



Deccan Education Society's

Fergusson College (Autonomous), Pune-4

Department of B.Voc. Interior Design



**Deccan Education Society's
FERGUSSON COLLEGE (AUTONOMOUS),
PUNE**

**Syllabus
for**

T. Y. B.Voc. (Interior Design)
[NEP 1.0]
(B.Voc. Semester-V and VI)

**With Effect From
2025-2026**

Syllabi NEP 1.0 Implemented from Academic Year 2025-26
T.Y. B.Voc Semester: V/ VI

Program Outcomes (POs) for B. Sc.	
PO1	Disciplinary Knowledge: (i) Demonstrate comprehensive knowledge of one or more discipline that form a part of an undergraduate B.Voc programme (ii) Execute strong theoretical and practical understanding generated from the chosen B.Voc programme.
PO2	Critical Thinking and Problem solving: Exhibit the skill of critical Design thinking and use them to predict a range of creative solutions towards a Design problem, evaluate them and chose the most appropriate options.
PO3	Social competence: (i) Exhibit thoughts and ideas effectively in writing and orally; communicate with others using appropriate media, build effective interactive and presenting skills to meet global competencies. (ii) Able to connect to people individually or in group settings.
PO4	Research-related skills and Scientific temper: (i) Demonstrate a sense of inquiry and capability for asking relevant/appropriate questions; ability to plan, execute and report the results of an experiment (ii) Employ knowledge of the avenues for research and higher academic achievements in the chosen field and allied subjects and aware about research ethics, intellectual property rights and issues of plagiarism.
PO5	Trans-disciplinary knowledge: Create new conceptual, theoretical, methodological innovations that integrates and transcends beyond discipline-specific approaches to address a common problem
PO6	Personal and professional competence: (i) Able to actively work individually and participates in team activities and demonstrates co-operation. (ii) Integrate enthusiasm and commitment to improve personal and team performance levels and build skills to achieve the goals.
PO7	Effective Citizenship and Ethics: Demonstrate empathetic social concern and equity centred national development; ability to act with an informed awareness of moral and ethical issues and commit to professional ethics and responsibility.
PO8	Environment and Sustainability: Understand the impact of the scientific solutions in societal and environmental contexts and demonstrate the knowledge of, and need for sustainable development.
PO9	Self-directed and Life-long learning: Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes.

Program Specific Outcomes (PSOs)

PSO	Outcomes
PSO1	Academic competence: i) Identify fundamental concepts of manual and computer designing, drafting and Practical application. (ii) Understand the working of the business venture in terms of consultancy, execution, costing, retailing and marketing. (iii) Classify various materials, using identification and testing methods.(iv) Demonstrate 2D,3D Presentation, Execution
PSO2	Personal and Professional Competence: (i) Review the latest market conditions, contemporary design trend, updated materials (ii) Design the commercial & residential interior projects using the advanced knowledge of materials ,construction techniques & software.
PSO3	Research Competence: (i) Analyze the work of Indian and international designers also the historical database of the living styles & interior around the world to take the inspiration, for development of their own themes.(ii) Plan and Execute the theme-based personnel ,Corporates or Government ventures.
PSO4	Entrepreneurial and Social competence: i) Apply competencies including communication and presentation skills orator and listening skills; along with the skill set to work in a team as well as an individual (ii) Create a awareness through their work by using products which are green and harmless for the society.

T.Y. B. Voc. NEP 1.0						
Semester	Paper	Paper Code	Title	Type	Credits	Exam Type
V	MAJOR	BID-301	PROFESSIONAL PRACTICE	THEORY	2	CE+ESE
		BID-302	LIGHTING DESIGN & ACOUSTICS	THEORY	2	CE+ESE
		BID-303	SUSTAINABLE INTERIORS	THEORY	2	CE+ESE
	ELECTIVE	BID-304	BAMBOO-USE IN INTERIOR-1	THEORY	2	CE+ESE
		BID-305	BAMBOO-FURNITURE MAKING-1	PRACTICAL	2	CE+ESE
		BID-306	3DS MAX PROJECT-TH	THEORY	2	CE+ESE
		BID-307	3DS MAX PROJECT-PR	PRACTICAL	2	CE+ESE
	MAJOR	BID-311	THESIS & PROJECTS -RESIDENTIAL	PRACTICAL	2	CE+ESE
		BID-312	RESIDENTIAL FURNITURE DESIGN	PRACTICAL	2	CE+ESE
	VSC	BID-331	MULTIPLE SKILL DEVELOPMENT	THEORY	2	CE
	MINOR	BID-321	BASIC TENDER	THEORY	2	CE+ESE
		BID-322	RESIDENTIAL MARKET SURVEY	PRACTICAL	2	CE+ESE
	FP	BID-345	FIELD PROJECT	THEORY / PRACTICAL	2	CE
VI	MAJOR	BID-351	LIFE SKILLS	THEORY	2	CE+ESE
		BID-352	MODULAR FURNITURE	THEORY	2	CE+ESE
		BID-353	SOFT SKILLS & PORTFOLIO DEVELOPMENT	THEORY	2	CE+ESE
	ELECTIVE	BID-354	BAMBOO-USE IN INTERIOR-2	THEORY	2	CE+ESE
		BID-355	BAMBOO-FURNITURE MAKING-2	PRACTICAL	2	CE+ESE
		BID-356	3D SKETCH UP PROJECT-TH	THEORY	2	CE+ESE
		BID-357	3D SKETCH UP PROJECT-PR	PRACTICAL	2	CE+ESE
	MAJOR	BID-361	THESIS & PROJECTS-COMMERCIAL	PRACTICAL	2	CE+ESE

		BID-362	COMMERCIAL FURNITURE DESIGN	PRACTICAL	2	CE+ESE
	MINOR	BID-371	TENDER DOCUMENT	THEORY	2	CE
		BID -372	COMMERCIAL MARKET SURVEY	PRACTICAL	2	CE+ESE
	OJT	BID-395	OJT	THEORY / PRACTICAL	4	CE

T.Y B.A. SEMESTER V		
	BID-301 - Professional Practice Major-Theory	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Explain the fundamental concepts of professional ethics and responsibilities. (Cognitive Level 1 - Remembering)	1
CO2	Illustrate real-world scenarios where ethical decision-making is crucial in professional practice. (Cognitive Level 2 - Understanding)	2
CO3	Apply ethical principles and legal frameworks to solve professional dilemmas. (Cognitive Level 3 - Applying)	3
CO4	Analyze case studies to assess the impact of professional conduct on organizations and society. (Cognitive Level 4 - Analyzing)	4

**BID-301 - Professional Practice
Major-Theory
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Interior Designer: Detailed Definition and its components	2
II	Interior Designer: Helps in 2.1 Selection 2.2 Economy 2.3 Elimination 2.4 Safety	2
III	Role an Interior Designer plays	2
IV	Methods of Checking on the Site 4.1 Material 4.2 Leveling & Alignment 4.3 Finishing 4.4 Workmanship 4.5 Samples 4.6 Progress 4.7 Finishes 4.8 Miscellaneous	4
V	How to enter into competition	2
VI	Types of Clients	2
VII	Searching for Clients	2
VIII	Office and its Management	4

IX	Functions of Interior Designer (Covered in 1 above)	2
X	Professional Fees with reference to Time spent	2
XI	Principles and Practices of Management	2
XII	Acts/Taxes are applicable to Interior Designer Profession 12.1 Shop Act 12.2 IT 12.3 GST/ Service Tax 12.4 PT 12.5 Contract 12.6 PF 12.7 Gratuity	4

Learning Resources- References

Sr. No.	References
1.	"Professional Ethics and Human Values" – R. S. Naagarazan
2.	"Business Ethics: Concepts and Cases" – Manuel G. Velasquez
3.	"Ethics in Engineering" – Mike W. Martin and Roland Schinzinger

T.Y B.A. SEMESTER V		
	BID-302- Lighting Design & Acoustics Major-Theory	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Define the fundamental principles of lighting design and acoustics. (Cognitive Level 1 - Remembering)	1
CO2	2. Explain the role of lighting and acoustics in enhancing architectural and interior spaces. (Cognitive Level 2 - Understanding)	2
CO3	Apply lighting and acoustic design principles to optimize indoor environments. (Cognitive Level 3 - Applying)	3
CO4	Analyze case studies to evaluate the effectiveness of lighting and acoustic solutions in real-world projects. (Cognitive Level 4 - Analyzing)	4

**BID-302- Lighting Design & Acoustics
Major-Theory
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	1. Perception of light,	3
II	2. Emotional impact / psychology	3
III	3. Day/natural light	3
IV	4. Types of light- Ambient, Accent, task, mood,	3
V	5. Lighting calculations- kelvin, CRI,	3
VI	6. Types of light fittings, Luminaires, systems,	3
VII	7. Residential spaces,	3
VIII	8. Commercial spaces	4
IX	9. Energy efficient design	5

Learning Resources- References

Sr. No.	References
1.	"Lighting Design Basics" – Mark Karlen, Christina Spangler, and James Benya
2.	"Architectural Acoustics" – David Egan

T.Y B.A. SEMESTER V		
	BID-303- Sustainable Interiors Major - Theory	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Define the fundamental principles of sustainability in interior design. (Cognitive Level 1 - Remembering)	1
CO2	2. Explain the impact of materials, energy efficiency, and indoor environmental quality on sustainable interiors. (Cognitive Level 2 - Understanding)	2
CO3	Apply sustainable design strategies to create eco-friendly and resource-efficient interior spaces. (Cognitive Level 3 - Applying)	3
CO4	4. Analyze case studies to assess the effectiveness of sustainable interior design solutions. (Cognitive Level 4 - Analyzing)	4

**BID-303- Sustainable Interiors
Major - Theory
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	1. Principles of sustainable interiors a. Design for energy efficiency b. Design for low environmental impact c. Design for waste reduction d. Design for longevity and flexibility e. Design for healthy environments	6
II	2. Life cycle analysis a. Introduction to GHG and Global warming b. Role of construction and interiors in GHG c. Embodied Energy and Carbon foot print of materials and designs d. Principles of LCA – Cradle to Cradle/Cradle to Grave/Cradle to Gate/Gate to Gate e. Carbon Cycle	6
III	3. Energy efficiency Materials, Products and designs a. Identifying and Choosing the green materials b. Evaluation of material or design c. 5R - Reduce Reuse Recycle Refurbish Reclaim	6
IV	4. Role of interior designers in sustainable interiors	6

V	5. Certification Of Green Products & Designs a. Certification Bodies b. Certification Process c. Advantages in Projects d. Standards for certification	6
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Learning Resources- References

Sr. No.	References
1.	"Sustainable Interior Design" – Lori Dennis
2.	"Sustainable Residential Interiors" – Annette Stelmack, Debbie Hindman, and Kari Foster
3.	"The Interior Design Handbook of Professional Practice: A Sustainable Approach" – Cindy Coleman

T.Y B.A. SEMESTER V		
	BID-304 – Bamboo-Use in Interior-1 Elective - Theory	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Identify the properties, types, and benefits of bamboo as a sustainable material in interior and furniture design. (Cognitive Level 1 - Remembering)	1
CO2	Explain the applications of bamboo in interior spaces and furniture, considering aesthetics, durability, and environmental impact. (Cognitive Level 2 - Understanding)	2
CO3	Apply bamboo-based design techniques to create functional and innovative interior and furniture solutions. (Cognitive Level 3 - Applying)	3
CO4	Analyze case studies to evaluate the effectiveness of bamboo in sustainable interior and furniture design. (Cognitive Level 4 - Analyzing)	4

BID-304 - Bamboo-Use in Interior-1
Elective - Theory
Course Contents

Unit No.	Title of Unit and Contents	No. of hours
I	History of Bamboo utilization, day-to-day use of bamboo and modern application of bamboo.	3
II	Types of Bamboo: Future prospects of bamboo technology. General Workshop safety and Tools safety.	3
III	Basics of Bamboo resources, type of propagation and practice in India and abroad, Selection of bamboo to make various bamboo products.	4
IV	4. Introduction of various hand tools and machine tools used on Bamboo technology, measuring tools. Conversion table etc. Brief description of Hand tools and Machine tools. Specification of tools and types of tools.	4
V	5. How to make pattern, banding, buffing and polishing of bamboo	4
VI	6. Various techniques of Preservation and Treatment of Bamboo (Through ancient/ traditional and modern methods) Colouring/Dying of Bamboo strips/ slivers	4
VII	7. Introduction of Bamboo Primary Processing Machineries and its uses. Brief description of cross cutting machine and how to operate, trouble shooting of this machines.	4
VIII	8. Introduction of various - Anatomical structure, Chemical properties, Physical properties and Mechanical Properties. Gross anatomy-Parechyma, Vascular bundles, fibres. Chemical constitution, Cellulose and hemicelluloses, lignin etc. Moisture content, Fibre saturation point and shrinkage, Specific gravity and mechanical properties, influence of age Air seasoning; Kiln seasoning; chemical seasoning and seasoning defects & remedies. Others process.	4

Learning Resources- References

Sr. No.	References
1.	"Bamboo in Architecture & Interior Design" – Kazi Ashraf
2.	"Bamboo Design Guide & Construction" – Jules J.A. Janssen
3.	"New Bamboo: Architecture and Design" – Marcelo Villegas

T.Y B.A. SEMESTER V		
	BID-305- Bamboo-Furniture Making-1 (Elective- Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Identify the characteristics, processing methods, and advantages of bamboo as a material for furniture making. (Cognitive Level 1 - Remembering)	1
CO2	Explain the design principles, joinery techniques, and structural properties of bamboo furniture. (Cognitive Level 2 - Understanding)	2
CO3	Apply craftsmanship techniques to design and construct functional bamboo furniture pieces. (Cognitive Level 3 - Applying)	3
CO4	Analyze the durability, sustainability, and market potential of bamboo furniture through case studies and real-world applications. (Cognitive Level 4 - Analyzing)	4

**BID-305- Bamboo-Furniture Making-1
(Elective- Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	POINTS` Through Visits and some actual handling. Demonstration of different bamboo item, its modern utilization by showing visual aids. (06hrs.) 7. Use of tools safety and workshop safety.	2
II	Demonstration through field visit and Harvesting Practice.	2
III	Introduction of Tools.	2
IV	Operate and practice of hand tools. It maintenance and precaution.	2
V	Practice of measurement of all systems.	2
VI	Hand sawing, Drilling, Skinning, Filling practice.	2
VII	Practice of handsawing.	2
VIII	Drilling, Skinning, filling practice etc	2
IX	Practice of pattern making, use of blow lamp and it precaution.	2
X	Preservation of Bamboo 15. Use of Borax & Boric Acid.	2
XI	Use of Smoke chamber and other Chemical Process.	2
XII	Practice of Traditional process.	2
XIII	Practice of dying utilizing various chemical and vegetative dyes.	2
XIV	Bamboo processing Machine 19. Practice on different machineries used to make various primary bamboo products.	2

XV	Practice of Cross Cutting machine, Soiling and lubrication of machine.	2
XVI	Splitting Machine	3
XVII	Practice of operation in Radial Splitting Machine, Automatic splitting Machine, oiling and lubrication of machine.	3
XVIII	Practice of operation in knot removing machine.	3
IXX	Polishing Machine	3
XX	Practice of operation in polishing machine, oiling and lubrication of machine.	3
XXI	Practice of operation in manual slivering machine, oiling and lubrication of machine.	3
XXII	Practice of operation in round stick machine oiling and lubrication of machine.	3
XXIII	Drill Machine	3
XXIV	Practice of operation in electric drill machine, oiling and lubrication of machine.	3
XXV	Practice of operation in 2 side / 4 side machine planer, oiling and lubrication of machine including preventive maintenance.	3

Learning Resources- References

Sr. No.	References
1	Bamboo Construction: Tradition, Modernity & Sustainability" – Gernot Minke
2	Bamboo Furniture" – Simon Velez
3	Bamboo Design Guide & Construction" – Jules J.A. Janssen

T.Y B.A. SEMESTER V		
	BID-306 - 3Ds Max Project-TH (Elective – Theory)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply various modeling techniques in 3Ds Max to create complex 3D models	3
CO2	Examine the texture & materials to 3D models in 3DS Max utilizing mapping techniques and material properties	3
CO3	Analyze the best modeling approach for different types of objects, considering factors such as polygon count, topology, and surface smoothness, to optimize model efficiency and realism.	4
CO4	Compare visual impact of different materials and textures on rendered scenes, considering factors such as reflectivity, transparency and surface details to achieve desired aesthetics effects.	4

**BID-306 - 3Ds Max Project-TH
(Elective – Theory)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
Unit -I	Introduction Of Project	3
Unit -II	Command Practice & Study	6
Unit -III	2d Study And Transformation In 3d	6
Unit -IV	2 nd Years 2d Project –Convert In To 3d	6
Unit -V	Detailed Discussion On Practical Aspects	9

Learning Resources- References

Sr. No.	References
1.	3D Max 2022 by Prof. Sham Tickoo
2.	Sketch up 2022 Hands-on Basics and Advanced Exercises by Tutorial Books.
3.	Sketch up to Layout by Matt Donley.

T.Y B.A. SEMESTER V		
	BID-307 - 3Ds Max Project-PR (Elective – Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply various modeling techniques in 3Ds Max to create complex 3D models	3
CO2	Examine the texture & materials to 3D models in 3DS Max utilizing mapping techniques and material properties	3
CO3	Analyze the best modeling approach for different types of objects, considering factors such as polygon count, topology, and surface smoothness, to optimize model efficiency and realism.	4
CO4	Compare visual impact of different materials and textures on rendered scenes, considering factors such as reflectivity, transparency and surface details to achieve desired aesthetics effects.	4

**BID-307 - 3Ds Max Project-PR
(Elective – Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	3D MODELLING OF 2 ND YEARS STUDIO PROJECT WITH ALL RENDREING AND PREPAREING HOLIASTIC 3D PROFESSIONAL PROJECT.	30
II	3D MODELLING OF 3 RD YEARS STUDIO PROJECT WITH ALL RENDREING AND PREPAREING HOLIASTIC 3D PROFESSIONAL PROJECT.	30

Learning Resources- References

Sr. No.	References
1.	3D Max 2022 by Prof. Sham Tickoo
2.	Sketch up 2022 Hands-on Basics and Advanced Exercises by Tutorial Books.
3.	Sketch up to Layout by Matt Donley.

T.Y B.A. SEMESTER V		
	BID-311 - Thesis & Projects - Residential (Major – Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply and optimize spatial layouts for large-scale commercial interiors, considering factors such as traffic flow, functionality, accessibility, and zoning regulations.	3
CO2	Use expertise in selecting and specifying materials, finishes, and furnishings suitable for large-scale commercial spaces, taking into account durability, sustainability, aesthetic appeal, and budget constraints.	3
CO3	Analyse technical documentation, including detailed drawings, specifications, schedules, and construction documents, to communicate their design concepts effectively to clients, contractors, and other stakeholders, demonstrating creativity, precision, and professional standards in their work..	3
CO4	Arrange advanced design principles and theories to develop innovative and cohesive interior design concepts for large-scale commercial spaces, integrating elements such as lighting, color theory, texture, scale, and proportion to create compelling and functional environments.	4

**BID-311 - Thesis & Projects - Residential
(Major – Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Residential Project – 01 No. Residential Space Design project with Gypsum Walls [Internal] and with Entire Home Automation. - Live Project - Site Measurements - Existing Civil Layouts and Sec. Elevations at various locations - Alternative Interior Layouts - Final Interior Layout along with Mood board Sets of Dwgs. SET – I Presentational Designs - - Approved Interior Layout + - False Ceiling Design/Treatment with Luminaries Layout + Mood board - Floor Designs / Patterns / Materials - Furniture object Designs - Sectional Elevations - 3D Views SET – II Design Details –	60

	- Approved Interior Layout + - False Ceiling Design with Luminaries - Ceiling Elec. points layout - Wall and Furniture Elec. points layout - Networking layout + AV systems + CCTV + Access Control + Fire Fighting - Switchboard Layout - Automation System Layout/s [Includes all gadgets, Appliances, types of equipment, Lighting, etc.] SET – III Services Details – -Approved Interior Layout + - Plumbing and Sanitation layout [includes all Washrooms and Water Inlets and Outlets required for various Gadgets, Appliances, Equipment, etc.] - Gas connections if any. SET – IV Furniture & Surface Treatment Details – - Approved Interior Layout + - Working Details with Structural and Finishing Materials of all designed objects. - Finishing materials proposed for various surfaces along with specifications. SET – V Quantification and Estimation of Entire Project. Final Submission of Project – - Spiral bound Book in A3 size with Hard Cover - Soft Copy of AutoCAD, 3Ds Max / sketch up, and PDF files via Email at given address.	
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Learning Resources- References

Sr. No.	References
1.	Commercial Space Vol.1 & 2 by Hong Kong Rihan International Culture
2.	Designing Commercial Interiors by Christine M.Piotrowski & Elizabeth A. Rogers.

T.Y B.A. SEMESTER V		
	BID-312 - Residential Furniture Design (Major – Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Identify the fundamental principles, materials, and styles used in residential furniture design. (Cognitive Level 1 - Remembering)	1
CO2	Explain the relationship between ergonomics, aesthetics, and functionality in residential furniture. (Cognitive Level 2 - Understanding)	2
CO3	Apply design principles and material knowledge to create innovative and functional residential furniture. (Cognitive Level 3 - Applying)	3
CO4	Analyze furniture designs based on user needs, sustainability, and contemporary trends in residential interiors. (Cognitive Level 4 - Analyzing)	4

**BID-312 - Residential Furniture Design
(Major – Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Lecture 1-2: Introduction to Furniture Design Lecture 1: Overview of Furniture Design History Lecture 2: Elements and Principles of Furniture Design Lecture 3-4: Materials and Tools Lecture 3: Wood as a Primary Material in Furniture Design Lecture 4: Alternative Materials and Sustainability in Furniture Design Lecture 5-6: Design Process Lecture 5: Concept Development and Ideation Lecture 6: Sketching and Rendering Techniques for Furniture Design Lecture 7-8: Ergonomics and Human Factors Lecture 7: Ergonomic Considerations in Furniture Design Lecture 8: Anthropometrics and Proportion in Furniture Design Lecture 9-10: Furniture Styles and Movements Lecture 9: Overview of Furniture Styles (e.g., Modern, Contemporary, Art Deco) Lecture 10: Influential Furniture Designers and Movements Lecture 11-12: Structural Design and Construction Lecture 11: Joinery Techniques and Structural Integrity Lecture 12: Furniture Prototyping and Model Making Lecture 13-14: Digital Tools in Furniture Design Lecture 13: Introduction to CAD Software for Furniture Design Lecture 14: 3D Modeling and Visualization Techniques	60

Learning Resources- References

Sr. No.	References
1.	"Interior Design Illustrated" – Francis D.K. Ching
2.	"Furniture Design and Construction" – Stuart Lawson
3.	"Fitted Furniture Design: Techniques, Principles, and Practical Solutions" – Danny Proulx

T.Y B.A. SEMESTER V		
	BID-331 – Multiple Skill Development (Theory - VSC)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO-1	Identify various essential skills required for personal and professional growth, such as communication, problem-solving, and time management. (Cognitive Level 1 - Remembering)	1
CO-2	Explain the significance of adaptability, teamwork, and leadership in a multidisciplinary environment. (Cognitive Level 2 - Understanding)	2
CO-3	Apply diverse skill sets to effectively manage tasks, collaborate with teams, and enhance productivity. (Cognitive Level 3 - Applying)	3
CO-4	Analyze personal strengths and weaknesses to develop strategies for continuous skill improvement and career advancement. (Cognitive Level 4 - Analyzing)	4

**BID-331 – Multiple Skill Development
(Theory - VSC)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Seminar on Landscape design	5
II	Seminar on Vastushastra	4
III	Seminar on Social Media & Digital Marketing	4
VI	Seminar on Psychology	4
V	Seminar on Entrepreneurship	4
VI	Seminar on AI in Interior	4
VII	Seminar on Photography	5

Learning Resources- References

Sr. No.	References
1.	No Reference Books because of subject is design for live seminars

T.Y B.A. SEMESTER V		
	BID-321 - Basic Tender (Minor – Theory)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
I	Understanding Tendering Procedures Explain the fundamentals of tendering, including types of tenders, bidding processes, and contract selection criteria in interior projects.	1
II	Preparation of Tender Documents Develop and structure a complete tender document, including BOQ (Bill of Quantities), technical specifications, and contract terms for interior works.	2
III	Cost Estimation and Budgeting Analyze project costs, prepare accurate estimates, and apply pricing strategies to ensure competitive and profitable bidding.	3
IV	Legal and Contractual Aspects Identify key legal considerations, contract clauses, and compliance requirements in interior design tenders to avoid disputes and ensure smooth execution.	4

**BID-321 - Basic Tender
(Minor – Theory)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Types of Tenders A. Open Tender B. Selective Tender C. Single-Stage Tender D. Two-Stage Tender E. Negotiated Tender F. Framework Agreement G. Design-Build Tender H. Turnkey Tender	7
II	Tender Process A. Introduction and Background Information: B. Scope of Work: C. Site Visit and Pre-Bid Meeting Details: D. Technical Specifications: E. Drawings and Plans: F. Timeline and Deliverables: G. Bid Submission Requirements: H. Terms and Conditions:	8

	I. Terms and Conditions: J. Contact Information K. Appendice	
III	Floating of Tender A. Publish Tender Notice B. Pre-Bid Meeting (Optional) C. Receive and Evaluate Bids D. Negotiation and Clarification (if applicable) E. Award Contract	7
IV	Execution, Billing and Closing of Tender A. Contract Execution B. Monitor and Manage Performance C. Billing Schedule D. Invoice Preparation E. Supporting Documentation F. Submission of Invoices G. Invoice Review and Approval H. Payment Processing I. Final Account Settlement J. Project Closeout K. Documentation and Recordkeeping L. Lessons Learned	8

Learning Resources- References

Sr. No.	References
1.	"Estimating and Tendering for Construction Work" – Martin Brook Covers how to estimate costs, prepare tenders, and bid competitively.
2.	"Construction Contracts: Questions and Answers" – David Chappell

T.Y B.A. SEMESTER V		
	BID-322 - Residential Market Survey (Minor – Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO-1	Identify various types of interior materials available in the market, including their properties, uses, and pricing. (Cognitive Level 1 - Remembering)	1
CO-2	Explain the factors influencing material selection, such as durability, sustainability, aesthetics, and cost-effectiveness. (Cognitive Level 2 - Understanding)	2
CO-3	Apply market research techniques to compare and evaluate different interior materials based on quality, availability, and trends. (Cognitive Level 3 - Applying)	3
CO-4	Analyze survey data to recommend suitable interior materials for specific design projects, considering functionality and client needs. (Cognitive Level 4 - Analyzing)	4

**BID-322 - Residential Market Survey
(Minor – Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
1	Design Week 1-2: Introduction to Interior Materials Market Survey. Overview of interior materials market survey within the context of interior design. Importance of understanding materials trends and innovations. Basic concepts and terminology related to interior materials market survey Week 3-4: Understanding Material Properties and Performance Exploration of various interior materials used in design (e.g., flooring, wall coverings, textiles) Analysis of material properties such as durability, sustainability, and maintenance requirements Case studies of projects showcasing effective material selection and performance Week 5-6: Trends in Interior Materials. Identifying current and emerging trends in interior materials Analysis of trends in materials usage, finishes, and textures Exploration of sustainable and eco-friendly material options Week 7-8: Supplier and Manufacturer Analysis Researching and evaluating suppliers and manufacturers of interior materials Understanding the supply chain and distribution channels in the interior design industry Assessing the quality, reliability, and reputation of material suppliers Week 9-10: Material Testing and Evaluation Introduction to material testing methods and standards conducting hands-on evaluations of material samples. Interpreting test results and selecting appropriate materials for design projects Week 11-12: Market Research Techniques Methods for conducting market	60

	surveys and analysing data specific to interior materials Survey design, sampling techniques, and data collection strategies Utilizing qualitative and quantitative research methods Week 13: Emerging Technologies and Innovations in Interior Materials. Exploration of new technologies shaping the interior materials market (e.g., smart materials, 3D printing) .Case studies of innovative uses of materials in interior design projects Week 14: Industry Trends and Forecasting. Analysis of industry reports, market trends, and forecasts relevant to interior materials. Discussion of factors influencing material trends (e.g., technological advancements, sustainability concerns, cultural shifts) Week 15: Final Project Presentations. Final presentations of individual or group projects. Analysing interior materials Market trends Integration of research findings into design proposals Peer feedback and reflection on the course learning outcomes	
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Learning Resources- References

Sr. No.	References
1	"Materials for Interior Environments" – Corky Binggeli
2	Interior Design Materials and Specifications" – Lisa Godsey
3	Materials and Interior Design" – Lorraine Farrelly & Rachael Brown
4	Architectural Materials for Interior Design" – Victoria Ballard Bell

T.Y B.A. SEMESTER V		
	BID-345 – Field Project (FP-Theory/Practical)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Identify key Interior industry problems, trends, and client needs.	1
CO2	Develop mood boards, sketches, and digital renderings	3
CO3	Justify decision-making strategies in Designing and execution.	5
CO4	Develop a final report documenting the entire field project journey.	6

**BID-345 – Field Project
(FP-Theory/Practical)**

Unit No.	Subject Name	No. of Lectures
I	Project Conceptualization & Planning -Introduction to Field Projects in Interior Design. Market Research & Consumer Analysis. Project Ideation & Brainstorming Techniques. Feasibility Study & SWOT Analysis. Proposal Writing & Presentation Skills.	6
II	Research & Data Collection -Methods of Interior Research (Qualitative & Quantitative). Data Collection Techniques (Surveys, Interviews, Field Observations) Consumer Behavior & Market Trends Analysis. Competitor Study & Benchmarking. Research Report Writing & Interpretation	6
III	Design & Prototyping -Concept Development & Sketching. Material Selection. Furniture Prototyping. Digital Design & CAD Applications. Iterative Design Process & Refinement.	6
IV	Industry Collaboration & Execution -Working with Industry Partners & Mentors. Costing & Budgeting for Interior Projects. Production & Supply Chain Coordination. Ethical Practices & Sustainability Considerations. Project Execution & Time Management	6
V	Presentation, Reflection & Evaluation -Interior Project Documentation & Report Writing. Portfolio Development & Digital Presentation. Self-Assessment & Peer Review Techniques. Industry & Faculty Feedback Integration. Final Exhibition or Client Presentation	6

Sr. No.	References
1.	Interior Design Handbook of Professional Practice" – Cindy Coleman
2.	Designing Interiors" – Rosemary Kilmer & W. Otie Kilmer
3.	Interior Design Visual Presentation" – Maureen Mitton
4.	Construction and Detailing for Interior Design" – Drew Plunkett

T.Y B.A. SEMESTER VI		
	BID-351 - Life Skills Major-Theory	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply critical thinking and problem-solving techniques to real-life situations for effective decision-making. (Cognitive Level 3 - Applying)	3
CO2	Analyze personal strengths, weaknesses, and emotional intelligence to enhance self-awareness and interpersonal relationships. (Cognitive Level 4 - Analyzing)	4
CO3	Evaluate various life management strategies, including time management, stress management, and financial planning, for overall well-being. (Cognitive Level 5 - Evaluating)	5
CO4	Develop and implement innovative solutions for personal and professional challenges to achieve long-term goals. (Cognitive Level 6 - Creating)	6

**BID-351 - Life Skills
Major-Theory
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
Unit -I	Self-awareness & Control	2
Unit -II	Critical Thinking	2
Unit -III	Problem Solving/ Decision Making	2
Unit -IV	Creative Thinking	2
Unit -V	Hygiene	2
Unit -VI	Self-defence	2
Unit -VII	Financial Literacy	2
Unit -VIII	Business Communication	2
Unit -IX	Time Management	2
Unit -X	Anger, Anxiety and Stress Management	2
Unit -XI	Leadership	3
Unit -XII	Team Building	3
Unit -XIII	Manners and Etiquettes	4

Learning Resources- References

Sr. No.	References
1.	"Atomic Habits" – James Clear
2.	"The 7 Habits of Highly Effective People" – Stephen R. Covey
3.	"Mindset: The New Psychology of Success" – Carol S. Dweck
4.	"How to Win Friends and Influence People" – Dale Carnegie
5.	"Thinking, Fast and Slow" – Daniel Kahneman
6.	"Deep Work: Rules for Focused Success in a Distracted World" – Cal Newport

T.Y B.A. SEMESTER VI		
	BID-352 - Modular Furniture (Major - Theory)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply design principles and material knowledge to develop functional and adaptable modular furniture. (Cognitive Level 3 - Applying)	3
CO2	Analyze the structural, ergonomic, and aesthetic aspects of modular furniture for residential and commercial spaces. (Cognitive Level 4 - Analyzing)	4
CO3	Evaluate the sustainability, cost-effectiveness, and market demand of modular furniture solutions. (Cognitive Level 5 - Evaluating)	5
CO4	Design and prototype innovative modular furniture systems that optimize space utilization and user experience. (Cognitive Level 6 - Creating)	6

**BID-352 - Modular Furniture
(Major - Theory)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	POINTS - Introduction to Modular Furniture A) Need and requirement of modular furniture B) What can be made in modular furniture. C) Where it can be used. D) Users of modular furniture	5
II	Material used in Modular furniture E) Wood and Wood products F) Metals G) Glass H) Fabric I) Artificial and Natural stone	5
III	Manufacturing Process J) Infrastructure K) Machines involved in manufacturing L) Process M) Handling	5

	N) Management	
IV	Design and Development of Modular Furniture O) Design P) Restriction and limitation Q) Quantification of material R) Purchase orders S) Factory process document	5
V	Production T) Assembly line U) Various process as per material V) Inputs to machine W) Material shifting to machine. X) Processing of material from one part to other part. Y) Finishing and cleaning Z) Packing AA) Stacking BB) Dispatch	5
VI	Assembly of furniture on site A) Reading of Assembly drawing B) Sorting of material C) Fixing of components. D) Joining and arranging as per plan E) Cleaning and Handove	5

Learning Resources- References

Sr. No.	References
1.	Furniture Design" – Jim Postell
2.	Furniture: Furniture That Transforms Space" – Anna Yudina
3.	Nomadic Furniture" – Victor Papanek & James Hennessey

T.Y B.A. SEMESTER VI		
	BID-353 - Soft skills & Portfolio development (Elective – Theory)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply effective communication, teamwork, and problem-solving skills in professional and personal settings. (Cognitive Level 3 - Applying)	3
CO2	Analyze personal strengths, weaknesses, and career aspirations to develop a strategic growth plan. (Cognitive Level 4 - Analyzing)	4
CO3	Evaluate different portfolio presentation techniques to enhance professional branding and career opportunities. (Cognitive Level 5 - Evaluating)	5
CO4	Design and create a professional portfolio showcasing skills, projects, and achievements for career advancement. (Cognitive Level 6 - Creating)	6

**BID-353 - Soft skills & Portfolio development
(Elective – Theory)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Basics of Communication: Types, Use, Limitations, Characteristics, Principles and Barriers	5
II	Interview Preparation: Types of Interviews, Interviews for Interior Designers	5
III	Preparing Portfolio for designer's interview based on the guidelines	5
IV	Differentiating between other corporate interviews and interior designer's interview	5
V	Interview Techniques, Manners & Etiquettes	5
VI	Creating a portfolio and preparing for interviews	5

Learning Resources- References

Sr. No.	References
1.	"Soft Skills: The Software Developer's Life Manual" – John Sonmez
2.	Developing Soft Skills" – Hariharan S.
3.	Portfolio Design" – Harold Linton & William Engel
4.	Designing a Digital Portfolio" – Cynthia Baron

T.Y B.A. SEMESTER VI		
	BID-354 - Bamboo-Use in Interior-2 (Elective – Theory)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply design principles to incorporate bamboo as a sustainable material in interior spaces. (Cognitive Level 3 - Applying)	3
CO2	Analyze the structural, aesthetic, and environmental benefits of bamboo in interior design applications. (Cognitive Level 4 - Analyzing)	4
CO3	Evaluate the durability, functionality, and market potential of bamboo-based interior design solutions. (Cognitive Level 5 - Evaluating)	5
CO4	Design and develop innovative interior spaces using bamboo as a primary material for furniture, flooring, and décor. (Cognitive Level 6 - Creating)	6

BID-354 - Bamboo-Use in Interior-2
Elective - Theory
 Course Contents

Unit No.	Title of Unit and Contents	No. of hours
I	Various bamboo species and their utilization. Selection of bamboo as per job specification.	3
II	What is Design? Free hand drawing of various items.	3
III	Design intervention on new innovative products. Different aspects of drawing How to make model and mock up Selection of Marketable Product.	4
IV	Joints: Briefing about various joints, method of joints, uses of joints.	4
V	Practice of bamboo ornaments and various gift items. Designing of various Handicraft items. Identification of suitable products as per market demand like tea coaster, bamboo bags, placemat etc. Make a process lay-out of individual products.	4
VI	Introduction: Use of various Household and Public furniture, Advantage of sketch making of various furniture designs	4
VII	Use of Jigs& fixture. Bamboo, Cane, Wood, Nail, Adhesive, Binding wire, Plastic Rope, Nut-bolt etc	4
VIII	Process of Weaving Bamboo Mats, Process of making Bamboo Blinds Different patterns of Mat and Blind.	4

Learning Resources- References

Sr. No.	References
1	Bamboo Construction: Tradition, Modernity & Sustainability" – Gernot Minke
2	Bamboo Furniture" – Simon Velez
3	Bamboo Design Guide & Construction" – Jules J.A. Janssen

T.Y B.A. SEMESTER VI		
	BID-355- Bamboo-Furniture Making-2 (Elective - Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply construction techniques and joinery methods to create functional bamboo furniture pieces. (Cognitive Level 3 - Applying)	3
CO2	Analyze the structural strength, sustainability, and aesthetic appeal of bamboo furniture in various design applications. (Cognitive Level 4 - Analyzing)	4
CO3	Evaluate the performance, durability, and market potential of bamboo furniture compared to conventional materials. (Cognitive Level 5 - Evaluating)	5
CO4	Design and prototype innovative bamboo furniture that aligns with contemporary interior and sustainable design trends. (Cognitive Level 6 - Creating)	6

**BID-355- Bamboo-Furniture Making-2
(Elective - Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Pressure Machine 28. Practice on Hydraulic Press Machine.	2
II	Practice on Resin Applicator machine.	2
III	Glue Mixing and Weaving Machine	2
IV	Practice on Glue Mixing machine and DD Saw machine.	2
V	Practice on weaving Machine.	2
VI	Use of Blow Torch (LPG)	2
VII	Practice of pattern making, use of blow torch and it precaution.	2
VIII	Maintenance of Machine	2
IX	Cleaning of machine.	2
X	Lubrication and oiling of machine and trouble shooting.	2
XI	Practice of seasoning bamboos by different process and propagation methods.	2
XII	Identification of bamboo as per job requirement at practical field.	2
XIII	Practice on free hand drawing.	2

XIV	Practice on Drawing of various gift items, stationery Item.	2
XV	Practice on Drawing of various gift items, stationery Item	3
XVI	Making of Bamboo Models / Prototype.	3
XVII	Practice of making model and mock.	3
XVIII XVIX	Practice in tongue and groove or male and female joint, bolt fastening joint. Overlapping joint, Ushape joint. Horizontal joint, Vertical joint etc	3
XX	Demo of various type of furniture.	3
XXI	Draw the Neat sketch of furniture.	3
XXII	Demonstration of different material used in furniture making.	3
XXIII	Making of Bamboo Mats and Blinds.	3
XXIV	Making of Bamboo Mats by using Weaving Machine and Manually	3
XXV	Making of Bamboo Blinds.	3

T.Y B.A. SEMESTER VI		
	BID-356 - 3D Sketch Up Project-TH (Elective – Theory)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply various modeling techniques in 3D SketchUp to create complex 3D models	3
CO2	Examine the texture & materials to 3D models in 3D SketchUp ,utilizing mapping techniques and material properties	3
CO3	Analyze the best modeling approach for different types of objects, considering factors such as polygon count,topology,and surface smoothness,to optimize model efficiency and realism.	4
CO4	Compare visual impact of different materials and textures on rendered scenes, considering factors such as reflectivity, transparency and surface details to achieve desired aesthetics effects.	4

**BID-356 - 3D Sketch Up Project-TH
(Elective – Theory)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
Unit -I	INTRODUCTION OF PROJECT	3
Unit -II	COMMAND PRACTICE & STUDY	6
Unit -III	2D STUDY AND TRANSFORMATION IN 3D	6
Unit -IV	2 ND YEARS 2D PROJECT –CONVERT IN TO 3D	6
Unit -V	DETAILED DISCUSSION ON PRACTICAL ASPECTS	9

Learning Resources- References

Sr. No.	References
1.	3D Max 2022 by Prof. Sham Tickoo
2.	Sketch up 2022 Hands-on Basics and Advanced Exercises by Tutorial Books.
3.	Sketch up to Layout by Matt Donley.

T.Y B.A. SEMESTER VI		
	BID-357 - 3D Sketch Up Project-PR (Elective – Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply various modeling techniques in 3D SketchUp to create complex 3D models	3
CO2	Examine the texture & materials to 3D models in 3D SketchUp ,utilizing mapping techniques and material properties	3
CO3	Analyze the best modeling approach for different types of objects, considering factors such as polygon count, topology, and surface smoothness, to optimize model efficiency and realism.	4
CO4	Compare visual impact of different materials and textures on rendered scenes, considering factors such as reflectivity, transparency and surface details to achieve desired aesthetics effects.	4

**BID-357 - 3D Sketch Up Project-PR
(Elective – Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	3D MODELLING OF 2 ND YEARS STUDIO PROJECT WITH ALL RENDREING AND PREPAREING HOLIASTIC 3D PROFESSIONAL PROJECT.	30
II	3D MODELLING OF 3 RD YEARS STUDIO PROJECT WITH ALL RENDREING AND PREPAREING HOLIASTIC 3D PROFESSIONAL PROJECT.	30

Learning Resources- References

Sr. No.	References
1.	3D Max 2022 by Prof. Sham Tickoo
2.	Sketch up 2022 Hands-on Basics and Advanced Exercises by Tutorial Books.
3.	Sketch up to Layout by Matt Donley.

T.Y B.A. SEMESTER VI		
	BID-361 - Thesis & Projects - Commercial (Major – Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply and optimize spatial layouts for large-scale commercial interiors, considering factors such as traffic flow, functionality, accessibility, and zoning regulations.	3
CO2	Use expertise in selecting and specifying materials, finishes, and furnishings suitable for large-scale commercial spaces, taking into account durability, sustainability, aesthetic appeal, and budget constraints.	3
CO3	Analyse technical documentation, including detailed drawings, specifications, schedules, and construction documents, to communicate their design concepts effectively to clients, contractors, and other stakeholders, demonstrating creativity, precision, and professional standards in their work..	3
CO4	Arrange advanced design principles and theories to develop innovative and cohesive interior design concepts for large-scale commercial spaces, integrating elements such as lighting, color theory, texture, scale, and proportion to create compelling and functional environments.	4

**BID-361 - Thesis & Projects - Commercial
(Major – Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Commercial Project – 01 No. Commercial Space Design project - Live Project - Site Measurements - Existing Civil Layouts and Sec. Elevations at various locations - Alternative Interior Layouts - Final Interior Layout along with Mood board Sets of Drawings. SET – I Presentational Designs - - Approved Interior Layout + - False Ceiling Design/Treatment with Luminaries Layout + Mood board - Floor Designs / Patterns / Materials - Furniture object Designs - Sectional Elevations - 3D Views SET – II	60

	Design Details – - Approved Interior Layout + - False Ceiling Design with Luminaries - Ceiling Elec. points layout - Wall and Furniture Elec. points layout - Networking layout + PA systems + CCTV + Access Control + Fire Fighting - Switchboard Layout - Automation System Layout/s if any...	
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Learning Resources- References

Sr. No.	References
4.	Commercial Space Vol.1 & 2 by Hong Kong Rihan International Culture
5.	Designing Commercial Interiors by Christine M.Piotrowski & Elizabeth A. Rogers.

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T.Y B.A. SEMESTER VI		
	BID-362 - Commercial Furniture Design (Major – Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply design principles, ergonomics, and material selection to develop functional and aesthetic furniture pieces. (Cognitive Level 3 - Applying)	3
CO2	Analyze furniture design trends, structural integrity, and user requirements for various residential and commercial spaces. (Cognitive Level 4 - Analyzing)	4
CO3	Evaluate different furniture materials, construction techniques, and sustainability factors for innovative design solutions. (Cognitive Level 5 - Evaluating)	5
CO4	Design and prototype innovative furniture pieces that optimize space utilization, comfort, and aesthetic appeal. (Cognitive Level 6 - Creating)	6

**BID-362 - Commercial Furniture Design
(Major – Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
1	Lecture 1: Surface Treatments and Finishing Methods Lecture 2-3: Sustainable Design Practices Lecture 2: Sustainable Materials and Processes in Furniture Design Lecture 3: Recycling and Upcycling in Furniture Design Lecture 4-5: Case Studies and Design Analysis Lecture 4: Case Studies of Iconic Furniture Pieces Lecture 5: Design Analysis and Critique Lecture 6-8: Customization and Adaptation Lecture 6: Custom Furniture Design and Adaptation Lecture 7: Client Briefs and Project Management in Furniture Design Lecture 8-9: Production and Manufacturing Lecture 8: Mass Production vs. Handcrafted Furniture Lecture 9: Manufacturing Processes and Quality Control Lecture 10-11: Marketing and Branding Lecture 10: Branding Strategies in Furniture Design Lecture 11: Marketing Channels and Sales Techniques Lecture 12-13: Industry Trends and Innovation Lecture 13: Emerging Trends in Furniture Design Lecture 14: Innovative Materials and Technologies Lecture 15-16: Final Project Presentations Final Lecture 15: Project: Design and Prototype a Custom Furniture Piece Lecture 16: Presentation of Final Projects and Peer Feedback	60

T.Y B.A. SEMESTER VI		
	BID-371- Tender Document (Minor – Theory)	
	Number of Credits: 02 No. of Hours:30	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Apply the principles of tendering processes and documentation in project bidding and contract management. (Cognitive Level 3 - Applying)	3
CO2	Analyze legal frameworks, regulatory requirements, and compliance standards relevant to interior design and construction projects. (Cognitive Level 4 - Analyzing)	4
CO3	Evaluate different types of tender documents, contracts, and bidding strategies for successful project execution. (Cognitive Level 5 - Evaluating)	5
CO4	Develop a comprehensive tender document, incorporating legal, financial, and technical specifications for a project proposal. (Cognitive Level 6 - Creating)	6

**BID-371- Tender Document
(Minor – Theory)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
I	Notice of the Tender	6
II	Project Details	6
III	Floating of Tender	6
IV	Execution, Billing and Closing of Tender	6
V	Preparing final TENDER document for the the project with leagal compliances	6

Learning Resources- References

Sr. No.	References
1	"Estimating and Tendering for Construction Work" – Martin Brook Covers how to estimate costs, prepare tenders, and bid competitively.
2	"Construction Contracts: Questions and Answers" – David Chappell

T.Y B.A. SEMESTER VI		
	BID -372 - Commercial Market Survey (Minor – Practical)	
	Number of Credits: 02 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO-1	Identify various types of interior materials available in the market, including their properties, uses, and pricing. (Cognitive Level 1 - Remembering)	1
CO-2	Explain the factors influencing material selection, such as durability, sustainability, aesthetics, and cost-effectiveness. (Cognitive Level 2 - Understanding)	2
CO-3	Apply market research techniques to compare and evaluate different interior materials based on quality, availability, and trends. (Cognitive Level 3 - Applying)	3
CO-4	Analyze survey data to recommend suitable interior materials for specific design projects, considering functionality and client needs. (Cognitive Level 4 - Analyzing)	4

**BID-372- Commercial Market Survey
(Minor – Practical)
Course Contents**

Unit No.	Title of Unit and Contents	No. of hours
1	Design Week 1-2: Introduction to Interior Materials Market Survey. Overview of interior materials market survey within the context of interior design. Importance of understanding materials trends and innovations. Basic concepts and terminology related to interior materials market survey Week 3-4: Understanding Material Properties and Performance Exploration of various interior materials used in design (e.g., flooring, wall coverings, textiles) Analysis of material properties such as durability, sustainability, and maintenance requirements Case studies of projects showcasing effective material selection and performance Week 5-6: Trends in Interior Materials. Identifying current and emerging trends in interior materials Analysis of trends in materials usage, finishes, and textures Exploration of sustainable and eco-friendly material options Week 7-8: Supplier and Manufacturer Analysis Researching and evaluating suppliers and manufacturers of interior materials Understanding the supply chain and distribution channels in the interior design industry Assessing the quality, reliability, and reputation of material suppliers Week 9-10: Material Testing and Evaluation Introduction to material testing methods and standards conducting hands-on evaluations of material samples. Interpreting test results and selecting appropriate materials for design projects Week 11-12: Market Research Techniques Methods for conducting market surveys and analysing data specific to interior materials Survey design,	60

	sampling techniques, and data collection strategies Utilizing qualitative and quantitative research methods Week 13: Emerging Technologies and Innovations in Interior Materials. Exploration of new technologies shaping the interior materials market (e.g., smart materials, 3D printing). Case studies of innovative uses of materials in interior design projects Week 14: Industry Trends and Forecasting. Analysis of industry reports, market trends, and forecasts relevant to interior materials. Discussion of factors influencing material trends (e.g., technological advancements, sustainability concerns, cultural shifts) Week 15: Final Project Presentations. Final presentations of individual or group projects. Analysing interior materials Market trends Integration of research findings into design proposals Peer feedback and reflection on the course learning outcomes Assessment: Participation in class discussions and activities Completion of assignments and projects Presentation of final project. Understanding of interior materials market survey concepts and their application in design practice.	
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Learning Resources- References

Sr. No.	References
1	"Materials for Interior Environments" – Corky Binggeli
2	Interior Design Materials and Specifications" – Lisa Godsey
3	Materials and Interior Design" – Lorraine Farrelly & Rachael Brown
4	Architectural Materials for Interior Design" – Victoria Ballard Bell

T.Y B.A. SEMESTER VI		
	BID-395 - OJT (OJT – Theory / Practical)	
	Number of Credits: 04 No. of Hours:60	
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO-1	Apply theoretical knowledge and technical skills in a real-world work environment to enhance professional competency. (Cognitive Level 3 - Applying)	3
CO-2	Analyze workplace challenges, industry practices, and professional ethics to improve decision-making and problem-solving skills. (Cognitive Level 4 - Analyzing)	4
CO-3	Evaluate personal performance, workplace efficiency, and teamwork dynamics to enhance productivity and career growth. (Cognitive Level 5 - Evaluating)	5
CO-4	Develop innovative solutions, workflow improvements, or project contributions that add value to the organization. (Cognitive Level 6 - Creating)	6

BID-395 - OJT
(OJT – Theory / Practical)
Course Contents

Unit No.	Title of Unit and Contents	No. of hours
I	Description: The Interior Design Internship course provides students with the opportunity to gain practical experience in the field of interior design through supervised work placement in a professional setting. Students will apply theoretical knowledge and skills acquired throughout their degree program to real-world design projects under the guidance of industry professionals. Course Objectives: Gain practical experience in various aspects of interior design practice. Develop professional skills, including communication, teamwork, time management, and problem-solving. Apply design principles, techniques, and software tools in a professional context. Build a professional network and establish connections within the interior design industry. Reflect on personal and professional growth through self-assessment and feedback. Week 1-2: Orientation and Goal Setting Introduction to the internship program, objectives, and expectations Meeting with internship supervisor to discuss goals, learning outcomes, and project assignments. Review of internship guidelines, policies, and professional conduct expectations. Week 3-4: Observation and Familiarization Shadowing design professionals to observe their work processes and project workflows. Familiarization with the organization's design studio, resources, and software tools. Introduction to	60

	on-going projects and client interactions. Week 5-8: Project Participation and Skill Development Active involvement in design projects under the supervision of experienced designers. Application of design principles, space planning techniques, and material selection. Utilization of design software (e.g., AutoCAD, Revit, Sketch Up) to create drawings, renderings, and presentations. Participation in client meetings, presentations, and design reviews. Week 9-12: Independent Project and Portfolio Development Undertaking an independent design project or specific task assigned by the internship supervisor. Demonstration of initiative, creativity, and problem-solving skills in project execution. Development of a professional portfolio showcasing internship experiences, projects, and achievements. Preparation of presentation materials for final evaluation and review. Week 13-15: Reflection and Evaluation Reflection on internship experiences, challenges, and achievements. Completion of internship evaluation forms by both the student and supervisor. Final presentation of internship project and portfolio to faculty and peers. Discussion of lessons learned, future career goals, and strategies for professional development. Assessment: Supervisor evaluations of performance, professionalism, and project contributions. Completion of internship logbook or journal documenting daily activities and reflections Presentation of internship project and portfolio. Overall demonstration of competency and growth in professional skills and knowledge.	
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