

KURUKSHETRA UNIVERSITY

KURUKSHETRA



Syllabus
for
Under-Graduate Programme
Bachelor of Interior Design
Interdisciplinary Scheme–D
5th & 6th Sem.

Under Multiple Entry-Exit,
Internship and CBCS-LOCF in
Accordance to NEP-2020

w.e.f 2025-26

Department of Home Science

SEMESTER-5

Session:2025-26			
Name of the Course	Bachelor of Interior design		
Semester	V		
Subject	INTERIOR DESIGN-V		
Course Code	B23-IDS-501		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/DSE/PC/AEC/VAC)	CC-A4		
Level of the course (As per Annexure-I)	300-399		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes (CLO):	1: Analyze and apply advanced design methodology in large-scale interior projects. 2: Design hospitality interiors integrating furniture layout, finishes, and lighting systems. 3: Plan healthcare interiors addressing ergonomics, hygiene, and psychological comfort. 4: Integrate building services (HVAC, acoustics, lighting, fire safety) within interior layouts. 5: Prepare professional working drawings, specifications, and material boards for selected projects.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max.Marks:100 InternalAssessmentMarks:20(T)+10(P)=30 End Term Exam Marks:50(T) +20(P) =70		Time:3 hrs.(T) 4 hrs.(P)	

Part B- Contents of the Course		
<u>Instructions for Paper-Setter:</u> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory objective type question. <u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting at least one question from each unit as well as compulsory question.		
Unit	Topics	Contact Hours
I	Advanced design methodology- Concept development for large-scale interiors, integrating brand identity, user experience, and sustainability principles	10
II	Hospitality Interiors - Design of boutique hotel/restaurant/resort including furniture layout, finishes, lighting, acoustics, and thematic design	12
III	Healthcare Interiors -Design of clinic/wellness center with emphasis on ergonomics, hygiene, and psychological comfort	12
IV	Services Integration -Incorporating HVAC, artificial & natural lighting, acoustics, fire safety, and accessibility in interior layout	11
V*	Working drawings, specifications, and BOQ preparation for selected project spaces; material boards and 3D visualizations	30
Suggested Evaluation Methods		
Internal Assessment: ➤ Theory ● ClassParticipation:05 ● Seminar/presentation/assignment/quiz/classtest etc.:05 ● Mid-TermExam:10 ➤ Practical ● Seminar/Demonstration/Viva-voce/Labrecordsetc.:10 ● Mid-TermExam:NA		End Term Examination: 50 20

Part C- Learning Resources

Recommended Books/e-resources/LMS:

- “Interior Design Illustrated”, Francis D.K. Ching -Visual guide to space planning and design principles.
- “Hospitality Design for the Grumpy Traveler”, John C. Dunn - Practical insights into hospitality interiors.
- “Designing Commercial Interiors”, Christine M. Piotrowski & Elizabeth A. Rogers - Covers retail, hospitality, and office spaces.
- “Evidence-Based Design for Healthcare Facilities”, Cynthia S. McCullough -Specialized guide for healthcare interiors.
- “Lighting for Interior Design”, Malcolm Innes - Detailed study on artificial and natural lighting design
- “Materials for Interior Environments”, Corky Binggeli- Selection, application, and sustainability of materials.
- “Building Services Handbook” , Fred Hall & Roger Greeno - Integration of HVAC, fire safety, and other services in interiors.

Session: 2025-26			
Name of the Course	Bachelor of Interior design		
Semester	V		
Subject	MATERIALS & CONSTRUCTION DETAILS-V		
Course Code	B23-IDS-502		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/DSE/PC/AEC/VA C)	CC-B4		
Level of the course (As per Annexure-I)	300-399		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes (CLO):	1: Analyze the properties and applications of advanced composite materials and select appropriate materials for interior projects. 2: Demonstrate knowledge of façade and glazing systems and integrate them effectively within interior and exterior spaces. 3: Apply modular systems in designing flexible and efficient interior layouts. 4: Design and detail interior lighting systems by integrating fixtures, conduits, and layouts into interior drawings. 5: Prepare detailed working drawings and execution documents, including specifications, BOQs, and quality checklists, for a selected commercial/interior projects (hospitality, auditorium, retail)		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks:100 InternalAssessmentMarks:20(T)+10(P)=30 End Term Exam Marks:50(T)+20(P)=70		Time:3hrs(T) 4hrs(P)	
Part B- Contents of the Course			

Instructions for Paper-Setter: The examiner will set nine questions in all, selecting two questions from each unit and one compulsory objective type question.

Instructions for the candidate: The candidate will have to attempt five questions in all, selecting at least one question from each unit as well as compulsory question.

Unit	Topics	Contact Hours
I	Advanced Composite Materials -HPL, ACP, FRP, engineered stone, laminates, their properties, fabrication, and applications	11
II	Curtain Wall & Façade Systems - Glazing systems, cladding materials, structural glazing, ventilated façades	12
III	Modular Interior Systems -Modular furniture, demountable partitions, movable wall systems, modular kitchens for commercial/institutional use	12
IV	Lighting Integration in Interiors -Recessed, cove, pendant, track, integrated lighting systems, electrical conduits and detailing	10
V*	Case study, working drawings, Professional Execution Methods for commercial/interior projects (hospitality, auditorium, retail) with complete material and finishing schedules- Tender documentation, specifications writing, BOQs, quality checks, vendor coordination	30
Suggested Evaluation Methods		
Internal Assessment: ➤ Theory ● Class Participation:05 ● Seminar/presentation/assignment/quiz/classtest etc.:05 ● Mid-TermExam:10 ➤ Practicum ● Class Participation: ● Seminar/Demonstration/Viva-voce/Labrecordsetc.:10 ● Mid-TermExam:NA		End Term Examination: 50 20

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Francis D.K. Ching, Building Construction Illustrated - Comprehensive reference on materials and construction systems.
- W. R. J. Keall, Modern Building Materials, Structures and Techniques - Covers composite materials and façade systems.
- Michael Forsyth, Materials and Skills for Historic and Modern Buildings - Selection and detailing for a range of materials.
- Egan &Matz, Concepts in Architectural Acoustics - Acoustic principles and treatments for interiors.
- Gary R. Steffy, Architectural Lighting Design - Detailed study on integrating lighting into interiors.
- Corky Binggeli, Materials for Interior Environments -Materials selection with technical and aesthetic focus.
- American Institute of Architects, Architectural Graphic Standards - Industry-standard detailing and material references.

Session:2025-26			
Name of the Course	Bachelor of Interior design		
Semester	V		
Subject	BUILDING SERVICES - III (HVAC, Fire Safety & Security Systems)		
Course Code	B23-IDS-503		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/DSE/PC/AEC/VA C)	CC-C4		
Level of the course (As per Annexure-I)	300-399		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes (CLO):	1: Explain the principles of HVAC systems and evaluate suitable systems for different interior spaces. 2: Design and integrate HVAC layouts, components, and ducting systems within interior projects. 3: Apply fire safety codes and design evacuation, detection, and suppression systems for interior environments. 4: Incorporate security and access control systems into interior layouts with effective placement strategies. 5: Prepare service layouts and working drawings integrating HVAC, fire safety, and security systems for selected projects.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5

Max. Marks:100 InternalAssessmentMarks:20(T)+10(P)=30 End Term Exam Marks:50(T) +20(P) =70	Time:3hrs.(T) 4 hrs.(P)
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Part B-Contents of the Course		
<u>Instructions for Paper-Setter:</u> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory objective type question. <u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting at least one question from each unit as well as compulsory question.		
Unit	Topics	Contact Hours
I	Introduction to HVAC Systems – Principles of heating, ventilation, and air conditioning; thermal comfort parameters; types of HVAC systems (centralized, split, VRV/VRF, ducted); selection criteria for interior spaces	11
II	Components & Layouts – Air handling units, chillers, condensers, ducts, diffusers, grilles; placement strategies for interiors; integration with false ceilings and partitions	11
III	Fire Safety Systems – Fire behavior, classification of fires, fire resistance ratings; fire detection systems (smoke, heat, flame detectors); suppression systems (sprinklers, hydrants, extinguishers); fire exits and evacuation planning for interiors	12
IV	Security & Access Control – CCTV, biometric systems, intrusion alarms, motion sensors, card access systems; placement strategies and wiring integration in interiors	11
V*	Lab/Practical Component – Preparation of service layouts for HVAC, fire safety, and security systems for a selected building; working drawings with specifications and legend symbols; case studies of existing systems in commercial or public buildings	30

Suggested Evaluation Methods	
Internal Assessment: ➤ Theory ● ClassParticipation:05 ● Seminar /presentation/ Assignment/ quiz/ classtest etc.:05 ● Mid-TermExam:10 ➤ Practicum ● Class Participation: ● Seminar/Demonstration /Viva-voce/ Lab records etc.:10 ● Mid-TermExam:NA	End Term Examination: 50 20
Part C- Learning Resources	
Recommended Books/e-resources/LMS: ● Moncef Krarti, Energy Audit of Building Systems: An Engineering Approach - HVAC design and energy efficiency. ● Samuel Sugarman, HVAC Fundamentals - Core principles and system types. ● NFPA (National Fire Protection Association), NFPA Fire Protection Handbook -Fire safety codes and design guidelines. ● Jane Buchanan & Michael R. J. Barrett, Fire Safety Management Handbook - Fire risk assessment and safety planning. ● Bill Phillips, Security Systems and Intruder Alarms - Practical guide to security systems in buildings. ● American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), ASHRAE Handbook -HVAC systems design. ● David G. Cotts et al., The Facility Management Handbook - Integration of building services into design and operations.	

SEMESTER 6

Session:2025-26			
Name of the Course	Bachelor of Interior design		
Semester	VI		
Subject	INTERIOR DESIGN - VI		
Course Code	B23-IDS-601		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/DSE/PC/AEC/VAC)	CC-A4		
Level of the course (As per Annexure-I)	300-399		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes (CLO):	1: Design interiors for public spaces considering crowd flow, accessibility, and zoning. 2: Plan retail interiors integrating branding, display systems, and customer experience. 3: Apply sustainable and adaptive reuse strategies in redesigning existing buildings. 4: Execute a comprehensive capstone interior project integrating services and detailing. 5: Develop a professional portfolio documenting drawings, visuals, and specifications.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max.Marks:100 InternalAssessmentMarks:20(T)+10(P)=30 End Term Exam Marks:50(T) +20(P) =70		Time:3 hrs.(T) 4 hrs.(P)	

Part B- Contents of the Course		
<u>Instructions for Paper-Setter:</u> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory objective type question. <u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting at least one question from each unit as well as compulsory question.		
Unit	Topics	Contact Hours
I	Urban Public Spaces - Interiors for large public facilities (airport lounges, museums, cultural centers) focusing on zoning, user flow, and accessibility	11
II	Retail Chains & Branding -Multi-outlet retail design, display systems, visual merchandising, and customer experience strategies	11
III	Sustainable & Adaptive Reuse - Redesigning heritage/industrial buildings into functional interior spaces	11
IV	Capstone Project - Comprehensive mixed-use interior design (minimum 2000 sqm) with all drawings, renderings, material boards, and cost estimates	12
V*	Professional Practice & Portfolio Development -Preparing industry-ready presentations, portfolios, and learning about contracts, tendering, and project management	30
Suggested Evaluation Methods		
Internal Assessment: ➤ Theory ● ClassParticipation:05 ● Seminar/presentation/assignment/quiz/classtest etc.:05 ● Mid-TermExam:10 ➤ Practicum ● Class Participation: ● Seminar/Demonstration/Viva-voce/Labrecordsetc.:10 ● Mid-TermExam:NA		End Term Examination: 50 20

Part C- Learning Resources

- Jennifer Hudson Interior Architecture: From Brief to Build-Complete process from concept to completion.
- Otto Riewoldt, Retail Design- Strategies for branding, visual merchandising, and customer experience.
- Douglas Macdonald, Adaptive Reuse: Extending the Lives of Buildings- Revitalizing heritage and industrial spaces.
- Matthew Carmona, Public Spaces, Urban Spaces - Design approaches for public interiors and urban environments.
- Harold Linton, Portfolio Design -Creating a professional designer's portfolio.
- David Kent Ballast, Interior Detailing: Concept to Construction - Standards and methods for technical detailing.
- Christine M. Piotrowski, Professional Practice for Interior Designers- Industry standards, contracts, and career preparation.

Session: 2025-26			
Name of the Course	Bachelor of Interior design		
Semester	VI		
Subject	Interior Project Management		
Course Code	B23-IDS-602		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/DSE/PC/AEC/VA C)	CC-B4		
Level of the course (As per Annexure-I)	300-399		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes (CLO):	1: Explain the scope, stages, and stakeholder roles in interior project management. 2: Prepare project schedules using WBS, Gantt charts, and CPM for interior works. 3: Develop cost estimates, BOQs, and budgets applying rate analysis and value engineering. 4: Analyze contracts, tenders, and legal aspects related to interior project execution. 5: Prepare a complete project management plan including schedule, BOQ, contract documents, and quality control checklist for an interior project.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks:100 Internal Assessment Marks:20(T)+10(P)=30 End Term Exam Marks:50(T)+20(P)=70		Time:3hrs(T) 4hrs(P)	

Part B- Contents of the Course		
<u>Instructions for Paper-Setter:</u> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory objective type question. <u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting at least one question from each unit as well as compulsory question.		
Unit	Topics	Contact Hours
I	Introduction to Project Management in Interiors- Definition, scope, and stages of interior projects; roles of project manager and stakeholders; integration of design and execution	8
II	Project Planning & Scheduling- Work breakdown structures (WBS), Gantt charts, Critical Path Method (CPM), resource allocation, sequencing of trades in interiors	15
III	Cost Estimation & Budgeting- Types of estimates, rate analysis, quantity take-off, preparing Bills of Quantities (BOQ), value engineering	11
IV	Contracts, Tenders & Legal Aspects- Types of contracts, tender documentation, bidding process, vendor selection, contractual obligations, dispute resolution	11
V*	Quality Control & Site Management- Quality assurance protocols, safety regulations, coordination with contractors, site supervision, tracking progress, managing change ordersPreparation of a complete project management plan for an interior project including schedule, BOQ, contract documents, and quality control checklist	30
Suggested Evaluation Methods		
Internal Assessment: ➤ Theory ● Class Participation:05 ● Seminar/presentation/assignment/quiz/classtest etc.:05 ● Mid-TermExam:10 ➤ Practicum ● Class Participation: ● Seminar/Demonstration/Viva-voce/Labrecordsetc.:10 ● Mid-TermExam:NA		End Term Examination: 50 20

Part C- Learning Resources

Recommended Books/e-resources/LMS:

- Jack Meredith & Samuel Mantel, Project Management: A Managerial Approach - Fundamentals of project management.
- K. K. Chitkara, Construction Project Management: Planning, Scheduling, and Controlling - Adaptable to interior projects.
- Christine M. Piotrowski, Professional Practice for Interior Designers -Contracts, documentation, and business aspects.
- David G. Cotts, Kathy Roper & Richard Payant, The Facility Management Handbook - Managing operations and execution in built environments.
- Harold Kerzner, Project Management: A Systems Approach to Planning, Scheduling, and Controlling - Advanced project management tools.
- Chris Hendrickson, Project Management for Construction - Resource planning, cost control, and coordination.
- Allan Ashworth, Contractual Procedures in the Construction Industry -Legal and procedural guidelines for tendering and contracts.

Session: 2025-26			
Name of the Course	Bachelor of Interior design		
Semester	VI		
Subject	Professional Practice		
Course Code	B23-IDS-603		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/DSE /PC/AEC/VA C)	CC-C4		
Level of the course (As per Annexure-I)	300-399		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes (CLO):	1: Explain the role, ethics, and responsibilities of an interior designer in professional practice. 2: Analyze procedures for establishing and managing different types of interior design firms. 3: Apply knowledge of contracts, legal frameworks, and fee structures in client-designer agreements. 4: Develop strategies for marketing, branding, and client relationship management in interior practice. 5: Draft a professional contract, fee proposal, and personal marketing portfolio for an interior project.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks:100 Internal Assessment Marks:20(T)+10(P)=30 End Term Exam Marks:50(T) +20(P) =70		Time:3hrs.(T) 4 hrs.(P)	

Part B- Contents of the Course		
<u>Instructions for Paper-Setter:</u> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory objective type question. <u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting at least one question from each unit as well as compulsory question.		
Unit	Topics	Contact Hours
I	Role of the Interior Designer -Scope of services, professional ethics, codes of conduct, role in society, relationship with allied professionals	9
II	Setting up Practice -Types of firms (sole proprietorship, partnership, LLP, private limited), registration, licensing, GST, business development	12
III	Contracts & Legal Framework, Fee Structures & Billing -Letter of agreement, standard forms of contract, client-designer agreements, consultancy contracts, professional liabilities, dispute resolution, Methods of charging (percentage, lump sum, hourly), fee schedules, cost-plus basis, payment milestones, invoicing	12
IV	Marketing & Client Relations - Brand building, networking, client acquisition, presentation skills, handling negotiations, retaining clients	12
V*	Drafting a complete professional contract for a hypothetical interior project, preparing a fee proposal, and developing a personal marketing portfolio	30
Suggested Evaluation Methods		
Internal Assessment: ➤ Theory ● Class Participation:05 ● Seminar/presentation/Assignment/quiz/class test etc.:05 ● Mid-Term Exam:10 ➤ Practicum ● Class Participation: ● Seminar/Demonstration/Viva-voce/Lab record etc.:10 ● Mid-Term Exam:NA		End Term Examination: 50 20

Part C- Learning Resources

Recommended Books/e-resources/LMS:

- Christine M. Piotrowski, Professional Practice for Interior Designers -Industry-standard guide for business and ethics in interior design.
- AIA, Architect's Handbook of Professional Practice -Adaptable for interior design contracts and management.
- Roshan Namavati, Professional Practice -Legal and procedural aspects for design professionals.
- Fred Lawson, Design and Project Management for Architects and Interior Designers - Integrating design and business operations.
- David Kent Ballast, Interior Design Business Handbook - Fee structures, client contracts, and marketing strategies.
- Interior Designers of Canada (IDC), Code of Ethics & Professional Standards - Ethics and practice guidelines.

Session:2025-26			
Name of the Course	Bachelor of Interior design		
Semester	VI		
Subject	Computer Applications		
Course Code	B23-IDS-604		
Course Type: (CC/MCC/MDC/CCM/DSEC/VOC/DSE /PC/AEC/VA C)	CC-C4		
Level of the course (As per Annexure-I)	300-399		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes (CLO):	1: Develop advanced 2D drawings using AutoCAD with appropriate layers and plotting standards. 2: Construct 3D interior models using SketchUp/3ds Max/Revit. 3: Apply rendering techniques with materials, textures, and lighting for photorealistic outputs. 4: Create walkthroughs and animated presentations for interior projects. 5 : Execute a complete project presentation combining 2D, 3D, and rendered visuals with professional layouts.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks:100 InternalAssessmentMarks:20(T)+10(P)=30 End Term Exam Marks:50(T) +20(P) =70		Time:3hrs.(T) 4 hrs.(P)	

Part B- Contents of the Course		
<u>Instructions for Paper-Setter:</u> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory objective type question. <u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting at least one question from each unit as well as compulsory question.		
Unit	Topics	Contact Hours
I	Advanced 2D Drafting and 3D Modeling for Interiors- Layers, blocks, dynamic components, parametric constraints in AutoCAD; setting up sheets for plotting, creating complex interior spaces, furniture, and joinery using SketchUp/3ds Max/Revit, BIM	10
II	Rendering Techniques- Applying materials, textures, lighting setups, camera views; introduction to V-Ray/Lumion/ AR/VR	15
III	Walkthrough & Animation- Creating virtual tours and animated sequences for interior spaces	10
IV	Presentation Graphics- Integrating 2D/3D outputs with Adobe Photoshop/Illustrator/InDesign for professional layouts	10
V*	Complete modeling, rendering, and presentation of a commercial or residential interior project with working drawings	30
Suggested Evaluation Methods		
Internal Assessment: ➤ Theory ● Class Participation:05 ● Seminar/presentation/Assignment/quiz/classtest etc.:05 ● Mid-TermExam:10 ➤ Practicum ● Class Participation: ● Seminar/Demonstration/Viva-voce/Labrecordsetc.:10 ● Mid-TermExam:NA		End Term Examination: 50 20

Part C- Learning Resources

Recommended Books/e-resources/LMS:

- George Omura, Mastering AutoCAD -Advanced drafting techniques.
- Bonnie Roskes, SketchUp for Interior Design -Modeling workflows for interiors.
- Kelly L. Murdock,Autodesk 3ds Max Bible - 3D modeling, animation, and rendering.
- Brian Bradley, Photorealistic Rendering with V-Ray -Rendering techniques for realistic outputs.
- Evan Troxel, Rendering in SketchUp -Practical guide to producing visuals.
- Adobe Creative Team, Adobe Photoshop Classroom in a Book - Image editing for design presentations.
- Daniel Tal, Rendering in SketchUp and Layout -Combining modeling and presentation for client work.