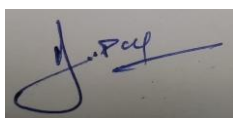


RAJA MANSINGH TOMAR MUSIC & ARTS UNIVERSITY

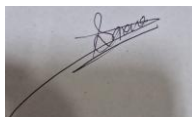
B. DESIGN IN INTERIOR DESIGN Scheme / Practical / Syllabus 2026-2027



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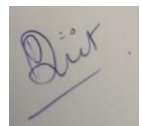
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Mrs. Aachal Bansal



Mrs. Ashwini Sharma



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B.Design in Interior Design - 1st Year - Scheme

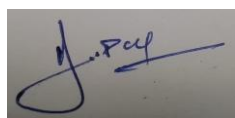
Paper	Time (in hours)	Size paper	Ext Marks		Midterm / CCE		Total
			Max. Marks	Min. Marks	Max. Marks	Min. Marks	
THEORY							
1. Fundamentals & Theory of Design	3 Hrs.	-	70	23	30	10	100
2. Anthropometrics & Ergonomics	3 Hrs.	-	70	23	30	10	100
3. History of Indian Architecture	3 Hrs.	-	70	23	30	10	100
PRACTICAL							
1. Design Fundamentals	4 Hrs.	A3	70	23	30	10	100
2. Anthropometrics & Ergonomics	4 Hrs.	A3	70	23	30	10	100
3. Construction I	4 Hrs.	A3	70	23	30	10	100
4. Engineering Drawings & Graphics	4 Hrs.	A3	70	23	30	10	100
TOTAL							700

NOTE: For Passing examination, the candidates shall be required to secure 33% marks in each of the prescribed subject, separately in

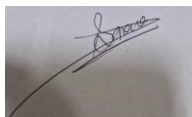
1. The University Theory Exam
2. The University Practical Exam
3. Internal Assessment, i.e., CCE done at college/university level



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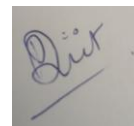
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B.Design in Interior Design - 1st Year– Theory

Paper 1 – Fundamentals & Theory of Design

Unit 1: Elements of Interior Design

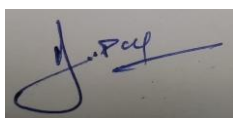
- Definition of Line, its types, expressive qualities (flow, weight, energy), visual illusion, and materials used in line drawing
- Definition of Shape, its types, and relationship with composition and visual impression
- Definition of Form, types of forms, and their 3D dimensional quality and visual impression
- Understanding Space, Types such as positive/negative, active/passive, and their importance and role in design
- Texture: Definition, visual and tactile types, and its use in materials and surfaces, methods of application, tools used.
- Pattern: Definition, understanding of pattern, repetition, and its use in fabrics, walls, and interior elements
- Light: Introduction to light, types (natural and artificial), and its role in visibility and mood in interior spaces

Unit 2: Color Theory

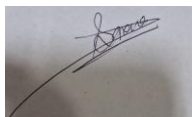
- What is Color – Basic idea of color, how light creates color, and factors affecting color perception
- Color Systems & Mixing – Basics of color wheels (pigment, light, Munsell) and how colors mix
- Properties of Color – Hue (name), Value (light/dark), Intensity (brightness), Temperature (warm/cool)
- Color in Design – Use of color with principles (balance, rhythm, emphasis, harmony) and elements (space, line, texture, light, contrast, depth)
- Color Schemes & Harmony – Types of color combinations (monochromatic, analogous, complementary, etc.) and creating pleasing palettes
- Influence of Color – Effect of colors on mood, emotions, and daily life
- Tone (Value) – Light and dark variations of color and their role in creating depth and space



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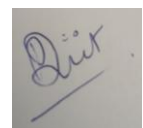
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Unit 3: Space in Interior Design

- Space - Definition of space and types like social, private, work, and storage spaces
- Theories & Principles of Space – Basic principles related to space planning and design understanding
- Space Planning Process – Steps involved in planning a space, including measuring, scales, and units
- Organization of Space – Arrangement of shapes, forms, and design elements to define and structure space
- Elements Defining Space – Horizontal, vertical, overhead, and depressed elements that shape interiors
- Types of Spatial Configurations – Linear, L-shaped, parallel planes, U-shaped, and four-plane spaces

Unit 4: Theory of Design

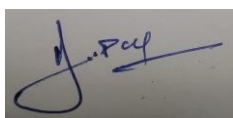
- What is Design & Design Process – Meaning of design, steps to design, creative process, and concept development
- Problem-Solving in Design – Understanding user needs and finding effective design solutions
- Information & Site Analysis – Data collection methods and site study (soil, surroundings, access, water, ventilation, sunlight)
- Diagramming in Design – Types of diagrams, elements, relationships, and concept representation
- Design Operations – Basic operations like layering, recombining, and rotating elements in design

Unit 5: Form & Space in Architecture

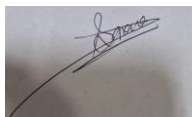
- Organization of Form & Space – Arrangement of form and space, including space within a space
- Spatial Relationships – Interlocking spaces, adjacent spaces, and spaces linked by common areas
- Types of Spatial Organization – Centralized, linear, radial, clustered, grid, and circulation-based organization
- Design Principles – Axis, Balance, Hierarchy, Harmony, Unity, Repetition, Rhythm, Contrast, Emphasis, Scale, & Proportion



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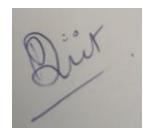
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- Form & Its Transformation – Understanding Transformation, Dimensional Transformation, Subtractive Transformation, Additive Transformation, Grouping Forms. Surface Articulation, Form and Movement
- Built vs Open Spaces – Achieving balance between constructed and open areas
- Drafting Standards & Symbols – Basic standards and commonly used symbols in design drawings

Suggested Reading:

- *Introduction to Architecture* by Francis D.K. Ching
- *Design Process: A Primer for Architectural and Interior Design* by Sam F. Miller
- *Design Thinking Process and Methods 3rd Edition* by Robert Curedale
- *Design Literacy for All – A Hand book* by IIID

Paper 2 – Anthropometrics & Ergonomics

Unit 1: Introduction

- Ergonomics & Anthropometry: definition and applications
- Human body proportions
- Ergonomics in design and user-centered approach
- Domains: physical, cognitive, organizational
- Work physiology, stress, environmental factors

Unit 2: Principles of Anthropometry

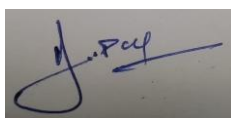
- Ergonomic concepts: clearance, reach, posture
- Working zones and heights
- User limitations and working area
- Ergonomic injuries, fatigue, and errors

Unit 3: Human Body Structure

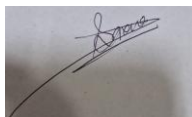
- Body dimensions and anatomy basics
- Static & dynamic anthropometry, somatotypes
- Posture, strength, and vision
- Seating principles and hand anthropometry



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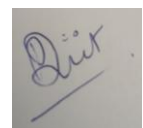
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Unit 4: Ergonomics in Design

- Standard postures (standing, sitting, etc.)
- Posture and work relationship
- Work surfaces (vertical & horizontal)
- Ergonomics in residential (kitchen, bedroom, bathroom) and office spaces

Unit 5: Anthropometric Data

- Measurement techniques and percentile data
- Variations: gender, age, ethnicity
- Data collection methods
- Standard reference planes (SRP, horizontal, vertical, median)

Suggested Reading:

- *Bodyspace: Anthropometry, Ergonomics and the Design of Work* by Stephen Pheasant
- *Handbook of Human Factors and Ergonomics Methods* by Stanton & Hedge
- *Ergonomics and Design: A Reference Guide* by Scott Openshaw
- *Introduction to Human Factors and Ergonomics* by Bridger

Paper 3 – History of Indian Architecture

Unit 1: Ancient Indian Architecture

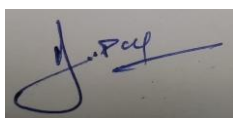
- Understanding Time line and classification of Indian Architecture
- Town planning of Mohenjo-Daro and Harappa, Dholavira, Lothal, Bet Dwarka
- Rock Cut Buddhist Architecture - Barabar caves in Bihar, Ajanta caves, Ellora Caves, Badami Caves, Bhaja Caves, Karla Caves, Bedse Caves, Kanheri Caves, Jogimara Caves, Sitamarhi Cave of Rajgir, Udayagiri and Khandagiri Caves, Sittanavasal Cave, Sittanavasal Cave, Bagh Caves, Elephanta Caves.
- Salient features of a Chaitya Hall and Vihara. Stupa of Sanchi & Stupa of Nagarjunakonda

Unit 2: Temple Architecture

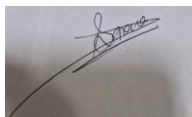
- Basic Features of the Hindu Temples - Garbhagriha, Mandapa, Shikhar or Vimana, The Vahan, Gopura.



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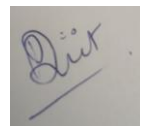
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- Concept and evolution of Hindu Temple - Nagara style, Dravida style , Vesara style.
- Famous Temples of India - Tigawa temple, Ladh Khan temple, Aihole Papanatha and Virupaksha temple at Pattadakal. Kailasanathar temple, Dashavatara temple in Deogarh.
- Mandapas & Rathas Example of masonry temples – Shore Temple, Mahaballipuram, Kanchipuram, , Brihadeeswarar Temple, Tanjore , Meenakshi Amman temple, Madurai.
- Lingaraja Temple, Bhubaneswar & Sun Temple, Konarak.
- Kandariya Mahadeva temple, Khajuraho –Surya Temple, Modhera.

Unit 3: Indo-Islamic Architecture

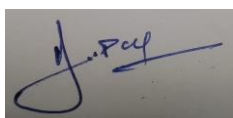
- Evolution of Islamic Architecture in India - Time line : Early Islamic Architecture (12th to 16th century, Mughal Architecture (16th to 18th century & Indo-Islamic Architecture (18th to 19th century).
- Key Features of Islamic Architecture in India - Domed Roofs, Minarets, Archways, Calligraphy, Geometric Patterns, Courtyards, Water Features, Ornate Decoration, Perforated Screens.
- Imperial Style - Delhi Sultanate - Kutub Minar & Kutub Complex, Tomb of Ghiyasuddin Tughlaq, Alai Darwaza.
- Provincial Style – (Mandu, Gujarat, Bengal, and Jaunpur) – Jahaj Mahal, Jami masjid, Ahmedabad.
- The Mughal Style (Delhi, Agra, And Lahore) - Humayun's Tomb, Delhi, Fatehpur Sikri (lay out, Buland darwaza, Diwan-i-Khas, The Taj Mahal, Agra, Red Fort, Delhi.
- The Deccan Style (Bijapur, Golconda) - Gol Gumbaz, Bijapur, & Charminar, Hyderabad.

Unit 4: Colonial & Modern Indian Architecture

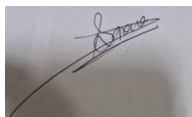
- Characteristics of Indo-Serenic Architecture: St. Paul's Cathedral, Calcutta, Bombay Town Hall, University of Madras Senate House & Victoria Memorial Hall, Calcutta.
- Renaissance, Art Deco, Gothic Architecture in India - Mumbai High Court, David Sassoon Library, Wellington Fountain, Regal Cinema, Victoria Terminus
- Contribution of Edwin Lutyens & Herbert Baker to the lay-out and Architecture of New Delhi – Rashtrapathi Bhavan & Parliament House.



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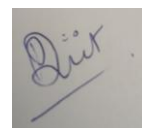
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Unit 5: Regional Architecture of India

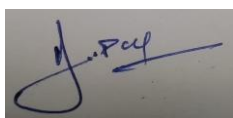
- Rajput Architecture, Sikh Architecture, Maratha Architecture.
- Indian Vernacular Style of Architecture.
- Dravidian Architecture.
- Kalinga Architecture.
- Vernacular Architecture.

Suggested Reading:

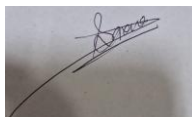
- *History of Indian Architecture by Binda Thapar*
- *Modern Architecture History of India by Keneth Frampton*
- *Art and Architecture of Indian Subcontinent by Harle J C*
- *Indian Architecture by Percy Brown*



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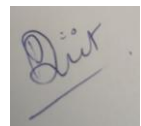
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B.Design - Interior Design - 1st Year– Practical

Paper 1 – Design Fundamentals

Overview: This course introduces the foundational skills required for interior and architectural design. Students develop an understanding of design elements such as line, shape, form, color, texture, and space, along with principles like balance, rhythm, harmony, contrast, emphasis, and proportion. The course explores color theory, spatial organization, and the relationship between form and space through practical exercises and concept development. It also focuses on space planning, understanding spatial relationships, and transformation of forms. Students learn basic drafting techniques, standards, and representation methods to communicate design ideas effectively, while creating functional, aesthetically balanced, and user-oriented interior spaces.

Assignment List:

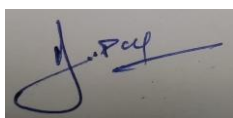
1. Visual Texture, Expressive Lines & Impact of Lines – 4 sheets (A3 size)
2. Shape – Visualization using +ve and -ve Space – 5 sheets (A3 size) along with model
3. Exploration of Planes – 4 sheets (A3 size) along with models
4. Composition of Geometric & Organic Shapes – 4 sheets (A3 size) along with models
5. Visual Transformation of Forms – 4 sheets (A3 size) along with models
6. Organization of Space & Form – 10 sheets (A3 size) along with models
7. Design Principles – 10 sheets (A3 size) along with model
8. Tangible & Visual Textures – 5 sheets (A3 size)
9. Still Life & Life Sketching – 5 sheets (A3 size)
10. One- & Two-Point Perspective – 6 sheets (A3 size)
11. Color Wheel, Color Schemes & Illusions – 6 sheets (A3 size)

Suggested Reading:

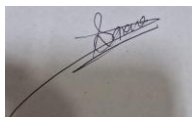
- *Light, Shade and Shadow (Dover Art Instruction)* by E. L. Koller
- *Now to Draw What You See (Practical Art Books)* by Rudy De Reyna
- *Bridgman's Complete Guide to Drawing from Life* by George B Bridgima,
- *Color* by Edith Anderson Feisner
- *Color* by Betty Edwards
- *How Color affect Design* by Aaris Sherin



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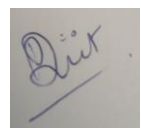
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Paper 2 – Anthropometrics & Ergonomics

Overview- Anthropometry and ergonomics focuses on understanding human body measurements and applying them to create comfortable, safe, and functional spaces. Anthropometry deals with dimensions such as height, reach, and proportions of different users, while ergonomics ensures that designs suit human abilities and limitations. Together, they help in creating user-friendly and efficient environments. Students learn about body structure, posture, movement, and concepts like clearance and reach, along with the impact of environmental factors on comfort. The practical application of this knowledge is crucial, as it helps in designing furniture and spaces that fit the human body correctly.

Assignment List:

1. Human Proportions (*3 Sheets*) - Male, Female, and Children figures (scaled with proportions)
2. Standing Dimensions (*1 Sheet*) - Stature, eye, shoulder, elbow, hip, knuckle, fingertip heights
3. Sitting Dimensions (*1 Sheet*) - Sitting height, eye, shoulder, elbow heights
4. Lower Body Measurements (*1 Sheet*) - Thigh thickness, buttock–knee, buttock–popliteal, knee, popliteal height
5. Upper Body Measurements (*1 Sheet*) - Shoulder breadth, hip breadth, chest depth, abdominal depth, arm lengths
6. Head, Hand & Foot (*1 Sheet*) - Head, hand, and foot dimensions
7. Span Measurements (*1 Sheet*) - Arm span, elbow span
8. Ergonomics (*10 Sheets*) - Clearance and reach zones
9. Circulation Space Study (5 Sheets)

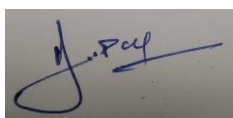
Study and draft standard circulation requirements for residential and office furniture layouts as per standard dimensions- Sheets to be Included: Bedroom Circulation, Living Room Circulation, Office Circulation.

Suggested Reading:

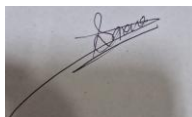
- *Body Space - Anthropometry, ergonomics & the design of work* by Stephen Pheasant,
- *Handbook of Human Factors & Ergonomics Methods* by Stanton & Hedge,
- *Ergonomics & Design: a reference guide* by Scott Openshaw,
- *Introduction to Human Factors and Ergonomics* by Bridger



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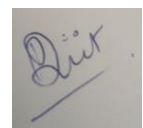
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Paper 3 – Construction I

Overview: Construction serves as a comprehensive foundation in architectural and interior drafting, focusing on the technical communication of spatial design. It bridges the gap between early conceptualization and detailed execution. Students will begin with spatial relationship planning using bubble diagrams before moving into rigorous scaled drafting, including detailed floor plans, reflected ceiling plans, elevations, and sections.

The curriculum dives deep into the basics of interior spaces, starting from foundation to roof structures, while detailing components like stairs, flooring, doors, and windows. By combining technical drafting skills with functional space planning, students will learn to design zones - Bedroom, Kitchen, Toilet, Living Areas and ultimately combine their learning by producing a complete, fully rendered residential design drawing set.

Assignment List:

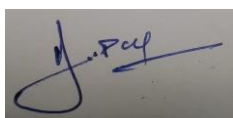
1. Architectural material symbols.
2. Brick bonds and stone masonry drawings.
3. Opening symbols including doors, windows, and ventilators.
4. Types of stairs with plan, elevation, staircase sections, and detailed drawings.
5. Types of flooring with plans and sections.
6. Bubble diagrams and space planning exercises.
7. 1BHK floor plan drafting
8. Door and window schedules, furniture layout plans, and ceiling layout plans with sections.
9. Working drawings for living area, bedroom, toilet, and kitchen spaces.
10. Building sections, elevations, mood boards, and perspective views for interior or exterior spaces.

Suggested Readings:

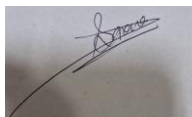
- *Building Construction Illustrated* by Francis D. K. Ching
- *Interior Design Illustrated* by Francis D. K. Ching
- *Building Construction* by B. C. Punmia
- *Time-Saver Standards for Interior Design and Space Planning* by Joseph DeChiara



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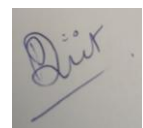
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Paper 4 – Engineering Drawings & Graphics

Overview: This course introduces the fundamentals of architectural and interior drawing as a core design communication tool. It covers basic drawing principles, line types, lettering, and sign conventions for accurate representation. Students learn geometric constructions, plane curves, and architectural forms like arches. It also includes scales, orthographic and isometric projections, sciography, perspective drawing, and drafting standards. Emphasis is placed on dimensioning, material representation, and rendering techniques. The subject builds strong visualization, technical accuracy, and professional presentation skills essential to design practice.

Assignment List: (To be done in A3 sheets)

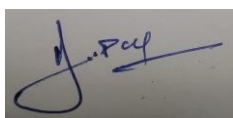
1. Introduction to basic principles of drawing, sign conventions, line types, and line weights.
2. Lettering techniques and drawing of different fonts for architectural presentation.
3. Introduction to plane geometry, including exercises in lines and angles.
4. Construction of triangles, quadrilaterals, regular polygons, and plane curves such as ellipse, parabola, hyperbola, and ovals.
5. Study and construction of arches, including typical arch forms and methods of drawing.
6. Construction and application of plain and diagonal scales in drafting practice.
7. Orthographic projection and first angle projection principles- Projection of points, lines, planes, and solids.
8. Principles of isometric, oblique, and axonometric projections- Three-dimensional representation and projection of solids.
9. Principles of sciography and the study of shade and shadows in plan, elevation, and other views.
10. Representation of human figures and accessories in 2D and 3D drawings.
11. Measured perspective drawings using one-point perspective method.
12. Drafting standards and presentation techniques.

Suggested Reading:

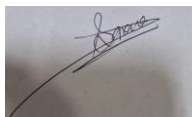
- *Interior Graphics Standard* by Corky Binggeli
- *Engineering Drawing* by N.D. Bhatt
- *Perspective for Interior Design* by John Pile



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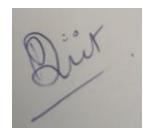
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B.Design in Interior Design - 2nd Year - Scheme

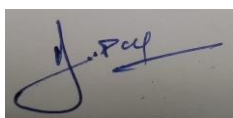
Paper	Time (in hour)	Size paper	Ext Marks		Midterm / CCE		Total
			Max. Marks	Min. Marks	Max. Marks	Min. Marks	
THEORY							
1. History Of European Architecture	3 Hrs.	-	70	23	30	10	100
2.Materials & Construction - I	3 Hrs.	-	70	23	30	10	100
3.Interior Services - I	3 Hrs.	-	70	23	30	10	100
PRACTICAL							
1.Furniture Design	4 Hrs.	Digital	70	23	30	10	100
2.Interior Services - I	4 Hrs.	Digital	70	23	30	10	100
3. Interior Design Studio I	6 Hrs.	Digital	70	23	30	10	100
4.Computer Aided Design	6 Hrs.	Digital	70	23	30	10	100
TOTAL							700

NOTE: For Passing examination, the candidates shall be required to secure 33% marks in each of the prescribed subject, separately in

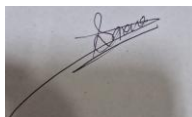
1. The University Theory Exam
2. The University Practical Exam
3. Internal Assessment, i.e., CCE done at college/university level.



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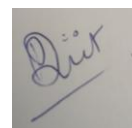
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B.Design in Interior Design - 2nd Year - Theory

Paper 1 – History of European Architecture

Unit 1: Ancient European Architecture

- Egyptian Architecture - Key characteristics, materials, and construction techniques, Use of decoration, motifs, columns, and capitals, Study of tomb and temple architecture
- Greek Architecture - Factors influencing Greek architecture, Classical orders. Optical corrections in temples
- Roman Architecture - Masonry types and construction of vaults and domes, Orders, Building types, Key examples.

Unit 2: Byzantine, Romanesque & Gothic

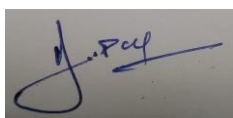
- Byzantine Architecture - Characteristics, Combination of basilica and centralized layouts, Use of mosaics and materials (Hagia Sophia), Other structures: Basilica Cistern, bridges, monasteries
- Romanesque Architecture - Features & Examples: Pisa Cathedral, Leaning Tower of Pisa, Durham Cathedral
- Gothic Architecture - Development and periods of Gothic style, Key features, Important monuments: Cologne Cathedral, Notre Dame, Sainte-Chapelle, Palace of Westminster

Unit 3: Renaissance, Baroque & Rococo

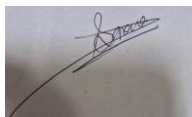
- Renaissance Architecture - Definition and phases of Renaissance, Features, Key works: St. Peter's Basilica, Florence Cathedral, Sistine Chapel interiors
- Baroque Architecture - Characteristics, Use of domes, curves, and contrast, Examples: St. Peter's Square, St. Paul's Cathedral, Palace of Versailles
- Rococo Architecture - Origin and evolution from Baroque, Features, Examples: Catherine Palace, Sanssouci Palace, Hôtel de Soubise



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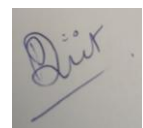
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Unit 4: Neoclassical, Art Nouveau & Art Deco

- Neoclassical Architecture - Revival of classical Greek and Roman styles, Features, Examples: Panthéon (Paris), Brandenburg Gate, Lincoln Memorial
- Art Nouveau - Origin and philosophy, Features, Examples: Casa Milà, Hotel Tassel, Secession Building
- Art Deco - Origin and development in the modern era, Features, Examples: Chrysler Building, Eastern Columbia Building, Miami Art Deco District

Unit 5: Modernism & Postmodernism

- Modernism - Principles of functionalism and minimalism, Emphasis, Major Styles: Bauhaus, De Stijl, Expressionism, Functionalism, Minimalism, Study of their origins, characteristics, and key architects
- Postmodernism - Introduction to Deconstructivism and its features
- Important Architects and Their Works - Frank Lloyd Wright, Le Corbusier, Ludwig Mies van der Rohe, Zaha Hadid, Norman Foster

Suggested Reading:

- *The Handbook of Interior Architecture and Design* by Brooker & Weinthal
- *A History of Interior Design* by John Pile

Paper 2 - Materials & Construction- I

Unit 1: Wood and Wood-Based Materials

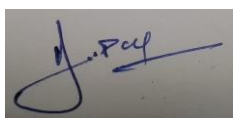
- Anatomy, characteristics, and properties of wood including fire resistance, electrical, thermal, and acoustical properties.
- Defects in timber, seasoning of timber, and classification into hardwood and softwood.
- Wood products and composites including plywood, block board, hard board, chip board, Masonite board, MDF, HDHMR, cane, and bamboo.
- Laminates and veneers: types, properties, manufacturing process, adhesives, preservation, maintenance, and applications in interiors.

Unit 2: Flooring, Ceilings, and Wall Finishes

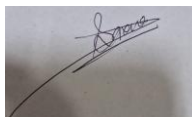
- Interior flooring materials including mud, cement, brick, granolithic, terrazzo, mosaic, marble, tiles, timber, rubber, cork, PVC, and glass flooring.



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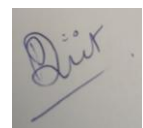
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- Exterior flooring materials including concrete slabs, brick flooring, and exterior tiles.
- Tiles: classification, properties, applications, laying techniques, skirting, and moldings.
- Ceilings: types, materials, finishes, and applications.
- Wall finishes including paint, wallpaper, cladding, paneling, and PVC panels with their properties, applications, and maintenance.

Unit 3: Doors, Windows, Ventilation, and Hardware

- Types of wooden, metal, and special doors along with door fittings and accessories.
- Types of windows, skylights, ventilators, and window fittings.
- Principles and importance of natural and mechanical ventilation, air circulation, fans, and ducts.
- Door, window, and furniture hardware, fasteners, and modern hardware systems used in interiors.

Unit 4: Metals, Plastics, Paints, and Finishes

- Metals: types, properties, finishes, and applications in interior construction.
- Plastics: types, properties, uses, environmental impact, recycling, and sustainability.
- Paints: types, properties, and methods of application.
- Surface finishes, wall finishes, and protective coatings used in interiors.

Unit 5: Glass, Stones, Tiles, Fibers, and Fabrics

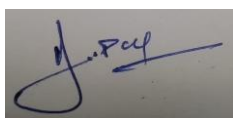
- Types of glass, safety glass, properties, and applications in interiors.
- Stones: types, properties, finishes, and uses.
- Modern and special tiles and their applications.
- Natural and synthetic fibers, their properties, and applications.
- Fabrics: types, finishes, and use in interior spaces.

Suggested Reading:

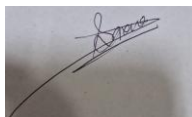
- *Building Material by Gurucharn Singh*
- *Building Construction I and II by Sanjay Mahajan*
- *Building Construction by Sushil Kumar*



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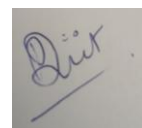
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Paper 3 – Interior Services - I

Unit 1: Lighting

- Natural lighting: daylight factor, recommended daylight standards, calculations for openings, principles of good natural lighting, reflection, transmission, and psychological impact of lighting.
- Artificial lighting: direct, indirect, concealed, task, decorative, ambient, neon, flood, underwater, and special-purpose lighting.
- Lighting systems and fixtures: luminous intensity, lux, lumen, color temperature, lighting schemes, types of lamps, luminaires, fans, switches, sockets, dimmers, and legends used in lighting layouts.

Unit 2: Electrical Systems

- Fundamentals of electrical systems including voltage, amperage, wattage, power generation and transmission, HT and LT supply, single-phase and three-phase systems.
- Wiring systems: service wires, metering, circuits, distribution boards, safety devices, and electrical standards.
- Electrical layouts, symbols, earthing systems, conductors, switchboards, electrical points, safety precautions, and standards.

Unit 3: Water Supply Systems

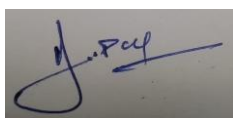
- Sources of water supply and methods of water treatment including screening, aeration, sedimentation, filtration, disinfection, and softening.
- Components of water distribution systems including valves, pumps, pipe materials, joints, bends, service connections, hydrants, and storage tanks.
- Water storage and distribution methods, direct and indirect supply systems, hot and cold water supply, heaters, circulation systems, and piping layouts.

Unit 4: Sanitation and Drainage

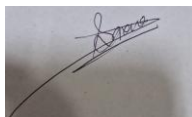
- Principles of sanitation and sewerage systems including sanitary, storm, and combined drainage systems.
- Building drainage components including pipes, traps, vents, gullies, inspection chambers, manholes, and sewage treatment methods.



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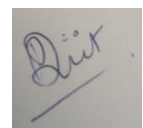
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- Wastewater disposal systems including septic tanks, soil absorption systems, solid waste disposal, composting, incineration, aerobic and anaerobic decomposition, and BOD.

Unit 5: Plumbing and Sanitaryware

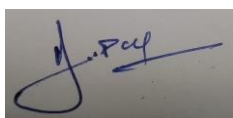
- Introduction to plumbing systems, plumbing terminology, and standard dimensions for kitchens, washrooms, and utility areas.
- Plumbing fittings including taps, faucets, showers, mixers, diverters, valves, and traps.
- Sanitaryware including bathtubs, water closets, urinals, shower stalls, basins, sinks, and quality standards for sanitary and CP fittings.

Suggested Reading:

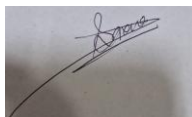
- *Interior Design by Ahmed A. Kasu*
- *Building Services Handbook by Fred Hall*
- *Mechanical and Electrical Equipment for Buildings by Walter T. Grondzik*
- *Plumbing Services Design Guide by CIBSE*



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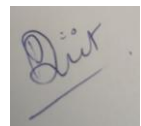
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B.Design in Interior Design - 2nd Year - Practical

Paper 1 – Furniture Design

Overview: This subject focuses on developing practical skills in furniture design, construction, and representation. Students learn basic terminology, types of wooden joints, and their applications through drawings and models. The course covers standard dimensions and preparation of reference sheets for various furniture types. Emphasis is given to drafting furniture in AutoCAD, including plans, elevations, and sections of sofas, beds, wardrobes, and storage units. Students also explore functional and modular furniture design with model making. Additionally, the subject includes the study of renowned designers and their iconic works, enhancing understanding of form, function, and aesthetics in furniture design.

Assignment List:

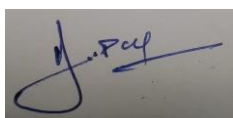
1. Basics of furniture construction including terminology, wooden joints, applications, and rendering of furniture elements. *(To be done in AutoCAD and A3 sheets)*
2. Preparation of reference sheets with standard dimensions for living room, bedroom, kitchen, and office furniture. *(To be done in AutoCAD and A3 sheets)*
3. Furniture drawings with plans, elevations, sections, and models for sofas, dining furniture, centre tables, TV units, beds with hydraulic details, and wardrobes. *(To be done in AutoCAD)*
4. Drawings and models of storage and functional furniture including racks, bookshelves, cabinets, and shelves. *(To be done in AutoCAD)*

Suggested Reading:

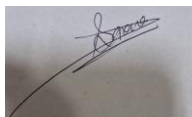
- *The Atlas of Furniture Design* by Vitra Design Museum
- *Furniture Design: An Introduction to Development, Materials and Manufacturing* by Stuart Lawson



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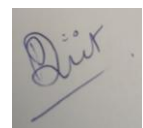
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Paper 2 – Interior Services - I

Overview: This subject focuses on developing practical skills in electrical planning, lighting design, water supply systems, plumbing, sanitation, tiles, ceilings, walls in **Salon/Exhibition Hall**. Students learn basic terminology, types of walls and ceilings, sanitation systems, and their applications through drawings. The course covers standard dimensions and sheet preparation for various ceiling designs, plumbing, drainage layouts, and salon interiors. Emphasis is given to drafting layouts in AutoCAD, including plans, elevations, and sections of washrooms, kitchens, and salon spaces. Students also explore functional and modern bath fittings, salon furniture, workstation planning, and service area layouts. Additionally, the subject includes the study of bath fittings, salon fixtures, their finishes, and prices, enhancing understanding of form, function, aesthetics, and space planning in interior design.

Assignment List:

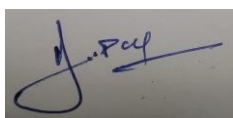
1. Electrical symbols, electrical layouts, and lighting design for residential and commercial spaces.
2. Lighting calculations and market survey of electrical fittings, lamps, and fixtures.
3. Plumbing and sanitation symbols, layouts, drainage systems, and water supply systems.
4. Drawings of traps, inspection chambers, septic tanks, and hot and cold-water supply systems.
5. Market survey of plumbing, sanitary fittings, partition materials, fittings and ceiling materials
6. Bubble diagram and Zoning.
7. Floor plans, presentation plans and working plans.
8. Electrical and False ceiling layouts with different ceiling design types.
9. Plumbing layouts.

Suggested Reading:

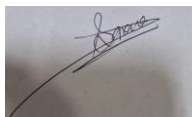
- *Building Services Handbook* by Fred Hall
- *Mechanical and Electrical Equipment for Buildings* by Walter T. Grondzik
- *Time-Saver Standards for Interior Design and Space Planning* by Joseph DeChiara



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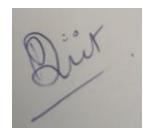
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Paper 3 - Interior Design Studio I

Overview: Practical residential and commercial projects help students bridge the gap between theory and real-world application by developing creativity, technical skills, and problem-solving abilities. Through residential projects, students learn space planning, ergonomics, material selection, and designing according to user needs and lifestyle. Commercial projects focus on functional planning, user circulation, brand integration, and the use of durable materials for high-traffic spaces. Overall, these projects enhance visualization, presentation skills, and prepare students to confidently handle real interior design challenges.

Assignment List:

Students shall prepare residential and commercial interior design projects including the following components:

1. Design brief, mood board, bubble diagram, and concept development.
2. Space planning, circulation planning, and measurement drawings.
3. Furniture layout and interior wall elevations.
4. Flooring layout and reflected ceiling plan.
5. Electrical and plumbing layouts.
6. Perspective views, 3D views, and material charts.
7. Model making and presentation sheets. (for 2BHK)

Projects to be Submitted:

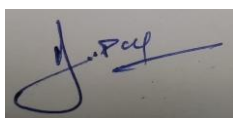
1. Residential Project – 2BHK residential planning for a 30' × 50' plot with 15' × 50' built-up area.
2. Commercial Project – Office design for professional spaces such as CA office, lawyer's office, advertising agency, or software development firm (20' × 50').

Suggested Reading:

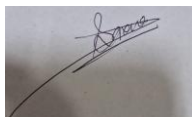
- *Time-Saver Standards for Interior Design and Space Planning (DeChiara)* by Joseph DeChiara, Julius Panero, and Martin Zelnik
- *Human Dimension and Interior Space* by Julius Panero and Martin Zelnik
- *Architects' Data* by Ernst Neufert



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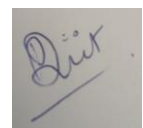
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Paper 4 – Computer Aided Design

Overview: This course introduces students to digital drafting, modeling, rendering, and presentation techniques using AutoCAD, Photoshop, and SketchUp. Students learn the fundamentals of 2D drafting, working drawings, 3D modeling, rendering, texturing, and presentation layouts used in interior design and architecture. The course focuses on developing technical accuracy, visualization skills, and software integration through practical exercises and projects. Students gain hands-on experience in preparing professional drawings, rendered floor plans, furniture models, and presentation sheets suitable for residential and commercial design projects.

Assignment List:

(To be done in AutoCAD)

1. Bungalow plan drafting.
2. Preparation of working drawings.

(Photoshop)

3. Floor plan and sectional elevation rendering, Presentation sheet preparation.

(SketchUp)

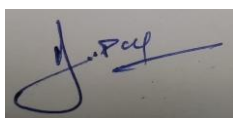
4. Basic 3D model creation.
5. Furniture modeling and texturing.
6. Final rendered presentation with A3 print output.

Suggested Reading:

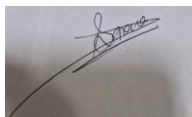
- *Mastering AutoCAD* by George Omura
- *Adobe Photoshop Classroom in a Book* by Adobe
- *SketchUp for Interior Design* by Lydia Cline
- *Interior Design Visual Presentation* by Maureen Mitton



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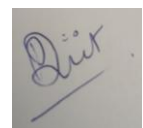
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B.Design in Interior Design - 3rd Year - Scheme

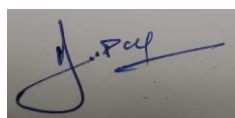
Paper	Time (in hours)	Size paper	Ext Marks		Midterm / CCE		Total
			Max. Marks	Min. Marks	Max. Marks	Min. Marks	
THEORY							
1. Landscape Design Fundamentals	3 Hrs.	-	70	23	30	10	100
2.Interior Services - II	3 Hrs.	-	70	23	30	10	100
3.History of Furniture Design	3 Hrs.	-	70	23	30	10	100
PRACTICAL							
1. Construction II	3 Hrs.	Digital	70	23	30	10	100
2. Interior Design Studio II	6 Hrs.	Digital	70	23	30	10	100
3. Landscape Design Studio	3 Hrs.	Digital	70	23	30	10	100
4. 3D Architectural & Interior Visualization	6 Hrs.	Digital	70	23	30	10	100
TOTAL							700

NOTE: For Passing examination, the candidates shall be required to secure 33% marks in each of the prescribed subject, separately in

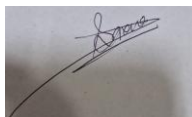
1. The University Theory Exam
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3. Internal Assessment, i.e., CCE done at college/university level.



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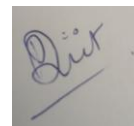
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B.Design in Interior Design - 3rd Year– Theory

Paper 1 – Landscape Design Fundamentals

Unit 1 - Fundamentals Of Landscaping

- Basic terminology in garden design –pruning, cutting, layering, topiary etc.
- Elements of visual design in landscape.
- Human perception (views and vistas) in landscape design
- Landscaping elements, water bodies, pools, fountains, cascades,
- Planters, Rocks, Artifacts, Fences, Hedges, Paving & lighting.
- Layouts and practices in landscape design in Europe, south-east Asia and India.

Unit 2 – Characteristics Of Plants

- Identification and use of plants in landscape designs.
- Criteria for selection of plant material for specific design applications
- Classification in plants, Creepers, Climbers, Herb, Shrubs & Trees & Flowering Plants, Plant texture, Plant height, Plant spacing. Suspended plants.
- Planting for appearance of form, leaf color and texture, branching habit, trunk form and their texture, color of flowers and fruits.
- Planting for visual effects and accent. Plants for special uses in commercial and residential developments

Unit 3 - Indoor Plants

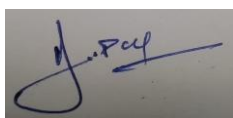
- Introduction & functions of indoor plants. Light intensity and behavior of Indoor plants.
- Soil separators & Planting medium.
- Artificial and preserved plants.
- Flower containers and materials used in Flower decoration.
- Flower arrangements – Ikebana, European/Dutch, Oriental/Eastern, Mediterranean, Modern/Contemporary

Unit 4 - Plant Irrigation & Drainage

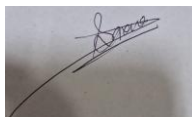
- Plant containers, Built-in planters & balcony rail planters. Construction details for planters
- Watering by hand. Automated low-volume irrigation systems.
- Sub-irrigation systems & Drip irrigation systems
- Methods of establishing grass lawn, lawn weeds and their treatment.
- Irrigation and drainage of lawn areas. Drainage for rooftop & balcony. Drainage of water bodies.
- Types of manures, insecticides and pesticides.



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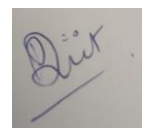
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Unit 5 - History & Theory of Landscape Architecture

Understanding characteristics & construction details of Landscape Planning and Garden design of:

- Hanging Gardens of Babylon
- Gardens of the Villa D'Este (Tivoli, Italy)
- Gardens of Versailles (Versailles, France)
- Ryoan-ji Temple Zen Garden (Kyoto, Japan)
- The Summer Palace Garden (Beijing, China)
- Shalimar Bagh (Srinagar, India)
- Aram Bagh (Agra, India)
- Central Park (New York City, USA)

Suggested Reading:

- *The Professional Practice of Landscape Architecture* by Walter Rogers
- *Foundations of Landscape Architecture* by Norman Booth
- *Residential Landscape Architecture: Design Process for the Private Residence* by Norman K. Booth & James E. Hiss

Paper 2 – Interior Services - II

Unit 1: Air Conditioning Fundamentals, Systems, and Applications

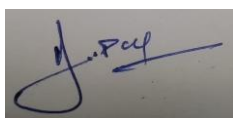
- Principles of Air Conditioning and Refrigeration.
- Vapour Compression Cycle, Compressors, Evaporators, and Refrigerant Control Devices.
- Cooling Towers, Chilled Water Plants, Fan Coil Systems, and Water Piping
- Introduction to Cooling Load and Stack Effect.
- Types of Air-Conditioning Systems Including Window, Packaged, and HVAC Systems.
- Air Handling Systems, Duct Layouts, Air Distribution, and Ventilation in Interior Spaces.
- Applications of Air-Conditioning Systems in Residential and Commercial Interiors.

Unit 2: Advanced Lighting Design and Illumination

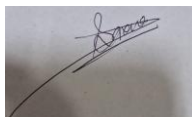
- Advanced Daylighting Design and Analysis.
- Professional Lighting Calculations and Standards.



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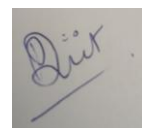
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- Specialized Lighting for Interior Applications.
- Decorative, Accent, and Experiential Lighting.
- Electrical Integration and Lighting Layout Detailing.
- Human-Centric Lighting Design.

Unit 3: Fire Safety and Protection Systems

- Fundamentals of fire, fire spread, and fire-resistant materials used in interiors.
- Means of escape including exit routes, staircases, emergency pathways, signage, and emergency lighting.
- Fire detection and firefighting systems including smoke detectors, alarms, extinguishers, sprinklers, hose reels, and hydrants.
- Interior planning considerations for fire safety including furniture layouts, circulation, material selection, and electrical safety.

Unit 4: Electrical Systems for Interiors

- Single and three-phase supply systems, protective devices, ISI standards, types of wires, and wiring systems.
- Planning of electrical layouts, switch rooms, distribution boards, fan points, power points, and lighting points.
- PVC sheathed wiring systems, protective earthing, and earth electrodes.

Unit 5: Acoustics and Sound Control

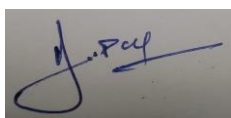
- Introduction to sound, frequency, amplitude, and acoustic principles including reflection, absorption, diffusion, and transmission.
- Acoustic materials and their applications in interiors.
- Sound-absorbing and sound-insulating materials including fabric, carpet, foam, wood, and glass.
- Practical acoustic design strategies including zoning, layering of materials, and balancing acoustics with aesthetics.

Suggested Reading:

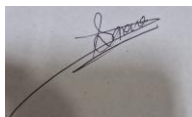
- *Comprehensive HVAC System Design* by N.C. Gupta
- *Refrigeration & Air Conditioning* by SCERT Kerala
- *Building Services Engineering* by David V. Chadderton



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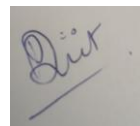
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Paper 3 – History of Furniture Design

Unit 1: Introduction to Furniture Design

- Definition, functions, and evolution of furniture.
- Relationship between furniture, architecture, and interior design.
- Basic materials and construction techniques including wood, metal, and upholstery.

Unit 2: Furniture of Ancient Civilizations and Medieval Period

- Egyptian furniture and decorative styles.
- Greek furniture with emphasis on proportion and harmony.
- Roman furniture and the use of luxurious materials.
- Medieval and Gothic furniture including heavy wooden furniture, arches, carvings, and multipurpose furniture.

Unit 3: Renaissance, Baroque, and Rococo Furniture

- Revival of classical Greek and Roman influences during the Renaissance.
- Symmetry, proportion, ornamentation, and Italian craftsmanship.
- Baroque furniture characterized by grandeur and bold ornamentation.
- Rococo furniture with curved forms, decorative elegance, and French influence.

Unit 4: Neoclassical and 19th Century Furniture Styles

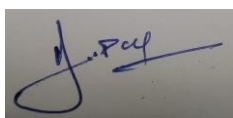
- Neoclassical furniture inspired by classical antiquity with clean lines and minimal ornamentation.
- Influence of archaeological discoveries on furniture design.
- Impact of the Industrial Revolution and mass production on furniture styles.
- Victorian furniture and the Arts and Crafts movement.

Unit 5: Modern, Postmodern, and Contemporary Furniture Design

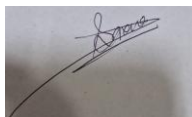
- Early modernism and the concept of function over decoration.
- Use of modern materials including steel, glass, and plywood.
- Postmodern furniture design with bold forms, color, irony, and mixed materials.
- Key movements including Bauhaus and De Stijl.
- Influential designers including Le Corbusier, Charles Eames, and Ray Eames.
- Contemporary furniture design, sustainability, eco-friendly materials, digital fabrication, minimalism, multifunctional furniture, and Indian furniture traditions and influences.



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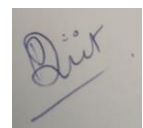
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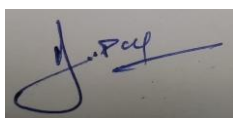
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Suggested Reading:

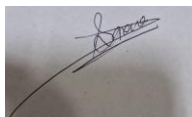
- *Furniture: World Styles from Classical to Contemporary* by Judith Miller
- *A History of Furniture* by Joseph Aronson
- *World Furniture: An Illustrated History* by Helena Hayward
- *Twentieth-Century Furniture Design* by Jonathan M. Woodham



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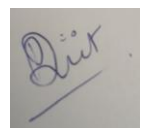
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B.Design in Interior Design - 3rd Year - Practical

Paper 1 – Construction - II

Overview: Construction II bridges the gap between conceptual interior design and site execution, equipping students with the technical proficiency required to produce field ready working drawings. Design Health Care Centre as per Regulatory requirements. Students will draft construction detailing of interior architectural elements, including civil kitchen counters, false ceilings, specialized flooring, and furniture units. The subject will also emphasize the critical integration of MEP (Mechanical, Electrical, and Plumbing) services—such as AC, electrical layouts, and plumbing—ensuring that students can effectively coordinate aesthetic intent with functional building systems through industry-standard drafting practices.

Assignment List:

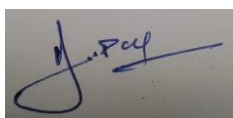
1. Case study of a Health Care Centre.
2. Study of requirements and regulations for Health Care Centre planning.
3. Bubble diagram and space planning.
4. Preparation of 2D floor plan and working floor plan.
5. Centre line plan.
6. Column layout.
7. Beam layout and beam details.
8. Foundation plan and foundation details drawings.
9. Opening schedule and furniture layout.
10. Ceiling layout and flooring layout.
11. HVAC layout, Plumbing layout, Electrical layout.
12. Reception, OPD and Procedure room working drawings.

Suggested Reading:

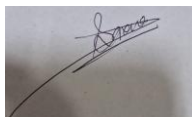
- *National Building Code of India by Bureau of Indian Standards (Healthcare & Building Services Guidelines)*
- *Hospital and Healthcare Facility Design by Fred Lawson*



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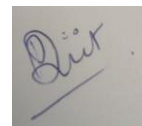
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Paper 2 – Interior Design Studio II

Overview: This design studio focuses on developing comprehensive planning, drafting, and presentation skills through real-world projects. Students work on a 5BHK farmhouse & a primary/play school, learning to handle different scales and functions. The course emphasizes site analysis, zoning, conceptual development, and detailed drawings including plans, sections, elevations, and service layouts (plumbing, electrical, HVAC). Students also explore furniture detailing, landscaping, and basic BOQs. The integration of AutoCAD, Photoshop, and 3D Software enhances visualization through 3D views and walkthroughs. Overall, the subject builds practical knowledge of spatial planning, technical drawings, and professional presentation.

Assignment List:

(Design and submission to be completed in AutoCAD, Photoshop, and 3D Software)

1. Case study, site analysis, and study of requirements and regulations.
2. Bubble diagram, zoning, and conceptual sketches.
3. Preparation of master plan with roof layout and basic landscape planning.
4. Floor plans, presentation plans, and working plans.
5. Flooring layout with sectional details.
6. False ceiling layout with sectional details.
7. Plumbing, electrical, looping, and HVAC layouts.
8. Sections, elevations, and detailed area elevations.
9. Furniture detail drawings including plans, sections, elevations, and 3D views.
10. Basic landscape elements, water feature details, and BOQ preparation.
11. 3D views and walkthrough presentations.

Projects to be Submitted:

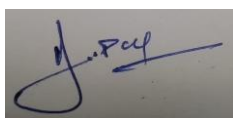
1. Farm house (5BHK) – Plot size: 8000 sq. ft. Built- Up Area: 3500 sq. ft.
2. Primary/ Play School Design - Plot size: 7000 sq. ft. Built- Up Area: 3000 sq. ft.

Suggested Reading:

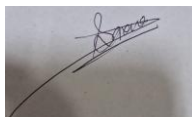
- *Contemporary Houses by Indian Architects – IAG*
- *Hotel Design, Planning and Development – Richard H. Penner, Lawrence Adams & Stephani Robson*
- *Healthcare Spaces No. 6: Planning, Design, Construction – Braun Publishing*



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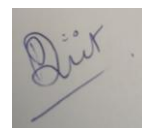
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Paper 3 –Landscape Design Studio

Overview: This subject focuses on designing a compact public park with efficient use of space and a strong balance between softscape and hardscape elements. Students will develop a complete landscape proposal including site planning, zoning, circulation paths, seating areas, and recreational pockets. The design must integrate plantation layouts, small water features, and basic deck or shaded areas. Emphasis is given to functional zoning, visual aesthetics, and user comfort through well-planned elevations and realistic 3D rendered views of the proposed landscape.

Assignment List:

To design a Public Park (to be done in AutoCAD and 3D Software)

1. Case study, site analysis, requirement study, and study of by-laws and regulations.
2. Bubble diagram and zoning plan.
3. Master plan and elevation drawings of the public park.
4. Water feature planning and landscape detailing.
5. Preparation of 3D views and rendered presentations.
6. Plant list with quantities and specifications.

Projects to be Submitted:

1. Public Park - Plot size: 10,000-12,000sq. ft.

Suggested Readings:

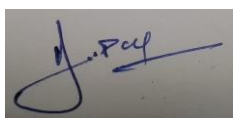
- *Landscape Architecture: A Manual of Environmental Planning and Design* by John Ormsbee Simonds
- *Site Planning and Design Handbook* by Thomas H. Russ
- *Planting Design Handbook* by Nick Robinson

Paper 4 – 3D Architectural & Interior Visualization

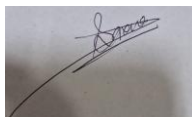
Overview: This course provides a complete introduction to contemporary 3D visualization workflows used in architecture and interior design. Students learn the fundamentals of 3D modelling, material creation, texturing, lighting, rendering, and post-production using latest industry-standard 3D software tools. The course focuses on developing practical skills for creating realistic interior and exterior visualizations through



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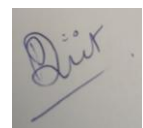
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hands-on assignments and design projects. Students are encouraged to explore modern workflows and adapt to evolving software pipelines used across the visualization industry.

Assignment List:

(To be done using latest industry-standard 3D visualization software)

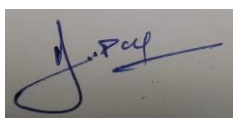
1. Exterior visualization for a 20' × 50' residential/commercial space.
2. 3D bedroom design (12' × 15') including modeling, materials, lighting, and rendering.
3. Cut-section isometric view and rendered presentation.

Suggested Reading:

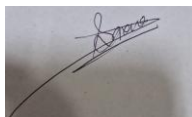
- *Autodesk 3ds Max 2024: A Comprehensive Guide by CAD/CIM Technologies*
- *Mastering Autodesk 3ds Max by Jeff Harper*
- *Digital Lighting and Rendering by Jeremy Birn*



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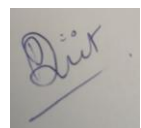
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B.Design in Interior Design - 4th Year - Scheme

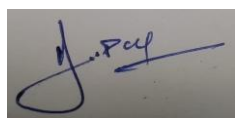
Paper	Time (in hours)	Size paper	Ext Marks		Midterm / CCE		Total
			Max. Marks	Min. Marks	Max. Marks	Min. Marks	
THEORY							
1. Estimation & Costing	3 Hrs.	-	70	23	30	10	100
2. Project Management	3 Hrs.	-	70	23	30	10	100
3. Sustainability & Automation in Interiors	3 Hrs.	-	70	23	30	10	100
PRACTICAL							
1. Interior Design Studio III	3 Hrs.	Digital	70	23	30	10	100
2. Interior Design Studio IV	3 Hrs.	Digital	70	23	30	10	100
3. Professional Training	1 Hrs.	Digital	70	23	30	10	100
4. Thesis	1 Hrs.	Digital/ Hardcopy	70	23	30	10	100
TOTAL							700

NOTE: For Passing examination, the candidates shall be required to secure 33% marks in each of the prescribed subject, separately in

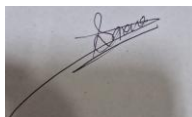
1. The University Theory Exam
2. The University Practical Exam
3. Internal Assessment, i.e., CCE done at college/university level.



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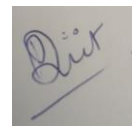
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B.Design in Interior Design - 4th Year– Theory

Paper 1 - Estimation & Costing

Unit 1: Introduction to Estimation

- Estimation – definition and purpose
- Types of estimates (preliminary, detailed, revised etc)
- Procedure for estimating cost of interior design projects
- Factors affecting estimation
- Role of estimation in project planning and budgeting

Unit 2: Specifications in Interior Design

- Definition and Purpose of Specifications
- Nature, types & Importance of Specifications in Interior Projects
- Relationship between Drawings, Specifications, and Execution
- Principles of Specification Writing
- Standard Format of Specifications
- Technical Terminology in Specifications
- Role of Specifications in Tendering
- Specifications for Interior Works (woodwork, wall paneling, false ceiling, etc.)
- Role in Quality Control and Material Selection
- Importance of Specifications in Interior Design

Unit 4: Introduction to Costing

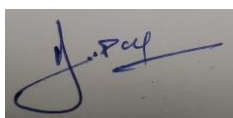
- Definition of Costing
- Purpose of Costing in Interior Design
- Types of Costing (approximate, detailed, item-wise)
- Costing of Interior Components – electrical systems, finishes, joinery works, plumbing systems, and false ceiling systems
- Factors Affecting Costing – material, labour, design complexity, location
- Difference between Estimation and Costing

Unit 5: Numericals based on Plinth area

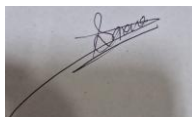
- Introduction to Plinth Area Estimation
- Need & Importance of Plinth Area Method



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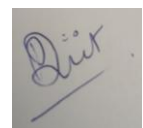
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- Plinth Area Method (Concept & Formula)
- Calculation of Cost using Plinth Area Rate
- Advantages & Limitations of Plinth Area Estimation
- Numerical Problems based on Plinth Area Method

Suggested Reading:

- *Estimating and Costing in Civil Engineering: Theory and Practice Including Specifications and Valuations* by B.N. Dutta
- *The Interior Designer's Guide to Pricing, Estimating, and Budgeting* by Theo Stephen Williams, *Quantity Surveying and Valuation* by K.K. Chitkara

Paper 2 – Project Management

Unit 1: Introduction to Project Management

- Concepts of project planning, scheduling, and controlling
- Role of decision-making in project management
- Methods of planning and programming
- Human aspects of project management
- Work Breakdown Structure (WBS)
- Project life cycle
- Limitations of traditional management systems

Unit 2: Elements of Network

- Definition of - Event, Activity, Dummy activity
- Network rules and graphical guidelines
- Numbering of events

Unit 3: Critical Path Method (CPM) & PERT Analysis

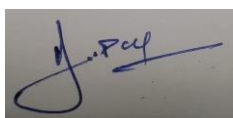
- CPM network analysis
- PERT time estimation techniques
- Time computation
- Network analysis

Unit 4: Project Time Reduction & Optimization

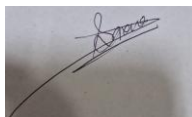
- Project cost concepts - Direct cost, Indirect cost, Total project cost
- Slope of direct cost curve



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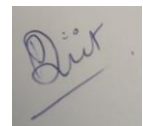
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- Optimum project duration
- Network crashing for cost optimization
- Steps involved in cost-time optimization

Unit 5: Project Updating & Resource Allocation

- When and why to update a project
- Data required for updating
- Steps in project updating process
- Resource usage profile (histograms)
- Resource smoothing and resource leveling
- Computer applications in project management

Suggested Reading:

- *Professional Practice for Interior Designers by Christine M. Piotrowski*
- *Project Management for the Design Professional by David Burstein & Frank A. Stasiowski*
- *Time Management for Architects and Designers*

Paper 3 – Sustainability & Automation in Interiors

Unit 1: Foundations of Sustainable & Intelligent Interior Design

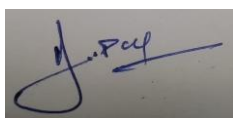
- Introduction to sustainability and smart interiors
- Relationship between technology and eco-friendly design
- Concepts of Circular Economy and Internet of Things (IoT)
- Climate-responsive and user-centered design approaches
- Role of intelligent systems in contemporary interiors

Unit 2: Sustainable Materials & Resource Efficiency

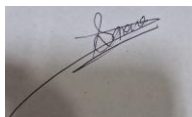
- Eco-friendly, renewable, recycled, and low-impact materials
- Life-cycle thinking in material selection
- Smart materials: responsive glass, adaptive surfaces, sensor-based materials
- Energy, water, and material conservation strategies
- Reducing environmental impact and carbon footprint



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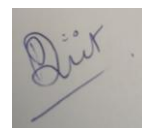
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Unit 3: Energy-Efficient & Smart Environmental Systems

- Passive design strategies: lighting, ventilation, insulation
- Smart lighting and HVAC automation systems
- Energy monitoring and optimization technologies
- Integration of renewable energy systems
- Indoor environmental quality: air quality, daylighting, and thermal comfort
- Smart sensors for lighting, temperature, and air quality control
- Relationship between automation systems and green building performance

Unit 4: Smart Space Planning & Adaptive Interiors

- Multifunctional and flexible interior spaces
- Smart furniture and space optimization systems
- Modular and adaptive interior design
- Adaptive reuse and sustainable spatial planning
- User interaction and intelligent interior environments
- Home automation systems and IoT-based controls

Unit 5: Green Buildings, Water Management, and Sustainable Interior Practices

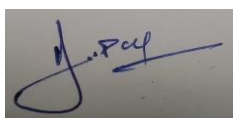
- Introduction to Green Buildings and Sustainable Interior Design
- Principles and Importance of Sustainable Interiors
- Water-Saving Fixtures and Smart Monitoring Systems
- Rainwater Harvesting and Greywater Reuse
- Waste Reduction, Recycling, and Reuse Strategies
- Sustainable Finishes and Non-Toxic Materials
- Energy-Efficient and Resource-Conscious Design Strategies
- Indoor Environmental Quality and Healthy Interior Spaces
- Overview of Green Building Rating Systems such as LEED and IGBC
- Sustainable and Smart Design Compliance and Future Trends

Suggested Reading:

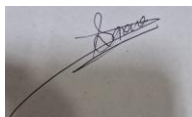
- *Sustainable Design: A Critical Guide* by David Bergman
- *Sustainable Construction: Green Building Design and Delivery* by Charles J. Kibert
- *Smart Homes and Their Users* by Tom Hargreaves & Charlie Wilson
- *The Shape of Green: Aesthetics, Ecology, and Design* by Lance Hosey



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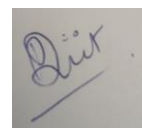
Dr. Sachin Pal



Mrs. Aachal Bansal



Mrs. Ashwini Sharma



Dr. Parul Dixit
HOD Fashion Dept. RMTU

B.Design - Interior Design - 4th Year– Practical

Paper 1 – Interior Design Studio III

Overview: This project involves the planning and design of a **4 Star Hotel or Resort Design**. The design focuses on efficient functional zoning and a comfortable guest experience while maintaining hospitality standards. It integrates essential components such as accommodation, food services, recreation facilities, and landscape areas within a well-organized layout. Special emphasis is placed on smooth circulation, service efficiency, and strong architectural presentation to create a balanced and functional hotel environment.

Assignment List:

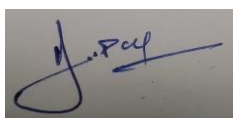
1. Case Study & Site Analysis.
2. Bubble Diagram.
3. Master Plan Along with Roof Layout and Landscape.
4. All Floor Plans.
5. Presentation Plans and Working Plans.
6. Flooring Layout Along with Section Detail.
7. Plumbing and Electrical layout.
8. False Ceiling Layout Along with Section Detail.
9. Detailed Working Drawings of Lobby Area.
10. Detailed Working Drawings of Different Types of Suites.
11. Sectional Elevation.
12. 3D Views or Walkthrough.

Suggested Reading:

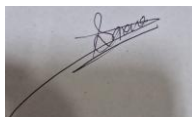
- *Hotel Design, Planning and Development* by Richard H. Penner, Lawrence Adams & Stephani Robson
- *Hotels and Resorts: Planning, Design and Refurbishment* by Margaret Huffadine
- *Time-Saver Standards for Interior Design and Space Planning* by Joseph DeChiara, Julius Panero & Martin Zelnik
- *Designing Interiors* by Rosemary Kilmer & W. Otie Kilmer



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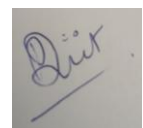
Dr. Sachin Pal



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Mrs. Ashwini Sharma



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Paper 2 – Interior Design Studio IV

Overview: This design studio focuses on developing comprehensive planning, drafting, and presentation skills through real-world projects. Students work on a **Restaurant/ Disco or Nightclub/ Bakery Café /Cafeteria/ Open-Air Restaurant**. The course emphasizes site analysis, zoning, conceptual development, and detailed drawings including plans, sections, elevations, and service layouts (plumbing, electrical, HVAC). Students also explore furniture detailing, landscaping, and basic BOQs. The integration of AutoCAD, Photoshop, and 3DS Max enhances visualization through 3D views and walkthroughs. Overall, the subject builds practical knowledge of spatial planning, technical drawings, and professional presentation.

Assignment List: Design and submit the project using AutoCAD, Photoshop, and 3DS Max.

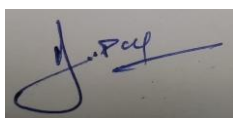
1. Case Study (Live & Online) with Site Analysis
2. Requirement Study & Building Regulations
3. Bubble Diagram, Zoning & Conceptual Sketches
4. Master Plan with Roof Layout & Landscape
5. All Floor Plans & Presentation Plans
6. Working Drawings with Sections & Elevations
7. Flooring Layout & False Ceiling Layout with Section Details
8. Plumbing, Electrical Looping & HVAC Layouts
9. Detailed Area Elevations (Any 2 Areas)
10. Furniture Details (Any 3) – Plan, Section, Elevation & 3D Views
11. Basic Landscaping with Water Feature Details & Detailed BOQ
12. 3D Views / Walkthrough Presentation

Suggested Readings:

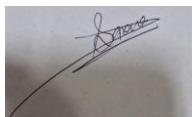
- *Restaurant Design* by Drew Plunkett & Olga Reid
- *Designing Commercial Interiors* by Christine M. Piotrowski
- *Hotel and Restaurant Design* by David Stone



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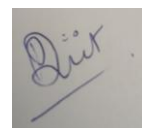
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Paper 3 – Professional Training

Overview: Professional Training serves as the critical bridge between the academic studio and the professional interior design industry, preparing this graduating batch to confidently enter the workforce. The course focuses on translating academic achievements into a compelling professional narrative through the strategic development of resumes and portfolios. By securing and completing a mandatory 45-day (full-time) or 90-day (part-time) internship at a recognized design firm or architectural office, students will gain invaluable on-site and office experience. The curriculum demands active observation and rigorous documentation, requiring students to produce drafted work of built environments, research on emerging market materials, and practical execution of complex design details.

Assignment List:

- CV & Portfolio.
- Training Portfolio Report - Sealed & Signed by Internship Office head.
- Training Certificate from Internship Firm.

Suggested Readings:

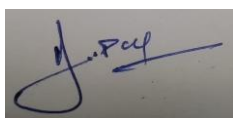
- *The Interior Design Professional's Guide to Business, Procedures, and Strategies* by Christine M. Piotrowski
- *Portfolio Design* by Harold Linton
- *Design Portfolios* by Diane Bender
- *Professional Practice for Interior Designers* by Christine M. Piotrowski

Paper 4 – Thesis

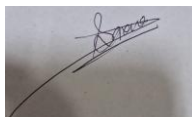
Overview: The Thesis Design Studio is the final stage of the design curriculum, where students independently develop a comprehensive design project through research, analysis, and creative exploration. The studio integrates design theory, technical knowledge, and conceptual thinking to address real-world issues in architecture and interior design. Students are expected to identify a relevant design problem, conduct case studies and site analysis, and develop innovative design solutions supported by drawings, models, and visual presentations. Emphasis is placed on sustainability, smart technologies, functionality, and user-centered design to create environmentally responsive and aesthetically effective interior spaces.



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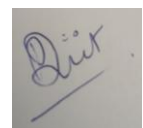
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Thesis Guidelines & Flow

UNIT 1: Thesis Proposal & Project Identification

- Selection and finalization of thesis topic
- Identification of project type, site, and user group
- Understanding project scope and design objectives
- Preparation of project brief and problem statement
- Initial concept ideas and proposal approval

UNIT 2: Research & Literature Study

- Study of interior design theories related to the project
- Literature review of similar projects and typologies
- Study of standards, ergonomics, and spatial requirements
- Analysis of materials, lighting, furniture, and finishes
- Formulation of design guidelines through research

UNIT 3: Case Studies, Site & User Analysis

- Detailed study of live and literature case studies
- Comparative analysis of selected projects
- Site analysis including climate, orientation, and surroundings
- Space requirement and functional relationship study
- Inference and conclusions from case studies and site study

UNIT 4: Concept Development & Space Planning

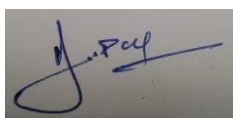
- Development of design concept and theme
- Bubble diagrams and zoning studies
- Spatial planning and circulation design
- Furniture layout and ergonomic considerations
- Material palette and color scheme development

UNIT 5: Design Development & Presentation

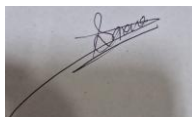
- Preparation of detailed interior design layouts
- Floor plans, sections, and elevations
- 3D views and rendered perspectives, walkthrough
- Learning outcomes and future scope of the project



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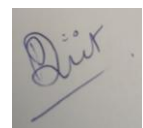
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Assignment List:

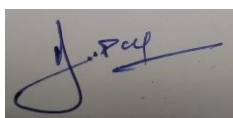
1. Complete Thesis Black Book (Minimum 40 Pages)
2. Design Sheets / Portfolio
3. 3D Renders and Visualisations
4. Physical / Digital sheets

Suggested Readings:

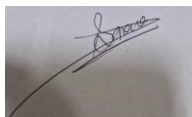
- *Research Methods for Interior Design* by Joy Dohr & Margaret Portillo
- *The Interior Design Reference and Specification Book* by Chris Grimley & Mimi Love
- *Sustainable Design: A Critical Guide* by David Bergman



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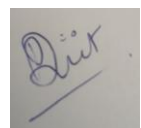
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