

KURUKSHETRA UNIVERSITY
KURUKSHETRA



Scheme of Examinations and Syllabus

for

Under-Graduate Programme

Bachelor of Interior Design

Interdisciplinary Scheme - D

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

w.e.f. 2023-24 (In Phased Manner)

Department of Home Science

KURUKSHETRA UNIVERSITY, KURUKSHETRA
Scheme of Examinations and Syllabus for Under-Graduate Programme
Under Multiple Entry-Exit, Internship and CBCS-LOCF in Accordance to NEP-2020
W.E.F. 2023-24 (In Phased Manner)
Bachelor of Interior Design

SEMESTER 1								
Course	Paper(s)	Nomenclature of Paper	Credits	Hours/week	Internal Marks	External Marks	Total Marks	Exam Duration
CC-A1 @ 4 Credit	B23-IDS-101	Interior Design (Principles)-1	3	3	20	50	100	3 Hours
		Interior Design (Principles)-1 –Lab	1	2	10	20		4 Hours
CC-B1 @ 4 Credit	B23-IDS-102	Materials and construction Details-1	3	3	20	50	100	3 Hours
		Materials and construction Details-1-Lab	1	2	10	20		4 Hours
CC-C1 @ 4 Credit	B23-IDS-103	Drawing Techniques & Graphics	3	3	20	50	100	3 Hours
		Drawing Techniques &Graphics-Lab	1	2	10	20		4 Hours
CC-M1 @2 Credit	B23-IDS-104	Art & Drawing	1	1	10	20	50	3 Hours
		Art & Drawing – Practical	1	2	5	15		4 Hours
MDC-1 @ 3 Credit		From the Courses offered by D/C/I						
AEC-1 @ 2 Credit		From available AEC-1 pool list of two credits as per NEP						
SEC-1 @ 3 Credit		From available SEC-1 pool list of three credits as per NEP						
VAC-1 @ 2 Credit		From available VAC-1 pool list of two credits as per NEP						

SEMESTER 2								
Course	Paper(s)	Nomenclature of paper	Credits	Hours/week	Internal Marks	External Marks	Total Marks	Exam Duration
CC-A2 @ 4 Credit	B23-IDS-201	Interior Design-II	3	3	20	50	100	3 Hours
		Interior Design-II – Lab	1	2	10	20		4 Hours
CC-B2 @ 4 Credit	B23-IDS-202	Materials and construction Details –II	3	3	20	50	100	3 Hours
		Materials and construction Details -II – Lab	1	2	10	20		4 Hours
CC-C2 @ 4 Credit	B23-IDS-203	Furniture Design Workshop	3	3	20	50	100	3 Hours
		Furniture Design Workshop -Lab	1	2	10	20		4 Hours
CC-M2 @ 2 Credit	B23-IDS-204	Advanced Graphics	1	1	10	20	50	3 Hours
		Advanced Graphics Practical	1	2	5	15		4 Hours
MDC-2 @ 3Credit		From the Courses offered by D/C/I						
AEC- 2 @ 2 Credit		From available AEC-2 pool list of two credits as per NEP						
SEC- 2 @ 3 Credit		From available SEC-2 pool list of three credits as per NEP						
VAC- 2 @ 2 Credit		From available VAC-2 pool list of two credits as per NEP						

Internship of 4 credits of 4-6 weeks' duration after 2 semester

SEMESTER 3

Course	Paper(s)	Nomenclature of paper	Credits	Hours/week	Internal Marks	External Marks	Total Marks	Exam Duration
CC-A3 @ 4 Credit	B23-IDS-301	Interior Design— III	3	3	20	50	100	3 Hours
		Interior Design— III Lab	1	2	10	20		4 Hours
CC-B3 @ 4 Credit	B23-IDS-302	Materials and construction Details –III	3	3	20	50	100	3 Hours
		Materials and construction Details –III-Lab	1	2	10	20		4 Hours
CC-C3 @ 4 Credit	B23-IDS-303	Building Services- I (Water Supply & Sanitation)	3	3	20	50	100	3 Hours
		Building Services - I (Water Supply & Sanitation) Lab	1	2	10	20		4 Hours
CC-M3 @4 Credit	B23-IDS-304	Sculpture Making	3	3	20	50	100	3 Hours
		Sculpture Making Practical	1	2	10	20		4 Hours
MDC-3 @ 3 Credits		From the Courses offered by D/C/I						
AEC-3 @ 2 Credit		From available AEC-3 pool list of two credits as per NEP						
SEC-3 @ 3 Credit		From available SEC-3 pool list of three credits as per NEP						

SEMESTER 4								
Course	Paper(s)	Nomenclature of paper	Credits	Hours/week	Internal Marks	External Marks	Total Marks	Exam Duration
CC-A4 @4 Credit	B23-IDS-401	Interior Design-IV	3	3	20	50	100	3 Hours
		Interior Design-IV Lab	1	2	10	20		4 Hours
CC-B4 @ 4 Credit	B23-IDS-402	Materials and construction Details –IV	3	3	20	50	100	3 Hours
		Materials and construction Details –IV Lab	1	2	10	20		4 Hours
CC-C4 @ 4 Credit	B23-IDS-403	Building Services- II (Electrical Systems & Lighting)	3	3	20	50	100	3 Hours
		Building Services- II (Electrical Systems & Lighting) – Lab	1	2	10	20		4 Hours
CC-M4 (V) @4 Credit		From available CC-M4 (V) pool list of four credits as per NEP						
AEC-4 @ 2 Credit		From available AEC-4 pool list of two credits as per NEP						
VAC-3 @ 2 Credit		From available VAC-3 pool list of two credits as per NEP						

Internship of 4 credits of 4-6 weeks' duration after 4th semester (If not done in 2nd Semester)

SEMESTER 5

Course	Paper(s)	Nomenclature of Paper	Credits	Hours/ week	Internal Marks	External Marks	Total Marks	Exam Duration
CC-A5 @4 Credit	B23-IDS-501	Interior Design – V	3	3	20	50	100	3 Hours
		Interior Design – V Lab	1	2	10	20		4 Hours
CC-B5 @ 4 Credit	B23-IDS-502	Materials and construction Details –V	3	3	20	50	100	3 Hours
		Materials and construction Details –V Lab	1	2	10	20		4 Hours
CC-C5 @ 4 Credit	B23-IDS-503	Building services- III (HVAC, Fire Safety & Security Systems)	3	3	20	50	100	3 Hours
		Building services- III (HVAC, Fire Safety & Security Systems) Lab	1	2	10	20		4 Hours
CC-M5 (V) @4 Credit	B23-IDS-504	From available CC-M5 (V) pool list of four credits as per NEP						
Skill Enhancement Course		Internship # 4 credits						

Four credits of internship, earned by a student during summer internship after 2nd semester or 4th semester, will be taken into account in 5th semester of the students who pursue 3 year UG Programme without taking exit option.

SEMESTER 6

Course	Paper(s)	Nomenclature of paper	Credits	Hours/week	Internal Marks	External Marks	Total Marks	Exam Duration
CC-A6 @4 Credit	B23-IDS-601	Interior Design - VI	3	3	20	50	100	3 Hours
		Interior Design– VI Lab	1	2	10	20		4 Hours
CC-B6 @ 4 Credit	B23-IDS-602	Interior Project Management	3	3	20	50	100	3 Hours
		Interior Project Management Lab	1	2	10	20		4 Hours
CC-C6 @ 4 Credit	B23-IDS-603	Professional Practice	3	3	20	50	100	3 Hours
		Professional Practice Lab	1	2	10	20		4 Hours
CC-M6 @4 Credit	B23-IDS-604	Computer Applications	3	3	20	50	100	3 Hours
		Computer Applications Practical	1	2	10	20		4 Hours
CC-M7(V) @4 Credit	From available CC-M7(V) pool list of four credits as per NEP							

SEMESTER 1

Session: 2023-24

Part A - Introduction

Session: 2023-24			
Part A - Introduction			
Subject	INTERIOR DESIGN-I (PRINCIPLES)		
Semester	I		
Name of the Course	Bachelor of Interior Design		
Course Code	B23-IDS-101		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VAC)	CC-A1		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	<p>The objective of the course is to provide a clear understanding about the basic design elements and principles to be followed while designing any space using different standards, materials and technologies. It enables the students to understand the visual composition in an interior space with color schemes, textures, light, shadow etc. Introduction to human dimensions, functions, space – activities, space standards, relationships of a simple single living unit to understand the minimum space requirement by individual to perform various activities.</p>		
Credit	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(TH) + 20(P) = 70		Time : 3hrs(T) 4hrs(P)	

Part B- Contents of the Course

Instructions for Paper- Setter: The examiner will set eight questions in all, selecting two questions from each unit.

Instructions for the candidate: The candidate will have to attempt five questions in all, selecting atleast one question from each unit.

t	Topics	Contact Hours
I	<p>Principles of visual composition</p> <p>Symmetry, Asymmetry, Repetition, Rhythm, Background, Foreground, Sense of Direction, Harmony, Balance and Proportion.</p>	10
II	<p>Elements of visual composition</p> <p>Dots, Lines, Planes, Patterns, Shapes, Colors, Textures, Levels, Light, and Fenestration, Exploring color schemes, Textures and Texture schemes.</p>	11
III	<p>Anthropometrics Study</p> <p>Human dimensions anthropometry in various postures (in applied form), their relation to everyday utilities like the table, chair, bed, sink etc . To make measured drawing of a bedroom with anthropometrical reference.</p>	11
IV	<p>Design Exercise</p> <p>Design of Anthropometrics Cell with minimum space requirements of single unit for a single person and study the interior spaces by making 3-D views (axonometric and isometric). This exercise will include areas like living area, sleeping area, washroom, cooking area with furniture layout in 2-D drawings including elevations covering an area of 25-50 sqm. Using various principles of design, textures and color schemes.</p>	10
V*	<ul style="list-style-type: none"> • Practice making 2 dimensional compositions on paper using different mediums and physical models using different materials. • Application of elements/principles of visual composition. 	28
Suggested Evaluation Methods		

Session: 2023-24			
Part A - Introduction			
Subject	MATERIALS & CONSTRUCTION DETAILS - I		
Semester	I		
Name of the Course	Bachelor of Interior Design		
Course Code	B23-IDS-102		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-B1		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	The objective of this course is to make the students understand of all the available materials, which are used in designing the various different interior spaces. It gives a fair knowledge of different furnishings and finishes used for all the interior surfaces of the space.		
Credit	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(TH) + 20(P) = 70		Time : 3hrs(T) 4hrs(P)	
Part B- Contents of the Course			
<p><u>Instructions for Paper- Setter:</u> The examiner will set six questions in all, selecting three questions from each unit.</p> <p><u>Instructions for the candidate:</u> The candidate will have to attempt four questions in all, selecting atleast two questions from each unit.</p>			

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> • Timber, cane, bamboo – characteristics of good timber, defects, applications of timber finishes in timber. • Wood – Plywood, block boards, particle board, medium density fibre etc. – their properties, process of manufacture, tools and technology of its application and quality assessment, finishes to reconstituted wood, - lamination, polishing etc. 	9
II	<ul style="list-style-type: none"> • Masonry – Mud; bricks; building tiles - roof, floor and wall tiles; stones; clay; lime, sand, mortars, cement and aggregate; concrete; gypsum based plaster etc. 	11
III	<ul style="list-style-type: none"> • Paints– Protective coating paints. Types of paints, Composition, functions, preparation and application method, painting on different surfaces, defects in painting etc. • Varnishes (Oil and spirit) – Various types and methods of application. 	11
IV	<ul style="list-style-type: none"> • Insulation Materials – Various insulating materials, their properties and applications. Surface finishes for wood products and derivatives etc. Coatings – clear and pigmented finishes technical or protective coatings etc. 	9
V*	<ul style="list-style-type: none"> • Execute a market survey of different materials in terms of furnishes and finishes (Flooring material/finishes, wall material/finishes, roofing material /finishes). • Formulate a case study of an existing house to study its interiors along with furnishes and finishes used in it. 	30
Suggested Evaluation Methods		

Session: 2023-24			
Part A - Introduction			
Subject	DRAWING TECHNIQUES & GRAPHICS-I		
Semester	I		
Name of the Course	Bachelor of Interior Design		
Course Code	B23-IDS-103		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VAC	CC-C1		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	To familiarize the students with basic knowledge of good drafting and lettering techniques and visualizing geometrical forms through plans sections & elevations.		
Credit	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(TH) + 20(P) = 70		Time : 3hrs(T) 4hrs(P)	
Part B- Contents of the Course			
<p><u>Instructions for Paper- Setter:</u> The examiner will set eight questions in all, selecting two questions from each unit.</p> <p><u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.</p>			

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> • Line, lettering and Dimensioning • Drafting techniques, principles of good drafting. • Scales & its use in the Architectural drawing. • Representation of material and Architectural Elements through Graphic Symbols 	10
II	<ul style="list-style-type: none"> • Projections of point, lines, planes & development of surfaces and Solids in various positions. • Principles of projection, methods of orthographic projection study of Architectural Plans, Elevation and Section 	10
III	<ul style="list-style-type: none"> • Pictorial View: Oblique, Isometric, Axonometric views of solid composition & buildings • Definitions of perspective (picture plane, stationery point etc.) 	10
IV	<ul style="list-style-type: none"> • Perspective: - Normal Eye view & Birds eye view. • One point & Two point perspective of building forms.(Exterior only) • Perspectives having more than 2 vanishing points. 	10
V*	<ul style="list-style-type: none"> • Visualize geometric forms in daily life and present them in the form of drawings/ sketches/ photographs. • 3D Composition using solid shapes with suitable material of student's choice. 	30
Suggested Evaluation Methods		

Session: 2023-24			
Part A - Introduction			
Subject	ART & DRAWING		
Semester	I		
Name of the Course	Bachelor of Interior Design		
Course Code	B23-IDS-104		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-M1		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	To familiarize the students with different mediums like pencil, charcoal, crayons, pastel, water colours, pen and ink, poster colour etc.		
Credit	Theory	Practical	Total
	1	1	2
Contact Hours	1	2	3 Hrs.
Max. Marks: 50 Internal Assessment Marks : 10(T) + 5(P) = 15 End Term Exam Marks : 20(TH) + 15(P) =35		Time : 3hrs(T) 4hrs(P)	
Part B- Contents of the Course			
<u>Instructions for Paper- Setter:</u> The examiner will set eight questions in all, selecting two questions from each unit.			
<u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.			

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> ● Introduction of drawing equipment's, materials and methods of using them. ● Scale & its application for drawing geometric shapes ● Lettering different styles ● Free-hand sketching: 200 (submit at the final submission) 	7
II	<ul style="list-style-type: none"> ● Exercise to develop the free hand skills of drawing lines, circles, cubes etc. ● Different strokes in pencil by using different grades, Tonal values, different textures etc. 	6
III	<ul style="list-style-type: none"> ● Indoor and outdoor sketching, Shading & rendering - Using furniture, human being, vehicles, animals, birds, trees (natural & manmade objects) etc. 	8
IV	<ul style="list-style-type: none"> ● Develop the ability to draw and colour with different mediums -Still live, landscape, interior etc. with (natural & manmade objects). 	7
V*	<ul style="list-style-type: none"> ● Making compositions on paper using different mediums 	28
Suggested Evaluation Methods		
Internal Assessment: <ul style="list-style-type: none"> ➤ Theory <ul style="list-style-type: none"> ● Class Participation: 04 ● Seminar/presentation/assignment/quiz/class test etc.:00 ● Mid-Term Exam: 06 ➤ Practicum <ul style="list-style-type: none"> ● Class Participation: ● Seminar/Demonstration/Viva-voce/Lab records etc.:05 ● Mid-Term Exam: NA 		End Term Examination: 20 15
Part C-Learning Resources		

Recommended Books/e-resources/LMS:

- A History Of Fine Arts in India & the West,Edith Tomory
- Interior Design & space Planning, DechiriaPabero Zelnik
- Interior Design Illustrate,Francis D.K. Ching
- Islamic Architecture in Interior, Satish Grover
- History of art by janson H.W., published by Newyork, 1978.
- A history of fine arts in India and the west orient by Tomory Edith, Published by Longman, 1995
- The Best Interior India,Anuradha Mahindra
- Indian Interior AngelikaTaschen
- Sir Fletcher B. A history of Architecture

SEMESTER 2

Session: 2023-24			
Part A - Introduction			
Subject	INTERIOR DESIGN-II		
Semester	II		
Name of the Course	Bachelor of Interior Design		
Course Code	B23-IDS-201		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-A2		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	<p>The objective of the course is to provide a clear understanding about the design procedures and techniques of interior design of spaces with different activities and uses, using different standards, materials and technologies. It enables the students to understand the visual design in an interior space with color schemes, textures, light, shadow etc. The exercise to be executed in this course enable the students to design the space interiors for a two storey building with the required services, infrastructure, furniture layout, circulation, open-built and exterior-interior relationship in and around the plot boundaries.</p>		
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

Instructions for Paper- Setter:The examiner will set eight questions in all, selecting two questions from each unit.

Instructions for the candidate: The candidate will have to attempt five questions in all, selecting atleast one question from each unit.

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> • Introduction to design problem with the methodology to proceed with the concept, Case studies and data collection through primary and secondary sources, Formulation of concept with client's requirements. 	10
II	<ul style="list-style-type: none"> • Introduction to various design aspects like: space configuration, interior circulation, the basic structural requirements, finishes, furniture layout, basic services, and aesthetics. 	10
III	<ul style="list-style-type: none"> • Design the interiors of an independent residential unit of minimum area of 150 sqm. 	11
IV	<ul style="list-style-type: none"> • Design the interiors for a office space with a floor area of appx. 300sqm. – 400 sqm. • Design should be presented in the form of 2D and 3D drawings (plan, elevations, sections and views) rendered with textures, colors, patterns etc. 	9
V*	<ul style="list-style-type: none"> • Detailed study of spaces such as living, dining, bedrooms, kitchen, toilet etc. including the furniture layout, circulation, clearances, lighting and ventilation, etc. • Space planning for office interiors – cabinets, conference rooms , open office systems. • Integration of spaces and functions in the design of bus shelter/milk booth/ watchman's cabin/ traffic police kiosk/ flower stall/ ATM center, etc. • Case study of existing house and analysis of the spaces. 	30

Suggested Evaluation Methods

<p>Internal Assessment:</p> <p>➤ Theory</p> <ul style="list-style-type: none"> ● Class Participation: 05 ● Seminar/presentation/assignment/quiz/class test etc.:05 ● Mid-Term Exam: 10 <p>➤ Practicum</p> <ul style="list-style-type: none"> ● Class Participation: 00 ● Seminar/Demonstration/Viva-voce/Lab records etc.:10 ● Mid-Term Exam: NA 	<p>End Term Examination:</p> <p>50</p> <p>20</p>
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Part C-Learning Resources

Recommended Books/e-resources/LMS:

- A Visual Dictionary of Architecture, Francis D.K. Ching
- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Commercial Interior Perspectives, Graphic – Sha (Editor)
- Design with Wood , Carol Soucek King
- Drywall (Pro Tips for Hanging & Finishing), John D. Wagner
- Graphic Interiors (Space Designed by Graphic Artists), Corina Dean
- Interior design illustrated , Francis D.K. Ching
- Home Plumbing (The David & Charles Manual of), Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran
- Illustration + Perspectives (In Pantone Colors),EijiMitooka
- Elements of Architecture, MeissPieree Von
- Architecture: Form, Space and Order, Francis D.K. Ching
- A.J. Metric Handbook, Jan Bilwa and Leslie Fair weather
- Architectural Graphic standards, Boaz Joseph
- The Curtain Book, MitchllBeazlty
- Interior Design Visual, Maureen Mitton 2nd Edition
- 100 Bright Ideas For color, Sue Rose
- Window Fashion, Charles T. Randall
- Illustration + Perspectives (In Pantone Colors), EijiMitooka

*Applicable for courses having practical component.

Session: 2023-24			
Part A - Introduction			
Subject	MATERIALS & CONSTRUCTION DETAILS-II		
Semester	II		
Name of the Course	Bachelor of Interior Design		
Course Code	B23-IDS-202		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-B2		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	To familiarize the students with construction properties and cases of traditional building materials used in construction. To understand the use of these traditional building materials in simple building works.		
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 eight questions in all, selecting two questions from each unit.			
<u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.			
Unit	Topics		Contact Hours
I	<ul style="list-style-type: none"> • Mud and Clay Products: Mud including stabilized earth, Burnt Bricks, Brick Tiles, Brick Ballest and Surkhi, • Stone, Lime, Sand, flyash, Surkhi, Cement, Mortar, Concrete: Classification, Availability, Preparation, Characteristics, Manufacturing and Uses. • Water Proof Materials: Asphalt, Bitumen, and 		10

	Synthetic	
II	<ul style="list-style-type: none"> ● Element of building: Terminology, nomenclature of various parts of building from foundation to roof. ● Brick Works: Brick Terminology, Bonds in Brick work, Detail at junctions, Brick Jalis. ● Stone Masonry, hollow block, lightweight concrete and glass block construction. 	10
III	<ul style="list-style-type: none"> ● Introduction to Built Elements – Study of built elements in the interiors with respect to materials used. Basic construction methods and general specifications. ● Introduction to basic structural systems ● Elements of structure & their functions and behavior ● Beams, slabs, columns, walls, foundations, bearing wall systems, trusses. 	10
IV	<ul style="list-style-type: none"> ● Foundation: simple, stepped, combined, cantilevered footing, RCC footing and raft foundation. 	10
V*	<ul style="list-style-type: none"> ● Case Studies. ● Market Surveys. ● Visual Presentations. ● Site Visits. 	30
Suggested Evaluation Methods		
Internal Assessment: <ul style="list-style-type: none"> ➤ Theory <ul style="list-style-type: none"> ● Class Participation: 05 ● Seminar/presentation/assignment/quiz/class test etc.:05 ● Mid-Term Exam: 10 ➤ Practicum <ul style="list-style-type: none"> ● Class Participation: ● Seminar/Demonstration/Viva-voce/Lab records etc.:10 ● Mid-Term Exam: NA 		End Term Examination: 50 20
Part C-Learning Resources		

Recommended Books/e-resources/LMS:

- **Bindra, S.P. and Arora, S.P.**- Building Construction: Planning Techniques and Methods of Construction, 19th ed. DhanpatRai Pub., New Delhi, 2000.
- **Chowdary, K.P.**- Engineering Materials used in India, 7th ed. Oxford and IBH, New Delhi, 1990.
- **Francis D.Ching**- Building Construction Illustrated, Wiley publishers, 2008.
- **Moxley, R. Mitchell's** Elementary Building Construction, Technical Press Ltd.
- **Rangwala, S.C.**- Building Construction: Materials and Types of Construction, 3rd ed. John Wiley and Sons, Inc., New York, 1963.
- **Rangwala, S.C.** -Building Construction 22nd ed. Charota Pub. House Anand, 2004.
- **Sushil Kumar.** T.B. of Building Construction 19th ed. Standard Pub. Delhi, 2003.

*Applicable for courses having practical component.

Session: 2023-24			
Part A - Introduction			
Subject	FURNITURE DESIGN WORKSHOP		
Semester	II		
Name of the Course	Bachelor of Interior Design		
Course Code	B23-IDS-203		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-C2		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	The objective of the course is to provide knowledge about analysis of existing piece of furniture in its functional aspect, technical aspects and skill required materials and properties, biomechanical factors and ergonomically consideration, aesthetic consideration and back acing and economical factors consideration.		
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:3 hrs(T) 4 hrs(P)	
Part B- Contents of the Course			
<u>Instructions for Paper- Setter:</u> The examiner will set eight questions in all, selecting two questions from each unit.			
<u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.			
Unit	Topics		Contact Hours
I	<ul style="list-style-type: none"> Analyzing furniture: Analyzing furniture forms and designing furniture forms scientifically based on ergonomics, material design and working parameters and visual perception of furniture as a single form and as a system in a given interior space. 		10

II	<ul style="list-style-type: none"> • Measurement drawing: Measurement drawing of a piece of a furniture-plan, elevation and detail drawings on proper scale. • History of furniture from early days to industrial revolution 	10
III	<ul style="list-style-type: none"> • Modular Aspect: Modular aspect and approach towards all types of furniture, cost criteria of design furniture for lower income sector society. 	10
IV	<ul style="list-style-type: none"> • Furniture Style: Design and understand Post Independence furniture style 	10
V*	<ul style="list-style-type: none"> • Make a sheet work showcasing ancient furniture into modern furniture. • Measure Drawing of a Piece of Furniture –Draw (With elevations & other details) on full scale. 	30
Suggested Evaluation Methods		
Internal Assessment: <ul style="list-style-type: none"> ➤ Theory <ul style="list-style-type: none"> • Class Participation: 05 • Seminar/presentation/assignment/quiz/class test etc.:05 • Mid-Term Exam: 10 ➤ Practicum <ul style="list-style-type: none"> • Class Participation: • Seminar/Demonstration/Viva-voce/Lab records etc.:10 • Mid-Term Exam: NA 		End Term Examination: 50 20
Part C-Learning Resources		
Recommended Books/e-resources/LMS: <ul style="list-style-type: none"> • Window Fashion, Charles T. Randall • Illustration + Perspectives (In Pantone Colors), EijiMitooka • Elements of Architecture, MeissPieree Von 		

Session: 2023-24			
Part A - Introduction			
Subject	ADVANCED GRAPHICS		
Semester	II		
Name of the Course	Bachelor of Interior Design		
Course Code	B23-IDS-204		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VAC)	CC-M2		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	<ul style="list-style-type: none"> To impart the techniques of rendering in different media and skills of three dimensional visualization and presentation. 		
Credits	Theory	Practical	Total
	1	1	2
Contact Hours	1	2	3
Max. Marks: 50 Internal Assessment Marks : 10(T) + 5(P) = 15 End Term Exam Marks : 20(TH) + 15(P) =35		Time : 3hrs(T) 4hrs(P)	
Part B- Contents of the Course			
<p><u>Instructions for Paper- Setter:</u>The examiner will set eight questions in all, selecting two questions from each unit.</p> <p><u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.</p>			
Unit	Topics		Contact Hours
I	<ul style="list-style-type: none"> Free hand sketching & rendering of furniture, and interior schemes, landscape etc. Orthographic projections of geometric forms & furniture items. Free-hand sketching: 500 (submit at the final 		7

- How to paint & draw by Jaxtheimer
- Colour Fundamentals by Graves MAintland
- Colour for Architects by T Porter, D Mikellides
- Anatomy & Drawing by Victor Perard
- Fundamentals of Drawing by Barrington Barber
- The Big book of Drawing & Painting by Francisco AsensioCerver
- The complete book of Drawing Techniques by peter Stanyer
- Watercolour,Oilcolour&Gouache by Wendy Jelbert& Ian Sidaway

SEMESTER 3

Session: 2023-24			
Part A - Introduction			
Subject	INTERIOR DESIGN-III		
Semester	III		
Name of the Course	Bachelor of Interior design		
Course Code	B23-IDS-301		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-A3		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	The objective of the course is to introduce the students with the different types of exhibition and presentation spaces and the interior design requirements related to them. The course should involve different design ideas and schemes to represent the designing of exhibition spaces, as these are the prime area of designing emerging in the modern world.		
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			
<p><u>Instructions for Paper- Setter:</u>The examiner will set eight questions in all, selecting two questions from each unit.</p> <p><u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.</p>			

Recommended Books/e-resources/LMS:

- Drawing a Creative Process, Francis D.K. Ching
- Design Drawing + CD, Francis D.K. Ching
- Architecture Graphics, Francis D.K. Ching 4th Edition
- Interior design & space planning, DechiaraPaberoZelnik
- Interior design illustrated, Francis D.K. Ching
- Graphic Interiors
- Space Designed by Graphic Artists, Corina Dean
- Home Plumbing (The David & Charles Manual of), Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran
- Illustration + Perspectives (In Pantone Colors), EijiMitooka

Session: 2023-24			
Part A - Introduction			
Subject	MATERIALS & CONSTRUCTION DETAILS-III		
Semester	III		
Name of the Course	Bachelor of Interior design		
Course Code	B23-IDS-302		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-B3		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	To introduce and familiarize the students with advanced and speedy building techniques The understanding for the system to be adopted for the construction of large span structures.		
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 eight questions in all, selecting two questions from each unit.			
<u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.			
Unit	Topics		Contact Hours
I	<ul style="list-style-type: none"> ● Building Materials -Physical and behavioral properties of materials, their application in the construction of floors, walls, ceilings, walls, doors, windows, staircases, built in furniture, partitions and other interior design components. 		10

II	<ul style="list-style-type: none"> Reinforced Cement Concrete: Types, Mixing, Curing, Water Cement Ratio, and reinforced Brick Concrete, Qualities and workability. 	10
III	<ul style="list-style-type: none"> Prefabrication- Pre-casting methods, materials, on – site and off- site prefabrication, components etc. 	11
IV	<ul style="list-style-type: none"> Introduction to false ceiling with Gypsum, POP, Grid Ceiling, types and fixing methods. 	10
V*	<ul style="list-style-type: none"> Case studies/ market surveys/ visual presentations/ site visits/ drawings. Market surveys to be conducted to find out the commercial and technical names, sizes, codes for materials, testing, fabrication, commercial methods of pricing, billing etc. 	30
Suggested Evaluation Methods		
Internal Assessment: <ul style="list-style-type: none"> ➤ Theory <ul style="list-style-type: none"> Class Participation: 05 Seminar/presentation/assignment/quiz/class test etc.:05 Mid-Term Exam: 10 ➤ Practicum <ul style="list-style-type: none"> Class Participation: Seminar/Demonstration/Viva-voce/Lab records etc.:10 Mid-Term Exam: NA 		End Term Examination 50 20
Part C-Learning Resources		
Recommended Books/e-resources/LMS: <ul style="list-style-type: none"> A Visual Dictionary of Architecture, Francis D.K. Ching Interior design illustrated, Francis D.K. Ching House Book (The Complete Guide to Home Design), Terence Conran Masonry (Concrete, Brick, Stone), Christine Beall Metric Handbook (Planning & Design Data) 2nd Ed. Edited By, David Adle 		

Session: 2023-24			
Part A - Introduction			
Subject	BUILDING SERVICES- I (Water Supply & Sanitation)		
Semester	III		
Name of the Course	Bachelor of Interior design		
Course Code	B23-IDS-303		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-C3		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	The objective of the course is to provide a clear understanding about the Water Supply, Sanitation and waste water disposal system in a building as part of the building services and know the latest market trends and requirements.		
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 eight questions in all, selecting two questions from each unit.			
<u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.			

Session: 2023-24			
Part A - Introduction			
Subject	SCULPTURE MAKING		
Semester	III		
Name of the Course	Bachelor of Interior design		
Course Code	B23-IDS-304		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-M3		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	<ul style="list-style-type: none"> • Introduction to sculpture-basic elements and their relationships -Sculptural exercises based on studies from nature, human figures or other areas of contact. • Study of different mediums 		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks:100		Time:3hrs(T)	
Internal Assessment Marks::20(T)+10(P)		4hrs(P)	
End Term Exam Marks:50(T)+20(P)			
Part B- Contents of the Course			
<u>Instructions for Paper- Setter:</u> The examiner will set eight questions in all, selecting two questions from each unit.			
<u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.			
Unit	Topics		Contact Hours
I	Types of metal, Lost wax process (Cire Perdue), Dogra/ Baster/ Sand casting process, The Built-up runner & investment, Patina & Coloring.		12

II	Knowledge about foundry, Pit blast furnace, Blast furnace, Gas furnace, Coal furnace, Diesel furnaces, Mould baking Procedure.	10
III	Cement concrete casting, P.O.P. casting, Fiber glass casting, Paper pulp casting. Paper mesh, Ceramic Mural.	9
IV	Stone carving techniques on marble, sand stone, & granite, Understanding about stone carving techniques and tool, Wood carving techniques according to the maquette, Understanding about wood carving techniques and tool, Colouring on wood & seasoning	8
V*	Four to five exercises using different mediums	30
Suggested Evaluation Methods		
Internal Assessment: > Theory <ul style="list-style-type: none"> ● Class Participation: 05 ● Seminar/presentation/assignment/quiz/class test etc.:05 ● Mid-Term Exam: 10 > Practicum <ul style="list-style-type: none"> ● Class Participation: ● Seminar/Demonstration/Viva-voce/Lab records etc.:10 ● Mid-Term Exam: NA 		End Term Examination: 50 20
Part C-Learning Resources		
Recommended Books/e-resources/LMS: <ul style="list-style-type: none"> ● Sculpture in plastic arts – Nicholas Roukas ● Modern Sculpture – Harbeart Read ● The complete sculpture of Barbara Hepworth – Alan ● Masterpieces of western sculpture – Howard Hibbard ● Calder – H.H.Arnason ● Principles of metal casting – Richard W. Heine & Philip C. Rosenthal ● Contemporary Stone Sculpture – Donaz Meilach 		

SEMESTER 4

Session: 2023-24			
Part A - Introduction			
Subject	INTERIOR DESIGN-IV		
Semester	IV		
Name of the Course	Bachelor of Interior design		
Course Code	B23-IDS-401		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-A4		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	<ul style="list-style-type: none"> • The objective of the course is to introduce the students with the Interior design of Primary school and Library. • The course should involve different design ideas and schemes to represent the designing, as these are the prime area of designing emerging in the modern world. 		
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: 3 hrs(T) 4 hrs(P)	
Part B- Contents of the Course			
<p><u>Instructions for Paper- Setter:</u>The examiner will set eight questions in all, selecting two questions from each unit.</p> <p><u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.</p>			
Unit	Topics		Contact Hours

I	<ul style="list-style-type: none"> Applying anthropometry in relation to interior spaces of primary school, Various techniques of creating designs & Color scheme in relation to interiors 	11
II	<ul style="list-style-type: none"> Layout and Constructional details of furniture units used in school and library, Application of color, texture, pattern and their psychological effects in interiors. 	10
III	<p>Primary School & Library</p> <p>Interior Design for specific ideas and select materials appropriate to intended purpose and to understand the visuals and functional characteristics.</p>	12
IV	Interior Model of the space with all furniture, interior details in place and interior finishes with different colors, Textures.	12
V*	<ul style="list-style-type: none"> Collection of samples of material for interiors of various parts of buildings color, texture, modulations and pattern evolution. Material, workmanship, specification etc. Prepare a model of the project. 	30
Suggested Evaluation Methods		
<p>Internal Assessment:</p> <p>➤ Theory</p> <ul style="list-style-type: none"> Class Participation: 05 Seminar/presentation/assignment/quiz/class test etc.:05 Mid-Term Exam: 10 <p>➤ Practicum</p> <ul style="list-style-type: none"> Class Participation: Seminar/Demonstration/Viva-voce/Lab records etc.:10 Mid-Term Exam: NA 		<p>End Term Examination:</p> <p>50</p> <p>20</p>
Part C-Learning Resources		
<p>Recommended Books/e-resources/LMS:</p> <ul style="list-style-type: none"> Drawing a Creative Process, Francis D.K. Ching Design Drawing + CD, Francis D.K. Ching Architecture Graphics, Francis D.K. Ching 4th Edition Interior design & space planning, Dechiara Pabero Zelnik Interior design illustrated, Francis D.K. Ching 		

- Graphic Interiors
- Space Designed by Graphic Artists, Corina Dean
- Home Plumbing (The David & Charles Manual of), Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka

Session: 2023-24			
Part A - Introduction			
Subject	MATERIALS & CONSTRUCTION DETAILS-IV		
Semester	IV		
Name of the Course	Bachelor of Interior design		
Course Code	B23-IDS-402		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-B4		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	To introduce and familiarize the students with advanced and speedy building techniques The understanding for the system to be adopted for the construction of large span structures.		
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

Instructions for Paper- Setter: The examiner will set eight questions in all, selecting two questions from each unit.

Instructions for the candidate: The candidate will have to attempt five questions in all, selecting atleast one question from each unit.

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> • Metals – Steel, iron, aluminum, bronze, brass, copper – alloys, characteristics, form and uses, properties, definition of terms, methods of working with metals, fixing and joinery in metals, finishing and treatment to metals. • Application of Metals to Built Form and Interiors - Special doors and windows, ventilators – sliding, sliding and folding, revolving, pivoted, rolling, collapsible, dormer, skylights, clerestory etc. 	10
II	<ul style="list-style-type: none"> • Fabrics and Other Furnishing Materials – Fibers, textiles, fabric treatments, carpets, durries, tapestries, draperies, upholstery, wall coverings, etc. – properties, uses and application in the interiors. • Miscellaneous materials such as cork, leather, paper, rexene etc. – their properties, uses and applications in the interiors. A brief overview of green materials. 	11
III	Glazing-Skylights, Curtain walls, Double glazing, Eco Boards, wood and its products	10
IV	Understanding various types of boards and hardware for kitchens cabinets with fittings/ fixtures/accessories and construction details with finishing schedules.	9
V*	Design and construction with fittings/fixtures/details of a bedroom wardrobe with finishes.	30
Suggested Evaluation Methods		

Session: 2023-24			
Part A - Introduction			
Subject	BUILDING SERVICES- II (Electrical Systems & Lighting)		
Semester	IV		
Name of the Course	Bachelor of Interior design		
Course Code	B23-IDS-403		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-C4		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	To initiate students into theory and practice of electrical systems and fixtures. Introduction to reception and distribution of main supply, fittings and accessories.		
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:3 hrs(T) 4 hrs(P)	
Part B- Contents of the Course			
<u>Instructions for Paper- Setter:</u> The examiner will set eight questions in all, selecting two questions from each unit.			
<u>Instructions for the candidate:</u> The candidate will have to attempt five questions in all, selecting atleast one question from each unit.			
Unit	Topics		Contact Hours
I	Properties of light, distribution of lighting, control points and layout		10
II	Natural/artificial lighting, Lighting of spaces, Lighting		10

	Equipment, Lighting conditions, Various systems of lighting	
III	Methods of Internal/ external wiring, Branch distribution boards, Lighting layout, fittings and fixtures	10
IV	Formation of plan, Symbols, Standard Height, its advantages & disadvantages.	10
V*	<ul style="list-style-type: none"> Prepare Electrical plan for 2BHK 	30
Suggested Evaluation Methods		
Internal Assessment: <ul style="list-style-type: none"> > Theory <ul style="list-style-type: none"> Class Participation: 05 Seminar/presentation/Assignment/quiz/class test etc.:05 Mid-Term Exam: 10 > Practicum <ul style="list-style-type: none"> Class Participation: Seminar/Demonstration/Viva-voce/Lab records etc.:10 Mid-Term Exam: NA 		End Term Examination: 50 20
Part C-Learning Resources		
Recommended Books/e-resources/LMS: <ul style="list-style-type: none"> Building Construction, N.L. Arora &, B.R. Gupta Building Services, Anthony Rowley 		