

w.e.f Academic Year 2009-10

'E' Scheme

CURRICULUM FOR DIPLOMA IN INTERIOR DESIGN (ID)

SCHEME: E

DURATION: TWO YEAR

PATTERN: FULL TIME -YEARLY

(To be implemented from the Academic Year 2009 - 2010)



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

ISO 9001-2000 Certified

49, Kherwadi, Aliyawer Jung Marg, Mumbai - 400 051


MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI
TEACHING AND EXAMINATION SCHEME
COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
DURATION OF COURSE : TWO YEARS
WITH EFFECT FROM 2009-10
YEAR : FIRST
DURATION : 32 WEEKS
PATTERN : FULL TIME - YEARLY
SCHEME : E

| SR. NO. | SUBJECT TITLE | Abbreviation | SUB CODE | TEACHING SCHEME | | | EXAMINATION SCHEME | | | | | | | | | |
|--------------|------------------------------------|--------------|----------|-----------------|----------|-----------|--------------------|------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|
| | | | | TH | TU | PR | PAPER HRS. | TH (1) | | PR (4) | | OR (8) | | TW (9) | | SW (16009) |
| | | | | | | | | Max | Min | Max | Min | Max | Min | Max | Min | |
| 1 | Basic Design | BAD | 13662 | 2 | -- | 1 | 3 | 100 | 40 | -- | -- | -- | -- | 25@ | 10 | 100 |
| 2 | Interior Design | IND | 13663 | 1 | -- | 3 | 6 | 100 | 40 | -- | -- | 50# | 20 | 50@ | 20 | |
| 3 | Construction Technique | COT | 13664 | 2 | -- | 5 | 4 | 100 | 40 | -- | -- | -- | -- | 50@ | 20 | |
| 4 | Materials & Products | MAP | 13665 | 4 | -- | -- | 3 | 100 | 40 | -- | -- | -- | -- | -- | -- | |
| 5 | Primary Services | PRS | 13666 | 1 | 1 | -- | 2 | 50 | 20 | -- | -- | -- | -- | -- | -- | |
| 6 | Communication & Personality Skills | CPS | 13667 | 2 | -- | 2 | -- | -- | -- | -- | -- | 25# | 10 | 25@ | 10 | |
| 7 | Paraline & Perspective projections | PPP | 13668 | 1 | -- | 5 | -- | -- | -- | -- | -- | -- | -- | 100@ | 40 | |
| 8 | Market Study & Practices I | MSP | 13669 | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | 25@ | 10 | |
| TOTAL | | | | 13 | 1 | 17 | -- | 450 | -- | -- | -- | 75 | -- | 275 | -- | 100 |


 Student Contact Hours Per Week: **31 Hrs.**
THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH.

 Total Marks : **900**

 @ 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- Termwork, SW- Sessional Work

- Conduct two class tests each of 25 marks for each theory subject. 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
- Code number for TH, PR, OR and TW are to be given as suffix 1, 4, 8, 9 respectively to the subject code.

|  MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI TEACHING AND EXAMINATION SCHEME | | | | | | | | | | | | | | | | |
|--|--------------------------------|--------------|----------|-----------------|-----------|-----------|--------------------|------------|-----|---------------------------------|-----|------------|-----|------------|-----|------------|
| COURSE NAME : DIPLOMA IN INTERIOR DESIGN | | | | | | | | | | | | | | | | |
| COURSE CODE : ID | | | | | | | | | | | | | | | | |
| DURATION OF COURSE : TWO YEARS | | | | | | | | | | WITH EFFECT FROM 2010-11 | | | | | | |
| YEAR : SECOND | | | | | | | | | | DURATION : 32 WEEKS | | | | | | |
| PATTERN : FULL TIME - YEARLY | | | | | | | | | | SCHEME : E | | | | | | |
| SR. NO. | SUBJECT TITLE | Abbreviation | SUB CODE | TEACHING SCHEME | | | EXAMINATION SCHEME | | | | | | | | | |
| | | | | TH | TU | PR | PAPER HRS. | TH | | PR | | OR | | TW | | SW (16010) |
| | | | | | | | | Max | Min | Max | Min | Max | Min | Max | Min | |
| 1 | Advance Interior Design | AID | 13678 | 1 | -- | 5 | 8 | 200 | 80 | -- | -- | -- | -- | 50@ | 20 | 100 |
| 2 | Speciality Interior Design | SID | 13679 | 1 | -- | 5 | -- | -- | -- | -- | -- | 50# | 20 | 100@ | 40 | |
| 3 | Interior Working Drawing | IWD | 13680 | 2 | -- | 6 | 4 | 100 | 40 | -- | -- | 25# | 10 | 50@ | 20 | |
| 4 | Interior Professional Practice | IPP | 13681 | 1 | -- | 2 | 2 | 50 | 20 | -- | -- | 25# | 10 | 50@ | 20 | |
| 5 | Secondary Services | SES | 13682 | 1 | 1 | -- | 2 | 50 | 20 | -- | -- | -- | -- | -- | -- | |
| 6 | 2D and 3D CADD | CAD | 13683 | 1 | -- | 4 | -- | -- | -- | -- | -- | -- | -- | 50@ | 20 | |
| 7 | Market Study & Practices II | MAS | 13684 | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | 50@ | 20 | |
| TOTAL | | | | 07 | 01 | 23 | -- | 400 | -- | -- | -- | 100 | -- | 350 | -- | 100 |
| <p>Student Contact Hours Per Week: 31 Hrs. THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH. Total Marks : 950 @ Internal Assessment, # External Assessment, Ø Common to All Conventional Diploma, #* Online Examination, No Theory Examination.</p> <p>Abbreviations: TH-Theory, TU- Tutorial, PR-Practical, OR-Oral, TW- Termwork, SW- Sessional Work</p> <ul style="list-style-type: none"> ➤ Conduct two class tests each of 25 marks for each theory subject. 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 ➤ Code number for TH, PR, OR and TW are to be given as suffix 1, 4, 8, 9 respectively to the subject code. | | | | | | | | | | | | | | | | |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR : FIRST
SUBJECT TITLE : BASIC DESIGN
SUBJECT CODE : 13662

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|-----|----|----|-----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 02 | -- | 01 | 03 | 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 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.

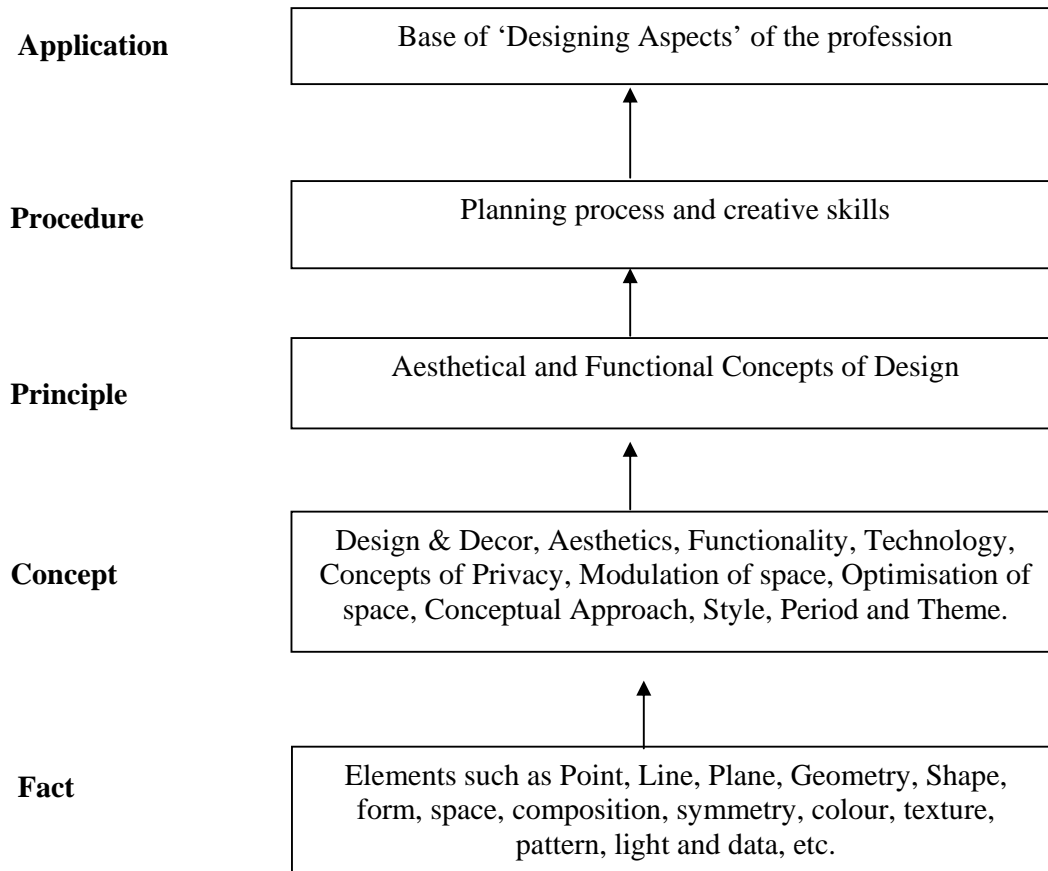
The students shall also learn planning processes and develop intellectual and creative skills required for Interior Design & Advance Interior Design.

OBJECTIVES:

The student will be able to:

- a. Understand importance of the role of interior designer and be able to differentiate between design and decoration.
- b. Use tools of interior design based on Aesthetical and Functional aspects.
- c. Identify Concepts with approach; Styles & Historical Periods; and Themes.
- d. Implement Processes of Design.

Learning Structure



LEARNING SKILLS:

- a. Motor skills
- b. Intellectual skills

SYLLABUS:

| CH. No. | TOPIC | HRS | Marks |
|----------|---|-----------|-----------|
| 1 | Interior Design and Decoration | | |
| 1.1 | Understanding design and decoration (02) | | |
| 1.2 | Importance of design - Optimisation, Economics (04) | | |
| | Importance of design - Time, Maintainability, Multiplicity (06) | | |
| 1.3 | Role of Interior Designer- (04) | 06 | 16 |
| | a. Interest of user with respect to economy, comfort, safety, security, etc | | |
| | b. Limitations on design due to existing constraints such as Position of entries, exits, windows, ventilators; sunk-slabs and other structural elements, etc. | | |
| | c. Universal design catering to all types including differently able users. | | |
| | d. Scope of work- new projects, additions & alterations | | |
| 2 | Tools of Interior Design | | |
| 2.1 | Understanding aesthetical, functional, technological aspects. (02) | | |
| 2.2 | Aesthetical tools | 26 | 58 |
| | a. Principles of Design - Balance, Emphasis, Rhythm, Harmony, Scale and Proportion (16) | | |
| | b. Elements of design - Point, Line, Shape, Form, Colour and colour theory, Texture and Pattern (12) | | |
| | c. Aesthetical design consideration - <u>Physical</u> such as touch, smell, hearing, etc; <u>Social</u> such as interactive, status symbols, etc; <u>Psychological</u> such as derivable pleasure from use, emotional comfort, etc; <u>Ideological</u> such as environmental, patriotic, socialistic, etc; and <u>Opinions influenced by associations</u> such as newness, nostalgic, thrill, risk involved, safety, reliability, etc. (12) | | |
| 2.3 | Functional tools | | |
| | a. Ergonomics- Its study - Postures, Anthropometrics, Biomechanics (12) b. Zoning, Grids, Modulation of space within and without, enveloping space within the room and furniture (04) | | |
| 3 | Design Notions | 26 | 20 |
| 3.1 | Concepts - 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. (<i>Not for examination</i>) | | |

| | | | |
|---------------------------|--|-----------|------------|
| 3.2 | Period & Styles - Historical & Cultural approach with stress on ability to identify Occidental Periods and Oriental styles and with special focus on Contemporary Indian period and styles. a. Occidental - Classical, Medieval, 19 th Century AD, Contemporary (08) b. Oriental - Japanese, Chinese, Thai, and Indian (08) | | |
| 3.3 | Themes - The common thread that binds the entire design in a story line such as Beach, 'Mela', Dessert, Village, etc. (04) | | |
| 4 Planning Process | | | |
| 4.1 | Understanding process of design (Need-Design brief-Information collection-Developing Alternatives-Analysis-Solution) (02) | | |
| 4.2 | Planning Process of Interior Design (04) a. Design Brief - simple and clear description about what is to be designed b. Relevant Data collection such as location & condition of site, Client profile & requirements, Materials, etc. c. Data Analysis - analysing and forming alternative schemes based on personal interpretations of design brief and relevant data using design tools and design concepts. d. Selection- finalising the best scheme through personal justifications. e. Presentation- representing the final scheme in graphical manner (Presentation and Technical Drawings) | 06 | 06 |
| TOTAL | | 64 | 100 |

PRACTICAL ASSIGNMENTS (Total 10 numbers)

To be carried out in a journal-form on large size square grid pad and/or drawn to scale on A1 size drawing paper in sync with the philosophy of individual institute.

| Description | No. |
|---|-----------|
| Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain: | |
| Principles of design at conceptual and at interior design level. | 01 |
| Elements of design at conceptual as well as contextual level. | 02 |
| Collect, generate and record static (Human dimensions) and dynamic (Activity wise) data related to the following postures: | |
| Standing (cooking, bar tending, working at shop counters, opening doors, drafting, using urinals, bathing, using over head units, etc.) | 03 |
| Squatting (using Indian pan, squats, using storages below counters, manual sweeping | 04 |

| | |
|---|-----------|
| & mopping, etc.) | |
| Sitting (writing, desk job, dining, relaxing, general sitting, using European water closets, etc) | 05 |
| Sleeping (sleeping, resting, etc.) | 06 |
| Graphical representation of elements such as entablatures, cornices, base, capital, column, beam, relief work, stucco work, sculptures, furniture for: | |
| Occidental periods from Classical to 19 th Century | 07 |
| Oriental - Japanese, Chinese and Thai styles | 08 |
| Contemporary Period | 09 |
| Indian styles | 10 |

Notes:

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.

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publisher & Address |
|----------------|---|--|---|
| 01 | Joseph De Chaira Jullius Panero Martin Zelnik | Time Saver Standard for Interior Design & Space Planning | Mcgraw Hill New York |
| 02 | John Pile | Interior Design | Harry N. Adry Publishers |
| 03 | Ahmed Kasu | Interior Design | TWAIN Pub. Bombay |
| 04 | Jullius Panero Martin Zelnik | Human Dimensions and Interior Spaces | Whitney Library New York |
| 05 | Phillis Sleen Allen | Beginning of Interior Environment | New York |
| 06 | Shirish Bapat | Basic Design of Anthropometry | Bela books Publishers |
| 07 | Shirish Bapat | Living Area (Interior Space) | Bela books Publishers |
| 08 | Francis D K Ching | Interior Design Illustrated | Van Norstrund, New Delhi |
| 09 | V. S. Parmar | Design Fundamental in 1 st architecture | Somaiya Pub. Pvt. Ltd. |
| 10 | M. Prataprao | Interior Design Principles & Practices | Standard Publisher & Distributor, New Delhi |
| 11 | Sudhir Diwan | Sanskriti a manual of Interior Design Vol-1 | Interior Affairs, Mumbai |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR : FIRST
SUBJECT TITLE : INTERIOR DESIGN
SUBJECT CODE : 13663

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:

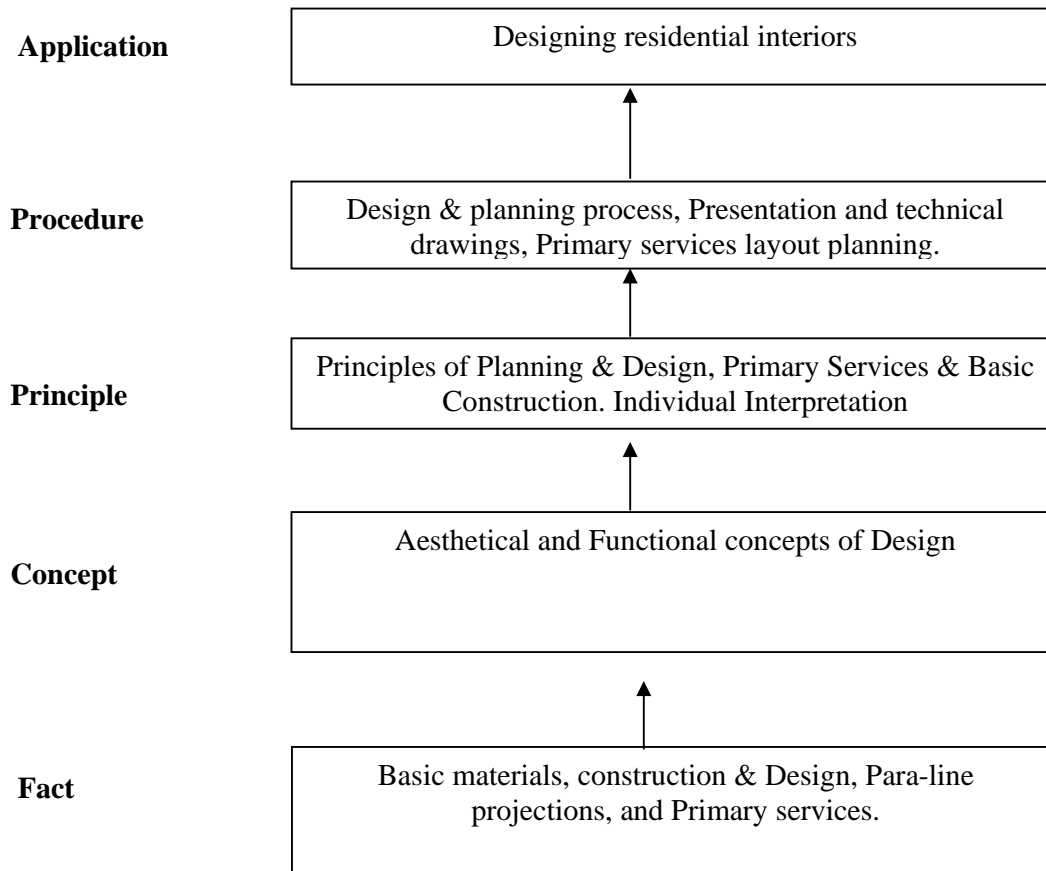
- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

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 small-scale residence of about 30 Sq. M. to complex activity based large-scale residence of about 300 Sq. M. (1-room unit to independent bungalow)

Learning Structure**LEARNING SKILLS:**

- a. Motor skills
- b. Intellectual skills

SYLLABUS:

| Ch. No. | Topic | Hrs | Marks |
|----------------|---|------------|--------------|
| 1 | Residential Interior Design and Drawing | 32 | 100 |
| | Instructions 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. | | |
| TOTAL | | 32 | 100 |

Notes:

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 1: 25 scale; and a 1-Point Perspective to suitable size, and assessed at 50%, 30%, and 20% weightage respectively.

PRACTICAL ASSIGNMENTS (Total 1, 2 or 3 in sync with the philosophy of individual institute)

To be drawn to scale on A1 size drawing paper

| Description | No. |
|--|------------------|
| Prepare and present scaled plan, sectional elevations, technical representations, and proportionate 3-D visuals all drawn and colour rendered manually that depict case-studies, manifestations, concepts, schematics, presentation and technical drawings | 1, 2 or 3 |

Notes:

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 any 1 practical assignment portfolio consisting of completed case studies, concept, schematics, presentation and technical drawing set.
2. Assessment of the term work is to be carried out continually by the subject teacher giving weightage of 80% towards designing acumen and 20% towards technical skills of the individual student.

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publisher & Address |
|---------|--------------------------------|---------------------------------|-----------------------------|
| 01 | Thames & Hudson | Living large in small spaces | Thames & Hudson |
| 02 | Aurora Cuito | New small homes | Loft Publications. S.L. |
| 03 | Ruth Pretty | The Ultimate Interior designer | Ward Lock |
| 04 | Stephen Crafti | Making the most of small spaces | Images Pub. Group, Pvt. Ltd |
| 05 | J Grayson Trulove | Studio Apartments | James Grayson Trulove |
| 06 | -- | Design 02 Residential Space I | Juzhu Kongjan |
| 07 | -- | Design 09 Residential Space III | Juzhu Kongjan |
| 08 | Shenzen Nanhair Art Design Co. | RS 03 Residential Space III | Juzhu Kongjan |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR : FIRST
SUBJECT TITLE : CONSTRUCTION TECHNIQUE
SUBJECT CODE : 13664

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|-----|----|----|-----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 02 | -- | 05 | 04 | 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)**

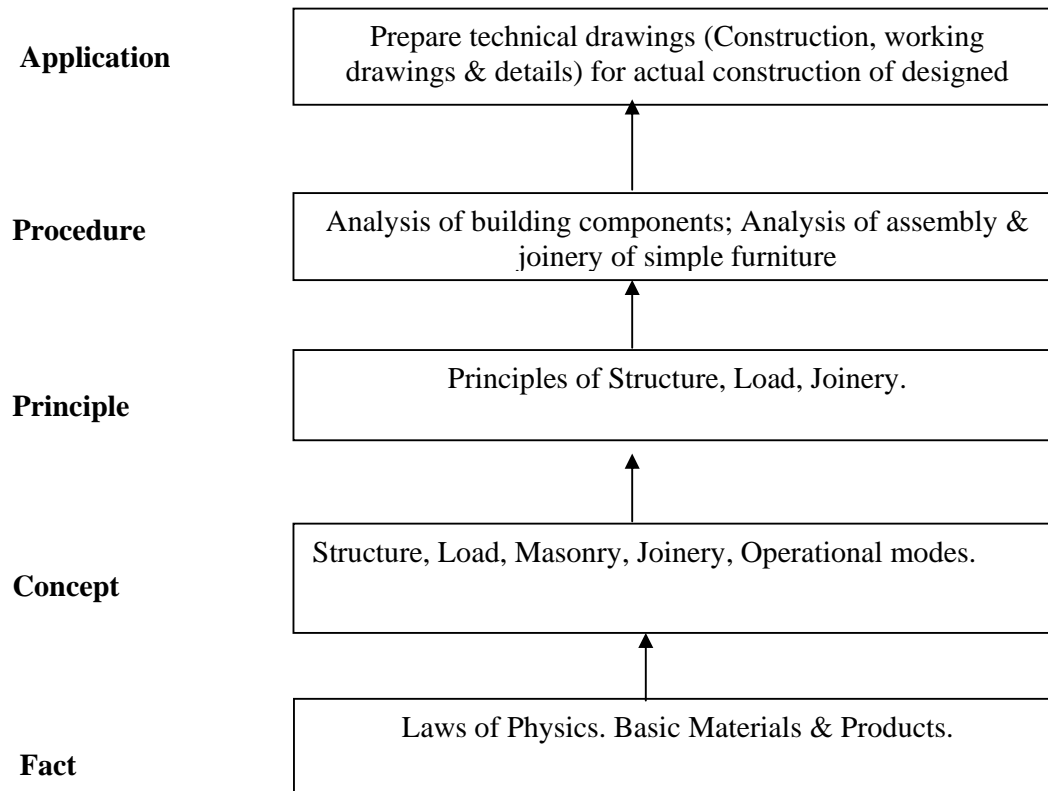
RATIONALE:

The 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. It further intends to equip student with thorough knowledge about design, construction, assembly and joinery of activity based readymade or designed furniture used in residential interior spaces.

OBJECTIVES:

The student will be able to:

- a. Define & understand - Structures, systems, elements, components; focussing on fundamentals of load transfer; techniques of erecting/installing structural floor and laying various floor finishes; techniques of constructing steps, stairs and ladders in different materials focussing on various types and forms; and assembly of doors and windows focussing on the mode of operation.
- b. 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; 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**LEARNING SKILLS:**

- a. Motor skills
- b. Intellectual skills

SYLLABUS:

| CH. No. | TOPIC | HRS | Marks |
|----------------|--|------------|--------------|
| 1 | Introduction to structure and building components | | |
| 1.1 | <p><u>Types of Structures:</u> (02)</p> <p>Natural and man-made structural systems in such as load bearing, framed, composite, tensile, shell structures.</p> | 04 | 04 |
| 1.2 | <p><u>Components & Elements of Built Structure:</u> (02)</p> <p>Introduction to foundations, footings, columns, beams, plinth, slabs, floors, structural and non-structural walls, fenestrations (Doors, windows, ventilators & openings), lintels, arches, steps, stairs, ladders, etc.</p> | | |
| 2 | Construction techniques of building components | | |
| 2.1 | <p><u>Masonry & Installations:</u> (04)</p> <p>Bricks masonry - Types of Bricks; bonds in ½ brick & 1 brick; header, stretcher English & Flemish bonds. Stone masonry - Types of masonry; random rubble, polygonal, & dry rubble works.</p> <p>Non-structural masonry installations constructed on-site such as stone seating, kitchen platform, etc. with focus on design, construction, material to be used for structure, cladding or surfacing and the provisions to be made for services such as plumbing, drainage, and electrification.</p> <p>Other non-structural installations assembled on-site such as cladding, panelling, partitions, etc. focussing on their structure and assembly using different materials</p> | 24 | 16 |
| 2.2 | <p><u>Ceilings, Floors & Floorings:</u> (04)</p> <p>Concept of structural ceiling of buildings such as flat, sloping, sunk & technique of structural framing for Loft, Mezzanine, Floors, Cavity & False Floor, sunk slab, etc.</p> <p>Provisions, care and process of flooring & laying natural & artificial materials on existing slab and floors; and fixing of tiles - clay, cement, stone, glass, metals, etc; junctions; tile-on-tile; patterns, inlays; etc.</p> | | |
| 2.3 | <p><u>Steps, Stairs Ladders:</u> (04)</p> <p>Study of steps, stairs & ladders, their elements such as tread, riser, etc.</p> <p>Study of typical forms such as straight, dog-legged, half turn, quarter turn, geometric (helical or spiral) with respect to load transfer.</p> <p>Study of different materials used in construction of stairs.</p> | | |
| 2.4 | <u>Opening, Lintels, Projections, and arches:</u> (04) | | |

| | | | |
|------------|---|-----------|-----------|
| | <p>Openings - Doors, windows, ventilators, and other openings focussing on different modes of operation and their affects on the jambs.</p> <p>Lintels - Types of Lintels in different materials such as wood, metal, & concrete</p> <p>Projections - Different types of chajjas & awnings; lofts in rooms; weather-shed</p> <p>Arches - Types of arches, classification according to centre, shape</p> | | |
| 3 | Joinery | | |
| 3.1 | <p>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 (04)</p> | 04 | 04 |
| 4 | Openings | | |
| 4.1 | <p><u>Jambs, Frames & Casings:</u> (04)</p> <p>Formation based on various modes of operation, materials, & techniques</p> | | |
| 4.2 | <p><u>Doors, Windows & Ventilators:</u> (24)</p> <p>Basis of modes of operation, positioning, placing of hardware; detailed study of modes of operation (Horizontal, vertical & inclined movement) such as swinging (folding-hinged, pivoted), sliding (Between or side of wall), combination (sliding-folding), and others such as collapsible, rolling, etc; and study of types of shutters such as framed, panelled, flush, glazed, and composite focussing on different materials wood, metal, glass, & plastics, etc.</p> | 12 | 28 |
| 5 | Residential Furniture | | |
| 5.1 | <p>Focussing on need, requirement, options, form, finish, materials, construction, and hardware; learning to design & prepare construction drawings of: -</p> <p><u>Different types of shelves & storages</u> such as wardrobe, overhead, display & showcases, etc. including understanding different options for carcass, shutters, drawers and internal shelves. (12)</p> <p><u>Different types of seats</u> such as stools (low & high), puffy (For living, dressing, bed-end, etc.), chairs (For living, dining, bed, desk-work, etc) sofas (1, 2 & 3-seater) (12).</p> <p><u>Different types of tables</u> such as side & centre tables (For living, dining, bed, terrace, garden, etc), work-tables (Dressing, study, etc) (12).</p> | 20 | 48 |

| | | | |
|--------------|--|-----------|------------|
| | Different types of bed such as 'divan', single-bed, double-bed, bunk-bed, combination-bed, etc; with and without storage (12). | | |
| TOTAL | | 64 | 100 |

PRACTICAL ASSIGNMENTS (Total 20 numbers)

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

| Description | No. |
|---|--------------------|
| Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain: | |
| Types of structure, components & elements of built structure. | 01 |
| Brick & stone masonry, openings & projections | 02 |
| Non-structural installations constructed & assembled onsite. | 03 |
| Lintels, arches, jambs, frames & casings | 04 |
| Collect, record and generate scaled drawings of: | |
| Ceilings, Floors & Floorings | 05 |
| Steps, Stairs Ladders | 06 |
| Joinery | 07 & 08 |
| Prepare to-the-scale drawings consisting of plans, elevations, sections, isometrics, details, etc. of: | |
| Swinging doors, windows & ventilators using different types of shutters | 09 & 10 |
| Sliding and combination doors, windows & ventilators using different types of shutters | 11 & 12 |
| Shelves & storages | 13 & 14 |
| Seats | 15 & 16 |
| Tables | 17 & 18 |
| Beds | 19 & 20 |

Notes:

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 of the individual student.

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publisher & Address |
|---------|---|--|-----------------------------|
| 01 | Joseph De Chaira Jullius Panero Martin Zelnik | Time Saver Standard for Interior Design & Space Planning | Mcgraw Hill New York |
| 02 | John Pile | Interior Design | Harry N. Adry Publishers |
| 03 | Ahmed Kasu | Interior Design | TWAIN Pub. Bombay |
| 04 | Jullius Panero Martin Zelnik | Human Dimensions and Interior Spaces | Whitney Library New York |
| 05 | Phillis Sleen Allen | Beginning of Interior Environment | New York |
| 06 | Shirish Bapat | Basic Design of Anthropometry | Bela books Publishers |
| 07 | Shirish Bapat | Living Area (Interior Space) | Bela books Publishers |
| 08 | Francis D K Ching | Interior Design Illustrated | Van Norstrund, New Delhi |
| 09 | V. S. Parmar | Design Fundamental in 1 st architecture | Somaiya Pub. Pvt. Ltd. |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR : FIRST
SUBJECT TITLE : MATERIALS AND PRODUCTS
SUBJECT CODE : 13665

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|-----|----|----|----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 04 | -- | -- | 03 | 100 | -- | -- | -- | 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)

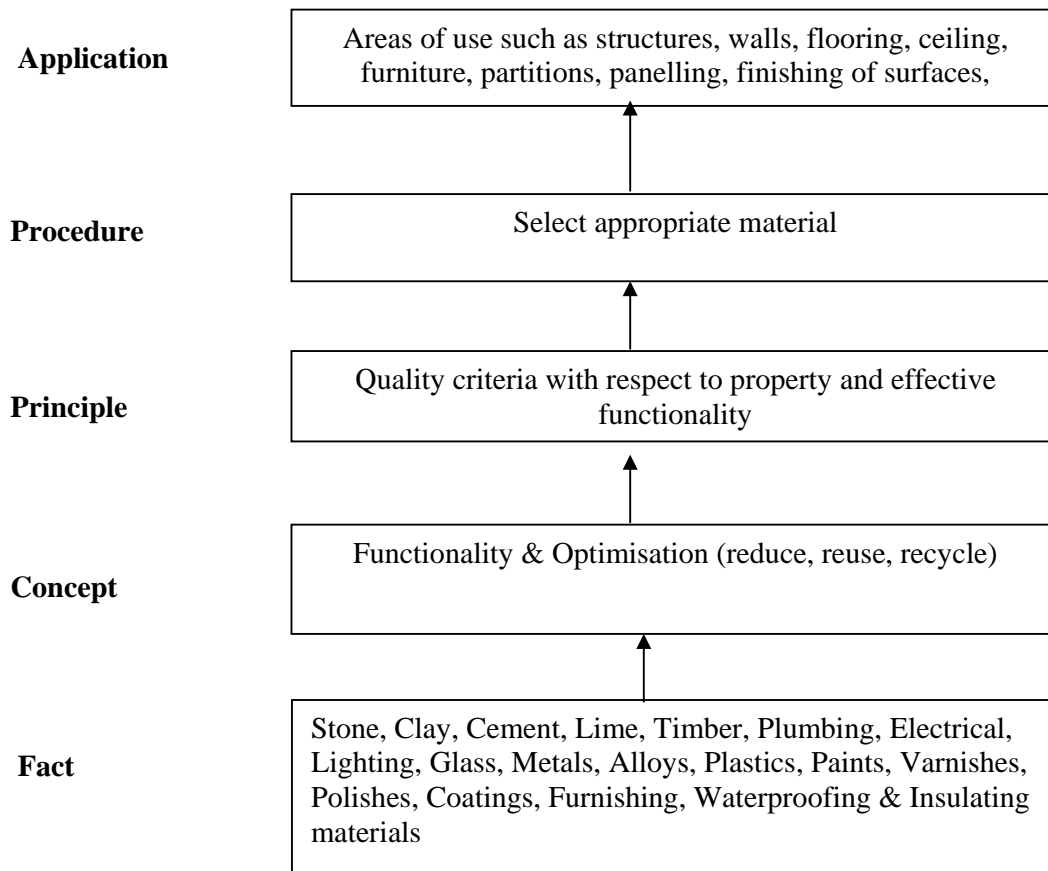
RATIONALE:

The 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.

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**LEARNING SKILLS:**

- a. Motor skills
- b. Intellectual skills

| CH No. | TOPIC | HRS | Marks |
|------------|---|-----------|-----------|
| 1 | Common Building Materials | | |
| 1.1 | <u>Stone: (06)</u> Geological, Physical and Chemical classification; types, sizes, properties and use of Igneous, Sedimentary and Metamorphic stones | | |
| 1.2 | <u>Clay: (06)</u> Types, Quality, Properties & Applications of clay Types, Quality & Properties of Brick Types, Quality, Properties of Terracotta Processing such as vitrifying, glazing, etc. (<i>Not for Examination</i>) | | |
| 1.3 | <u>Cement, Lime, Sand And Gypsum: (04)</u> Types & Properties of Cement, Lime, Fine and Course Aggregates Types & Applications of Concretes, Mortars and Plasters Properties & Applications of Gypsum & its products | | |
| 1.4 | <u>Timber: (04)</u> Classification and growth of trees and types of Timber Quality & Properties of Timber, Defects in Timber Seasoning & Preservation of Timber and other woods (<i>Not for Examination</i>) Uses of Hardwood and Softwood such as Teak, Rose, Deodar, Sal, Cedar, Silver, Ebony, etc. in edging, beading, moulding, battens, sections, planks, boards. Uses of cane, bamboo, etc in making of furniture | 40 | 24 |
| 1.5 | <u>Wood Products: (04)</u> Types, Quality & Uses of Veneers and Plywood Types, Quality & Uses of Block Board, Particle Board, Fibre Board, Chip Board, Hard Board, etc. Laminates and process of lamination. Process of Inlays, Post-forming, etc. (<i>Not for examination</i>) | | |
| 2 | Plumbing And Sanitary Materials | | |
| 2.1 | Types, Sizes & Quality of Pipes, Specials, Joints, Fittings and Fixtures for water supply and drainage systems (04) | | |
| 2.2 | Types & Sizes of Sanitary wares such as wash hand basins, Pans, Urinals, Bidets, Water Closets, Flushing Cisterns, Bath tubs, Shower cubicles, etc. (04) | 12 | 08 |
| 2.3 | Types & Sizes of accessories such as roll-holders, soap dishes, towel rods, napkin holders, and other racks, hooks & rings, etc. (<i>Not for examination</i>) | | |

| | | | |
|------------|--|-----------|-----------|
| 3 | Electrical And Lighting Materials | | |
| 3.1 | Types & Sizes of wires, conduits, casing capping, etc (02) | | |
| 3.2 | Types & Sizes of Electrical fixtures such as roses, holders, switches, sockets, switchboards, MCB, ELCB, etc. (04) | 06 | 10 |
| 3.3 | Types & Sizes of Electrical & Light fittings such as fans, Tube-light fittings, Lamp fittings, Chandeliers, etc. (04) | | |
| 4 | Floor Coverings | | |
| 4.1 | Rugs, durries and carpets of natural fibres, Carpets, PVC floors, Wood slats, etc. and floor coverings of synthetic fibres and in rolls such as PVC carpets (04) | 06 | 04 |
| 5 | Glass | | |
| 5.1 | Types, Quality and Properties (02) | | |
| 5.2 | Process of manufacturing of sheet, plate, and float glass (<i>Not for Examination</i>) | 08 | 04 |
| 5.3 | Post processing of glass such as etching, acid washing, toughening, staining, bending, edge polishing, film application (sun control and decorative) etc. (02) | | |
| 6 | Metals and Alloys | | |
| 6.1 | Type, Quality & Properties of Metals and Alloys (02) | | |
| 6.2 | Uses of Ferrous Metals such as Cast iron, Wrought iron, Mild steel, High carbon steel, etc. and non- Ferrous Metals and Alloys such as Aluminium, Copper, Zinc, Brass, Stainless steel, etc. (08) | 10 | 10 |
| 6.4 | Processing on metals such as Buffing, Plating, Anodising, Coating (Powder & Plastic), Galvanizing, etc. (<i>Not for Examination</i>) | | |
| 7 | Polymers and Allied Composites | | |
| 7.1 | Type, Quality & Properties of Plastics (02) | | |
| 7.2 | Uses of thermo-set and thermo-plastics such as Nylon, Acrylic, PVC, Poly-butylenes, Poly-Urethanes, etc. (04) | 10 | 10 |
| 7.3 | Uses of composites such as Polycarbonates, Glass reinforced plastic, Fibre reinforced plastic, Metal reinforced plastic, etc. (04) | | |
| 8 | Paints, Varnishes, Polishes and Coatings | 14 | 14 |
| 8.1 | Constituents (Pigment, Thinner, etc.), Classification (Water, Oil, acrylic based), Types (lime wash, distempers, acrylic emulsion, metallic, textured, etc.), Textural quality (Matt, Gloss, Satin, Lustre, etc) and Properties (06) | | |
| 8.2 | Process of painting (preparation of surface, primer coat, etc.) & application of paint with brush, roller, spray, etc. including application of paints on old, new and different surfaces. (04) | | |
| 8.3 | Constituents, Types & uses of Varnishes, Polishes & Coatings (French, | | |

| | | | |
|--------------|--|------------|------------|
| | Melamine, Lacquer, Polyurethane, etc.) (04) | | |
| 9 | Speciality Materials | | |
| 9.1 | <u>Furnishing Materials</u> (04) Types, Sizes and uses of Curtains, Screens and Blinds Types, Sizes and uses of Cushioning (Coir, Foam, Rubber, etc.) and Upholstery materials | 22 | 16 |
| 9.2 | <u>Waterproofing Materials</u> (04) Applications of Waterproofing materials such as Bitumen, Mastic asphalt, Asphalt sheets, Waterproofing powder, Gels and Liquids | | |
| 9.3 | <u>Insulating Materials</u> (08) Types, Quality 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, P U beads, Glass wool, Rock wool, Foam, Thermacol, Cork, Quilt, Jute, Coir, Particleboard, Hollow bricks, etc. | | |
| TOTAL | | 128 | 100 |

LEARNING RESOURCES:

| Sr.No. | Author | Title | Publication |
|---------------|-------------------|---|-------------------------------|
| 01 | D.N.Ghosh | Materials of constructions | Tata McGraw Hill |
| 02 | Gurucharan Singh | Building Materials | Standard Pub, & Dist |
| 03 | S.C. Rangawala | Engineering Materials | Charottar Pub. Anand (India). |
| 04 | K.P Roy Choudhary | Engineering Materials | Oxford Press, New Delhi |
| 05 | S.C. Rangawala | Water Supply & Sanitary Engineering | Charottar Pub. Anand (India). |
| 06 | William Rupp | Construction Materials of Interior Design | Whitney Library |
| 07 | M.V. Naik | Building Construction materials | Nirali Publication |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR : FIRST
SUBJECT TITLE : PRIMARY SERVICES
SUBJECT CODE : 13666

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|----|----|----|----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 01 | 01 | -- | 02 | 50 | -- | -- | -- | 50 |

NOTE:

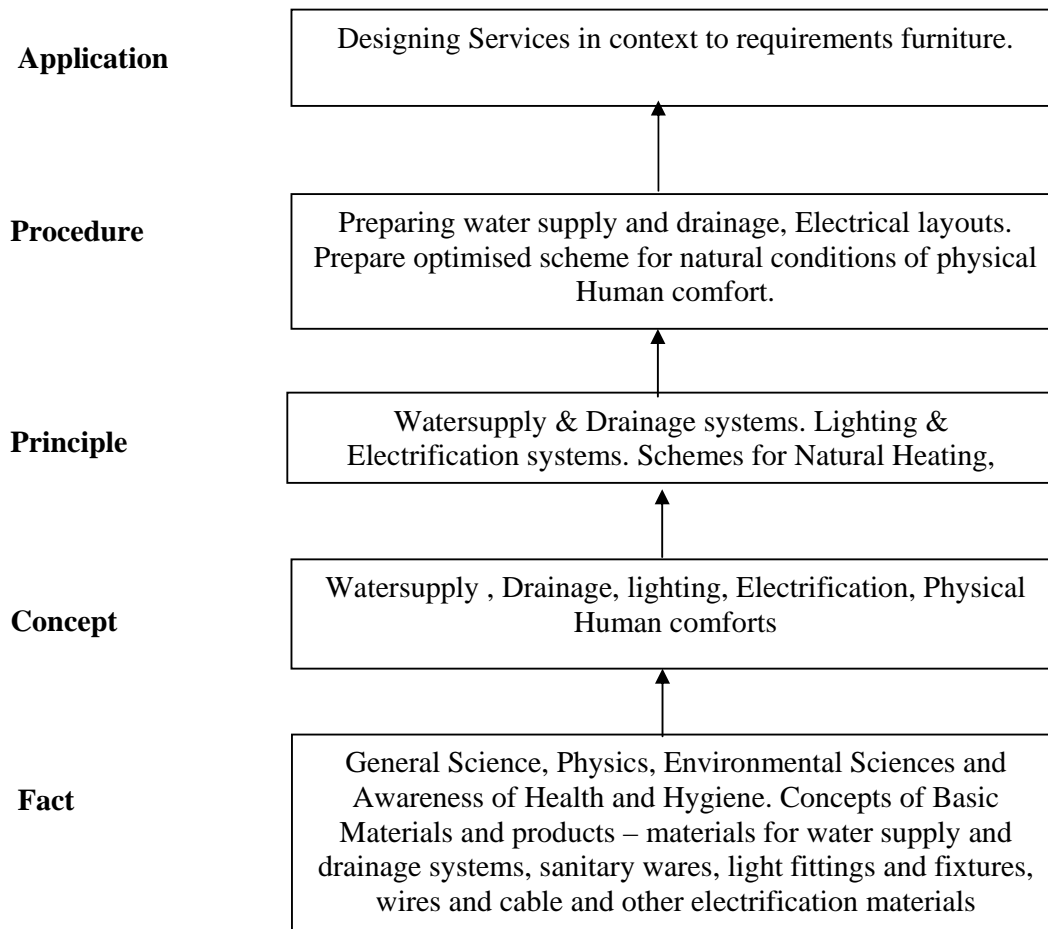
- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

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**LEARNING SKILLS:**

- a. Motor skills
- b. Intellectual skills

SYLLABUS:

| Ch. No. | Topic | Hrs | Marks |
|----------------|---|------------|--------------|
| 1 | Water Supply, Sanitation And Drainage | 10 | 16 |
| 1.1 | Introduction to principles of Water Supply, Sanitation & Drainage (02) | | |
| 1.2 | Cold and Hot water distribution & mixing systems using loft tanks, pressure pumps, geysers, boilers, mixers, diverters, etc. Waste and Soil Disposal systems using principles of Siphoning, Anti-Siphoning, Venting, etc. (<i>Focus on traps</i>) (04) | | |
| 1.3 | Distribution & Disposal (Open and Concealed) for: Cooking and Drinking – (Focus on Kitchen and Pantry areas) Washing – (Manual and Machine based, etc.) Bathing – (Modes such as shower, pressure jets and tubs) Flushing – (Urinal, Water Closet and Toilet areas) Miscellaneous - (Gardening, Indoor Fountain, Falls, Cascades) (06) | | |
| 1.4 | Understanding Distribution and Disposal layouts in context with appropriate gradients & Sizes, waterproofing consideration, appropriate use of specials such as joints & junctions. (04) | | |
| 2 | Electrification | 09 | 12 |
| 2.1 | Introduction (single and three phase, earthing, neutral, volts, amps and wattage relation), loading requirements. (02) | | |
| 2.2 | Principles of Distribution, and limitations of electrification (leakage, fluctuations, safety, excess loading, interferences, etc) (02) | | |
| 2.3 | Wiring standards & specifications (Sheathing, shielding, cross-section area, colour coding, etc), circuit wiring & installation systems (Open & Concealed). (04) | | |
| 2.4 | Understanding distribution layouts in context with appropriate loading use, wire sizing, sheathing consideration and appropriate use of specials such as joints & junctions. (04) | | |
| 3 | Light and Lighting | 08 | 14 |
| 3.1 | Introduction to Light (Natural & Non-natural light, Terminology such as Illumination, Lux, Lumens, Maintenance and Utility factors, Glare, etc.). Calculating the requirements according to the required levels of illumination. (02) | | |
| 3.2 | Quality of light such as Incandescent, Fluorescent, vapour lamps, halides & halogen, gas-filled such as neon, argon, etc, LED & lasers. (02) | | |

| | | | |
|--------------|--|-----------|-----------|
| 3.3 | Principles of Light (Transmission, reflection, distortion, refraction, inverse law, etc.). Types of lighting – i.e. Direct and Indirect (diffused, reflected). (04) | | |
| 3.4 | Selection of activity based types of illumination such as Ambient, Task, Ascent – Focus, Information such as step lighting, Signage, etc. And selection of systems of lighting such as up, down, side and cove lighting, track lighting, etc. (06) | | |
| 4 | Natural Heating, Ventilation and Conditioning of Air | | |
| 4.1 | Physical Human comforts – Climate based (Quality of Air, Temperature, Humidity) (<i>Not for Examination</i>) | | |
| 4.2 | 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). (04) | 05 | 08 |
| 4.3 | Principles of Ventilation; Natural Ventilation. Transmission of Heat; Control by natural means (04) | | |
| TOTAL | | 32 | 50 |

LIST OF TUTORIALS:**Draw Sketches in journal (Large size Square grid pad) OR Drawing Sheet:**

01. Preparing water supply and drainage layout for:

- a. Cooking and drinking areas
- b. Washing areas
- c. Bathing areas
- d. Flushing areas
- e. Ancillary areas

02. Preparing distribution and disposal for given layout with consideration of gradients, pipe sizes, water proofing with use of specials along with legend & nomenclatures, dimensions, etc.

03. Preparing Electrical layout for given interior space with consideration of loading use, specials along with legend & nomenclatures, dimensions, etc.

04. Calculating required illumination for given activities and room layouts

05. Preparing ambient illumination layout selecting necessary fittings, fixtures & systems.

06. Preparing accent and/or task illumination layout selecting necessary fittings, fixtures & systems.

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publication |
|----------------|------------------|---|---|
| 01 | F. Hall | Plumbing technology | British Library Cataloguing in Publication Data |
| 02 | Shubhangi Bhide | Building services & equipments | Rudra offset |
| 03 | H. L. Ohri | Water Supply and Sanitary Engineering | Charotar Publishing House |
| 04 | A. C. Panchdhari | Water Supply and sanitary installations | Bureau of Indian Standards, N Delhi |
| 05 | Sandeep Mantri | Practical Bldg. Const. & its mgmt | Mantri proj. & consultancy Pvt. ltd |
| 06 | B. Raja Rao | Electricity for Architects | Technical Book publisher |
| 07 | Norbert Lechner | Heating, cooling, lighting Design | Library of congress Cataloguing in Publication Data |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR : FIRST
SUBJECT TITLE : COMMUNICATION & PERSONALITY SKILLS
SUBJECT CODE : 13667

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|----|----|-----|-----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 02 | -- | 02 | -- | -- | -- | 25# | 25@ | 50 |

Notes:

Sync with overall philosophy of individual institution it has the discretion to conduct the subject in 8, 16, 24 or 32 weeks.

RATIONALE:

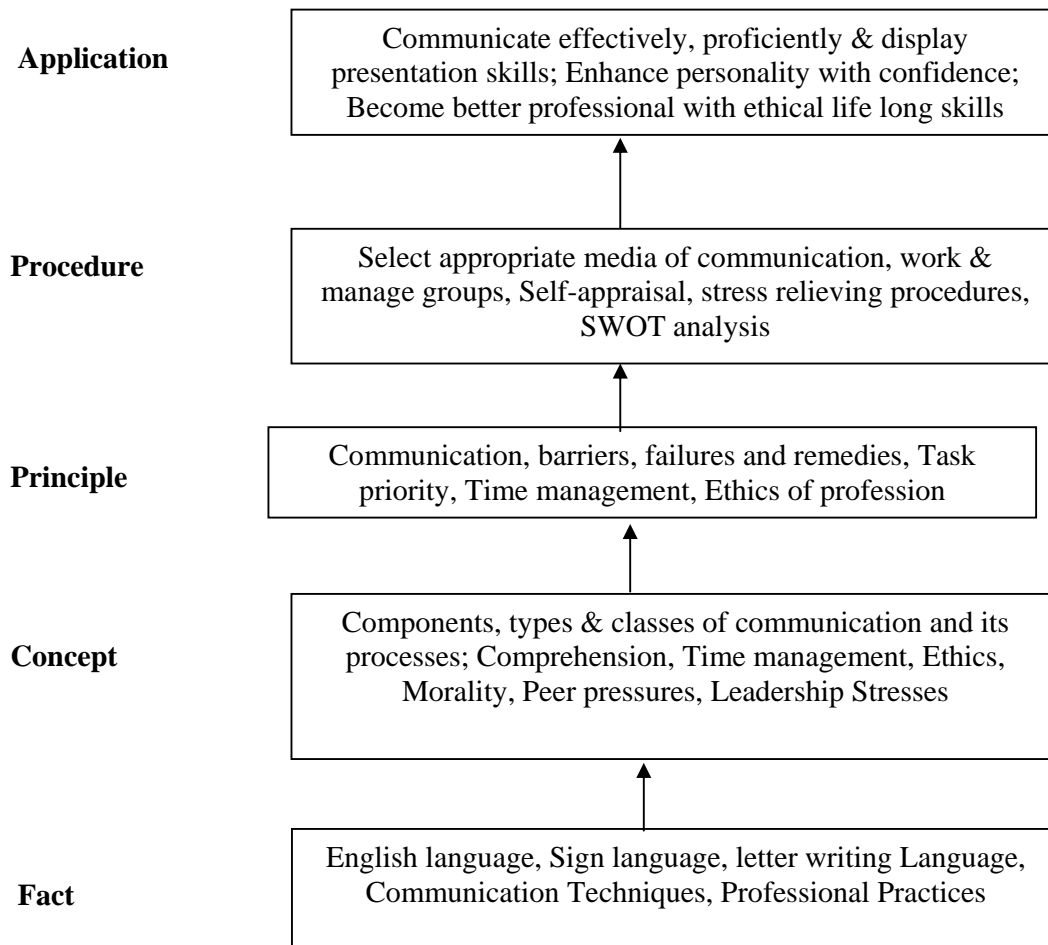
The subject intends to enhance Verbal and Non-verbal Communication Skills of students with an intention to improve the language and conversational ability through different media such as face to face, presentations, written, graphic, audio etc. It aims at making students understand how the different 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**LEARNING SKILLS:**

- a) Intellectual Skills
- b) Motor skills

SYLLABUS

| Ch. No. | Topic | Hrs |
|----------------|---|------------|
| 1 | Communication Skills | |
| 1.1 | Definition of communication; Process of communication (Defining context, Knowing audience, Designing message, Encoding, Selecting proper channel, Transmitting, Receiving, Decoding and Feedback) | 12 |
| 1.2 | Elements of communication (Sender, Receiver, Message, Channel, Feedback & Context) | |
| 1.3 | Principles of communication (Definition, Purpose, 7Cs, Effective messaging, etc) | |
| 1.4 | Knowing & overcoming barriers to effective communication | |
| 1.5 | Types of communication (Formal, Informal); Forms of communication (Verbal, Non-Verbal & Written); Direction of communication (Lateral, Vertical [upward/downward], Diagonal); Different media of communication (Audio, Video, Graphic, Written, Print, Electronic etc) | |
| 2 | Voice Culture & Body language | |
| 2.1 | Introduction to voice culture (Designing messages, preparation, practice and presentation of written and graphic contents); International phonetic script | 12 |
| 2.2 | Vocalic (aspects of speech such as tone, emphasis, pitch, volume, pauses, undulations, timbre etc); Presentation skills for an individual and in a group | |
| 2.3 | Codes of communication (Body language, Chronemics & Artefacts) | |
| 2.4 | Body language (Kinesics- eye contact, gesture, posture, body movements & facial expression); Proxemics - (Using space, Physical Appearance); Haptics - (touch); Chronemics (managing time). Artefacts (environment & objects) | |
| 2.5 | Using combination of non-verbal and verbal communication Using & interpreting visuals - tables, graphs, charts, etc | |
| 3 | Presentation Skills | 12 |
| 3.1 | Designing message outline - Organizing ideas, determining the general and specific purpose of communication, analysing the receiver of written messages, context, scope etc. Ways of writing topic sentences, paragraphs, function paragraphs, summary, information text etc. Forms of written messages | |
| 3.2 | Business Writing: Business letter writing: parts of business letters, standards of these, letter of application, inquiry, reply to inquiry, complaint, reply to complaint, persuasive, apology etc types in relation to the profession of interior designing. Use of effective and grammatically correct language | |

| | | |
|--------------|---|-----------|
| 3.3 | Drafting reports: short reports, concept and contents of long reports, effective sentence construction, punctuation and presentation of the text | |
| 3.4 | Analytical writing, Language of specification writing, Technical writing, literary writing Reports generation including graphs, pie charts, Bar charts, comparatives, etc. | |
| 5 | Debate, Groups & Discussions | |
| 5.1 | Groups (Introduction, formation, thought, pitfalls, dynamics); Teams (Types, team building, problem of resistance, stuck teams, difference between team and group, team member); Group communication and meetings (cooperation & collaboration); Leadership (Society, Structure, changes in society & interpersonal relations.) | 08 |
| 6 | Manners & Etiquettes, Grooming & Confidence Building | |
| 6.1 | Interpersonal skills (Conflict, resolution, transactional analysis, etc.); Personality (Areas & analysis); Stress (Physiology & health, coping strategies, counteracting stress, Yoga, stress in group work, controlling emotions); Frustration (introduction, defence mechanism) | 12 |
| 7 | Time Management and Success Mantra | |
| 7.1 | Punctuality, Self Discipline, Delegation of work, Precision, Maintenance of Database, Prioritisation, Systemization and Standardization; SWOT analysis (Concept & process) | 08 |
| TOTAL | | 64 |

PRACTICAL ASSIGNMENTS (Total 12 numbers)

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.

| Description | No. |
|---|-----|
| Prepare in graphical and print media form: | |
| Notes about elements, principles, types & barriers in communication. | 01 |
| Elaborate how to communicate effectively in context to interior design profession | 02 |
| Technical report of visit to site/factory/exhibition focussing on interior design relevance | 03 |
| Case study of residential interiors, your interpretations & appraisals in analytical manner | 04 |
| Book review of any current interior works | 05 |
| Critical appreciation of interior work carried out by any professional interior designer | 06 |
| Personal critic about Manners & Etiquettes, Grooming & Confidence Building | 07 |
| Self-appraisal and SWOT analysis | 08 |
| Collect, record and present information in verbal form through: | |

| | |
|---|-----------|
| Individual presentation on any relevant interior study | 09 |
| Individual presentation of interior design defending the relevance and logic of your solution | 10 |
| Group seminar on any relevant interior trend & style | 11 |
| Debate on differences in opinion related to the field of interior design | 12 |

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.

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publication |
|---------|------------------------------|--|-----------------------------------|
| 01 | K K Nelson, F Dubors | Learning to learn | Allyn & Bacon |
| 02 | E. H. McGrath | Basic Managerial Skills for all | Prentice hall of India |
| 03 | P D Kulkarni & B B Sharma | Independent Study Techniques | TTTI, Chandigarh |
| 04 | Elizabeth Hierney | 101 Ways to Better Communication | Kogan Page |
| 05 | Malvika Nagarkar | Communication Skills | MSBTE |
| 06 | Wren & Martin | English Grammar | Chand Books |
| 07 | Burgoon Michael | Human Communication | London: Sage Pub. |
| 09 | G Leech & Jan Svartvik | A Communicative grammar of English | ELBS |
| 10 | Thomas Huckin & Leslie Olson | Technical writing and Professional communication | London William Collins & Sons Co. |
| 11 | Lyn Clark & Zimmer | Business English & Communication | New York: Mcgraw Hill |
| 14 | John Thill & Courtland | Excellence in Business communication | New York: Mcgraw Hill |
| 15 | R K Bansal & J B Harrison | Spoken English for India | New York: Mcgraw Hill |
| 16 | J D O'Conner | Better English Pronunciation | N Delhi: Orient Longman |
| 18 | Fred Luthans | Organizational Behaviour | Mc Graw Hills |
| 19 | E H Megram | Basic Managerial Skills for all | Prentice Hall of India |
| 20 | Glenn Parker | Team Building | Viva Books Pvt Ltd |
| 21 | Elizabeth M Christopher | Leadership Training | Viva Books Pvt Ltd |

Web Sites:

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

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR : FIRST
SUBJECT TITLE : PARALINE AND PERSPECTIVE PROJECTIONS
SUBJECT CODE : 13668

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|----|----|----|------|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 01 | -- | 05 | -- | -- | -- | -- | 100@ | 100 |

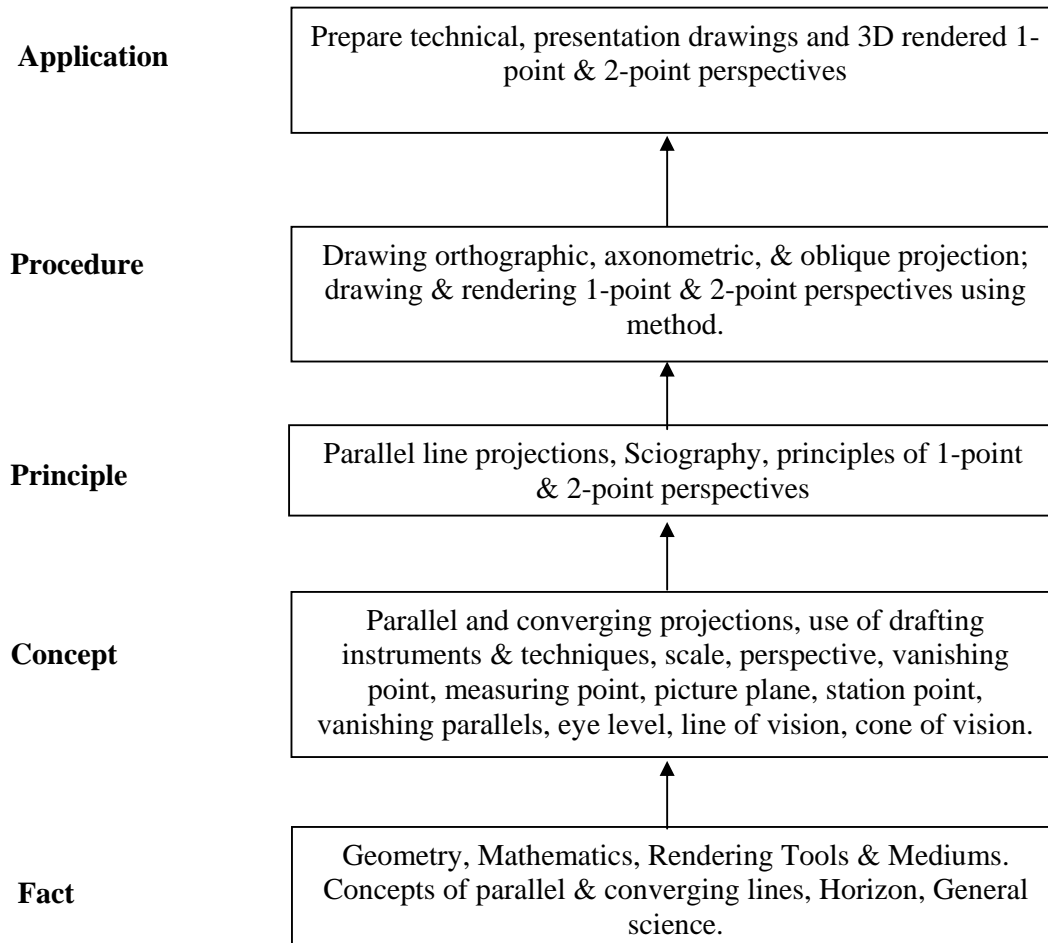
RATIONALE:

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 design 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.

Learning Structure**LEARNING SKILLS:**

- a. Intellectual Skills
- b. Motor skills

SYLLABUS:

| CH. No. | TOPIC | HRS |
|------------|--|-----------|
| 1 | Basics of Graphical Representation | |
| 1.1 | Study of line, shape and form; pattern, texture, weight, gradation & value; material indication, annotation, interpretation of lines and lettering techniques. Principals of representation of volumes, solids and objects using Static & Dynamic Visualisation as well as using Imagery Perception | 04 |
| 2 | Basics of Technical Drawing | |
| 2.1 | Study of drafting techniques and use of drafting tools; methodology of representing Lines and Shapes; Scale and Proportion. Principles of parallel line Projection | 01 |
| 3 | Parallel Line Projections | |
| 3.1 | Orthographic Projections (Plans, Elevations and Sections); Oblique Projections (Cavalier and Cabinet); Axonometric Projections (Isometric, Military and other) | 14 |
| 4 | Rendering & Presentation Techniques | |
| 4.1 | Rendering techniques using Graphite & Colour Pencils, Pen & Ink, Watercolours, Photo colours ('Fuji'), Composites (Inks with water colours, Inks with colour pencils, etc). Study of rendering effects (Sciography, Light, reflection, etc.) | 04 |
| 4.2 | Study of preparing Presentation & Technical Drawings | |
| 5 | Principles of Perspective & Technical method s of drawing perspective | |
| 5.1 | 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 and the three-point perspective (<i>3-point convergence only as explanation and Not for examination</i>) | 09 |
| 5.2 | Technique of drawing 1-point perspective assuming the picture plane in front; behind; & in-between the object (Explained as combination of front & behind) | |
| 7 | Technique of drawing 2-point perspective assuming the picture plane in front; behind; & in-between the object (Explained as combination of front & behind) | |
| | TOTAL | 32 |

PRACTICAL ASSIGNMENTS (Total 14 numbers)

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

| Description | No. |
|--|-----|
| 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: | |

| | |
|---|------------------------|
| 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. | 01 |
| Different patterns and textures with variation in terms of weight, gradation and value. Conventional indications for various constructional materials and standard annotations. | 02 |
| Static (one position) and dynamic (different stills in motion about X, Y, Z axis) of volumes and solids (cube, pyramids, prisms, cone, etc.) and morphing into furniture form. | 03 |
| Cavalier, cabinet & axonometric views of furniture objects. | 04 |
| Prepare drawings of the following: | |
| Plans, elevations, section & isometric of 6 furniture objects (different geometric forms). | 05 |
| Fully detailed technical plan & sectional elevations of any interior space that also uses primary service installations. | 06 |
| 1-point perspectives with relevant block furniture with the condition of Picture plane - a. In front, b. Behind, & c. In between the room. | 07, 08 & 09 |
| 2-point perspectives with relevant block furniture with the condition of Picture plane - a. In front, b. Behind, & c. In between the room. | 10, 11 & 12 |
| 1-point perspective using best rendering medium skills acquired by the individual student. | 13 |
| 2-point perspective using best rendering medium skills acquired by the individual student. | 14 |

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publisher & Address |
|----------------|-----------------|--|--------------------------------|
| 01 | N.D. Bhatt | Engineering drawing- Plane & Solid Geometry | Charottar Pub. Anand, Gujrat |
| 02 | S. C. Rein Koff | Interior Graphics and Design Standards | Whitney Library, New York |
| 04 | Robert W. Gill | The Thames and Hudson Manual of Rendering with pen and ink | Thames & Hudson ltd. London |
| 05 | Graphic Shaw | Interior Perspectives to Architectural Designs | Graphic Shaw |
| 06 | Shankar Mulik | A Text Book of perspectives and graphics | Allied Pub. Bombay |
| 07 | F D K Ching | Perspective Drawing | -- |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR : FIRST YEAR
SUBJECT TITLE : MARKET STUDY AND PRACTICES - 1
SUBJECT CODE : 13669

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|----|----|----|-----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| -- | -- | 01 | -- | -- | -- | -- | 25@ | 25 |

RATIONALE:

This subject intends the student to understand professional and practical aspects of Interior design through guest lectures & workshops; Market surveys; Case studies & Site visits related to First Year.

OBJECTIVES:

The student will gain first-hand experience in aspects of workshops, Market surveys, Case studies and Site Visits related to subjects of First Year.

LEARNING SKILLS:

- a. Intellectual skills : Observational, Analytical
- b. Motor skills : Data Collection

PRACTICAL ASSIGNMENTS (Total 12 numbers)

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.

| Description | No. |
|--|-----------|
| Prepare write-ups & reports of the guest lectures given by eminent professionals on: | |
| Principles & elements of Design; ergonomics & design concepts; water supply, sanitation & drainage; electrical & lighting; natural heating, ventilation & conditioning of air; etc. | 01 |
| | 02 |
| Prepare write-ups & reports of personal & group recording on: | |
| Demonstrations and/or workshops on creativity; techniques of rendering; innovative use of materials (Cane, bamboo, clay, ceramics, etc); making decorative elements (Lampshades, showpieces, indoor fountain, murals, etc); use of techniques (Carpentry, paper-folding, | 03 |
| | 04 |

| | |
|--|--|
| structural framing, sunk-slab for services, masonry & other installations, etc). | |
| Prepare individual analytical reports on case studies & site-visits conducted to: | |
| Residential Interiors for recording measurements, preparing measured drawing, learning & observing design, construction & primary services; Factory premises for studying stone cutting & polishing, plywood manufacture, pottery making, etc; Interior sites for studying different masonry, carpentry, false-ceiling, & primary services based activities. | 05 06 07 08 |
| Compile data on market surveys conducted for types, availability, sizes, colour, rates, etc. of: | |
| a. 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, etc). | 09 |
| b. Primary services (Plumbing & sanitary materials, electrical & lighting materials, etc). | 10 |
| c. Functional & decorative accessories (Calendars, clocks, ashtrays, lampshades, water falls, curios, statues, murals, paintings, posters, art & artefacts, etc). | 11 |
| d. Appliances & Gadgets (Mixers, juicers, ovens, cooking ranges, geysers, boilers, refrigerators, washing machines, dish washers, audio & video systems, computers, inverters, etc). | 12 |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR OF STUDY : SECOND YEAR
SUBJECT TITLE : ADVANCE INTERIOR DESIGN
SUBJECT CODE : 13678

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|-----|----|----|-----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 01 | -- | 05 | 08 | 200 | -- | -- | 50@ | 250 |

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)**

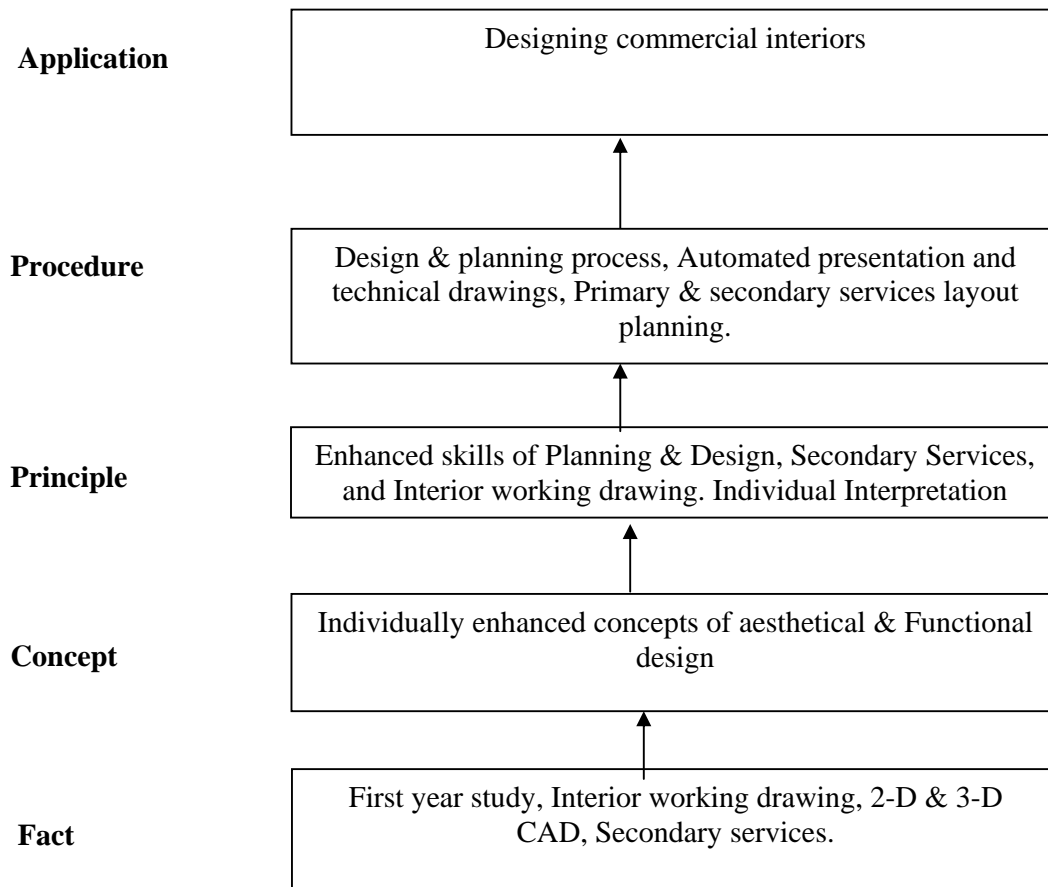
RATIONALE:

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 Sq. M. to complex activity based large-scale commercial space of about 500 Sq. M. (Shop to Corporate office)

Learning Structure**LEARNING SKILLS:**

- Motor skills
- Intellectual skills

SYLLABUS:

| CH. No. | TOPIC | HRS | Marks |
|----------------|---|------------|--------------|
| 1 | Commercial Interior Design and Drawing | 16 | 200 |
| | Instructions 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. | | |
| TOTAL | | 16 | 200 |

Notes:

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.

PRACTICAL ASSIGNMENTS (Total 1, 2 or 3 in sync with the philosophy of individual institute)

To be drawn to scale on A1 size drawing papers

| Description | No. |
|---|------------------|
| Prepare and present scaled plan, sectional elevations, technical representations, and proportionate 3-D visuals all drawn and colour rendered manually (and/or automated) that depict case-studies, manifestations, concepts, schematics, presentation and technical drawings | 1, 2 or 3 |

Notes:

1. Assessment of the term work is to be carried out continually by the subject teacher giving weightage of 80% towards designing acumen and 20% towards technical skills of the individual student.

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publisher & Address |
|---------|-------------------------------|---|-------------------------------|
| 01 | Stafford Cliff | The best exhibition Stand Design 2 | Roto vision Sa Switzerland |
| 02 | Vilma Barr Katherine Field | Stores: Retail Display and Design | PBC International Inc. |
| 03 | Carles Broto | New shop Design | Arian Mostaedi |
| 04 | Rolshoven Martin | Exhibition Design | Rockport Publishers |
| 05 | Jeong JI Seong ed. | Interior Design Bar and Restaurant | Jeong JI Seong |
| 06 | Nanuelli Sara | Design for Shopping New Retail Interiors | Laurence King Publishing Ltd. |
| 07 | Jeong JI Seong | Interior design boutique, hotel & spa (Motel & hotel) | Jeong JI Seong |
| 08 | Carles Broto | New shop Design | Arian Mostaedi |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR OF STUDY : SECOND YEAR
SUBJECT TITLE : SPECIALITY INTERIOR DESIGN
SUBJECT CODE : 13679

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|----|----|-----|------|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 01 | -- | 05 | -- | -- | -- | 50# | 100@ | 150 |

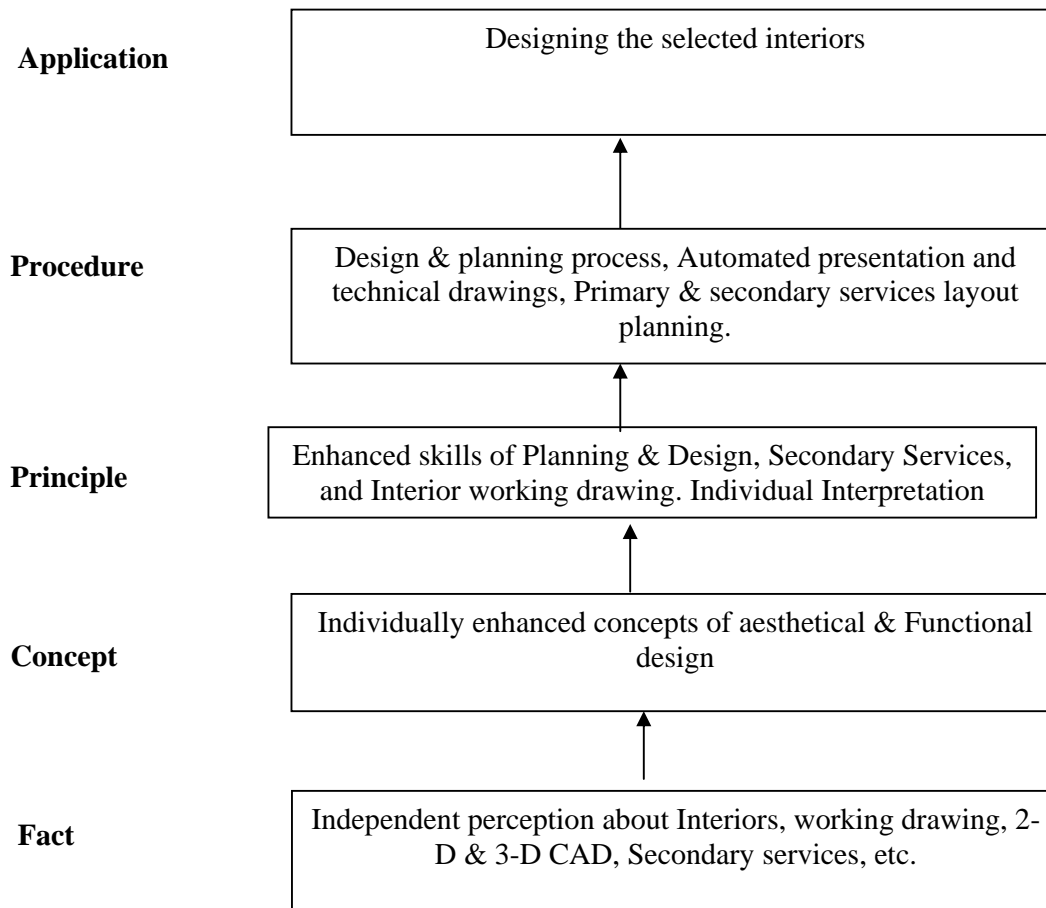
RATIONALE:

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 100 to 300 Sq. M. (Institution, Government office, Cinema hall, Auditorium, Transport hub catering to road and rail, etc.)

Learning Structure**LEARNING SKILLS:**

- a. Motor skills
- b. Intellectual skills

SYLLABUS:

| CH. No. | TOPIC | HRS |
|----------------|--|------------|
| | Speciality Interior Design and Drawing | |
| 1 | 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. | 16 |
| TOTAL | | 16 |

PRACTICAL ASSIGNMENTS

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

| Description | No. |
|--|----------|
| Prepare and present analytical report, scaled plan, sectional elevations, technical representations, and proportionate 3-D visuals all drawn and colour rendered manually (and/or automated) that depict case-studies, manifestations, concepts, schematics, presentation and technical drawings | 1 |

Notes:

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 any 1 practical assignment portfolio consisting of completed case studies, concept, schematics, presentation and technical drawing set.
2. Assessment of the term work is to be carried out continually by the subject teacher giving weightage of 80% towards designing acumen and 20% towards technical skills of the individual student.

LEARNING RESOURCES:

Individual, in relation with the subject selected by the student.

Referance material could be collected through Internet as well as books, as per the guidance given by the Guide concerned.

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR OF STUDY : SECOND YEAR
SUBJECT TITLE : INTERIOR WORKING DRAWING
SUBJECT CODE : 13680

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)

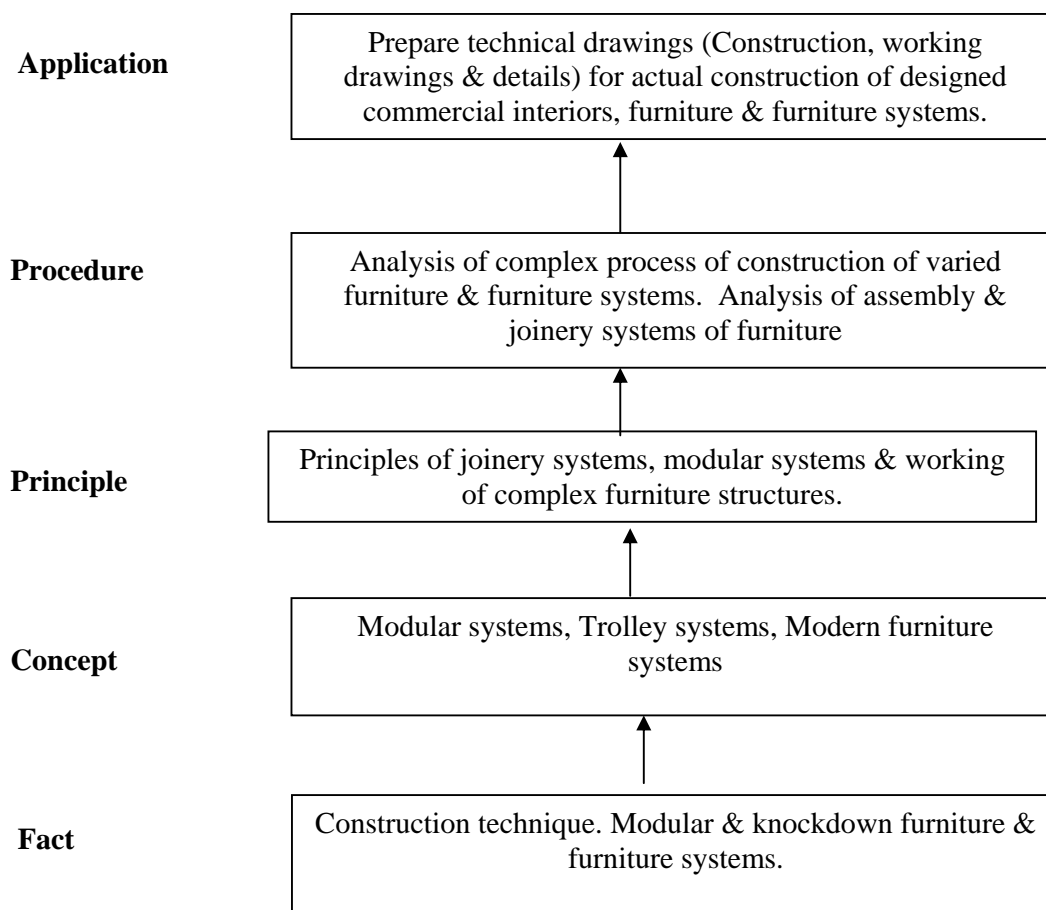
RATIONALE:

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:

- a. 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.
- b. 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.

Learning Structure**LEARNING SKILLS:**

- a. Motor skills
- b. Intellectual skills

SYLLABUS:

| Ch. No. | Topic | Hrs | Marks |
|----------------|--|------------|--------------|
| 1 | Knockdown & Modular furniture | 08 | 12 |
| 1.1 | Types of knockdown & modular furniture such as seats & seating; tables & counters; storage units, trolleys, partitions & other furniture systems. | | |
| 1.2 | Principles of optimisation, structure, assembly components and services provision focussing on readymade or customized need including suitability of material and effective use. | | |
| 1.3 | Analysing need & selecting and/or designing & detailing appropriate knockdown or modular furniture suitable for commercial requirement. (12) | | |
| 2 | Automated furniture systems | 08 | 08 |
| 2.1 | Introduction to need of automation of furniture and identification such as movable partitions, storages, etc. | | |
| 2.2 | 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, etc. (04) | | |
| 2.3 | Analysis of need & selection of automation systems based on - capacity, size, shape, form, essential clearances and other technical data standards. (04) | | |
| 3 | Automated & stationary movement systems | 12 | 16 |
| 3.1 | Introduction to need of mass/bulk movement (horizontal, inclined, vertical) of persons and materials. | | |
| 3.2 | Working principles of motors, lifts, elevators, conveyors and identification of use in passenger, service & special lifts; hydraulic & scenic elevators; belt, chain, pneumatic conveyors; revolving discs, platforms; moving stairs & escalators. | | |
| 3.3 | Study of movement systems based on - capacity, size, shape, form, essential clearances and other technical data standards. (04) | | |
| 3.4 | Conceptualisation of designer steps, stairs & ladders using appropriate materials, technique, assembly, ornamentations and working out designer details. (12) | | |
| 4 | Speciality openings, panelling & partitions | 12 | 20 |
| 4.1 | Special formations of jambs, frames & casings based on heat, fire, & sound insulating needs. (04) | | |

| | | | |
|--------------|---|-----------|------------|
| 4.2 | Special study of doors, windows & ventilators based on heat, fire, & sound insulating needs including study of special hardware, modes of operation, materials & techniques, types of shutters, etc. (08) | | |
| 4.3 | Designing & preparing working details for thermal & sound insulating panelling & partitions including using appropriate material and technique, etc. (08) | | |
| 5 | Commercial Furniture | | |
| 5.1 | <p>Designing & preparing working drawings focussing on need, requirement, options, form, finish, materials, construction, and hardware: -</p> <p><u>Special types of displays & storages</u> such as bulk filing, books, & materials, bar overhead, shop front display & showcases, etc. including designing unique furniture using suitable options. (12)</p> <p><u>Commercial seats & seating</u> such as visitor chairs & sofa seating (With/without armrests), executive & conference chairs (low & high back) (12).</p> <p><u>Special types of worktops</u> such as side & rear credenza, executive/reception desk & table, conference table & worktop, etc. (12).</p> <p><u>Single & multi-level counters</u> (With/without storage) such as bank, bar, reception, ticket booking, service, etc. (12).</p> | 24 | 44 |
| TOTAL | | 64 | 100 |

PRACTICAL ASSIGNMENTS (Total 16 numbers)

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

| Description | No. |
|--|---------|
| Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain: | |
| Individual analysis of design & details of existing knockdown & modular furniture based on principles of optimisation, structure, assembly components & services provision | 01 & 02 |
| Analysis of design & details of existing automated furniture based on individual observations. | 03 & 04 |
| Collect, record and generate scaled drawings of: | |
| Automated & stationary movement systems | 05 & 06 |
| Speciality openings, panelling & partitions | 07 & 08 |
| Prepare to-the-scale working drawings and details of: | |

| | |
|--------------------------------------|--------------------|
| Special types of displays & storages | 09 & 10 |
| Commercial seats & seating | 11 & 12 |
| Special types of worktops | 13 & 14 |
| Single & multi-level counters | 15 & 16 |

Notes:

1. External examiner to conduct the orals to check individual acumen, grasp, & understanding of the subject based on the entire portfolio of assignments.
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 of the individual student.

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publisher & Address |
|----------------|--|--|---------------------------------------|
| 01 | F D K Ching | Building Construction Illustrated | Van Nortrand |
| 02 | William P. Spence L. Duane Griffith | Furniture & Cabinet Construction | Prentice Hall Inc. New Jersey |
| 03 | Mario Dal Fabro | How To Build Modern Furniture | McGraw Hill Book Company, New York |
| 04 | William P. Spence L. Duane Griffith | Cabinet making, design & construction | Prentice Hall Inc. New Jersey |
| 05 | D.A.C.A. Boyne | Architects' Working Detail Vol. I | The Arch. Press Ltd. London |
| 06 | D.A.C.A. Boyne | Architects' Working Detail Vol. III | The Arch. Press Ltd. London |
| 07 | D.A.C.A. Boyne | Architects' Working Detail Vol. IV | The Arch. Press Ltd. London |
| 08 | D.A.C.A. Boyne | Architects' Working Detail Vol. V | The Arch. Press Ltd. London |
| 09 | D.A.C.A. Boyne | Architects' Working Detail Vol. VIII | The Arch. Press Ltd. London |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR OF STUDY : SECOND YEAR
SUBJECT TITLE : INTERIOR PROFESSIONAL PRACTICE
SUBJECT CODE : 13681

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)

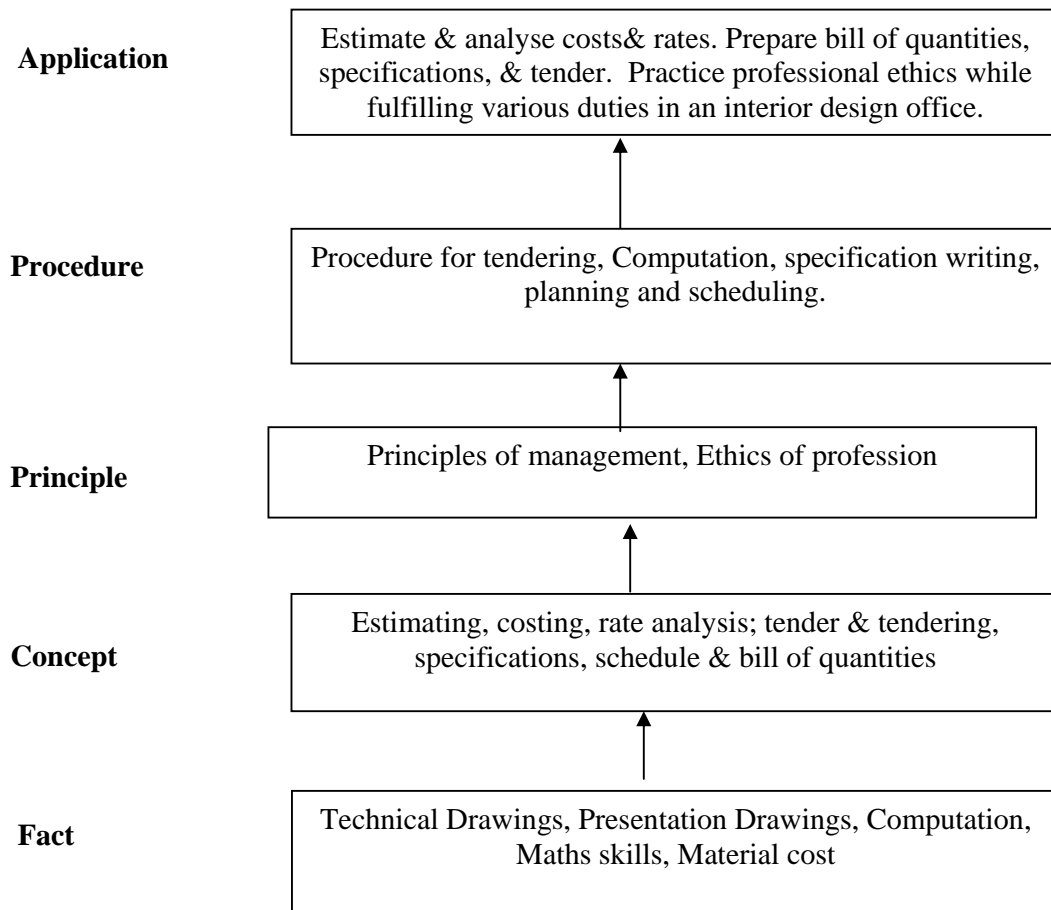
RATIONALE:

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**LEARNING SKILLS:**

- a. Motor skills
- b. Intellectual skills

| CH No. | TOPIC | HRS | Marks |
|------------|--|-----------|-----------|
| 1 | Estimating, Costing & Analysing Rates | | |
| 1.1 | Introduction to concepts of guesswork, estimation, costing & rate analysis. Need for estimating, costing & rate analysis. (02) | | |
| 1.2 | Components of estimation, costing & analysing rates (Drawings & specifications, units & modes of measurements, work out put, material & labour cost, contingencies, profit margins, indirect costs, etc). (04) | 08 | 10 |
| 1.3 | Methods of estimating (lump-sum, work specific, area of use, per number of user, day-work, item-rate, etc); costing (percentage basis, item rate basis, etc) & rate analysis (Primarily item rate basis) (04) | | |
| 2 | Tender & Tendering | | |
| 2.1 | Introduction & Definitions (<i>Not for examination</i>) | | |
| 2.2 | Tendering Procedure: Tender Document Preparation, Types of Invitations (Public Notice, Private Invitation, Negotiation) Floating of Tender, Opening and award of tender (04) | | |
| 2.3 | Aspects of Tender: Units of measurement & modes of measurement; Specifications of raw materials; Specifications and Schedule writing. (<i>Not for examination</i>) | 08 | 12 |
| 2.4 | 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 (04) | | |
| 2.5 | Contractual Procedures: Work order letter and acceptance letter, Interim bills and final bills, Bills certifications (04) | | |
| 3 | Career Opportunities & professional ethics | | |
| 3.1 | Entering the Profession (<i>Not for examination</i>) | | |
| 3.2 | Avenues for professional practice including advantages and limitations (04) | 04 | 08 |
| 3.3 | Professional Ethics (<i>Not for examination</i>) | | |
| 3.4 | Codes of conduct and responsibility towards client, fellow professionals, profession, contractors, suppliers, other consultants and the society (04) | | |
| 4 | Office & project management | 12 | 20 |
| 4.1 | Working of Interior Design Studio & ideal office structure; Distribution of work, authority, duties & responsibilities, Reporting, etc (04) | | |
| 4.2 | Work ethics: Acts applicable; Basis for Professional Fees & Scales of fees; Physical workplaces in the office; Accounting, maintenance of book of accounts and records (08) | | |

| | | | |
|--------------|---|-----------|-----------|
| 4.3 | Basic principles of management and application to interior designing projects (04) | | |
| 4.4 | Introduction to Bar Charts, Gantt Chart, PERT/ CPM (04) | | |
| TOTAL | | 32 | 50 |

PRACTICAL ASSIGNMENTS (Total 06 numbers)

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

| Description | No. |
|---|-----------|
| Design, draw neat and proportionate sketches & workout: | |
| Cost of 4 residential furniture (1 each of shelves & storages, seats, tables & bed) | 01 |
| Estimate of 4 commercial furniture (1 each of displays & storages, seats & seating, worktops & counters) | 02 |
| Specification for 2 non-structural masonry installations & 2 speciality panelling & partitions. | 03 |
| Specification for flooring in a living room & false-ceiling for a conference room | 04 |
| Rate analysis for any knockdown/modular furniture | 05 |
| Prepare: | |
| A set of item rate tender for any one residential or commercial project. A Bar chart or a Gantt chart for the works. | 06 |

Notes:

1. External examiner to conduct the orals to check individual acumen, grasp, & understanding of the subject based on the entire portfolio of assignments.
2. Assessment of the term work is to be carried out continually by the subject teacher on similar parameters as above.

LEARNING RESOURCES:

| Sr.No. | Author | Title | Publication |
|--------|-------------------------------|--|---------------------------|
| 01 | Roshan Namavati | Professional Practice (Estimation & Valuation) | Lakhani Book depot |
| 02 | Roshan Namavati | Architectural Detailing in Residential Interiors | Lakhani Book depot |
| 03 | C M Pitrowski | Professional Practice in Interior Design | Van Nostrand Reinhold |
| 04 | Harry Siegel, CPA, Alan Sigel | A Guide to Business Principle and Practices for Interior Designers | Whitney library of design |
| 05 | William R. Hall | Contract Interior Finishes | Whitney library |
| 06 | William Rupp | Construction Materials of Interior Design | Whitney Library |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR OF STUDY : SECOND YEAR
SUBJECT TITLE : SECONDARY SERVICES
SUBJECT CODE : 13682

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|----|----|----|----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 01 | 01 | -- | 02 | 50 | -- | -- | -- | 50 |

NOTE:

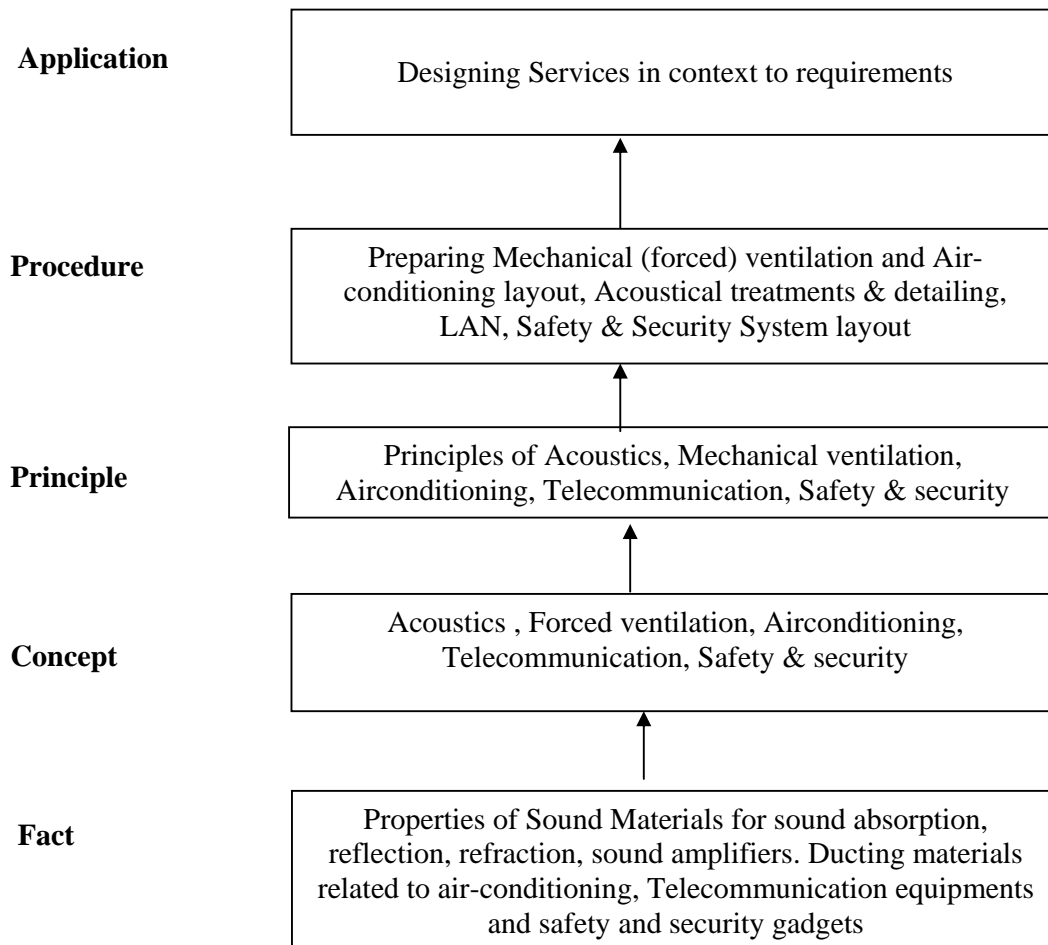
- Two tests each of 25 marks to be conducted as per the schedule given by MSBTE.
- Total of tests marks for all theory subjects are to be converted out of 100 and to be entered in mark sheet under the head Sessional Work. (SW)

RATIONALE:

The subject intends to equip the students with 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.

OBJECTIVES: The student will be able to:

- a. Apply concepts of secondary services.
- b. Use appropriate resources including optimisation.
- c. Design layouts for services.

Learning Structure**LEARNING SKILLS:**

- a. Motor skills
- b. Intellectual skills

SYLLABUS:

| CH. No. | TOPIC | HRS | Marks |
|----------------|--|------------|--------------|
| 1 | Heat and Sound | | |
| 1.1 | Principles of heat and effects of heat, Purpose of thermal insulation, advantages of insulation, general principle of thermal insulation and modes of insulation. (08) | 10 | 16 |
| 1.2 | 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) (08) | | |
| 1.3 | Strengthening, insulating, and eliminating of sound. Defects of sound. (<i>Not for examination</i>) | | |
| 1.4 | 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. (<i>Not for examination</i>) | | |
| 2 | Mechanical Ventilation and Air conditioning | | |
| 2.1 | Principles of forced ventilation: Mechanical Ventilation, Principles of Ducting and distribution for ventilation and conditioned air. Types of Fans: propeller, Auxiliary etc, Mechanical modes of ventilation (04) | 10 | 16 |
| 2.2 | Principles of Air conditioning, Refrigeration Cycle (04) | | |
| 2.3 | Systems of Air-conditioning: Non-ductable and ductable (08) Non-ductable - Window unit, Split units (Floor, wall, ceiling mounted, etc). Ductable - Split, Packaged (Air-cooled duct, Floor standing air & water-cooled units, Central air-conditioning, DX systems, Chilled water systems etc according to criteria of Volumetric load, occupancy and various activities. | | |
| 2.4 | Applications: According to various criteria of Volumetric load, occupancy and various activities. (<i>Not for examination</i>) | | |
| 3 | Communication systems | | |
| 3.1 | Types of communication systems- telephone, public address, facsimile, PBX, EPABX, Internet, Wifi, etc. Different types of telecommunication equipments (04) | 04 | 08 |
| 3.2 | LAN, WAN systems, Installation norms. (04) | | |

| | | | |
|--------------|---|-----------|-----------|
| 4 | Safety and Security Systems | | |
| 4.1 | Introduction to fire triangle and causes of fire. Fire prevention and Fire alarm systems such as proprietary, central system, Auxiliary, Remote station system etc. Fire detection such as smoke detectors, heat detectors, flame detectors and their installations norms. (04) | | |
| 4.2 | Systems for suppression of fire such as dry risers, wet risers, sprinklers, etc & their installation norms. Systems for fire extinguishers -dry chemical powders, carbon dioxide, water type, etc and their installation norms. Fire retarding treatments such as coating, adding of fibres etc. (02) | 05 | 10 |
| 4.3 | Introduction and principles of security (as per situations) Types of security systems, field devices such as switches, sensors, card-readers, locks, cameras, etc. Access controls Installation norms, Uses and applications. (04) | | |
| TOTAL | | 32 | 50 |

LIST OF TUTORIALS:**Draw to-the-scale layout giving necessary nomenclature-legend:**

07. Air-conditioning layout for an interior plan along with distribution, ducting & calculating the sizes.
08. Acoustical arrangement for given layout including drawing sectional elevations.
09. LAN layout for an interior plan including drawing typical details.
10. Security layout for an interior plan.

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publication |
|----------------|-----------------------------|--|---|
| 01 | Madan Mehta & James Johnson | Architectural Acoustics, Principles and Design | Library of congress Cataloguing in Publication Data |
| 02 | Frank and John Walk | Noise and vibration | British Library Cataloguing in Publication Data |
| 03 | Norbert Lechner | Heating, cooling, Lighting Design | Library of congress Cataloguing in Publication Data |
| 04 | Donald Hoff | Building services and equipments | Library of congress Cataloguing in Publication Data |
| 05 | Ernest Tricomi | ABC of Air-conditioning | D. B. Taraporevala & sons |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR OF STUDY : SECOND YEAR
SUBJECT TITLE : 2 D and 3D CADD
SUBJECT CODE : 13683

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|----|----|----|-----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| 01 | -- | 04 | -- | -- | -- | -- | 50@ | 50 |

Notes:

Sync with overall philosophy of individual institution it has the discretion to conduct the subject in 8, 16, 24 or 32 weeks.

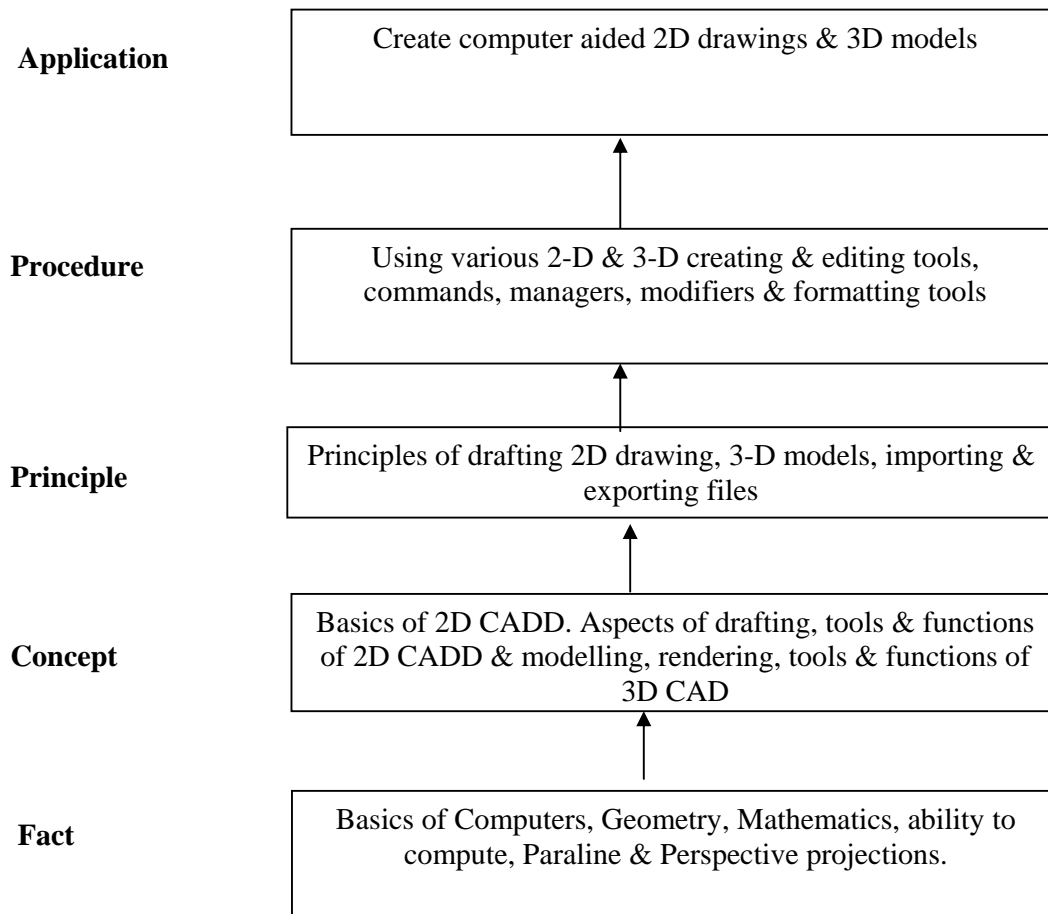
RATIONALE:

This subject intends the student to understand the importance of 2D & 3D CADD 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**LEARNING SKILLS:**

- a. Intellectual Skills
- b. Motor skills

SYLLABUS:

| CH No. | TOPIC | HRS |
|---------------|--|------------|
| 1 | Introduction to Computer Interface: 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 | Setting up a drawing: Units, Limits, Zoom commands, Layer manager & standard, Status bar | 05 |
| 3 | 2-D Drafting Techniques: Drafting commands, Modify command, Formatting text and dimensions | 05 |
| 4 | Plotting And Printing: Plot style manager, Using Internet for storing & exchanging drawings | 04 |
| 5 | Introduction To 3-D Interface: Compatibility of units with other CAD software, Importing and linking 2D CAD drawings | 02 |
| 6 | Main toolbar & modelling techniques: Basic primitives, Extended primitives, Compound object, Modifiers | 04 |
| 7 | Materials & Mapping: Standard material, Two sided materials, multi sub object material, Creating new materials, UVW mapping | 03 |
| 8 | Lights & Camera: Types of light, Types of camera | 02 |
| 9 | Rendering & Walk Through: Types of rendering, Saving rendered image, Concept of frames, Path animation, Saving an .avi File, Introduction to other animation formats | 05 |
| TOTAL | | 32 |

PRACTICAL ASSIGNMENTS (Total 02 numbers)

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

| Description | No. |
|--|------------|
| Design, prepare, render, generate & print: | |
| A portfolio of presentation drawings consisting of plan, 2 sectional elevations & 1-point perspective of a master bedroom. | 01 |
| A portfolio of presentation drawings consisting of plan, 2-point perspective & flooring layout of an executive cabin. | 02 |

LEARNING RESOURCES:

| Sr. No. | Author | Title | Publisher & Address |
|----------------|--|--|--------------------------------|
| 01 | George Omura | Mastering Auto cad 2000 | BPB publication |
| 02 | Beverly L. Kirkpatric & James M. Kirkpatric | Aotucad for Interior Design and space planning using Autocad 2005 | Pearson Education Inc., |
| 03 | Santhi Marappan & others | Autocad 2004 Reference guide | CADD center |

COURSE NAME : DIPLOMA IN INTERIOR DESIGN
COURSE CODE : ID
YEAR OF STUDY : SECOND YEAR
SUBJECT TITLE : MARKET STUDY AND PRACTICES -II
SUBJECT CODE : 13684

TEACHING AND EXAMINATION SCHEME:

| Teaching Scheme | | | Examination Scheme | | | | | |
|-----------------|----|----|--------------------|----|----|----|-----|-------|
| TH | TU | PR | PAPER HRS. | TH | PR | OR | TW | TOTAL |
| -- | -- | 01 | -- | -- | -- | -- | 50@ | 50 |

RATIONALE:

This subject intends the student to understand professional and practical aspects of Interior design through guest lectures & workshops; Market surveys; Case studies & Site visits related to Second Year.

OBJECTIVES:

The student will gain first-hand experience in aspects of workshops, Market surveys, Case studies and Site Visits related to subjects of Second Year.

LEARNING SKILLS:

- a. Intellectual skills : Observational, Analytical
- b . Motor skills : Data Collection

PRACTICAL ASSIGNMENTS (Total 12 numbers)

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.

| Description | No. |
|--|-------------------------------------|
| Prepare write-ups & reports of the guest lectures given by eminent professionals on: | |
| Commercial interiors; mechanical ventilation & air conditioning; safety & security systems; acoustics; knockdown & modular furniture; etc | 01 02 |
| Prepare write-ups & reports of personal & group recording on: | |
| Demonstrations and/or workshops on professional practices; personality enhancement; techniques of CADD rendering, Photoshop, Animations; lifts & escalators; mechanical, remote sensing systems; project, site & time management; mechanical & automated installations, etc. | 03 04 |
| Prepare individual analytical reports on case studies & site-visits conducted to: | |
| Commercial Interiors for recording measurements, preparing measured drawing, critically observing the design, working details, secondary services; Factory premises for studying manufacture of knockdown & modular furniture, mass production of decorative and functional fittings & fixtures, etc; Interior sites for studying complex on-site decision making and planning activities involved, & secondary services based activities. | 05 06 07 |
| Compile data on market surveys conducted for types, availability, sizes, colour, rates, etc. of: | |
| e. Secondary services (heat & sound insulation, mechanical ventilation, air-conditioning, communication systems, safety & security systems materials, etc). | 08 |
| f. Mechanical & automated accessories (hydraulic systems, automated sun-shading devices, etc) | 09 |
| g. Appliances & Gadgets (sensors, remote controls, Inter/Intra-activated devices, light sensors, LED devices, tracking & signalling devices, etc). | 10 |