern, asking questions as a professional interior designer.	05
8	Review on any one social awareness activity.	03
<b>TOTAL</b>		<b>32</b>

## Notes

External examiner to conduct the orals giving proportionate weightage to: -a. communication ability, b. value & depth of content, c. manners & etiquettes exhibited, and d. overall professional attitude of the student displayed through appearance & presentation of the practical assignments in booklet form.

Assessment of the term work is to be carried out continually by the subject teacher giving similar weightage as above.

## SUGGESTED LEARNING RESOURCES:

SR. NO.	TITLE	AUTHOR	PUBLICATION
1	Learning to learn	K K Nelson, F Dubor	Allyn & Bacon
2	Basic Managerial Skills for all	E. H. McGrath	Prentice hall of India
3	Independent Study Techniques	P D Kulkarni & B B Sharma	TTTI, Chandigarh
4	101 Ways to Better	Elizabeth Hierney	Kogan Page



SR. NO.	TITLE	AUTHOR	PUBLICATION
	Communication		
5	Communication Skills	MalvikaNagarkar	MSBTE
6	English Grammar	Wren & Martin	Chand Books
7	Human Communication	Burgoon Michael	London: Sage Pub.
8	A Communicative grammar of English	G Leech & Jan Svartvik	ELBS
9	Technical writing and Professional communication	Thomas Huckin& Leslie Olson	London William Collins & Sons Co.
10	Business English & Communication	Lyn Clark & Zimmer	New York: Mcgraw Hill
11	Excellence in Business communication	John Thill&Courtland	New York: Mcgraw Hill
12	Spoken English for India	R K Bansal& J B Harrison	New York: Mcgraw Hill
13	Better English Pronunciation	J D O'Conner	N Delhi: Orient Longman
14	Organizational Behaviour	Fred Luthans	McGraw Hills
15	Basic Managerial Skills for all	E H Megram	Prentice Hall of India
16	Team Building	Glenn Parker	Viva Books Pvt Ltd
17	Leadership Training	Elizabeth M Christopher	Viva Books Pvt Ltd

**SUGGESTED E-LEARNING RESOURCES**

1. [www.mindtools.com](http://www.mindtools.com)
2. [www.samcerto.com](http://www.samcerto.com)
3. [www.stress.org.uk](http://www.stress.org.uk)
4. [www.coopcomm.org/workbook.com](http://www.coopcomm.org/workbook.com)
5. [www.mapnp.org/lib/grpskil/theory.htm](http://www.mapnp.org/lib/grpskil/theory.htm)

**COURSE NAME** : DIPLOMA IN INTERIOR DESIGNING AND DECORATION  
**COURSE CODE** : ID / IN  
**YEAR** : SECOND  
**SUBJECT TITLE** : CADD PRESENTATION  
**SUBJECT CODE** : **23047**

**TEACHING AND EXAMINATION SCHEME**

TEACHING SCHEME			EXAMINATION SCHEME					TOTAL
TH	TU	PR	PAPER HRS	TH	PR	OR	TW	
01	--	01	--	--	--	--	50@	50

**RATIONALE**

This subject intends the student to understand the importance of CADD PRESENTATION for designing, preparing and exchanging drawings. The students will be able to generate a realistic view of their design. Also, communicating their ideas becomes very easy and effective.

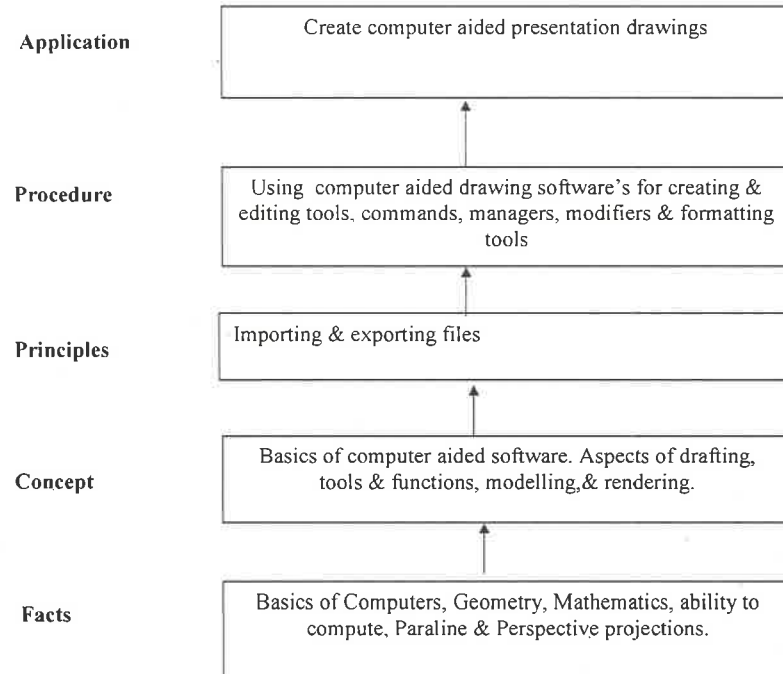
**OBJECTIVES**

The student will be able to

1. Develop the skill & knowledge in 3D Modelling and Animation.
2. Use basic 3D command to develop 3D drawings.
3. Use commands for edit/modification of existing drawings as per needs and suggestions.
4. 2-D CADD interface, various drafting and editing techniques, and plotting and printing.
5. 3-D interface, basic modelling techniques, application on materials, maps, lights, camera & rendering



## LEARNING STRUCTURE



## DETAILED CONTENTS

CHAPTER	CONTENTS	HOURS
1	<b>3D Presentation Techniques</b> <b>Main toolbar &amp; 3D modelling techniques</b> Definition of Modelling. Exploring the 3D Interface, Controlling & Configuring the Viewports, Customizing the 3D Interface & Setting Preferences, Working with Files, Importing & Exporting, Selecting Objects & Setting Object Properties, Duplicating Objects, Creating & Editing Standard Primitive & extended Primitives objects, Transforming objects, Pivoting, aligning etc. Standard primitives- Sphere, Box, Cylinder, Cone, Cube, Pyramid, Torus, Plain, Geo-Sphere. Extended primitives-hydra, torus, knot, chamfer box. Compound objects Modifiers	20
2	<b>2D Splines , Shapes &amp; compound object</b> Understanding 2D Splines & shape, Extrude & Bevel 2D, object to 3D, Understanding Loft & terrain, Modelling simple Objects with splines. Understanding Boolean.	
3	<b>Material and Mapping</b> Standard material, Two sided materials, multi sub object material, Creating new materials, UVW mapping Using the material editor & the material explorer creating & applying standard materials adding material details with maps using atmospheric & render effects	
4	<b>Lighting &amp; Camera</b> Target camera. Free camera. Adjusting and working on lens. Omni light. Spot light. Mental ray lighting	12
5	<b>Rendering and walkthrough</b> Render the object the object or views and save it in .jpg, .tif, .avi file. <b>Final render setting and walk through.</b>	
<b>TOTAL</b>		<b>32</b>

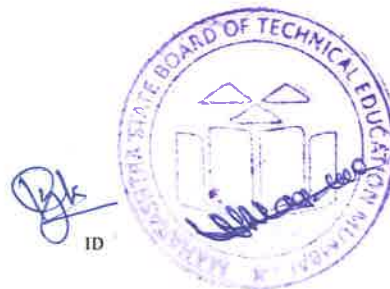
## SKILLS TO BE DEVELOPED

## INTELLECTUAL SKILLS

- Visualizing and drafting 2D and 3D objects with the help of software

## MOTOR SKILLS

- Analytical and Computer Aided Drafting



**LIST OF PRACTICAL/ ASSIGNMENTS**

To be carried out in computerised printed format on A-3 size sheets (Landscape orientation). One Sheet per topic

SR. NO.	DESCRIPTION	HOURS
1	Create all type of Standard, Extended, Primitive objects	02
2	Create compound objects.	02
3	Import from 2D to 3D	02
4	Create Doors, Windows and Stairs according to parameters	02
5	Convert all solid objects into editable mesh and editable poly.	02
6	Create walls, railing and foliage using AEC extended	02
7	Create Doors, Windows frame, Panels, Glasses using Boolean	02
8	Import readymade 3D objects from internet and apply in 3D model.	02
9	Apply different types of Lens and Effects in Lights.	02
10	Create Bounce Effect of Water.	02
11	Create Curtains using special modifiers a. Apply Camera, Lights and Materials in 3D Model. b. Create 3 seater sofa / double bed / six seating dining set in Model. c. Make a basic house and try out different colors and materials. Placing Movie Cameras in a Model. Print your document/ Walkthrough d. Make a rendered commercial project view in 3D modeling & submit A-3 print	12
<b>TOTAL</b>		<b>32</b>

