

Program Name : Diploma in Interior Designing and Decoration

Program Code : ID

Duration of Program : Two Years (Four Semesters) Pattern: Semester (Full Time) Duration : 16 Weeks

Semester : First

S. N.	Course Title	Course Abbreviation	Course Code	Teaching Scheme			Credit (L+T+P)	Examination Scheme												Grand Total
				L	T	P		Theory						Practical						
								ESE		PA		Total		ESE		PA		Total		
								Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	
Exam Duration in Hrs.	i	j	k	l	m	n(j+l)	o	p	q	r	s	t(p+r)	u	v(n+t)						
1	Basic Design	BDE	28036	2	--	8	10	--	--	--	--	--	50#	20	50	20	40	100		
2	Paraline Perspective	PEC	28037	2	--	4	6	--	--	--	--	--	50@	20	50	20	40	100		
3	Material, Product and Market Survey	MPM	28124	3	1	--	4	1.5	70*#	28	30*	00	100	40	--	--	--	100		
4	Primary Services	PNS	28125	3	1	--	4	1.5	70*#	28	30*	00	100	40	--	--	--	100		
5	Construction Techniques - 1	CTF	28038	2	--	4	6	--	--	--	--	--	50@	20	50	20	40	100		
Total				12	02	16	30	--	140	--	60	--	200	--	150	--	300	500		

Student Contact Hours Per Week: 30 Hrs. Theory and practical periods of 60 minutes each. Medium of Instruction: English Total Marks : 500

Abbreviations: ESE- End Semester Exam, PA- Progressive Assessment, L - Lectures, T - Tutorial, P - Practical

@Internal Assessment, # External Assessment, *# On Line Examination

* The average of 2 test to be taken during the semester for the assessment.

External PR ESE and average of 2 Skill tests / Practicals.

@ Internal PR ESE and average of 2 Skill tests / Practicals.

If student remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE.

> Candidates not securing minimum marks for passing the "PA" part of practical of any course is declared as "Detained" for that semester.

> During Internship and Project period students shall attend Institute one day in a week to meet the mentor and appraise about the progress. The log book, Project Diary and Internship performance shall be recorded by the mentor for progressive assessment.





Maharashtra State Board of Technical Education, Mumbai
Teaching and Examination Scheme

Program Name : Diploma in Interior Designing and Decoration

Program Code : ID

Duration of Program : Two Years (Four Semesters)

Pattern: Semester (Full Time)

Duration : 16 Weeks

With Effect From Academic Year: 2023 - 24

Semester : Second

Scheme : I

S. N.	Course Title	Course Abbreviation	Course Code	Teaching Scheme			Credit (L+T+P)	Exam Duration in Hrs.	Theory						Practical						Grand Total	
				L	T	P			ESE		PA		Total		ESE		PA		Total			
									Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks		Max Marks
1	Communication Skills	CSK	28087	2	--	2	4	--	--	--	--	--	--	--	--	50@ \$	20	50	20	100	40	100
2	Residential Interior Design	RID	28088	2	--	4	6	--	--	--	--	--	--	--	--	50#\$	20	50	20	100	40	100
3	Advance Interior Design - 1	AID	28089	2	--	4	6	--	--	--	--	--	--	--	--	50#\$	20	50	20	100	40	100
4	Construction Techniques - 2	CTS	28090	2	--	4	6	--	--	--	--	--	--	--	--	50#\$	20	50	20	100	40	100
5	2D CADD and 3D Modelling	CAD	28091	2	--	6	8	--	--	--	--	--	--	--	--	50@ \$	20	50	20	100	40	100
Total				10	--	20	30	--	--	--	--	--	--	--	--	250	--	250	--	500	40	500

Student Contact Hours Per Week: 30 Hrs. Theory and practical periods of 60 minutes each. Medium of Instruction: English Total Marks : 500

Abbreviations: ESE- End Semester Exam, PA- Progressive Assessment, L - Lectures, T - Tutorial, P - Practical

@Internal Assessment, # External Assessment, ** On Line Examination

*** The average of 2 test to be taken during the semester for the assessment.**

#\$ External PR ESE and average of 2 Skill tests / Practicals.

@\$ Internal PR ESE and average of 2 Skill tests / Practicals.

If student remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE.

> Candidates not securing minimum marks for passing the "PA" part of practical of any course is declared as "Detained" for that semester.

> During Internship and Project period students shall attend Institute one day in a week to meet the mentor and appraise about the progress. The log book, Project Diary and Internship performance shall be recorded by the mentor for progressive assessment.





Maharashtra State Board of Technical Education, Mumbai
Teaching and Examination Scheme

Program Name : Diploma in Interior Designing and Decoration

Program Code : ID **With Effect From Academic Year: 2023 - 24**

Duration of Program : Two Years (Four Semesters)

Pattern: Semester (Full Time) **Duration : 16 Weeks**

Semester : Third **Scheme : I**

S. N.	Course Title	Course Abbreviation	Course Code	Teaching Scheme			Credit (L+T+P)	Examination Scheme												Grand Total	
				L	T	P		Theory				Practical				Total	Min Marks	Max Marks			
								ESE Max Marks	Min Marks	Max Marks	PA Max Marks	ESE Max Marks	Min Marks	Max Marks	PA Max Marks						
a	b	c	d	e	f	g	h(c+f+g)	i	j	k	l	m	n(i+l)	o	p	q	r	s	t(p+r)	U	v(n+t)
1	Advance Interior Design -2	AID	28722	2	--	4	6	--	--	--	--	--	--	--	50#\$	20	50	20	100	40	100
2	Interior Design for Special Purpose	IDS	28723	2	--	6	8	--	--	--	--	--	--	--	50#\$	20	50	20	100	40	100
3	Secondary Services and Market Survey	SSM	28308	3	1	--	4	1.5	70*#	28	30*	00	40	100	--	--	--	--	--	--	100
4	Working Drawing for Interior Design	WDI	28724	2	--	6	8	--	--	--	--	--	--	--	50#\$	20	50	20	100	40	100
5	Professional Practice in Interior Design	PPI	28725	2	--	2	4	--	--	--	--	--	--	--	50#\$	20	50	20	100	40	100
Total				11	01	18	30	--	70	--	30	--	100	--	200	--	200	--	400	--	500

Student Contact Hours Per Week: 30 Hrs. Theory and practical periods of 60 minutes each. Medium of Instruction: English Total Marks : 500

Abbreviations: ESE- End Semester Exam, PA- Progressive Assessment, L - Lectures, T - Tutorial, P - Practical

@Internal Assessment, # External Assessment, *# On Line Examination

*** The average of 2 test to be taken during the semester for the assessment.**

#\$ External PR ESE and average of 2 Skill tests / Practicals.

@,\$ Internal PR ESE and average of 2 Skill tests / Practicals.

If student remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE.

> Candidates not securing minimum marks for passing the "PA" part of practical of any course is declared as "Detained" for that semester.

> During Internship and Project period students shall attend Institute one day in a week to meet the mentor and appraise about the progress. The 10% of the progress. The 10% of the progress. The 10% of the progress. The 10% of the progress.

Project Diary and Internship performance shall be recorded by the mentor for progressive assessment.





Maharashtra State Board of Technical Education, Mumbai
Teaching and Examination Scheme

Program Name : Diploma in Interior Designing and Decoration

Program Code : ID

With Effect From Academic Year: 2023 - 24

Duration of Program : Two Years (Four Semesters)

Pattern: Semester (Full Time)

Duration : 16 Weeks

Semester : Fourth

Scheme : I

S. N.	Course Title	Course Abbre viation	Course Code	Teaching Scheme			Credit (L+T+P)	Exam Duration in Hrs.	Theory						Practical			Grand Total					
				L	T	P			ESE		PA		Total	ESE		PA			Total				
									Max Marks	Min Marks	Max Marks	Min Marks		Max Marks	Min Marks	Max Marks	Min Marks						
																				i	j	k	l
Total		30		30		--		--		--		--		150		--		300		--			
1	Project	PRO	28746	--	--	10	10	--	--	--	--	--	--	--	--	--	50#	20	50	20	100	40	100
2	Industrial Training	ITR	28747	--	--	20	20	--	--	--	--	--	--	--	--	--	100#	40	100	40	200	80	200
Total				--	--	30	30	--	--	--	--	--	--	--	--	--	150	--	150	--	300	--	300

Student Contact Hours Per Week: 30 Hrs. Theory and practical periods of 60minutes each. Medium of Instruction: English Total Marks : 300

Abbreviations: ESE- End Semester Exam, PA- Progressive Assessment, L - Lectures, T - Tutorial, P - Practical

@Internal Assessment, # External Assessment, *# On Line Examination

*** The average of 2 test to be taken during the semester for the assessment.**

#\$ External PR ESE and average of 2 Skill tests / Practicals.

@ \$ Internal PR ESE and average of 2 Skill tests / Practicals.

If student remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE.

> Candidates not securing minimum marks for passing the "PA" part of practical of any course is declared as "Detained" for that semester.

> During Internship and Project period students shall attend Institute one day in a week to meet the mentor and appraise about the progress. The log book, Project Diary and Internship performance shall be recorded by the mentor for progressive assessment.

Note : The Institute is required to sign MOU with related local industries for Industrial Training



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : FIRST
COURSE TITLE : BASIC DESIGN
COURSE CODE : 28036

1. RATIONALE

The subject is the primary core of the total course and forms the spine of the 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.

2. COMPETENCY

The student will be able to:

- Understand the importance of the role of interior designer and be able to differentiate between design and decoration.
- Use tools of interior design based on Aesthetic and Functional aspects.
- Identify Concepts with approach; Styles & Historical Periods and Themes.
- Implement Processes of Design.
- Design interiors of simple individual activity based rooms i.e. living room, dining, living cum dining, kitchen, master bedroom, children room & Toilets-WC, Bath etc.

3. COURSE OUTCOMES

The Students will be able to

- Understand the basics of Design and apply this knowledge in interior design for different rooms by using various design tools and principles.
- Design interior spaces aesthetically and functionally.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
2	-	8	10	-	-	-	-	-	-	-	50#\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#\$) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P- Practical, ESE -End Semester Examination, PA - Progressive Assessment



@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	Understanding the nomenclature of furniture's in the residential areas
2	Elements of design at conceptual as well as contextual level. Considering the element "FORM" E.g. Cube at conceptual level & puffy at contextual level minimum 6 to 8 different forms
3	Identifying the elements of design from any interior base room (Picture) 7 minimum
4	Prepare proportionate sketches on A1 size T.K. drawing sheet Static (Human dimensions) and Dynamic (Activity wise) dimensions related to the following postures:
5	Standing (cooking, bartending, working at shop counters, opening doors, using urinals, bathing, using overhead units, using wardrobe for adults and child etc.)
6	Sitting (working on computer table, study table office working table, dressing table, dining, relaxing, general sitting, using European water closets, etc)
7	Squatting (using Indian pan, squats, using storages below counters, manual sweeping & mopping, etc.)
8	Sleeping (sleeping, resting, etc.)
9	Color theory: Prang Color Wheel- Primary, secondary, tertiary colors. Etc. Warm colors, Cool colors, earthy colors, neutral colors. Color mixing, Color Dimensions psychology of color, color planning in design.
10	Color schemes - Introduction and its types - Achromatic, Monochromatic, Analogous, Complementary, Split Complementary, Triad, and Tetrad. Color scheme planning for bedroom/living room/kitchen/dining room/kids Room/bathroom.
11	Sketches of elements such as entablatures, cornices, base, capital, relief work, sculptures, furniture of different period and styles - <u>to be carried out in separate sketch book</u>
12	Group presentation related to subject content. (PPT form) Occidental periods from Classical to 19 th Century Oriental - Japanese, Chinese styles Contemporary Period, Modern period. Indian styles History of Indian interiors - Hindu style - Rajasthan, Saharanpur, Dravidian style, Islamic style, Jain style, Buddhist style and its designs
13	Comparison between Concept & Theme in interior design –On A1 size sheet
14	Prominent names in the field of Architecture, sculptures, paintings international and Indian - Collect or sketch Graphical presentation of their creation.
15	Prepare & Present case studies, Concepts presentation and Technical data
16	Prepare and present scaled Plan, Sectional elevations of individual Residential rooms. living, dining, living cum dining, kitchen, bedrooms, children bedroom, Toilets, bath etc.



6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No	Equipment Name with Broad Specifications
1	Furniture - Drafting tables and stools
2	LCD Projector and Screen
3	Drafting tools

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	<p>Interior Design and Decoration</p> <p>1.1 a) Understanding Interior design and decoration b) Purpose of Interior design</p> <p>Role of Interior designer</p> <p>1.2 Importance of design—in regards to Optimization, Economy, Time, Maintainability, Multiplicity, comfort, safety, Risk, Security, Universal design, Limitation in design, Reliability etc.</p> <p>1.3 a) Aesthetic design consideration: status symbol, emotional, comfort, pleasure, environmental, nostalgic, etc.</p> <p>Functional Design consideration: circulation standard sizes of furniture, space utilization, zoning.</p>	02
II	<p>Tools of Interior Design</p> <p>2.1 Understanding aesthetical, functional, technological aspects.</p> <p>2.2 Aesthetical tools</p> <p>a. <u>Elements of design</u> - Point, Line, Shape, Form, Color and color theory, Texture, Pattern, light.</p> <p>b. <u>Principles of Design</u> - Balance, Emphasis, Rhythm, Harmony, Scale repetition & Proportion.</p> <p>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.</p> <p>2.3 Functional tools</p> <p>a. Ergonomics- Its study - Postures, Anthropometrics, Biomechanics. Zoning, Grids, Modulation of space within and without, enveloping space within the room and furniture</p>	04
III	<p>Design Notions</p> <p>3.1 Concepts – Manifestation of realization through contemplative germination and evolution of thought that gives design approach, although with clear understanding that the concept can be explained but not defined.</p> <p>3.2 Period & Styles – Historical & Cultural approach with stress on ability to identify Occidental Periods and Oriental styles and with special focus</p>	08

Unit	Topic and Contents	Hours
	<p>on Contemporary Indian period and styles. Introduction to furniture terminology based on methods of joinery techniques such as parquetry, Marquetry gilding, turning, pierced and chip carving, ormolu mounts. a. 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 etc. b. Oriental - Japanese, Chinese, and Indian</p>	
IV	<p>Concept & Themes The common thread that binds the entire design in a story line such as Beach, 'Mela', Dessert, Village, etc</p>	04
V	<p>Planning Process 5.1 Understanding process of design (Need-Design brief-Information collection-Developing Alternatives-Analysis-Solution), Understanding the difference between concept and theme. 5.2 Planning Process of Interior Design 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 - analyzing and forming alternative schemes based on personal interpretations of design brief and relevant data using design tools and design concepts. d. Selection- finalizing the best scheme through personal justifications. Presentation- representing the final scheme in graphical manner (Presentation and Technical Drawings)</p>	06
VI	<p>Designing Individual rooms with help of fully rendered plan & elevations only Living Room Dining Room Living cum Dining Kitchen Bedrooms Children bedroom Toilets-bath (Rendering optional)</p>	08
Total		32

8. SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES

Notes:

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 basic design practical assignment portfolio and sketch of elements and furniture's of periods and styles assigned on the sketch book size A3. 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.



9. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication
1	Time Saver Standard for Interior Design & Space Planning	Joseph De Chaira JulliusPanero 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	PhillisSleen Allen	New York

10. SOFTWARE/LEARNING WEBSITES

- <http://www.freesunpower.com>
- <https://www.instructables.com>
- <https://learn.adafruit.com/collins-lab-solar>
- <https://www.sciencedirect.com/>
- <https://www.energy.gov/energysaver/water-heating/solar-water-heaters>
- <https://www.youtube.com/watch?v=VaCy4hvwkKs>



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : FIRST
COURSE TITLE : PARALINE PERSPECTIVE
COURSE CODE : 28037

1. RATIONALE

The students should 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 Paralane 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. It should also develop the sketching skills of students so as to explain their thoughts immediately to the contractors as well as clients in an effective manner.

2. COMPETENCY

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

3. COURSE OUTCOMES

The students will be able to

- Develop the skills of using the drafting instruments.
- Represent graphically, symbolically, Color, Shades and Shadows of objects and areas.
- Prepare technical and presentation drawing.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit (L+T+P)	Examination Scheme												
L	T	P		Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
				Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
2	-	4	6	-	-	-	-	-	-	50@\$	20	50	20	100	40	

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P – Practical, ESE -End Semester Examination, PA - Progressive Assessment



@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

To be carried out on A1 / A2 size sheet

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	Assignments on sketches of different objects, furniture and interior spaces of rooms to be prepared on A3 size sketch book. 1 or 2 sketches per week
2	Usage of drafting instruments- lines
3	Usage of drafting instruments- Different shapes
4	Usage of drafting instruments- Different forms
5	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 1
6	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. 2
7	Different patterns and textures with variation in terms of weight, gradation and value. Conventional indications for various constructional materials and standard annotations.
8	Static (one position) and dynamic (different stills in motion about X, Y, Z axis) of volumes and solids (cube, pyramids, prisms, cone, etc.) transforming into furniture form.
9	Isometric axonometric views of furniture objects.
10	Oblique, isometric & axonometric views of furniture objects.
11	Basics of graphical representation. Different patterns with variation in terms of weight, gradation and value.
12	Basic graphical representation-Different textures with variation in terms of weight, gradation and value.
13	Static (one position) of volumes and solids (cube, pyramids, prisms, cone, etc.) and transforming into furniture form.
14	Dynamic (different stills in motion about X, Y, Z axis) of volumes and solids (cube, prisms, etc.) and transforming into furniture form.
15	Axonometric views of furniture objects.
16	Rendering Technique – Pencils, Water color
17	Plans, elevations, section & isometric of 6 furniture objects (different geometric forms).
18	Fully detailed technical plan & sectional elevations of any interior space that also uses primary service installations with rendering.
19	1-point perspectives with relevant block furniture with the condition of Picture plane - Grid & M.P. Method a. In front, b. Behind, & c. In between the room.
20	1-point perspective using best rendering medium skills acquired by the individual student. Bird's Eye View



Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
21	1-point perspective using best rendering medium skills acquired by the individual student. Different 4/5 rooms for practice.
22	2-point perspectives with relevant block furniture with the condition of Picture plane - Grid & M.P. Method a. In front, b. Behind, & c. In between the room.
23	2-point perspective using best rendering medium skills acquired by the individual student. Worm's Eye View
24	2-point perspective using best rendering medium skills acquired by the individual student. Different 4/5 rooms for practice.

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment Name with Broad Specifications
1	Manual drafting table & stool
2	T- square
3	Set square
4	Triangular scale
5	Set of pencils

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	Basics of Graphical Representation Study of line, shape and form; pattern, texture, weight, gradation value; material Indication, annotation, importance to interpretation of lines and lettering techniques. Principles of representation of volumes, solids and objects using Static Dynamic Visualization as well as using Imagery Perception	04
II	Basics of Technical Drawing 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	08
III	Parallel Line Projections Orthographic Projections (Plans, Elevations and Sections); Oblique Projections (Cavalier and Cabinet); Axonometric Projections (Isometric and other)	08
IV	Rendering & Presentation Techniques Rendering techniques using Graphite ; Colour Pencils, Pen Ink, Water colours, Photo colours ('Fuji'), Composites (Inks with water colours, Inks with colour pencils etc).	04



Unit	Topic and Contents	Hours
	Study of rendering effects (Sciography, Light, reflection, etc.) Study of preparing Presentation & Technical Drawings	
V	Principles of Perspective & Technical methods of drawing perspective I Methods of sketching proportionate 2D and 3D of objects, furniture and rooms. <ul style="list-style-type: none"> 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 (3-point convergence only as explanation and Not for examination) <ul style="list-style-type: none"> 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)	04
VI	Principles of Perspective & Technical methods of drawing perspective II	04
Total		32

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication
1	Engineering drawing- Plane & Solid Geometry	N.D. Bhatt	Charottar 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	--



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : FIRST
COURSE TITLE : MATERIAL, PRODUCT AND MARKET SERVEY
COURSE CODE : 28124

1. 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.

2. COMPETENCY

The student will be able to understand and select:

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

3. COURSE OUTCOMES

The students will be expected to

- Use clay products, cement, lime, gypsum at suitable places in interior design.
- Use and suggest suitable floor coverings as per the area /space.
- Make use of suitable insulating and waterproofing materials at appropriate places in interior design.

Students will be able to

- Understand the quality of natural and artificial wood and their uses in interior design.
- Understand the other basic materials such as glass Processed glass, metals and their finishes, use of appropriate paints Varnishes and coating. Their applications in residential interior design.
- Know the soft furnishing materials and their appropriate use in interior design.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit (L+T+P)	Examination Scheme												
L	T	P		Theory						Practical						
			Paper Hrs.	ESE		PA		Total		ESE		PA		Total		
				Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
3	1	-	4	1.5	70*#	28	30*	00	100	40	-	-	-	-	-	-

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@): Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.



Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. TUTORIAL ASSIGNMENTS

Tutorials should be planned to enhance learning. The faculty shall decide suitable assignments minimum one per unit based on the curriculum.

Sr. No.	Name of Assignment
1	Materials and products (Common building materials Such as various types of Stones :-Natural and Artificial (Procedure of Market survey – Students 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.)
2	Materials and products -, Different types of Clay Products and Glass (Procedure of Market survey – Students 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.)
3	Materials and products (Metals & Alloys) (Procedure of Market survey – Students 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.)
4	Materials and products (Different Types Of Paints) Procedure of Market survey – Students 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.)
5	Materials and products (Polymers & allied composites) (Procedure of Market survey – Students 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.)
6	Materials and products (Natural & synthetic floor coverings) (Procedure of Market survey – Students 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.)
7	Materials and products (Varnishes, polishes & coatings) (Procedure of Market survey – Students 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.)
8	Materials and products (Thermal & Acoustical insulations) (Procedure of Market survey – Students 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.)
9	Materials and products (Waterproofing) (Procedure of Market survey – Students 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.)
10	Materials and products (General & decorative hardware fittings & fixtures).



Sr. No.	Name of Assignment
	(Procedure of Market survey – Students 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.)
11	Materials and products (Awnings, weather sheds) (Procedure of Market survey – Students 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.)
12	Materials and products (Terrace Furniture) (Procedure of Market survey – Students 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.)
13	Materials and products (Composite boards, solid surfaces) (Procedure of Market survey – Students 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.)
14	Materials and products (Eco-friendly material ,natural wood & Artificial wood) (Procedure of Market survey – Students 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.)
15	Materials and products (Soft furnishing materials) (Procedure of Market survey – Students 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.)
16	Materials and products (Floor Coverings-Natural & Synthetic) (Procedure of Market survey – Students 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.)

6. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours	Marks
I	Common Building Materials- Stone, Clay Products, Cement, Lime, Sand & Gypsum Geological, Physical and Chemical classification; types, properties and use of Igneous, Sedimentary and Metamorphic stones 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. Types, Properties and uses of Cement, Lime, sand. Types, Properties & Applications of Concretes, Mortars and	14	10



Unit	Topic and Contents	Hours	Marks
	Plasters. Properties & Applications of Gypsum & its products.		
II	<p>Common Building Materials- Timber 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.</p> <p>Wood Products Types, properties & Uses of Veneers and Plywood. Types, Quality & Uses of BlockBoard, Particle Board, Fiber Board, Chipboard, Hard Board, Laminate and its use.</p> <p>Glass Classification of Glass Special varieties, Properties, sizes, thicknesses and uses of glass. Treatments of glass such as etching, acid washing, toughening, back painting, staining, bending, edge polishing, film application (sun control and decorative)</p>	04	12
III	<p>Metals & Non Metals Types, Properties and uses of Ferrous, Non Ferrous Metals and Alloys such as wrought iron, Aluminum, 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, Fiber reinforced plastic and Metal reinforced plastic. Composite Boards: Types, Qualities And Uses (ACP, WPC and HPL Exterior board-not for exam)</p>	10	12
IV	<p>Paints, Varnishes, Polishes & Coatings Constituents –Base, Pigment and Thinner. Classification -Water, Oil and acrylic based. Lime wash, Distemper and its application. Types of paints, Textural quality - Matt, Gloss, Satin and Luster. 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, color and transparent lamination.</p>	04	12
V	<p>Floor Coverings Rugs, durries and carpets of natural and synthetic fibers, PVC floors, wooden flooring types, natural fiber matting, linoleum, rubber</p>	08	12
VI	<p>Specialty Material 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.</p>	08	12



Unit	Topic and Contents	Hours	Marks
	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		
Total		48	70

7. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Common Building Materials	14	04	04	02	10
II	Glass	04	04	06	02	12
III	Metals & Non Metals	10	04	06	02	12
IV	Paints, Varnishes, Polishes & Coatings	04	04	06	02	12
V	Floor Coverings	08	04	06	02	12
VI	Specialty Material	08	04	06	02	12
Total		48	24	34	12	70

Legends: R-Remember, U-Understand, A-Apply and above (Bloom's Revised taxonomy)

Note: The actual distribution of marks at different taxonomy levels (of R, U and A) in the question paper may vary from above table.

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication
1	Engineering Materials	S.C Rangwala	Charotar Publication Anand (India)
2	Building Construction	Sushil Kumar	Standard Publication & Dist.
3	Materials of civil & interior construction	V.N.Chanapattan	Vidya V. Chanapattan Vidya .vvc @gmail.com
4	Materials of Interior Design (5 Volumes)	Harish Malpani	Raw Concepts
5	Materials Construction	D.N. Ghosh	Tata McGraw Hill

9. SOFTWARE/LEARNING WEBSITES

- www.interiordezine.com/finishes/
- www.surfaces.in
- www.onlinedesignteacher.com/2016/02/interior-design-materials-finishes
- www.contractdesign.com/products
- www.alliedinteriorproducts.com
- www.alliedbuilding.com



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : FIRST
COURSE TITLE : PRIMARY SERVICES
COURSE CODE : 28125

1. RATIONALE

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

2. COMPETENCY

Individual should gain knowledge of various services required for residential & commercial spaces & be able to prepare plumbing & electrical layout.

3. COURSE OUTCOMES

Students will be able to

- Learn basic terms of water supply & prepare plumbing layout in terms of water supply of interior spaces.
- Learn basic terms of drainage systems & prepare drainage layout in terms of water supply of interior spaces.
- Prepare electrical layout of interior spaces
- Calculate illumination for given activities.
- Suggest types of lighting as per the requirement
- Suggest pros & cons of different types of ventilation

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
3	1	-	4	1.5	70*#	28	30*	00	100	40	-	-	-	-	-	-

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination



5. TUTORIAL ASSIGNMENTS

Tutorials should be planned to enhance learning. The faculty shall decide suitable assignments minimum one per unit based on the curriculum.

Sr. No.	Name of Assignment
1	Preparing water supply & drainage layout for Cooking & drinking areas
2	Preparing water supply & drainage layout for Washing areas-washing machine, dishwasher
3	Preparing water supply & drainage layout for Bath areas-shower/shower cubicle. Bath tub. Flushing areas.
4	Preparing water supply & drainage layout for Ancillary areas-water fall, fountain in balcony,
5	Preparing water supply & drainage layout for Ancillary areas-water fall, fountain in Terrace garden
6	Preparing water supply & drainage layout for Cooking & drinking areas, washing areas-washing area-washing machine, dishwasher Bath areas-shower/shower cubicle. Bath tub. Flushing areas. ancillary areas-water fall, fountain in balcony, Terrace garden
7	Preparing distribution and disposal for given layout with consideration of gradients, pipe sizes, waterproofing with use of specials along with legend & nomenclatures, dimensions.
8	Preparing Electrical layout for given interior space-Studio Apartment with consideration of loading use, specials along with legend & nomenclatures, dimensions.
9	Preparing Electrical layout for given interior space -I BHK FLAT with consideration of loading use, specials along with legend & nomenclatures, dimensions.
10	Calculating required illumination for given activities and room layouts
11	Preparing ambient illumination layout selecting necessary fittings, fixtures & systems.
12	Preparing accent and/or task illumination layout selecting necessary fittings, fixtures & systems.
13	Case Study of Residential Primary services and related material research.
14	Study of Gadgets - Mixers, juicers, ovens, cooking ranges, geysers, boilers, refrigerators, washing machines, dishwashers, audio & video systems, computers, inverter from services point of view.
15	Study of Gadgets - Mixers, juicers, ovens, cooking ranges, geysers, boilers, refrigerators, washing machines, dishwashers, audio & video systems, computers, inverter from services point of view.
16	Study of automated sensory device based applications – Wash Basins Taps, Flushes, Lighting Systems, Curtains, HVAC.



6. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours	Marks
I	<p>Water Supply</p> <p>Introduction to principles of Water Supply, Types, Sizes & Quality of Pipes used for water supply Cold and Hot water distribution; mixing systems using loft tanks, geysers, boilers, mixers, diverters.</p> <p>Open and Concealed Distribution based on following Cooking and Drinking – Focus on Kitchen and Pantry areas Washing – Manual and Machine based Understanding Distribution layouts in context with appropriate gradients , Sizes, waterproofing, appropriate use of joints & junctions</p>	10	10
II	<p>Sanitation & Drainage</p> <p>Introduction to principles of Sanitation & Drainage. Types, Sizes & Quality of Pipes used for drainage systems Types Sizes of Sanitary wares such as wash hand basins, sinks, Pans, Urinals, Bidets, Water Closets, Flushing Cisterns, Bath tubs, Shower cubicles. Types & Sizes of accessories such as roll-holders, soap dishes, towel rods, napkin holders, and other racks, hooks Waste and Soil Disposal systems with Focus on trap -principles of Siphoning, Anti-Siphoning, Venting Open and Concealed disposal system based on following Bathing – Modes such as shower, pressure jets and tubs Flushing – Urinal, Water Closet and Toilet areas Miscellaneous - Gardening, Indoor Fountain, Falls, Cascades Understanding Disposal layouts in context with appropriate gradients , Sizes, waterproofing, appropriate Use of joints & junctions.</p>	10	12
III	<p>Electrification</p> <p>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 & Sizes of fans, light fittings, Lamp fittings, Chandeliers. Introduction (single and three phase, earthling, 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 & installation systems - open and concealed. Understanding distribution layouts in context with appropriate loading use, wire sizing, sheathing consideration and appropriate use of joints & junctions.</p>	10	12
IV	Lights	08	12



Unit	Topic and Contents	Hours	Marks
	Introduction to Light - Natural 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. Quality of light - Incandescent, Fluorescent, vapor lamps, halides & halogen, gas-filled - neon, argon. LED, lasers and Fiber optics.		
V	Lighting & Illumination Principles of Light - Transmission, reflection, distortion, refraction. Types of lighting – i.e. Direct, Indirect - diffused, Reflected. Selection of activity based types of illumination - Ambient, Task, Ascent, Focus, Information lighting – Step, Pathways, Ails, Signage. Selection of systems of lighting - up, down, cove lighting, track lighting.	06	12
VI	Natural-Heating, Ventilation & Conditioning Of Air Physical Human comforts – Climate based - Quality of Air, Temperature, Humidity 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 Principles of Ventilation; Natural Ventilation. Transmission of Heat; Control by natural means.	04	12
Total		48	70

7. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Water Supply	10	04	04	02	10
II	Sanitation & Drainage	10	04	06	02	12
III	Electrification	10	04	06	02	12
IV	Lights	08	04	06	02	12
V	Lighting & Illumination	06	04	06	02	12
VI	Natural-Heating, Ventilation & Conditioning Of Air	04	04	06	02	12
Total		48	24	34	12	70

Legends: R-Remember, U-Understand, A-Apply and above (Bloom's Revised taxonomy)

Note: The actual distribution of marks at different taxonomy levels (of R, U and A) in the question paper may vary from above table.

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication
1	Water Supply & Sanitary Engineering	S.C. Rangwala	Charotar Publication



9. SOFTWARE/LEARNING WEBSITES

- www.aquantindia.com
- www.jaquar.com
- www.johnsonbathrooms.in
- www.polycab.com/www.ajitpspl.com



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : FIRST
COURSE TITLE : CONSTRUCTION TECHNIQUES-1
COURSE CODE : 28038

1. 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 focusing on jamb treatments and operational aspects. It further intends to equip students with thorough knowledge about design, construction, assembly and joinery of activity based readymade or designed furniture used in residential interior spaces.

2. COMPETENCY

Understand and Define - Structures, systems, elements, components; focusing 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 focusing on various types and forms; and assembly of doors and windows focusing on the mode of operation.

3. COURSE OUTCOMES

Students will be able to:

- Identify types of structures & building components
- Construct internal wall
- Recognize arches
- Apply various joints used in carpentry
- Construct jambs, frames of doors & windows etc.
- Construct different types of doors & windows

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme													
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical						
					ESE		PA		Total		ESE		PA		Total		
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
2	-	4	6	-	-	-	-	-	-	-	-	50@\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE



Legends: *L*-Lecture, *T* – Tutorial/Teacher Guided Theory Practice, *P* –Practical, *ESE* -End Semester Examination, *PA* - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

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

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
	Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain
1	Types of structure (Sketch form)
2	Components & elements of built structure. (Sketch form)
3	Types of Bricks including Special Moulded bricks (Sheet form)
4	½ brick thick. Wall & 1 brick thick. Walls. (Sheet form)
5	Stone masonry (Sketch form)
6	Lintels & Arches (Sketch form)
7	Joinery - T.W. - Lengthening Joints (Sheet form)
8	Joinery - T.W. - Widening Joints (Sheet form)
9	Joinery - T.W. - Bearing Joints (Sheet form)
10	Joinery - T.W. - Framing Joints (Sheet form)
11	Joinery - Plywood (Sheet form)
12	T.W. casement window with ventilator, louvered, pivoted and other types of windows, UPVC windows (Sketch form)
13	Aluminum sliding window (Sheet form)
14	Types of door - according to mode of operation (Sketch form)
15	Details of T.W. Double panel partly glazed and partly paneled door. (Sheet form)
16	Details of T.W. framed fully glazed door (Sheet form)
17	Flush door with self-closing and locking arrangements.
18	Hardware (regular and advanced) for interior carpentry. (Sketch form)

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment Name with Broad Specifications
1	Manual drafting table & stool
2	T- square
3	Set square
4	Triangular scale

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.



Unit	Topic and Contents	Hours
I	<p>Introduction to structure and building components</p> <p>Types of Structures Natural and man-made structural systems in such as load bearing, framed, composite, tensile, shell structures.</p> <p>Components & Elements of Built Structure Introduction to foundations, footings, columns, beams, plinth, slabs, floors, structural and non-structural walls, Dry wall, fenestrations (Doors, windows, ventilators & openings), lintels, arches, steps, stairs, ladders.</p>	04
II	<p>Construction techniques of building components</p> <p>Masonry & Installations 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. 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>	06
III	<p>Opening , Lintels, Projections and Arches Openings - Doors, windows, ventilators, and other openings focusing on different modes of operation and their effects on the jambs. Lintels - Types of Lintels in different materials such as wood, metal, & concrete Projections - Different types of weather sheds & awnings; lofts in rooms; Arches - Types of arches, classification according to center, shape.(No theory questions for the topic Arches)</p>	04
IV	<p>Joinery Introduction to concepts of joinery and joints; study of material specific limitations of joinery and study of structural joints focusing 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>	06
V	<p>Openings Jambs, Frames & Casings Formation based on various modes of operation, materials, & techniques</p>	06
VI	<p>Openings Doors, Windows & Ventilators 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; and study of types of shutters such as framed, panelled, flush, glazed, and composite focusing on different materials wood, metal, glass, & plastics</p>	06
Total		32



8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	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	V.N.Chanapattan	Materials of civil & interior construction	V. Chanapattan

9. SUGGESTED E-LEARNING RESOURCES

- www.basicconstructionco.com
- www.understandconstruction.com
- www.basiccarpentrytechniques.com



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : SECOND
COURSE TITLE : COMMUNICATION SKILLS
COURSE CODE : 28087

1. RATIONALE

The students should 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 Praline 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. It should also develop the sketching skills of students so as to explain their thoughts immediately to the contractors as well as clients in an effective manner.

2. COMPETENCY

The student will be able to:

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

3. COURSE OUTCOMES

Students will

- Become acquainted with professional manners and etiquettes
- Become confident
- Communicate effectively with every person verbally as well as in written communication.
- Present themselves as well as their work in an impressive manner.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
2	-	2	4	-	-	-	-	-	-	-	50@\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#\$) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as **ABSENT** in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P-Practical, ESE -End Semester



Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
	Prepare in graphical and print media form:
1	Notes about elements, principles, types & barriers in communication.
2	Elaborate how to communicate effectively in context to interior design profession
3	Technical report of visit to site/factory/exhibition focussing on interior design relevance
4	Case study of residential interiors, your interpretations & appraisals in analytical manner
5	Book review of any current interior works
6	Critical appreciation of interior work carried out by any professional interior designer
7	Personal critic about Manners & Etiquettes, Grooming & Confidence Building
8	Self-appraisal and SWOT analysis
9	Power point presentation on the case study of a residential project with suggestions for improvisations
10	Critical study and presentation of one's own designs.
11	Work in pairs and critically appreciate any two renowned designers creation
12	Make a study of an ancient structure, monuments and give your analysis of the design and it's relevance
13	Group discussions on difference between structural design- past and present.
14	Group presentation on social issues
15	Mock interviews role play
16	Debate in pairs

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

Sr. No.	Equipment Name with Broad Specifications
1	Configuration - Min requirements - 8 GB RAM, 64 bit OS
2	MS Office
3	Internet connection

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	<p>Communication Skills</p> <p>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.</p> <p>Elements of communication - Sender, Receiver, Message, Channel, Feedback & Context</p> <p>Various people and agencies in interior designing profession to</p>	04



Unit	Topic and Contents	Hours
	<p>communicate with like civil engineer, Architect, contractors, mason, carpenter, plumber, decorators.</p> <p>Principles of communication - Definition, Purpose, 7Cs, Effective messaging, Vocabulary related to aesthetic and jargons related to architecture and engineering.</p> <p>Effective Communication and barriers.</p> <p>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</p> <p>The scope and importance of English in interior designing study and profession.</p> <p>Types of communication related to interior designing.</p>	
II	<p>Voice Culture & Body language</p> <p>Introduction to voice culture - Designing messages, preparation, practice and presentation of written and graphic contents; International phonetic script.</p> <p>Various types of Verbal communication viz. telephonic conversations, counselling, suggesting, requests, orders, presentations, public speaking and seminars.</p> <p>Aspects of speech - tone, emphasis, pitch, volume, pauses, undulations, timbre, Presentation skills for an individual and in a group</p> <p>Codes of communication - Body language - Kinesics- eye contact, gesture, posture, body movements & facial expression; Proxemics - Using space, Physical Appearance; Haptics- touch; Chronemics - managing time. Artefacts -environment & objects</p> <p>Use of body language during presentations, seminars, Meetings, conferences, conventions and interviews.</p> <p>These types of nonverbal codes are to be presented with practical application in informal verbal presentations.</p> <p>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>	04
III	<p>Presentation Skills</p> <p>Introduction of topic and suitable Language for presentations. Designing message outline - Organizing ideas, determining the general and specific purpose of communication, analyzing the written messages, context and scope. Ways of writing topic sentences, paragraphs, function paragraphs, summary, information text .Note making, precise and editing the text.</p> <p>Drafting reports - short reports, concept and contents of long reports, effective sentence construction, punctuation and presentation of the text.</p> <p>Monthly and annual report presentation. How to write effective emails.</p> <p>Spoken English: Introducing yourself, formally greeting someone, giving directions to a place.</p>	06
IV	<p>Debate and Groups Discussions</p> <p>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</p>	08



Unit	Topic and Contents	Hours
	and meetings (cooperation & collaboration); Leadership (Society, Structure, changes in society & 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.	
V	Manners & Etiquettes, Grooming & Confidence Building Interpersonal skills - Conflict, resolution, transactional analysis, Defense 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 behavior-etiquettes and mannerism, Dining Etiquette, Four magical words: Please, Excuse me, Thank you, Sorry. Office decorum - general code of conduct and social behavior.	04
VI	Time Management and Success Mantra Punctuality, Self-Discipline, Delegation of work, Precision, Maintenance of Database, Prioritization, Systemization and Standardization; SWOT analysis (Concept & process) Goal Setting, Time loss and utility.	06
Total		32

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication
1	Learning to learn	K K Nelson, F Dubors	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

9. SOFTWARE/LEARNING WEBSITES

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



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : SECOND
COURSE TITLE : RESIDENTIAL INTERIOR DESIGN
COURSE CODE : 28088

1. RATIONALE

The topic aims to use fundamental design knowledge and improve planning abilities for residential interior spaces with suitable application of fundamental materials, construction, and services needed for design projects. Students will also learn how to articulate their intellectual and artistic abilities.

2. COMPETENCY

Students will be able to design large and complex activity based residential areas such as 2 BHK apartments, flats, Bungalows. Appropriate material selection, Application of various services and construction. The student will be able to design Residential interiors for a space of about 100 Sq. M. to 300 Sq. M.

3. COURSE OUTCOMES

Student are expected to learn to design large and complex activity based residential areas such as 2 BHK apartment, flats, Bungalows .with Appropriate material selection Application of various services and Construction.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
2	-	4	6	-	-	-	-	-	-	-	50#	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	2 /3 BHK residence of area approximately 100 to 300 square meters with technical representation of false ceiling electrical layout plumbing drawing with color rendering and presentation on A1 size White TK sheet
2	Actual site case study



Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
3	Internet Case Study
4	Book case study
5	Identify client, Preparing questionnaire, meeting with client, Requirements framing. (Prepare report file)
6	Zoning
7	Concept development for different residential areas
8	Furniture layout (Alternatives 1)
9	Furniture layout (Alternatives 2)
10	Furniture layout (Alternatives 3)
11	Civil changes drawing with measurements, legend and other Nomenclature and schedule of doors and windows
12	Space Circulation or Measurements drawing
13	Flooring Pattern drawing with measurements, legend And schedule.
14	False ceiling and Electrical plan with measurements, legend and schedule, Plumbing details of one toilet block with measurements, legend with nomenclature.
15	Plumbing details of one toilet block with measurements, legend with nomenclature.
16	2D Sectional Elevations 2 no through & through.
17	2D Sectional Elevations 2 no through sunk
18	Material Board
19	Preparing False ceiling layout
20	Preparing Electrical layout
21	Working Drawing of any furniture 2nos
22	3D Views Internal rooms views mini.4 no. All drawings must be rendered in any medium of color.
23	3D sketch views of 2 different areas. (excluding previous views)

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment Name with Broad Specifications
1	Computer- Configuration Min requirements i7 processor 8 GB ram 64 bit OS NVidia graphics card required for 3D software Three button mouse is must for 3D
2	2D license software
3	3D license Software
4	MS OFFICE



7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	Case study, Client Profile & Clients Requirements	04
II	Furniture dimensions	04
III	Planning Process	08
IV	Electrical layout	04
V	Material Board	04
VI	Services	08
Total		32

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	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
5	ABC of Air-conditioning	Ernest Tricomi	D. B. Taraporevala & sons

9. SOFTWARE/LEARNING WEBSITES

- <https://www.primacoustic.com>
- <https://www.designingbuildings.co.uk>
- <https://www.nist.gov/programs-projects/space-conditioning-options-energy-efficient-buildings>
- <https://firecontrolsystems.biz/>
- <https://www.controlfiresystems.com/>
- <https://www.honeywell.com>
- <https://logicalread.com/network-diagrams/>

PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : SECOND
COURSE TITLE : ADVANCE INTERIOR DESIGN-1
COURSE CODE : 28089

1. RATIONALE

The subject intends to equip the students to apply professional design acumen while enhancing skills to planning of commercial 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.

2. COMPETENCY

The student will be able to design commercial interiors ranging from simple activity based small-scale commercial space of about 50 Sq. M. to 300 Sq. M. (Shop to small office)

3. COURSE OUTCOMES

The student will be able to design commercial interiors independently ranging from planning, preparing working drawings, selecting materials and all services layout

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
2	-	4	6	-	-	-	-	-	-	-	50#\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#\$) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	Introduction to a project topic
2	Actual site case study
3	Internet Case Study
4	Book case study
5	Anthropometric data collection
6	Ergonomics data collection
7	Planning Process – Bubble diagram/ Zoning
8	Space circulation layout



Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
9	Preparing Concept sheet
10	Drafting Civil Layout
11	Drafting Civil sections
12	Planning process – Alternative 1
13	Planning process – Alternative 2
14	Planning process – Alternative 3
15	Preparing flooring layout
16	Preparing Plumbing layout
17	Drafting the Sections
18	Preparing Electrical layout
19	Preparing False ceiling layout
20	Detailed working drawing of furniture item
21	3D Views
22	Material Board

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment Name with Broad Specifications
1	Computer- Configuration Min requirements i7 processor 8 GB ram 64 bit OS NVidia graphics card required for 3D software Three button mouse is must for 3D
2	2D license software
3	3D license Software
4	MS OFFICE

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	Case study	04
II	Anthropometric Data	04
III	Planning Process	08
IV	Working Drawing	08
V	Material Board	04
VI	Services	04
Total		32



8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication
1	The best exhibition stand design 2	Stafford cliff	Roto vision sa switzerland
2	Stores: Retails 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 & restaurant	Jeong JI Seong ed.	Jeong JI Seong



AKS

PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : SECOND
COURSE TITLE : CONSTRUCTION TECHNIQUES-2
COURSE CODE : 28090

1. 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 of bricks and brick bonding with masonry and arches along with the methods of assembly and joinery of doors, windows, ventilators focusing on jamb treatments and operational aspects. It further intends to equip students with thorough knowledge about design, construction, assembly and joinery of activity based readymade or designed furniture used in residential interior spaces.

2. COMPETENCY

The student will be able to:

- Define & understand - Structures, systems, elements, components; focusing 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 focusing on various types and forms; and assembly of doors and windows focusing on the mode of operation.
- Select or Design and Detail - Doors, windows and openings using appropriate hardware and material focusing 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.

3. COURSE OUTCOMES

Students will be able to:

- Learn the fundamental techniques of building construction ie. Components of structure load bearing and non-load bearing structures, Technique of construction, staircase, Construction and joinery of doors and windows.
- Learn the details and designs of doors, windows and opening using appropriate material and Hardware as per requirements
- Use appropriate joinery and hardware to be used while designing assembling and construction of functional and aesthetic furniture in residence.
- Identify type of ceiling
- Erect different types of flooring
- Identify staircase type and its use as per requirement of interior space
- Design and use of appropriate joinery for residential furniture.
- Erect kitchen civil platform, modular / carpentered storage.



4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
2	-	4	6	-	-	-	-	-	-	-	50#	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

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

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
	Prepare in graphical form using any material-media such as pictures, photographs, cuttings, etc. or draw neat and proportionate sketches to explain
1	Steps, Stairs Ladders and designing of comfortable staircase. (Sketch form)
2	Floors with respect to span viz; Single floor, Mezzanine Floor / Double floor & triple floor (Sketch form)
3	Fixing details of flooring (Sketch form)
4	Mezzanine floor in timber
5	Mezzanine floor in structural steel.
6	Details of Carcasses, Hinging methods of fixing shutters to boxed furniture, drawer fixing details, fixed and adjustable shelves.
7	Wardrobe
8	Shoe Rack
9	Center table
10	Bedside Table
11	Single bed /Double bed /Diwan
12	Study Table/Dressing Table
13	Puffy
14	T V unit
15	TW. Partition: Partly glazed, Solid partition
16	TW. Paneling
17	Gypsum False Ceiling
18	Civil details for Kitchen platform



Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
19	Carpentered or modular storage for Kitchen
20	Crockery unit
21	Sofa with loose cushion / Fully upholstered
22	Cavity and false floor (Sketch form)
23	Dining table with dining chair
24	Civil details for Vanity counter with counter sunk / top wash basin & undercarriage

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

Sr. No.	Equipment Name with Broad Specifications
1	Manual drafting table & stool
2	T- square
3	Set square
4	Triangular scale

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	Construction techniques of building components Ceilings, Floors & Floorings: 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. Provisions, care and process of flooring & laying natural & artificial materials on existing slab and floors; and fixing of tiles - clay, cement, stone, glass, metals; junctions; tile-on-tile; patterns, inlays; etc.	04
II	Steps, Stairs Ladders: Study of steps, stairs & 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.	04
III	Residential furniture I : Focusing on need, requirement, options, form, finish, materials, construction, and hardware; learning to design & prepare construction drawings of: - Different types of shelves & storages such as wardrobe, overhead, display & showcases, etc. including understanding different options for carcass, shutters, drawers and internal shelves.	06
IV	Kitchen storages : Kitchen storages such as trolley type, shelved. Modular kitchen storages.	06
V	Residential furniture II : Different types of seats such as stools (low & high), puffy (For living, dressing, bed-end, etc.), chairs (For living, dining, bed, desk-work, sofas (1, 2 & 3-seater).	06
VI	Residential furniture III : Different types of tables such as side & center tables (For living, dining, bed, terrace, garden), work-tables (Dressing, study. Different types of bed	06



Unit	Topic and Contents	Hours
	such as 'Divan, single-bed, double-bed, bunk-bed, combination-bed, etc.; with and without storage	
Total		32

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	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	Materials of civil & interior construction	V.N. Chanapattan	V. Chanapattan

9. SUGGESTED E-LEARNING RESOURCES

- www.basicconstructionco.com
- www.understandconstruction.com
- www.basiccarpentrytechniques.com



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : SECOND
COURSE TITLE : 2D CADD AND 3D MODELLING
COURSE CODE : 28091

1. 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.

2. COMPETENCY

Students should be able to Draft measured drawings, Design Spaces precisely, Draw Plan Elevation Section and View of any space. He/she should be able to produce photorealistic rendered views.

3. COURSE OUTCOMES

The student will be able to use:

- Basic computer interface.
- 2-D CADD interface, various drafting and editing techniques, and plotting and printing.
- 3-D interface, basic modeling techniques, application on materials, maps, lights, camera & rendering.
- To Produce Photorealistic images in 3D.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
2	-	6	8	-	-	-	-	-	-	-	50@\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#\$) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination



5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	Introduction of AutoCAD, Workspace, Shortcut, Unit, Line, Offset, Fillet. Use of zoom, pan, view, command in a drawing and setting drawing limits.
2	Osnap setting, Trim, Extend, Window, Door opening, Rectangle, UCS, Introduction, (Rectangle, triangle, Circle, Ellipse, pentagon, hexagon)
3	New Project start (minimum 2bhk), Layer, Layer Properties, Line width, line Type
4	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
5	Scale - Method 01 create drawing format as per scale, Print, convert dwg Into PDF format. Using text style, text edit, scale, divide, point style.
6	Draft plan and elevations of a T.W table.
7	Draft plan, sections and elevations of a <ul style="list-style-type: none"> ● Double bed with storage below. ● Sofa set ● Wardrobe ● T.V unit
8	Scale - Method 02 Insert jpg Image in plan draft objet as per image. Cerate 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.
9	Flooring plan, ceiling layout, electric layout using express menu, polyline, area calculation in cad, list
10	Draft Elevations using Construction line, Leader
11	Scale - Method 03 Draft construction drawing using view port setting in layout Render the plan, sectional elevations of a 2 BHK Flat.
12	Apply materials to the previously modeled furniture objects. (6 to 8 objects).
13	Prepare model interiors of a living room, apply materials and assign lights and camera.
14	<ul style="list-style-type: none"> ● Furnished plans ● Sections
15	Import from 2D to 3D
16	Create Doors, Windows and Stairs according to parameters
17	Create walls, Door window openings, Windows frame, Panels.
18	Create railing, Decorative items like Baluster, Flower vase etc.
19	Import readymade 3D objects / component from internet and apply in 3D model.
20	Create Different FURNITURE items like 3 seater sofa / double bed / dining set in 3D model
21	Positioning Camera at different angles.
22	Apply and EDIT different types Lights & Material in 3D Model
23	Creating an animated WALKTHROUGH
24	Rendering the model to photo realistic view.

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in



conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment Name with Broad Specifications
1	Configuration Min requirements 8 GB ram 64 bit OS Graphics card required for 3D softwares Three button mouse is must for 3D
2	2D license Softwares
3	3D license Softwares

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	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
II	Setting up a drawing: Units, Limits, Zoom commands, Layer manager & standard, Status bar 2-D Drafting Techniques: Drafting commands, Modify command, Formatting text and dimensions	10
III	Plotting And Printing: Plot style manager, Using Internet for storing & exchanging drawings	04
IV	Introduction To 3-D Interface: Compatibility of units with other CAD software, Importing and linking 2D CAD drawings Main toolbar & modeling techniques: Basic primitives, Extended primitives, Compound object, Modifiers	06
V	Materials & Mapping: Standard material, Two sided materials, multi sub object material, Creating new materials, UVW mapping	04
VI	Lights & Camera: Types of light, Types of camera Rendering & Walk Through: Types of rendering, Saving rendered image, Concept of frames, Path animation, Saving an .avi File, Introduction to other animation formats	06
Total		32



8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication
1	George Omura	Mastering Auto cad 2000	BPB publication
2	AutoCAD 2022 for Engineers and Designers, Basic and Intermediate	Prof Sham Tickoo	bpb
3	AutoCAD 2022: A Power Guide for Beginners and Intermediate Users	Sandeep Dogra	Repro Books

9. SOFTWARE/LEARNING WEBSITES

- <https://www.bibliocad.com/>
- <https://www.sketchpschool.com/>
- <https://www.thesketchpessentials.com/>



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : THIRD
COURSE TITLE : ADVANCE INTERIOR DESIGN-2
COURSE CODE : 28722

1. RATIONALE

The subject intends to equip the students to apply professional design acumen while enhancing skills to planning of commercial 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.

2. COMPETENCY

The student will be able to design commercial interiors ranging from simple activity based small-scale commercial space of about 300 Sq. M. to 500Sq. M. (Restaurants, Parlors, Salons Clinics, Offices etc.)

3. COURSE OUTCOMES

The student will be able to design commercial interiors independently ranging from planning, preparing working drawings, selecting materials and all services layout

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme													
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical						
					ESE		PA		Total		ESE		PA		Total		
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
2	-	4	6	-	-	-	-	-	-	-	-	50#\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#\$) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	Introduction to a project topic
2	Actual site case study
3	Internet Case Study
4	Book case study
5	Anthropometric data collection
6	Ergonomics data collection



Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
7	Drafting Civil Layout
8	Planning Process – Bubble diagram/ Zoning
9	Preparing Concept sheet
10	Planning process – Alternative 1
11	Planning process – Alternative 2
12	Planning process – Alternative 3
13	Space circulation layout
14	Furniture layout rendered
15	Preparing flooring layout
16	Drafting the Sections minimum 4
17	Preparing Electrical layout
18	Preparing False ceiling layout
19	Preparing Plumbing layout
20	Material Board
21	3D Views

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment Name with Broad Specifications
1	Computer- Configuration Min requirements i7 processor 8 GB ram 64 bit OS NVidia graphics card required for 3D software Three button mouse is must for 3D
2	2D license software
3	3D license Software
4	MS OFFICE

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	Case study- internet	04
II	Anthropometric Data	02
III	Planning Process	06
IV	Working Drawing	08
V	Material Board	06
VI	Services	06
Total		32



8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	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
5	ABC of Air-conditioning	Ernest Tricomi	D. B. Taraporevala & sons

9. SOFTWARE/LEARNING WEBSITES

- <https://www.primacoustic.com>
- <https://www.designingbuildings.co.uk>
- <https://www.nist.gov/programs-projects/space-conditioning-options-energy-efficient-buildings>
- <https://firecontrolsystems.biz/>
- <https://www.controlfiresystems.com/>
- <https://www.honeywell.com>
- <https://logicalread.com/network-diagrams/>

PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : THIRD
COURSE TITLE : INTERIOR DESIGN FOR SPECIAL PURPOSE
COURSE CODE : 28723

1. RATIONALE

The subject intends to equip the students to apply professional design acumen while enhancing skills to planning of commercial 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.

2. COMPETENCY

The student will be able to design commercial interiors ranging from simple activity based small-scale commercial space of about 500 Sq. M. to 1000 Sq. M.

(Big showrooms, supermarkets, restobars, food outlets, institutions, polyclinics etc.)

3. COURSE OUTCOMES

The student will be able to design commercial interiors independently ranging from planning, preparing working drawings, selecting materials and all basic services layouts such as plumbing, electrical and specialized services layout like AC, safety and security and LAN

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme													
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical						
					ESE		PA		Total		ESE		PA		Total		
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
2	-	6	8	-	-	-	-	-	-	-	-	50#\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#\$) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	Briefing of the project/topic
2	Actual case studies
3	Internet case studies



Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
4	Book case studies
5	Anthropometric data collection
6	Ergonomics data collection
7	Drafting existing plan
8	Planning process- bubble diagrams/zoning
9	Preparing concept sheet
10	Planning process- alternative1
11	Planning process- alternative2
12	Planning process- alternative3
13	Drafting the sections
14	Drafting civil layout
15	Drafting civil sections
16	Flooring layouts
17	Electrical layout
18	False ceiling layout
19	Plumbng layout
20	Preparing ac layout
21	Material board
22	Preparing saftey/security layout
23	Preparing lan layout
24	3d views minimum 3

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment Name with Broad Specifications
1	Computer- Configuration Min requirements i7 processor 8 GB ram 64 bit OS Nvidia graphics card required for 3D softwares Three button mouse is must for 3D
2	2D license Software's
3	3D license Software's
4	MS OFFICE

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	Case Studies	04
II	Anthropometric Data	02



Unit	Topic and Contents	Hours
III	Planning Process	08
IV	Working Drawings	08
V	Material Board	04
VI	Services	06
	Total	32

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	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
5	ABC of Air-conditioning	Ernest Tricomi	D. B. Taraporevala & sons

9. SOFTWARE/ LEARNING WEBSITES

- <https://www.primacoustic.com>
- <https://www.designingbuildings.co.uk>
- <https://www.nist.gov/programs-projects/space-conditioning-options-energy-efficient-buildings>
- <https://firecontrolsystems.biz/>
- <https://www.controlfiresystems.com/>
- <https://www.honeywell.com>
- <https://logicalread.com/network-diagrams/>

PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : THIRD
COURSE TITLE : SECONDARY SERVICES AND MARKET SURVEY
COURSE CODE : 28308

1. RATIONALE

The subject intends to equip the students with concepts and principles of acoustics, thermal insulation, mechanical (forced) ventilation and air-conditioning, safety /security systems, telecommunication and LAN. It will also develop the analytical skills in designing appropriate services layout and schemes.

2. COMPETENCY

The students will be able to prepare working drawings for heat insulation and acoustical treatments to the given interior spaces. They will be able to do the services layouts such as AC layouts, fire layouts, security layouts, and telecommunication layouts.

3. COURSE OUTCOMES

Students will be able to

- Generate working drawings for thermal insulation and acoustical treatments to the given interior spaces
- Prepare AC layouts for any residential interior project
- Prepare AC layouts for any commercial interior project
- Prepare fire layouts for any interior project
- Security layouts for any interior project
- Lan layouts for any interior project

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
3	1	-	4	1.5	70*#	28	30*	00	100	40	-	-	-	-	-	-

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@): Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination



5. TUTORIAL ASSIGNMENTS

Tutorials should be planned to enhance learning. The faculty shall decide suitable assignments minimum one per unit based on the curriculum.

Sr. No.	Name of Assignment
1	Draw to-the-scale layout giving necessary nomenclature-legend: Acoustical arrangement for given layout including drawing sectional elevations(each for conference room/seminar hall and recording studio)
2	Draw to-the-scale layout giving necessary nomenclature-legend: Air-conditioning layout for an interior plan of a small space along with distribution, ducting & calculating the sizes for room air conditioners
3	Draw to-the-scale layout giving necessary nomenclature-legend: Air-conditioning layout for an interior plan along with distribution, ducting & calculating the sizes for centralized AC
4	Draw to-the-scale layout giving necessary nomenclature-legend: Fire layout for an interior plan
5	Draw to-the-scale layout giving necessary nomenclature-legend: Security layout for an interior plan.
6	Draw to-the-scale layout giving necessary nomenclature-legend: LAN layout for an interior plan including drawing typical details.

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

Sr. No.	Equipment Name with Broad Specifications
1	Computer- Configuration Min requirements i7 processor 8 GB ram 64 bit OS Nvidia graphics card required for 3D software's Three button mouse is must for 3D
2	2D license Software's
3	3D license Software's
4	MS OFFICE

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours	Marks
I	Heat and Sound- Principles of heat and effects of heat, Purpose	06	08



Unit	Topic and Contents	Hours	Marks
	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 sound. Defects of sound. (Not for examination) 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.		
II	Mechanical Ventilation - 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	06	08
III	Air conditioning- Principles of Air conditioning, Refrigeration Cycle Systems of Air-conditioning: Non-duct able and ductable Non-duct able - Window unit, Split units (Floor, wall, ceiling mounted, etc). Duct able - 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. Applications: According to various criteria of Volumetric load, occupancy and various activities. (Not for examination)	12	18
IV	Communication systems-Types of communication systems-telephone, public address, facsimile, PBX, EPABX, Internet, Wi-Fi, etc. Different types of telecommunication equipment LAN, WAN systems, Install Types of communication systems-telephone, public address, facsimile, PBX, EPABX, Internet, Wifi, etc. Different types of telecommunication equipment (04) LAN, WAN systems, Installation norms. Installation norms.	10	16
V	FIRE - 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 installation norms. 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 retardant treatments such as coating, adding of fibers etc.	06	08
VI	Safety and Security Systems- 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.	08	12
Total		48	70



8. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Heat and Sound	06	04	04	02	10
II	Mechanical Ventilation	06	04	02	02	12
III	Air conditioning	12	06	06	04	16
IV	Communication systems	10	04	04	04	12
V	Fire	06	02	04	02	08
VI	Safety and Security Systems	08	04	04	04	12
Total		48	24	24	18	70

Legends: R-Remember, U-Understand, A-Apply and above (Bloom's Revised taxonomy)

Note: The actual distribution of marks at different taxonomy levels (of R, U and A) in the question paper may vary from above table.

9. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	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
5	ABC of Air-conditioning	Ernest Tricomi	D. B. Taraporevala & sons

10. SOFTWARE/LEARNING WEBSITES

- <https://www.primacoustic.com>
- <https://www.designingbuildings.co.uk>
- <https://www.nist.gov/programs-projects/space-conditioning-options-energy-efficient-buildings>
- <https://firecontrolsystems.biz/>
- <https://www.controlfiresystems.com/>
- <https://www.honeywell.com>
- <https://logicalread.com/network-diagrams/>



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : THIRD
COURSE TITLE : WORKING DRAWING FOR INTERIOR DESIGN
COURSE CODE : 28724

1. 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, furniture systems & movement systems used in commercial spaces. It also intends to equip student with individualistic approach towards design, construction, assembly, hardware 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, automation & techniques

2. COMPETENCY

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 focusing 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.

3. COURSE OUTCOMES

Student will be able to

- Recognize difference between knock down furniture, modular furniture and carpentry furniture and will be able to apply it on required spaces.
- Draw and execute detailed and corrected partitions and paneling as per space and design requirement.
- Design & execute special work tops with different surface applications and will be able to select specific chairs in commercial spaces.
- Design & execute multi-level counters in different spaces as well as understand the details of different storages in commercial spaces.
- Understand automated furniture and bulk storage system.
- Know about detail working of lifts, escalators and conveyers.
- Design and draft staircases in special materials and different design and will be able to calculate the steps and slope for staircase design.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit (L+T+P)	Examination Scheme											
L	T	P		Theory						Practical					
				Paper Hrs.	ESE		PA		Total		ESE		PA		Total
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
2	-	6	8	-	-	-	-	-	-	50#\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.



(#S) or (@S) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	Knock down furniture (Sheet)
2	Modular furniture 1 (Sheet)
3	Modular furniture 2 (Sheet)
5	Ordinary Paneling (Sheet)
5	Ordinary partitions – Paneled partition and sandwich partition (Sheet)
6	Speciality paneling and partition (Sheet)
7	Commercial furniture – Special types of worktops Conference table (Sheet)
8	Commercial furniture – Special types of worktops Executive table (Sheet)
9	Commercial furniture – Special types of worktops shop counter (Sheet)
10	Commercial furniture – Special types of worktops sweet/ cake shop counter (Sheet)
11	Commercial furniture – Single and multi-level counter bank counter (Sheet)
12	Commercial furniture – Single and multi-level counter reception counter (Sheet)
13	Commercial furniture – Single and multi-level counter bar counter (Sheet)
14	Commercial furniture – Single and multi-level counter ticket booking counter with storage (Sheet)
15	Commercial seats & seating – office chairs and seating (Sheet)
16	Special types of displays & storages – file cabinet, library storage (Sketch)
17	Special types of displays & storages – overhead displays and showcases (Sketch)
18	Automated furniture systems automation in movable partitions, storages (Sketch and journal)
19	Automated furniture systems 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., (Sketch and journal)
20	Automated furniture systems Analysis of need & selection of automation systems based on - capacity, size, shape, form, essential clearances, and other technical data standards. (Sketch and journal)
21	Automated movement systems Lift (Sketch and journal)
22	Automated movement systems Escalator (Sketch and journal)
23	Automated movement systems conveyer (Sketch and journal)
24	Stationary movement systems – Designer staircase (Sketch and journal)



6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

Sr. No.	Equipment Name with Broad Specifications
1	Manual Drafting table and stools
2	T- Square
3	Set square
4	Triangular scale
5	Pencil set

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	<p>Knock down furniture and Modular furniture Analyzing need & selecting and/or designing & detailing appropriate knockdown or modular furniture suitable for commercial requirement. Understand advantages and disadvantage. Difference between carpentry made furniture, knock down furniture and modular furniture</p> <p>understand and draft details of hardware used in knock down furniture, assembly of different modules, it's sizes, materials and functions of tools used to fix hardware</p> <p>Understand and draft details of hardware used in modular furniture, base materials and finishing materials and understand the machinery used it. At least one factory visit is mandatory</p>	06
II	<p>Paneling & Partitions draft & understand different framing and finishing materials used in wall paneling, ordinary and special partitions. i.e., Teak wood, aluminium, plywood & mild steel for framing. Plywood & partical boards for base surface. Glass (fully glazed), MDF with paint, laminate, cement boards, acrylic sheet, veneer, WPC, wallpaper, foam panels, etc.</p> <p>Draft & understand special materials used in paneling and partitions for sound insulation, thermal insulation and acoustic treatments. Understand the design and selection criteria of materials according to need of space. Special study of door, window & ventilator. New materials and hardware are to be introduced. Understand the special surface treatments methods and materials</p>	08
III	<p>Commercial furniture draft & understand side & rear credenza of executive table, conference table, reception table, workshop table, ticket booking counter, shop counter, sweet shop counter, bank counter, bar counter, Materials selection criteria and design requirements.</p> <p>Understand working of visitor chairs & sofa seating (With/without armrests), executive & conference chairs (low & high back).</p> <p>draft and understand bulk filing & storage system, library book storages</p> <p>Draft and understand bar overhead, shop front display & showcases, etc. including designing unique furniture using suitable options.</p>	12
IV	<p>Automated furniture 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. Analysis of need & selection of automation systems based on - capacity, size, shape, form, essential clearances, and other technical data standards.</p>	02



Unit	Topic and Contents	Hours
V	Automated movement system Introduction to the need of mass/bulk movement (horizontal, inclined, vertical) of persons and materials. Working principles of motors, lifts, identification of use in passenger, service & its types. understand working of elevators, hydraulic & scenic elevators; belt, chain, identification of use in passenger, service understand working of conveyors, and pneumatic conveyors; revolving discs, platforms	02
VI	Stationery movement system - Conceptualize and draft at least two of designer staircase. Understand designer steps, stairs & ladders using appropriate materials, technique, assembly, ornamentations and working out designer details. Study of step and slope calculations for designing staircase and revise terminologies of staircase	02
Total		32

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	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	Materials of civil & interior construction	V.N. Chanapattan	V. Chanapattan

9. SOFTWARE/LEARNING WEBSITES

- <http://www.freesunpower.com>
- <https://www.instructables.com>
- <https://learn.adafruit.com/collins-lab-solar>
- <https://www.sciencedirect.com/>
- <https://www.energy.gov/energysaver/water-heating/solar-water-heaters>
- <https://www.youtube.com/watch?v=VaCy4hvwwKs>



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : THIRD
COURSE TITLE : PROFESSIONAL PRACTICE IN INTERIOR DESIGN
COURSE CODE : 28725

1. RATIONALE

The subject intends to equip the students with knowledge & skills of estimating, costing, analyzing 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.

2. COMPETENCY

Students will be able to do the estimates, rate analysis for any given item. They would be able to prepare tender as well for any interior project. They will be able to handle the sites independently

3. COURSE OUTCOMES

Students will be able to

- Choose the Right Avenue for career
- Understand their duties and responsibilities as a professional become aware about following Code of conduct for ethical practices
- Apply correct units and modes of measurements, preparing estimates using different suitable methods. Students will be able to do rate analysis for given item
- Prepare Tender documents, checking running bills, final bills on the site.
- Coordinate between different contractors and able to manage the site
- Apply different project management techniques for efficient working on site

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
2	-	2	4	-	-	-	-	-	-	-	50#\$	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#\$) or (@\$) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination



5. LIST OF PRACTICALS/ EXERCISES/ ASSIGNMENTS/ CASE STUDIES

Sr. No.	Name of Practical/ Exercise/ Assignment/ Case Study
1	Rate analysis of 1 residential furniture (Shelves & storage)
2	Rate analysis of 1 residential furniture (Seats)
3	Rate analysis of 1 residential furniture (Table)
4	Rate analysis of 4 residential furniture (Bed)
5	Rate analysis of 1 commercial furniture (Display Unit)
6	Rate analysis of 1 commercial furniture (Storage Unit)
7	Rate analysis of 1 commercial furniture (Seat & Seating)
8	Rate analysis of 1 commercial furniture (Worktops)
9	Rate analysis of 1 commercial furniture (Counters)
10	Specification for 2 non-structural masonry installations
11	Specification for 2 specialty paneling & partitions.
12	Specification for flooring in a living room or false-ceiling for a conference room
13	Rate analysis for any knockdown/modular furniture
14	Prepare: A set of item rate tender for any one residential or commercial project.
15	Prepare: A Bar chart or a Gantt chart for the works.
16	Prepare a CPM and PERT for any small project up to 100 sq.m.

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

Sr. No.	Equipment Name with Broad Specifications
1	Computer- Configuration Min requirements i7 processor 8 GB ram 64 bit OS NVidia graphics card required for 3D software Three button mouse is must for 3D
2	2D license software
3	3D license Software
4	MS OFFICE

7. THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to attain the identified competencies.

Unit	Topic and Contents	Hours
I	Career Opportunities & professional ethics-Entering the Profession Avenues for professional practice including advantages and limitations, Professional Ethics (Not for examination) Codes of conduct and responsibility towards client, fellow professionals, profession, contractors, suppliers, other consultants and the society	04
II	Rate analysis-Introduction to concepts of guesswork, estimation, costing & rate analysis. Need of rate analysis. Components of rate analysis (Drawings & specifications, units & modes of measurements, material & labor cost, contingencies, profit margins, indirect costs, etc).	06



Unit	Topic and Contents	Hours
III	Estimating & Costing - Need of estimating & costing Components of estimation & costing (Drawings & specifications, units & modes of measurements, work out put, material & labor cost, contingencies, profit margins, indirect costs, etc). (04)	04
IV	Tender –Introduction, aspects and contents-Introduction & Definitions Tendering Procedure: Tender Document Preparation, Types of Invitations (Public Notice, Private Invitation, Negotiation) Floating of Tender, Opening and award of tender (04) 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	08
V	Tendering(contractual procedures)- Work order letter and acceptance letter, Interim bills and final bills, Bills certifications	04
VI	Office & project management-Working of Interior Design Studio & ideal office structure; Distribution of work, authority, duties & responsibilities, Reporting, etc 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)	06
Total		32

8. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	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 Sigel	Whitney library of design
5	Contract Interior Finishes	William R. Hall	Whitney library
6	Construction Materials of Interior Design	William Rupp	Whitney Library

9. SOFTWARE/LEARNING WEBSITES

- <https://www.forbes.com>
- <https://oa.tatanex>
- <https://www.tendersontime.com>
- <https://Constructioncoverage.com>
- <https://Zapier.com>



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : FOURTH
COURSE TITLE : PROJECT
COURSE CODE : 28746

1. RATIONALE

The main aim of the preparation of project is to judge the knowledge gained by the students during their tenure of the programme, the transfer of learning to useful socially relevant application. This will also help in various skills such as Personal, social, professional and lifelong learning. The students will be benefited lot by this exercise of preparation of project on their experiences which will certainly add values in their attitudes such as value for health, work commitment, hardworking, honesty, problem solving, and punctuality, loyalty and independent study. The Student should also make a brief presentation about the project and the salient observations and findings.

2. COMPETENCY

The student will be able to design & execute commercial and residential interiors projects.

3. COURSE OUTCOMES

The student will be able to design commercial & residential interiors independently ranging from planning, preparing working drawings, selecting materials, estimation and costing and all services layouts, etc.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit (L+T+P)	Examination Scheme													
L	T	P		Theory						Practical							
			Paper Hrs.	ESE		PA		Total		ESE		PA		Total			
Max	Min	Max		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min			
-	-	08	08	-	-	-	-	-	-	-	-	50#	20	50	20	100	40

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@) : Under the practical ESE - 50 Marks (100%)

1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as **ABSENT in PR-ESE**

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination



5. IMPLEMENTATION STRATEGY

Candidate should be assigned Project preferably individually or if at all not possible can form a group of maximum 3 members. Every candidate must maintain the weekly progress diary and the guide should review the progress and sign the diary regularly.

Every candidate has to submit **Synopsis Report** (of pages not more than 10) and deliver Two Presentations for the completion of the Project.

First Presentation of Synopsis - to the Internal Guide tentatively during Third Week of the Academic Term.

Second Presentation on complete Project - to be given to the Internal Guide during Second Class Test schedule.

Contents of the Synopsis - It should include the following points

1. Cover Page of the Synopsis (Title of the Project, Student and Guide Details, Institute Name, Academic Year, Maharashtra State Board of Technical Education, Mumbai)
2. Index
3. Introduction
4. Need of the Project and Objectives
5. Problem Definition
6. Methodology
7. Action Plan

Evaluation of Practical-PA will be the average of two presentations, synopsis report and weekly progress diary maintained by the candidate.

There should not be any sort of typographical, diagrammatic and any other mistake/s in the final bound copy of the project report submitted by the candidate.

PROJECT REPORT / PORFOLIO CONTENTS

Sr. No.	Particulars
1	Introduction to a project topic
2	Actual site case study
3	Internet Case Study
4	Book case study
5	Detailed analysis of case study
6	Anthropometric data collection
7	Draft/ prepare presentation detailed sheet of anthropometric data
8	Ergonomics data collection
9	Draft/ prepare presentation detailed sheet of ergonomics data
10	Drafting Existing Civil Layout
11	Drafting Demolishing Civil Layout
12	Drafting Final Civil Layout
13	Drafting civil sections
14	Preparing flooring layout
15	Material specification sheet and sections sheet of flooring layout
16	Preparing Plumbing layout



Sr. No.	Particulars
17	Preparing Drainage layout
18	Planning Process – Bubble diagram/ Zoning
19	Concept procedure
20	Preparing Concept sheet
21	Planning process – Alternative 1
22	Planning process – Alternative 2
23	Planning process – Alternative 3
24	Space circulation layout
25	Material Board
26	Specification sheet
27	Drafting the Sections
28	Project estimation and costing
29	Preparing A.C. Layout
30	Preparing Security layout
31	Preparing LAN layout
32	Preparing Firefighting layout
33	Preparing false ceiling layout
34	Preparing Electrical layout
35	Working Drawings object 1
36	Working Drawings object 2
37	Working Drawings object 3
38	Working Drawings object 4
39	Working Drawings object 5
40	3D Views
41	Project report

PROJECT REPORT CONTENTS

The Project report should essentially consists of the following details.

- COVER PAGE OF THE PROJECT
- CERTIFICATE FROM THE INSTITUTE
- ACKNOWLEDGEMENT
- TABLE OF CONTENTS
- ABSTRACT
- INTRODUCTION
- METHODOLOGY OF PROJECT
- RESULTS
- CONCLUSION AND FUTURE SCOPE
- ABOUT THE ORGANISATION / COMPANY (IN CASE OF INDUSTRY BASED PROJECTS)



- REFERENCES / BIBLIOGRAPHY

GUIDELINES FOR PREPARING THE PROJECT REPORT

Project work is a basic requirement for the award of Diploma. Project should be prepared based on any one of the subjects of the Programme. The project work should be comprehensive and cover all aspects of the management.

COVER PAGE OF THE PROJECT

The Cover Page of the Project Report must include Title of the Project, Student and Guide Details, Institute Name, Academic Year, Maharashtra State Board of Technical Education, Mumbai.

CERTIFICATE FROM THE INSTITUTE

Certification from Project Guide, HOD, Principal and signature of external examiner during final examination.

ACKNOWLEDGEMENT

It should appear on the third page and the report writer should acknowledge the guidance provided by the project guide. Here the author may also acknowledge other persons who might have rendered help or supplied the required data or information for completion of the project. It should be brief and crisp. Generally, one page should suffice for acknowledgement.

TABLE OF CONTENTS

It must consist of Chapter No., Name of the Chapter and Page Number.

ABSTRACT

Abstract should describe the entire project work with its aim, objectives and methodology and conclusion. The abstract should be limited to one or two pages.

INTRODUCTION

Give brief description of need, significance and applications of the Project. It is recommended to limit the description to about 2 to 5 pages.

METHODOLOGY OF PROJECT

This is the most important part of the project and forms the main body of the project report. It needs very comprehensive coverage of all aspects.

It will be prudent to mention the methodology used for the project work, e.g., collecting information of various types of equipment/components, questionnaires, detailed study, working principle, operations, block diagram, structure, material used for designing of technical specifications, results etc. thereafter, detail procedure to achieve the project output.

RESULT

It should content the experimentation result of the project.

CONCLUSION AND FUTURE SCOPE

Based on the project work, draw inferences, and mention future scope. The future scope should be specific, relevant and practically implementable.



ABOUT THE ORGANISATION / COMPANY (IN CASE OF INDUSTRY BASED PROJECTS)

Should mention organizational structure, product / services (limit 1 or 2 pages.)

REFERENCES / BIBLIOGRAPHY

Mentions books, research papers, web sites referred in the report and in this section.

a. PORTFOLIO FORMAT

Paper Size - A2

Printing - Only on one side of the sheet

Student should submit one hard copy and soft copy in PDF format to the Institute.



PROGRAMME NAME : DIPLOMA IN INTERIOR DESIGNING AND DECORATION
PROGRAMME CODE : ID
SEMESTER : FOURTH
COURSE TITLE : INDUSTRIAL TRAINING
COURSE CODE : 28747

1. RATIONALE

Industrial training course is introduced to all Diploma programmes with the aim to imbibe the industry culture and professional practices in the students before they enter into world of work. By exposing and interacting with the real life industrial setting, student will appreciate and understand the actual working of an industry, best practices adopted in industry and other requirements in the industry or their chosen field of training. The industrial needs such as the soft skills, life skills and hands-on practices are intended to be inculcated in the students through this training. This short association with the industry will be instrumental in orienting the students in transforming them to be industry ready after completion of diploma programme.

2. COMPETENCY

This course is intended to develop the following competencies:

- Soft Skills i.e. Communication, Presentation and others.
- Life Skills i.e. Time management, Safety, Innovation, Entrepreneurship, Team building and others
- Hands-on Practices i.e. taking measurements on site, generating 2D &3D drawings, selection of materials, site management.

3. COURSE OUTCOMES

The industrial training is intended to acquire the competencies as mentioned above to supplement those attained through several courses up to fourth semester of the program:

- Communicate effectively (verbal as well as written) to execute the work.
- Prepare the industry report of the executed work.
- Exercise time management and safety in the work environment.
- Work in teams for successful completion of projects assuring quality.
- The student will be able to design commercial & residential interiors independently ranging from planning, preparing working drawings, selecting materials, estimation and costing and all services layouts, etc.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit	Examination Scheme												
L	T	P	(L+T+P)	Paper Hrs.	Theory						Practical					
					ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
-	-	20	20	-	-	-	-	-	-	-	100#	40	100	40	200	80

(*): Under the theory PA, 30 marks is the average of 2 class tests of 30 marks each to be taken during the semester for the assessment.

(#) or (@): Under the practical ESE - 50 Marks (100%)



1) 30 Marks (60%) - For Practical – ESE

2) 20 Marks (40%) - Average of 2 Skill tests / Practicals of 30 marks each is to be conducted during the semester, and then should be converted to 20 marks.

Note: If student Remaining absent in PR-ESE shall be considered as ABSENT in PR-ESE

Legends: L-Lecture, T – Tutorial/Teacher Guided Theory Practice, P –Practical, ESE -End Semester Examination, PA - Progressive Assessment

@Internal Assessment, #External Assessment, *#Online Examination

5. GENERAL GUIDELINES FOR INDUSTRIAL TRAINING

The Industries/Organizations can be Government/Public limited/ private family enterprises or Solo entrepreneur.

- **Duration of Industrial Training:** 8 weeks in Final Semester as per the credits of the programme.
- **Training Area:** Students should be trained in Large and Medium scale Industry / Organization. However, despite the best efforts by the Institute, if large and medium scale Industry / Organization are not available to all students then, students can also be placed in Small scale Industry / Organization.
- **Skill Knowledge Partner(SKP) :** To be identified by the Institute as per their programme areas like
 1. Architect/ Interior Designer Office
 2. Furniture Industries
 3. Modular Industry
 4. Kitchen Manufacturing Industry
 5. 3D Visualizer
 6. Materials & product industries

6. EXPECTATIONS FROM Skill Knowledge Partner(SKP)

Helping institute in developing the following competencies among students

- Soft Skills i.e. Communication, Presentation and others.
- Life Skills i.e. Time management, Safety, Innovation, Entrepreneurship, Team building and others
- Hands-on Practices i.e. taking measurements on site, generating 2D &3D drawings, selection of materials, site management.

7. ROLE OF PARENT DEPARTMENT OF THE INSTITUTE

- Collecting information about Industry / Organization available for training along with capacity.
- Institutions have to enter in to MOU with number of SKPs(Industries/ Organizations) for accommodating all the enrolled students for the mandatory
- Student and mentor allocation as per the slots available for in.-plant training (Desirable mentor- student ratio is 1:15).
- Communication with Industry / Organization available for training along with capacity and its confirmation
- Student enrollment for training.



- Issuing letter to the Industry / Organization for the training along with details of students and mentors.
- Principal/ HOD/ Faculty should address students about industrial safety norms, rules and discipline to be maintained in the Industry/ Organization during the training before relieving students for training.
- The faculty member during the visit to Industry/ Organization will check the progress of the student in the training, his/ her attendance, discipline and project report preparation.
- Mentors to carry out progressive assessment of the students during the training through Progressive Assessment (PA).
- End Semester Examination(ESE) assessment by mentor along with Industry / Organization expert as external examiner

8. ROLES AND RESPONSIBILITIES OF THE STUDENTS

Following should be informed to students in the letter deputing them for the training, an undertaking for this should also be taken from them

- Students would interact with the mentor to suggest choices for suitable Industry / Organization. If students have any contact in Industry / Organization (through their parents, relatives or friends) then same may be utilized for securing placement for themselves and their peers.
- Students have to fill the forms duly signed by authorities along with training letter and submit it to training officer/ concerned authority in the industry on the first day of training. Student should also carry with him/her the Identity card issued by institute during training period.
- He/she will have to get all the necessary information from the training officer/ concerned authority regarding schedule of the training, rules and regulations of the Industry / Organization and safety procedures to be followed. Student is expected to observe these rules, regulations, procedures.
- Students should know that if they break any rule of industry or do not follow the discipline then industry can terminate the training and send back the student.
- It is the responsibility of the student to collect information from Industry / Organization about understanding the instructions clearly given by the training officer/ concerned authority, meet his/ her expectations.
- It is the responsibility of the student to collect information from Industry / Organization about quality assurance methods/specifications of machines and raw materials/maintenance procedures/ production planning/work ethics/professional practices/organizational structure etc.
- During the training period students have to keep daily record of all the useful information in Log book
- Maintain the Diary/Logbook and get it signed from mentor as well as Industry / Organization Training in-charge.
- In case they face any major problem in industry such as an accident or any disciplinary issue then they should immediately report the same to the institute.



- Prepare final report about the training for submitting to the department at the time of presentation and viva-voce and get it signed from mentor as well as Industry / Organization training in-charge.

9. FORMAT FOR TRAINING REPORT

Following is the suggestive format for the training report, actual format may differ slightly depending upon the nature of Industry / Organization. The training report may contain the following

- Title page
- Certificate
- Abstract
- Acknowledgement
- Content Page

Chapter 1. Organizational structure of Industry / Organisation and General Lay Out/ structure of interior designer/architect office.

Chapter 2. Introduction of Industry / Organisation (Type of products and services, history, turn over and number of employees etc.)

Chapter 3. Types of major equipment/instruments/ machines/ softwares used in Industry/Organizational with their specification, approximate cost and specific use and their routine maintenance.

Chapter 4. Designing & execution Processes /Manufacturing along with production /planning and control methods and standard operating procedures.

Chapter 5. Major material handling product and procedures.

Chapter 6. Safety procedures followed

Chapter 7. Particulars of Practical Experiences in Industry / Organisation if any in Production/ Assembly/ Testing/Maintenance.

Chapter 8. Short report/description of the project (if any done during the training)

Chapter 9. Special/challenging experiences encountered during training if any (may include students liking & disliking of work places)

- References /Bibliography

10. SUGGESTED LEARNING STRATEGIES

Students should visit the website of the Industries/Organizations can be Government/Public limited/ private family enterprises or Solo entrepreneur where they are undergoing training to collect information about products, processes, capacity, number of employees, turnover etc. Students may also visit websites related to other similar industries as their learning resource.

11. TENTATIVE WEEK-WISE SCHEDULE OF INDUSTRIAL TRAINING

The industrial training is a common course to all programmes; therefore the industry / Organization selection will depend upon the nature of programme and its related industry. The training activity may vary according to nature and size of Industry / Organization. The details of activities to be completed during week wise Industrial Training schedule should be planned by the Industry. The evaluation of Industrial training will be done on the basis of skills acquired by the student during this 8 weeks period



12. SUGGESTED PRACTICALS/ EXERCISES- Log book format

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI - 400051
DIPLOMA IN INTERIOR DESIGN AND DECORATION (ID)

Name of the Student:		Name of the Firm:		
Semester:		Address:		
Enrollment No:				
Details of the Project:				
Sr. No.	Task	Day	Date	Detail Task
1	PRESENTATION & APPROVAL DRAWINGS			
2	SITE VISITS & FIELD OBSERVATION STUDY			
3	INTERACTION WITH CONSULTANTS/CLIENT			
4	WORKING DRAWINGS & DETAILS			
5	OFFICE ADMIN & LOG BOOK			
6	3D MODELLING			
SIGNATURE OF STUDENT		STAMP AND SEAL WITH SIGNATURE (OFFICE)		STAMP AND SEAL WITH SIGNATURE (INSTITUTE)



EVALUATION SHEET FOR PA OF INDUSTRIAL TRAINING

Sr. No.	Enrollment Number	Name of Student	Marks by Mentor & Industry Supervisor jointly	Marks by Industry Supervisor	Marks by Mentor Faculty	Total Marks
			Out of 40 (A)	Out of 30 (B)	Out of 30 (C)	Out of 100 (A+B+C)

DISTRIBUTION OF END-SEMESTER-EXAMINATION (ESE) MARKS OF INDUSTRIAL TRAINING

Marks for Industrial Training Report	Marks for Seminar/Presentation	Marks for Oral/Viva-voce	Total ESE Marks
25	25	50	100



