

B.Sc. in Interior Designing Subject & Syllabus

First year	Semester 1	Core Paper I - Theory of Interior Design
		Core Paper II - Art and Interior Design
		Core Practical I - Basic Design Studio
		Allied I - Sketching & Drafting Practical
	Semester 2	Core Paper III - History of Interior Design I
		Core Paper IV - Materials and Construction I
		Core Practical II - Interior Design Studio I: Residential Spaces
		Allied II - Interior Drawing & CAD Practical
Second year	Semester 3	Core Paper V - Materials and Construction II
		Core Paper VI - History of Interior Design II
		Core Paper VII - Human Factors in Design
		Core Practical III - Interior Design Studio II: Commercial & Institutional Design
	Semester 4	Core Paper VIII - Materials and Construction III
		Core Paper IX - Building Services
		Core Practical IV - Interior Design Studio III: Retail Design
		Allied IV - Landscape for Interiors
		Skill Based II - Computer Applications 2 - Practical
Third year	Semester 5	Core Paper X - Basics in Architecture
		Core Paper XI - Estimation & Costing
		Core Paper XII - Furniture in Interiors
		Core Practical V - Interior Design Studio IV: Furniture & Exhibition Design
	Semester 6	Core Paper XIII - Sustainable Interiors
		Core Paper XIV - Professional Practice
		Core Practical VI - Interior Design Capstone Project

Semester 1

THEORY OF INTERIOR DESIGN

Unit:1	INTRODUCTION
What is design? Meaning, Purpose; Factors affecting Design: Context - shaping force, Research - material, process; The role of taste in Design -Objectives of Aesthetic Planning - Beauty, Expressiveness, Functionalism; Basic Design, 2-dimensional, 3-dimensional Design; Ways of Seeing: Attentive observation, Similarities and differences, Connections, Tactile sensation.	
Unit:2	DESIGN ELEMENTS
Gestalt and Perceptual Theories, Design Elements- Point, Line, Plane -natural/geometric shapes, Texture; Perception modified by Scale, Light, Contrast, Pattern and Space, Form and Volume - Solids and Voids, Colour - Hue, Value and Saturation, Colour Systems, Colour Perception - Light, Simultaneous Contrast, Space, Colour Schemes.	
Unit:3	DESIGN PRINCIPLES
Design Principles: Proportion- Proportioning Systems- Fibonacci Series and Golden section, Scale visual scale, human scale, Balance - Visual Balance - Symmetrical Balance, Asymmetrical Balance, and Radial Balance. Creating Harmony, Visual Unity, Ways to achieve Unity - proximity, repetition, and continuation, Rhythm - Visual Rhythm, Spatial Rhythm, Unity and Variety, Emphasis - by contrast/ placement/ isolation, Degrees of Emphasis.	
Unit:4	DESIGN PROCESS
Design Process- Analysis, synthesis, design evaluation; Design criteria function and purpose, utility and economy, form and style; human factors human dimensions, distance zones, activity Relationships, Space requirements - spatial planning, function, aesthetics.	
Unit:5	ANTHROPOMETRICS
Interior Space - Definition; Elements structuring interior space - wall, floor, ceiling/roof, articulation; spatial form and dimension - square, rectangular, curvilinear spaces, height of spaces, Transitions and openings - doorways, windows, stairways.	

Core Paper II – Art and Interior Design

Unit:1	INTRODUCTION
What is Art? Purpose of Art; Art and Aesthetics; Essential Concepts in Context and Perspective; Why it matters; How we see; Critical Modalities.	
Unit:2	ART THROUGH TIME
Development of art: A survey of history of art forms: pre historic times to present times: changing nature of art through time in terms of content: form and material.	
Unit:3	ART FORMS
Exploration of art forms – study of traditional and contemporary art forms painting, sculpture, architecture, decorative arts, design arts, digital art; Relationship between art and design from earliest time; Study of famous and influential Artists, Craftsmen and people who pioneered innovations in their own fields and their influence on design and other fields. For eg: Van Gogh, Dali, William Morris, etc.	
Unit:4	ORNAMENT
Study of ornament in Interior Design. Different types of ornamentation in the interiors. Study and evaluation of artifacts and historic examples and their applicability.	
Unit:5	HERITAGE INTERIORS
Introduction to Heritage Interiors: Evolution of Interiors in different regions of India with examples. Heritage and identity at different spatial scales. Dimensions and scope of Heritage Interiors. Users and uses of Heritage interiors	

Core Practical I - Basic Design Studio

Unit:1	2D DESIGN
Designs involving various elements such as point, line, shape, colour and texture - use principles of design, grids, Golden section - apply to pattern creation & compositions such as mural design, fabric design, mosaics, linocut printing, collage etc.	
Unit:2	3D DESIGN
Exploring form creation: from 2D to 3D -- platonic solids (boards, paper), structural frames/joints (wood/misc.), Solid and Void compositions, Organic or free flowing Forms, Enclosing Space, Light and Texture. Use different materials such as clay, POP, metal etc.	
Unit:3	DESIGN BY ABSTRACTION
Study and analysis of forms, patterns and colour schemes in nature. Abstraction of natural forms and design of three-dimensional objects and two-dimensional patterns inspired by Them.	
Unit:4	OBJECT DESIGN
Study and critical analysis of man-made objects - their purpose, functional suitability, formal appeal, etc. - evolving suggestions for improvement of the same in light fixture, mobile, chair etc.	

Allied I – Sketching & Drafting Practical

Unit:1	INTRODUCTION TO FREEHAND DRAWING
Why we need to Draw – Seeing and Looking – Sketching to Scale; Introductory Pencil Exercises with different pencil point sizes and tone building exercises, Drawing what you see – Contour drawing, Shape and Proportion, Perspective, Tone, Detail, Texture and Shadow; Basic exercises Compositions of Still life, Plant forms, Daily objects; Perspective Sketches: Types of perspective views using vanishing points, Exercise – single object from multiple views; Shading exercises- study of light and shadow; Textures – Represent different textures and surfaces such as glass, water, stone, wood, metal and fabric. Use pencil, pen, and charcoal.	
Unit:2	SKETCHING
Outdoor Sketching including Landscape – trees, foliage (pen, colour pencil); Details such as stone carving, wood or metal work, ornament on furniture, gates, fixtures (pen, pencil, charcoal); Landscape, water bodies and built structures in different media (pen, colour pencil, water colour). Interiors Sketching – perspectives, lighting and composition, textures and details, material expressions, individual furniture, elevations etc. (pen with colour pencils/markers/pastels) Drawing from Photograph.	
Unit:3	DRAFTING BASICS
Drafting Tools – Sheet types & sizes, Layout and Scale. Simple exercises in drafting, point and line, line types, line weights, straight and curvilinear lines, Hierarchy of lines in Multi-view drawings, dimensioning, lettering, borders, title panels, using pencil & ink and different types of sheets. Architectural symbols – representation of building elements, openings, materials, Accessories etc., terminology and abbreviations used in architectural presentation.	
Unit:4	MEASURED DRAWING
2D drafting – Orthographic Projection of simple objects, furniture: Multi-view Drawings – Plan, Elevations, the Cross Section; Measuring and drawing to scale – scales and construction of scales, simple objects, furniture, doors and windows etc. in plan, elevation and section etc. reduction and enlargement of drawings.	
Unit:5	3D PROJECTIONS & ARCHITECTURAL REPRESENTATIONS
Isometric Views of Tables, Chairs, Cylindrical & Spherical elements, interior space etc. using simple isometric grid; Axonometric Construction of interior space or arrangement of objects. Sketching: Representation of landscape elements such as trees, indoor plants, planters, hedges, foliage, human figures in different postures, vehicles, street furniture and material textures, to scale; and their integration in 3D drawings. Sociography: Principles of Shade and Shadow- Shade and Shadows of Architectural Elements in Interiors. Shadows of Circular/ Cylindrical/ Spherical elements.	

Semester 2

Core Paper III - History of Interior Design I

Unit:1	EARLY CLASSICAL PERIOD
Importance and uses of learning history. Prehistoric - forms and patterns - dolmens, tribal cultures in Africa, Americas and Arctic; Ornamentation and Interior Decoration in caves;	
Unit:2	EARLY EGYPTIAN
Early settlements - Ancient Mesopotamian, North, Central and South American Designs. Ancient Egypt - Geometry and Proportion - temples and houses - furniture and furnishings;	
Unit:3	MIDDLE AGES
Greece: Minoan, Mycenaean, Greek - temple and secular interiors, Rome: Roman arches, vaults and domes, orders of architecture, Building types - amphitheaters, baths, temples, secular halls, furniture and furnishings,	
Unit:4	EARLY CHRISTIAN & GOTHIC
Early Christian, Byzantine and Romanesque - Churches, fortresses and castles, abbeys, houses, furniture and furnishings. Gothic Design - cathedrals - gothic arch, flying buttress, Furnishings.	
Unit:5	THE RENAISSANCE PERIOD
Renaissance Design - interiors and furniture, Elements of Baroque style, interiors & furnishings. America - Early colonial interiors & furniture, American Georgian and Queen Anne, Federal period designs.	

Core Paper IV – Materials and Construction I

Unit:1	BUILDING COMPONENTS & MATERIALS
Drawings of the Components of a Building - indicating foundation, plinth, superstructure, lintel, slab; Different types of Structural systems: Load bearing – brick or stone masonry, Framed structure -- RCC construction, Steel framing with light roofing; Building Materials: Brick – Classification & Types, Clay products – clay tiles, terracotta, porcelain, stoneware, earthenware, Glazing and their uses – Glazed ceramic Tiles, Cement- types and use, Sand, Timber Classification, storage and use, Steel and Glass - types, properties and applications.	
Unit:2	FOUNDATION & WALL CONSTRUCTION
Brick masonry: Sizes, types of bonds, wall thickness, strength and defects, typical structures; Stone masonry – rubble and ashlar- joints in stone masonry, safe loads; Brick- Stone Composite Masonry, Concrete Masonry, Reinforced Brick Masonry, Hollow Bricks; Load bearing walls, Cavity walls, Partition walls, Plastering – materials, composition and method; Wall cladding materials & Systems –Polycarbonate, HPL (High Pressure Laminate) boards; Cement fiber boards.	
Unit:3	FLOOR & ROOF
Ground Floor Construction – Plain Cement Concrete, Flooring Finishes – Brick Flooring, Cement Concrete, Terrazzo, Mosaic, Marble, Tile, Wood, Asphalt, Rubber, Linoleum; Upper Floors: RCC, Steel joist & precast Concrete, Timber, Hollow Block; Lintels and Arches– RCC and Brick; Stairs- Dimensions, Types, Construction, Materials– RCC, Steel and Wood, Steel and Tile/ Stone; Roof Types – Flat terraced, Pitched – basic elements, Materials- galvanized zinc, galvanized aluminum, Polycarbonate, Asphalt, Shingles, Terracotta / Cement Tiles.	
Unit:4	JOINERY & MISC MATERIALS
Wood – Soft and hardwood, plywood, laminated wood and particle boards – properties & uses; Synthetic Materials – Different types of Glass, their properties and uses; Plastics – injection molding & other manufacturing methods; Polycarbonate , HPL (High Pressure Laminate) boards for decking cladding; Fabrics – textile, Jute, leather etc. different types And their uses.	
Unit:5	STRUCTURAL SYSTEMS
Structural Systems: Design Loads – Live load, Dead load, Wind load, Snow load, Earthquake loads. Framed structures- load bearing structural components- columns and beams- steel, concrete; Load bearing walls- Masonry structures, Prefabrication, cast-in site construction. Brief design concepts for earthquake loads.	

Core Practical II – Interior Design Studio I: Residential Spaces

Unit:1	USER & TYPOLOGY STUDY
Study of Residential Spaces: Component spaces; Activity Analysis & Space Standards; Climatic Cultural Associations – Symbols and Meaning; Access & Enclosure; Circulation, Openings & Articulation; Structure, Materials & Construction; Surface, Colour & Texture.	
Unit:2	CASE STUDIES
Book Case Studies, Real Life Case Studies – Documentation, Analysis, and Inference for Design.	
Unit:3	SITE ANALYSIS – CONTEXTUAL STUDY
Analysis of Project Context – Site Analysis; Geographic, Topographic, Soil, Climatic, Wind and Sun direction, Cultural, Landscape, Access, Services & Utilities, Existing views, structures, materials, colours, service lines, circulation, water body, special features, wildlife and vegetation.	
Unit:4	CONCEPTUAL & SCHEMATIC DESIGN
Adjacency Matrix, Bubble Diagram – Showing Spaces, Circulation, Access etc. Concept Stage: Design Concept presented as sketches (ink & colour pencil) showing 2D and 3D versions of the idea evolution. Spatial distribution shall be to proportion and can be shown as single line drawing. Conceptual models are optional. Scheme Stage: Drawings to Scale – Detailed Plan with furniture layout & fixtures, circulation, flooring level & finishes, Elevations and Sections and detail sketches as needed to clarify design idea. Colour scheme, material choices.	
Unit:5	DESIGN PRESENTATION
Detailed Drawings to include double line Detailed Plan showing Furniture and Fixture layouts, Flooring levels & Finishes, Elevations, Sections, Detail sketches 3D perspective / isometrics. Final Presentation on Cartridge paper, rendered in Ink & Colour. Colour scheme, Mood board and Model to be included.	

Allied II - Interior Drawing & CAD Practical

Unit:1	DIAGRAMS AND 2D DRAWING
Diagrams and Programming Analysis Graphics - Bubble Diagram, Blocking Diagrams, Fit and Stacking Plans, Conceptual Design, Mood - Inspiration Boards, Schematic Presentation Graphics, 2D drafting - Orthographic Projection Drawings for Interiors: Plans, Elevations, Sections, Reflected Ceiling Plans, Dimensions, Lettering. Praline and Perspective Drawings; Rendering for 2D drawings - Material representations, Use of different Media - Colour pencils, Watercolours or pen & ink.	
Unit:2	PARALINE & PERSPECTIVE DRAWING
3D representations - Isometric drawing, Plan Oblique drawing of Interiors and Objects drawn to scale; Interior Perspective Drawings - One point, Two-point and Three-point Perspective views using grid method. Drawing Ellipses. Rendering of 3D Drawings - Material representations, colour, light and objects; use of hybrid or composite presentation techniques.	
Unit:3	CAD DRAFTING
CAD Basics: Simple Exercises in 2D CAD software (AutoCAD/ArchiCAD) specifically or proficiency in drawing/ editing objects, texts, dimensioning, making and inserting blocks, understanding of units settings, scale, limits, line type, line weight, layers, colours and print commands. Complete design representation in the form of Orthographic Multi-view Drawings using CAD.	
Unit:4	WORD & IMAGE PROCESSING
Word Processing: Basic templates for creating text documents, editing, formatting, spelling/ grammar check, dictionary and thesaurus, page layout, fonts, indentation, inserting tables and images, document review and annotation in software like MSWord. Image Processing: Basic image Sourcing, editing and insertion for desktop publishing in Adobe Photoshop or similar software.	

Semester 3

Core Paper V - Materials and Construction II

Unit:1	STRUCTURE
Existing walls basic principles: load bearing walls masonry creating openings in load bearing walls, controlling moisture ingress lining external walls, non-load bearing walls, Structural principles materials in compression and tension, orientation of structural elements, cantilevers, beams, stability, rule of thumb sizing.	
Unit:2	WALL SYSTEMS
Interior Wall materials, construction framing (steel, wood), paneling (Plywood, MDF, Geoboard, Cement particle boards, HPL boards), Filling (insulation, air), Surface finish Plaster, Paint, tile, Wood, glass, metal, stone, brick, Plywood, wall paper, fabric, texturing marble, granite, white wash, color wash. Exterior Wall finishes Stone, rubble, tiles, fresco, murals, glass and metals, paints. Alternative partitions Free standing walls, Floating walls, and glazed partitions.	
Unit:3	FLOORS
Planning new structures- Installing mezzanines, Raising the floor, Openings in floors. Interior floor finishes Hard floor finishes, Resilient asphalt tile, linoleum, cork, rubber, Soft floors carpets and rugs, Exterior floors Concrete slabs, tiles, mosaic, terrazzo and terracotta, Selection and characteristics of exterior floor finishes.	
Unit:4	OPENINGS
Introduction to Openings Openings/arches technical terms types of arches materials used for construction Lintels types of lintels- materials used for construction.	
Unit:5	CEILING SYSTEMS
Ceilings Basic Principles, Types Suspended ceilings, Angled and curved ceilings, Proprietary ceiling systems hanging methods, Timber/steel and clay tile ceilings, other considerations. Materials Gyp-board, Acoustical tile, Metal, Glass, Wood, Clay tile Finish Treatment- plastering, embossing, fresco, plaster of Paris	

Core Paper VI - History of Interior Design II

Unit:1	INDIAN, CHINESE & JAPANESE
Islamic Tradition- Mosques and Palaces, Furnishings, decorations. India Buddhist, Hindu and Jain Architecture, Islamic influence, Indian furnishings, China architecture, interiors & furniture. Japanese Architecture material, structure, furnishings.	
Unit:2	REVIVAL
Regency Style - Furniture, Greek Revival, Gothic Revival, Industrial Revolution & Interiors Iron and Glass, Victorian Style Shaw & Queen Anne Revival, Vernacular House styles, ShakerDesign.	
Unit:3	ART MOVEMENTS
Arts & Crafts Movement, Art Nouveu Characteristics, Artists and Architects associated; Ecole- des Beaux Arts Eclecticism for the masses Rise of the Interior Decorator.	
Unit:4	BAHAUS TO POST MODERNISM
Emergence of Modernism F.L. Wright, De Still. International Style - Walter Gropius/ Bauhaus, Mies Van DerRohe, Le Corbusier, Aalto. Art Deco, Industrial Style, Industrial Design, Postwar Modernism, Contemporary Design, 1990 present?	
Unit:5	NEW AREAS OF INTERIOR DESIGN & CASE STUDIES
New areas of exploration in interior design- Sustainability, Technology, Adaptive Reuse, Historic Preservation, Style directions, Building and Interior types; Project Case Studies	

Core Paper VII - Human Factors in Design

Unit:1	PROXEMICS
Psychology of the client user as crucial factors influence of such factors in the design of the environment and interior architecture. Study of proxemics - effect of cultural and psychological factors on design	
Unit:2	ANTHROPOMETRICS
Issues of anthropometrics shape and size of human beings critical dimensions relating to human form such as height, width and length of reach- application of such data in design. Use of anthropometrics in residential spaces healthcare spaces audiovisual spaces-recreational spaces and public spaces-eating and drinking spaces	
Unit:3	ERGONOMICS
Concept of ergonomics Meaning, importance, and factors involved - worker, workplace, equipment, environment, and climate. Work environment- Location, space, indoor and outdoor climate, furniture, lighting and ventilation, flooring, noise, storage facilities. Design of workplace - Activity analysis Designing for work based on ergonomics principles.	
Unit:4	UNIVERSAL DESIGN
Universal Design, Human Diversity - Facts about the interaction of the environment and user - culture, gender, stage of life cycle, and physical characteristics, Designing for children, elderly and physically disabled. Environmental considerations.	
Unit: 5	HUMAN FACTORS
Human Factors in Residential, Commercial, Healthcare and Educational Design.	

Core Practical III - Interior Design Studio II: Commercial & Institutional Design

Unit:1	T TYPOLOGY, USER & CASE STUDIES
Study of Commercial Spaces; Activity Analysis & Space Standards; Designing for Action, Connection and Awareness; Collective Symbols and Meaning; Designing for Choice and Autonomy, for physical comfort, Safety, Accessibility and connection to nature. Book Case Studies, Real Life Case Studies Documentation, Analysis, and Inference for Design.	
Unit:2	CONTEXT AND SITE ANALYSIS
Analysis of Project Context - Site Analysis; Geographic, Topographic, Soil, Climatic, Wind and Sun direction, Cultural, Landscape, Access, Services & Utilities, Existing views, structures, materials, colors, service lines, circulation, water body, special features, wildlife and vegetation. Inference for Design. Design Program, Bubble Diagram, Adjacency Matrix, Program Analysis Graphics.	
Unit:3	CONCEPTUAL DESIGN
Development of Design Concept presented as sketches with colors showing 2D and 3D versions of the idea evolution. Mood and Inspiration Board. Spatial distribution shall be to proportion and can be shown as single line drawing along with a Conceptual model	
Unit:4	SCHEMATIC DESIGN
Plan developed with a detailed layout, showing circulation, individual furniture groupings to scale, Elevations and Sections. Double line plan with elevations sections as needed to clarify design idea.	
Unit:5	DESIGN PRESENTATION
Final Rendered Presentation Sheets, with Plan, Elevations, Sections, 3D views, Model Workshop on Model making, Guest Lecture by Architects, Site Visits to Schools and Multiplexes	

Semester 4

Core Paper VIII - Materials and Construction III

Unit:1	ACCESS, WINDOWS, VENTILATORS
Doors-types, materials used, detailing, finishing; Windows/ Ventilators- types, materials used, detailing, finishing.	
Unit:2	STAIRWAY, MEZZANINE CONSTRUCTION & MATERIALS
Stairs - Timber, Steel, Stone and Concrete, Handrails, cantilevered treads glass stairs.	
Unit:3	FURNITURE & FITTINGS
Furniture & Fixtures - Basic principles - base structures, joints, decorative joints, veneer, finishes, built-in seating, floating furniture, Shelving, Cabinet Countertop Solid Surfacing, Lacquered Glass, Laminate, Veneer, Solid Wood, Plywood, MDF, Hardware Fittings, Locks, Handles, Sliders, Hinges, bolts. Cabinet Hardware.	
Unit:4	FINISHES
Wall - Paint, Stain & Polish, Wall Paper, Art, Print, Glass, Panel, Mural; Ceiling Paint, Stain & Polish, Gyp, Glass, Wood, Metal; Floor Paint, Polish, Tile, Vinyl, Carpet.	
Unit:5	ADVANCED CONSTRUCTION TECHNIQUES AND MATERIALS
Advanced concrete building components and construction techniques. To include folded plates, shell structures, vaults, domes, pneumatic structures, tensile structures. Their composition, construction and finishing.	

Core Paper IX - Building Services

Unit:1	BUILDING AND ENVIRONMENT
Building and Enclosure- Environmental Factors- Environment control importance of environment control advantages, elements to be controlled in the interiors Temperature, Humidity and moisture, wind, air movement and quality, Day lighting and illumination, sound And Acoustics, sanitation, movement and accessibility.	
Unit:2	WATER SUPPLY AND DRAINAGE SYSTEMS
Water supply systems - quality and distribution protecting the water supply hot water retaining rainwater waste piping and vent piping wastewater treatment plumbing systems, piping layouts, sanitary fixtures, fittings and standards for kitchen, toilet and bath, appliances and equipment.	
Unit:3	FUNDAMENTALS OF ELECTRICAL & ELECTRONIC SYSTEMS, ACOUSTICS
Electricity: Electrical distribution and safety systems in buildings; fixtures, equipment, and appliances; electrical circuitry and internal wiring; electrical loads, peak demand, operational costs; Communication: Intercoms, Wi-Fi, broad band data cabling, and CCTV systems Acoustics: Basic concepts of sound and acoustics; sound insulation and transmission; absorption, reverberation, noise control and attenuation; acoustical requirements for different space types And design planning; site planning for noise control; exposure to acoustics design software.	
Unit:4	DESIGN ASPECTS OF AIR-CONDITIONING AND FIRE SAFETY SYSTEMS
Air-conditioning: Principles and components of mechanical ventilation and air conditioning systems; calculation based on design conditions and system sizing, design considerations for chiller rooms, cooling plants, AHUs; integration with natural ventilation, and other energy conserving technologies Fire Safety: Fire sources, spreading, and growth decay curve; material fire response and fire retardant materials; fire hydrants, fire escapes, refuge areas, fire tender access; smoke detector, alarm, and sprinkler systems; representation of fire Considerations in drawings.	
Unit:5	MECHANICAL TRANSPORTATION CONVEYING SYSTEMS
Access and movement systems Elevators and escalators Types and applications, Estimating the load, and size requirements, special and custom elevators domestic elevators, chair lifts. Ramps and accessibility, recommended ramp slopes for accessibility in interiors.	

Core Practical IV - Interior Design Studio III: Retail Design

Unit:1	INTRODUCTION
Study of Retail Spaces; Activity Analysis & Space Standards; Designing for Emphasis, Impact, Memory. Collective Symbols and Meaning; Display and Storage Requirements, Consumer and Seller Survey to inform Design. Space Standards, Anthropometric and Ergonomic Data.	
Unit:2	CASE STUDIES
Book Case Studies, Real Life Case Studies - Documentation, Analysis, and Inference for Design.	
Unit:3	SITE ANALYSIS - CONTEXTUAL STUDY
Analysis of Project Context - Site Analysis; Geographic, Topographic, Soil, Climatic, Wind and Sun direction, Cultural, Landscape, Access, Services & Utilities, Existing views, structures, materials, colors, service lines, circulation, water body, special features, wildlife and vegetation.	
Unit:4	CONCEPTUAL DESIGN
Development of Design Concept presented as sketches with colors showing 2D and 3D versions of the idea evolution. Spatial distribution shall be to proportion and can be shown as single line drawing along with a Conceptual model	
Unit:5	SCHEMATIC DESIGN
Plan developed with a detailed layout, showing circulation, individual furniture groupings to scale, Elevations and Sections. Double line plan with elevations/ sections as needed to clarify design idea.	
Unit:6	DESIGN PRESENTATION
Final Rendered Presentation Sheets, with Plan, Elevations, Sections, 3D views, and Model for the Viva Voce Presentation.	

Allied IV - Landscape for Interiors

Unit:1	INTRODUCTION
Landscaping Meaning and importance, Types of garden, garden components, garden design formal and informal layouts, principles of landscape design factors affecting design of landscape in interiors.	
Unit:2	LANDSCAPE DESIGN AROUND THE WORLD
Landscape design concepts across cultures - the English garden, the Japanese garden, the Mughal garden, Factors affecting approach to landscape design - space availability, climate and soil, design intent and use, stylistic purpose and scale. Lawn-importance, preparation, methods of cultivation, use, maintenance, Types of lawn.	
Unit:3	INDOOR PLANTS
Indoor plants- Selection of plants based on location, purpose, design effect and maintenance, principles of growing, potting and repotting techniques, pot culture potted plants, display and placement, upkeep and maintenance.	
Unit:4	FLOWER ARRANGEMENT
Use of flowers and containers for Interior Decoration-Importance, basic shapes, styles in flower arranging traditional, oriental, modern, free expression, dried and pressed flowers, fundamentals of Ikebana and styles of Ikebana.	
Unit:5	TRENDS IN INTERIOR GARDEN
Modern trends in gardening- Terrace garden, Rock garden, water garden, Bonsai culture, terrarium, developing ornamental plants in Home garden for flats roof garden, hanging garden, Kitchen garden; Hard landscape materials and construction details	

Skill Based II - Computer Applications 2 - Practical

UNIT I	ADVANCED CAD
Advanced CAD features for operational efficiency: 2D Isometric drawing, Isometric dimensioning, creating tool palettes, External reference drawing files, creating and using Dynamic Blocks, Viewports- controlling layers, colour, line weight.	
UNIT II	BASIC 3D MODELING IN CAD
Basic Exercises in 3D CAD software (AutoCAD/3DS Max/Revit), Understanding the co-ordinate system, 3D primitives, solid modelling and surface modelling, meshes, complex solids and surfaces, solid editing, 3D modifying, converting and sectioning.	
UNIT III	RENDERING
Rendering 3D views using material palettes, colours, textures, shades and shadows. Inserting objects from digital libraries and other sources, using software such as Lumion/ Blender/ Vray; Rendering 3D models: Material Browser, Assigning materials, material mapping, creating your own material reflectivity, transparency, cutouts, environment settings, Using render plugins in various software.	
UNIT IV	ANIMATION
Setting the Scene, Camera move/pan/ tilt animation, 3D animation, walk-through sequence, superimposing animated videos over base images.	

Semester 5

Core Paper X - Basics in Architecture

Unit:1	INTRODUCTION - EARLY HISTORY
Introduction definition of Architecture; The Beginnings Early History: Elementary forms of construction arch, post, lintel, cantilever roofing techniques truss, vaults and domes. Egyptian and Mesopotamian architecture Formation & Development; characteristic features, typical examples Greek Acropolis and Parthenon; development of post and lintel system Doric, ionic and Corinthian orders; Roman Forum, Pantheon and colosseum; development of arches and domes; Gothic Chartres cathedral; vaults & buttresses.	
Unit:2	INDIAN ARCHITECTURE
Introduction, Ajanta and Ellora Caves; Buddhist Architecture Characteristic features Sanchi stupa, Shaman, Viharas and chaityas. Hindu Architecture (North) Sun temple Konark, (South) Brihadeshwar temple, Meenakshi Amman Temple, Rock cut Temples - Mahabalipuram. Islamic architecture characteristic features. Taj Mahal, Charminar, Buland-Darwaza- FatepurSikri; Gateway of India, Victoria Memorial, The Open Hand, Lotus Temple-itsarchitectural features.	
Unit:3	MORDERN ARCHITECTURE
Renaissance - Industrial Revolution - Modern architecture- modern materials and new techniques, Great Architects of modern age- Le Corbusier, Mies Vander Rohe, Frank LloydWright, Charles Correa, BV Doshi, Laurie Baker.	
Unit:4	FUNDAMENTALS OF ARCHITECTURE
Form; Space; Order; Elements of Architecture Types, Systems and Components that inform design; The Design Process Tools and Techniques for Generating Ideas.	
Unit:5	MATERIALS, CONSTRUCTION & PRACTICE
Material qualities, Characteristics and Behaviors; Methods of Construction Building structure - Reusing the forces that act against the Buildings; Building systems. Architectural Practice and Communication; Allied Disciplines - Interior Design, Urbanism, Landscape Design.	

Core Paper XI - Estimation & Costing

Unit:1	WALL AND CEILING
Estimation for Wall Construction, Estimation for Partitions, Doors, Fixed Glass Windows. Estimation for Wall and Ceiling Treatments, Paint Calculation of prices for Wall coverings -Introduction to other wall materials such as wall tiles and paneling Estimation and costing ofSuspended Ceilings.	
Unit:2	FLOOR
Flooring Estimation Plank and Tile Flooring Resilient Flooring and Soft Flooring, Area Rugs Explanation of product, product sizing and packaging Commonly used flooring products and their estimation and costing.	
Unit:3	CABINETS & FURNITURE
Introduction to Built-In work, Discussion of Countertops and Cabinetry Product sizing and packaging. Pricing of Cabinetry using pricing grids, Construction and Finish Costing of all components of Countertops and Cabinetry.	
Unit:4	WINDOW TREATMENTS
Window Treatments -Common types of window treatments - specifications and pricing- Top Treatments, Window Shades and Hard Treatments- Curtains and Drapery - Pattern and materialestimation, Blinds and other coverings,	
Unit :5	SOFT FURNISHINGS & ARTIFACTS
Soft Furnishing and upholstery, Bedding: Spreads, Shams, Coverings; Reupholstered and Slipcovered Furniture - Calculate pricing from an upholstery manufacturer's price list Issues designer must consider when issuing an estimate.	

Core Paper XII - Furniture in Interiors

Unit:1	INTRODUCTION
Styles of furniture traditional, contemporary and modern design; Furniture for different purpose meaning, need; Factors influencing design climatic condition, family needs and preferences, availability, principles of design and financial limit.	
Unit:2	HISTORY AND ERGONOMICS
Furniture through the ages Overview; Development of Furniture design, Furniture for various spaces and functions Selection and arrangement; Ergonomics, anthropometrics and spatial conventions in furniture design furniture dimensions.	
Unit:3	FURNITURE MATERIALS
Familiar furniture materials Wood-teak, rosewood, walnut, cedar, mahogany, pine, birch, sal, plywood, bamboo, cane, metals, plastics, leathers, PVC Manufacturing process, materials, prototyping and innovation Custom and mass production in furniture.	
Unit:4	FURNITURE CONSTRUCTION
Construction features of furniture Process in wood furniture: shaping, carving, turning, fluting, reading, joining & finishes; Upholstering- techniques and designs Metal and Glass furniture methods and finishes - Ornament in furniture.	
Unit:5	FURNITURE AND FURNISHINGS
Furnishings Types, Design, Selection and Layout Care and maintenance wooden furniture, wicker and cane, metal furniture, PVC. Plastic, upholstered furniture Wood finishes and furniture polishes Window coverings Drapes, blinds and curtains materials, patterns and construction.	

Core Practical V - Interior Design Studio IV: Furniture & Exhibition Design

Unit:1	RESEARCH
Furniture Design- Form and Structure for similar functional need; Materials and their suitability for use as components of the furniture; Processes of making jointing, bending, cutting, mould casting etc. and consider suitability Material science and Fabrication process- both historical and contemporary material and fabrication processes. From this collective research and discussions, students will work together to develop a line of inquiry regarding material form and process.	
Unit:2	CASE STUDIES
Book Case Studies, Real Life Case Studies Documentation, Analysis, and Inference for Design	
Unit:3	CONTEXTUAL STUDY
Contextual Study can be User Study - Flexible designs can accommodate potential user variation, or special features can be added to accommodate a special need by a user; Study the Physical context in which furniture will be used - select materials and construction appropriate to the context; The selections will also influence visual impact, luxury, comfort, maintenance or flexibility- priorities deliberately.	
Unit:4	CONCEPTUAL DESIGN
Creative process: Material, process, user and context study will lead to their individual design concept. Show 2D and 3D versions of the idea evolution and present development of Design Concept as colored sketches. Submission: Line sketches with Concept Model	
Unit:5	SCHEMATIC DESIGN
Detailing: The design concept is further developed and detailed to include material, jointing, finishing, color and texture - with sketches, part models, and detailed drawings. Submission: Detailed Plan, Elevations, and Section with connection details. Double line plan with elevations sections as needed to clarify design idea.	
Unit:6	DESIGN PRESENTATION
Construction: Scaled Prototype model of furniture is constructed using identical or similar material and processes. It is supported with a detailed set of drawings for the final presentation and review. Submission for the Viva Voce Presentation: Prototype model, Final detailed set of Drawings completed, formatted, dimensioned and rendered. (Sheets: Plan, Elevations, Sections and Jointing Details as needed to communicate the design unambiguously)	

Semester 6

Core Paper XIII - Sustainable Interiors

Unit:1	ENERGY EFFICIENCY
Passive Methods: Orientation, Shading, Ventilation, Activity Placement, Insulation, Landscape, Water body, Earth cooling; Choice of Wall Systems, Roof, Glazing to minimize heat gain Renewable energy resources meaning and importance, solar energy advantages, principles and functions of solar devices solar room heater, solar lights, solar water heater, solar air conditioners.	
Unit:2	MATERIAL SELECTION / WASTE REDUCTION/LONG DESIGN LIFE
Materials and finishes used in green building- Eco friendly materials - Bamboo, straw, wood, dimension stone, Recycled stone, non-toxic metals, Earth blocks compressed, rammed, baked; vermiculites, flax linen, sisal, wood fibers, cork, coconut, polyurethane blocks etc.; Use of recycled, up cycled, repurposed and cradle to cradle" materials; Increased design life cycle - good material and construction quality, design flexibility	
Unit:3	GREEN BUILDING TECHNOLOGY
Meaning, Concepts of Green Building Technology, Need, Benefits of Green buildings. Policies and incentives encouraging sustainability - Green building practices and technologies. Details and specifications for Roof, walls, floors electrical, plumbing, windows, and doors, heating, ventilation and air conditioning (HVAC), insulation, Interior finishes, landscaping.	
Unit:4	WATER CONSERVATION
Water conservation technologies. Recharge of ground water flooding issues. Rain water harvesting importance, requirements of rainwater harvesting structure, types of rain water harvesting systems, advantages of water conservation strategies	
Unit:5	HEALTHY ENVIRONMENTS
Indoor Air Quality, No Toxic (VOC) Materials, Good Ventilation, Humidity levels maintained and air exchanges, Environmentally Responsible Lighting Design; Day lighting: Indirect / diffused; Design for Movement Activity and Connection Connect to nature views and interior landscaping -oxygenate the air and remove toxins.	

Core Paper XIV – Professional Practice

Unit:1	INTRODUCTION
Defining the Profession The Business of Interior Design Indian Institute of Interior Designers Rules and Regulations, Code of conduct Legal Responsibilities Code Compliance, IntellectualProperty Copyright;	
Unit:2	SETTING UP THE PRACTICE
Creating and Managing an Interior Design Practice Business formations Sole Proprietorship, Partnership, LLC, Pvt. Ltd Corporation Strategic Planning basics, mission statements, business analysis, goals objectives strategies, budgeting, measuring performance, benchmarking Money Management maintain records, control overheads Marketing Branding, Marketing Plan; Portfolio, Competitions, Website, Publications	
Unit:3	OPERATIONS
Preparing Design Proposals and Contracts, Estimating Design Fees Design Presentations; Tenders and quotations Tenders meaning types, preparation of tenders, quotations, contracts Documentation of works, managing manual resources, and digital resources Employee Management Contracts, Compensation and Benefits, Job classifications, descriptions, Performance Evaluation, Employee Handbook.	
Unit:4	FIRE SAFETY
Fire Safety Codes: Fire combustibility NBC fire resistant rating of materials firefighting requirements wet riser, dry riser, fire zones, fire escape staircase, fire alarms, smoke detectors and fire lifts. Codes For Barrier Free Environment: Requirement of toilets, corridors, etc. for handicapped persons wheel chair clearances ramps for handicapped according to ISO 9001 Standards	
Unit:5	OTHER CODES
Codes For Electrical Layout: Typical electrical layout for a building location requirement for switch rooms and distribution panels codes for fan points, power points and light points PVC sheathed wiring system protective earthing earth electrode; Codes For Lighting: Measurement of illumination and luminous intensity day light factor sky luminance ERC, IRC light output ratio recommended illumination levels for various spaces such as library, class room, garment factory, etc. Energy conservation in lighting. Codes For Ventilation: Ventilation rates air changes per hour relative humidity cross ventilation, stack effect, recommended ventilation rates for kitchen, toilet, etc.	

Core Practical VI - Interior Design Capstone Project

Unit:1	Project Definition
Project Proposal Topic of study, site plan, location, existing building plan if any and any other relevant information pertaining to the project site. Description of the Interior Design project proposed for the site: Name, Use, a tentative list of facilities to be accommodated and Design goal.	
Unit:2	Literature Research
Conduct Research on Building typology and related case studies Anthropometric & Ergonomic Data, Climatic Data; Materials, detailing and technologies relevant to building function; Topic of interest such as User psychology, Colour theory, sensorial design, and landscape for healing and sustainable interior detailing.	
Unit:3	Context and User Study
Prepare and Conduct Survey and Study Current users of the Space & Future users of the Design Proposal Their existing use patterns, problems and or limitations, needs wants, conflicting demands, user typologies, User timings and frequency, health, accessibility and maintenance issues, special considerations; Existing Site Conditions Detailed Site Drawings, Materials and Finishes, the construction and condition or state of repair, Building Service connections, Natural Lighting and Ventilation, Existing Building Architecture and Detailing, Accessibility and Circulation Movement through the site, advantages and constraints, Climatic considerations, Surrounding facilities, their usage, connection to the new proposal and physical appearance.	
Unit:4	Programme Development & Design Concept
Develop a Design Brief or Programme that details Spaces to be provided, Areas for each, facilities to be accommodated in each of the spaces and functional and qualitative requirements for these spaces in terms of activity accommodation, equipment needed, lighting ventilation needs, proximity needs etc.; Develop the main Design Idea or Concept The Basic Design theme for you Design. A simple space-planning layout and sketches that will guide further development of your design.	
Unit:5	Design Development
Forms and details Detailed double line plans, sections, elevation, 3D sketches, furniture details, ceiling design and landscape details if any Material selections, mood boards, colour palettes and lighting is also worked on to arrive at the final design proposal. Details will indicate method of assembly or construction - Perspective sketches or 3D renders are used to visualize the design	