B. Sc. Interior Design

Syllabus

AFFILIATED COLLEGES

Program Code:22U

2021 – 2022 onwards

BHARATHIAR UNIVERSITY

(A State University, Accredited with "A" Grade by NAAC,
Ranked 13th among Indian Universities by MHRD-NIRF,
World Ranking: Times -801-1000,Shanghai -901-1000, URAP - 982)

Coimbatore - 641 046, Tamil Nadu, India

Program Educational Objectives (PEOs)

Program Educational Objectives (PEOs)	
The **B. Sc. Interior Design** program describe accomplishments that graduates are expected to attain within five to seven years after graduation	
PEO1	Creatively solve problems for a wide range of physical interior environments, including residential and commercial, and for a diverse group of users.
PEO2	Design at different environmental scales from single rooms to more complex and even multi-storey facilities.
PEO3	Develop layout and details that integrate building services to ensure user comfort and efficient functioning of the interior space.
PEO4	Conduct detailed study of the context and different users and arrive at a clear Design Program providing both qualitative and quantitative guidelines for design.
PEO5	Use a wide range of materials and methods of interior construction and assembly in executing their interior design ideas effectively and develop detailed drawings for the same.
PEO6	Select appropriate materials, provide specifications for finish and materials and estimate the quantities and cost of the project.
PEO7	Start, organize and operate a professional interior design practice with knowledge of the processes of client interactions, contracts, ethics, code and legislation.
PEO8	Integrate plants and interior landscape into the design of interior spaces and detail and specify systems and materials for the same.
PEO9	Apply sustainable design practices in their design of interior spaces.

Program Specific Outcomes (PSOs)

Program Specific Outcomes (PSOs)	
After the successful completion of the B. Sc. Interior Design program, the students are expected to demonstrate,	
PSO1	Understand and apply design theories and practices in the field of Interior Design
PSO2	Ability to identify social, economic, environmental and cultural issues that have bearing on the Interior Design Process
PSO3	Have a clear understanding of human needs and methods for researching user requirements, socio-economic factors and cultural context.
PSO4	Apply knowledge of latest developments in materials and interior construction and detailing practices to their design projects.
PSO5	Follow and inspire high ethical values in professional practice
PSO6	Demonstrate sharp creative, technical, technological and critical thinking skills.
PSO7	Ability to specialise and work in areas such as furniture design, branding, interior landscape, lighting design, interior component and product design.

Program Outcomes (POs)	
On successful completion of the B. Sc. Interior Design program, the students should demonstrate,	
PO1	A basic knowledge of Arts & Culture and an understanding of its impact on the Design of Interiors.
PO2	Understanding of the Basic Elements and Principles of Design and its application in 2D, 3D and Interior Design.
PO3	Knowledge of the development of Interior and Furniture Design andArchitecture through History, and an understanding of its implications for design today.
PO4	Ability to follow a Design Process; to manipulate Form, Space, Colour, Lighting and Texture; and apply theoretical knowledge gained to develop Interior Design Solutions for projects.
PO5	Ability to plan and organise the Building Services effectively within the interior environment to improve safety, comfort, performance, efficiency and sustainable functioning of the built space.
PO6	Practical Knowledge of Interior Material Selection & Specification, Assemblies, Construction detailing and execution.
PO7	Knowledge and Ability to use computer technology for developing and communicating Design solutions.
PO8	Ability to understand ethical and professional responsibilities.
PO9	Knowledge of Environmental friendly practices in interior design
PO10	Ability to communicate effectively and work in interdisciplinary groups

BHARATHIAR UNIVERSITY : : COIMBATORE 641 046

B. Sc Interior Design (CBCS PATTERN)

(*For the students admitted from the academic year **2021-2022** and onwards*)

Scheme of Examination

Part	Title of the Course	Hours/ Week	Examination				Credits
			Duration in Hours	Maximum Marks			
				CIA	CEE	Total	
	Semester I						
I	Language - I	6	3	50	50	100	4
II	English - I	6	3	50	50	100	4
III	Core Paper I – Theory of Interior Design	3	3	50	50	100	4
III	Core Paper II – Art and Interior Design	3	3	30	45	75	3
III	Core Practical I – Basic Design Studio	6	3	50	50	100	4
III	Allied Paper I – Sketching and Drafting Practical	4	3	50	50	100	4
IV	Environmental Studies *	2	3	-	50	50	2
	Total	**30**	**-**	**280**	**345**	**625**	**25**
	Semester II						
I	Language - II	6	3	50	50	100	4
II	English - II	6	3	50	50	100	4
III	Core Paper III - History of Interior Design I	3	3	30	45	75	3
III	Core Paper IV – Materials and Construction I	3	3	50	50	100	4
III	Core Practical II – Interior Design Studio I	6	3	50	50	100	4
III	Allied Paper II – Interior Drawing and CAD Practical	4	3	50	50	100	4
IV	Value Education- Human rights *	2	3	-	50	50	2
	Total	**30**	**-**	**280**	**345**	**625**	**25**
	Semester III						
III	Core Paper V - Materials and Construction II	4	3	50	50	100	4
III	Core Paper VI – History of Interior Design II	4	3	30	45	75	3
III	Core Paper VII - Human Factors in Design	3	3	30	45	75	3
III	Core Practical III – Interior Design Studio II	8	3	50	50	100	4
III	Allied Paper III - Colour and Lighting	4	3	50	50	100	4
IV	Skill Based Subject I – Computer Applications 1 - Practical	5	3	30	45	75	3
IV	Tamil** / Advanced Tamil* (OR) Non-major elective - I (Yoga for Human Excellence)* / Women's Rights*	2	3	-	50	50	2
	Total	**30**	**-**	**240**	**335**	**575**	**23**
	Semester IV						
III	Core Paper VIII - Materials and Construction III	4	3	50	50	100	4
III	Core Paper IX - Building Services	4	3	50	50	100	4
III	Core Practical IV – Interior Design Studio III	8	3	50	50	100	4
III	Allied Paper IV - Landscape for Interiors	4	3	50	50	100	4

IV	Skill Based Subject II – Computer Applications II - Practical	8	3	30	45	75	3
IV	Tamil**/Advanced Tamil* (OR) Non-major elective -II (General Awareness*)	2	3	-	50	50	2
	Total	**30**	**-**	**230**	**295**	**525**	**21**
	Semester V						
III	Core Paper X - Basics in Architecture	5	3	50	50	100	4
III	Core Paper XI - Estimation and Costing	4	3	30	45	75	3
III	Core Paper XII – Furniture in Interiors	4	3	30	45	75	3
III	Core Practical V - Interior Design Studio IV	8	3	50	50	100	4
III	Elective I	4	3	50	50	100	4
IV	Skill Based Subject III - Floriculture and Landscaping Practical	5	3	30	45	75	3
	Total	**30**	**-**	**240**	**285**	**525**	**21**
	Semester VI						
III	Core Paper XIII – Sustainable Interiors	4	3	50	50	100	4
III	Core Paper XIV – Professional Practice	4	3	50	50	100	4
III	Project - Interior Design Capstone #	10	3	50	50	100	4
III	Elective II	4	3	50	50	100	4
III	Elective II	4	3	50	50	100	4
IV	Skill Based Subject IV - Applied Arts	4	3	30	45	75	3
V	Extension Activities **	-	-	50	-	50	2
	Total	**30**	**-**	**330**	**295**	**625**	**25**
	Grand Total	**180**	**-**	**1600**	**1900**	**3500**	**140**

CIA – Continuous Internal Assessment
CEE – Comprehensive External Examination

* No Continuous Internal Assessment (CIA). Only University Examinations.
** No University Examinations. Only Continuous Internal Assessment (CIA).
# Mark Division for Internship and Project is given below.

Total Marks	**CIA**	**CEE**	
		Evaluation	Viva-voce
100	50	30	20

ELECTIVE LIST		
ELECTIVE 1	A	Kitchen Design
	B	Introduction to Textiles and Clothing
	C	Green Building Technology
ELECTIVE 2	A	Furniture Construction and Detailing
	B	Merchandising and Display
	C	Entrepreneurial Development
ELECTIVE 3	A	Ergonomics
	B	Fashion Designing
	C	Project Management

First Semester

Course code	13A	THEORY OF INTERIOR DESIGN	L	T	P	C
Core		Paper I	3	-	-	4
Pre-requisite		English Reading & Writing, Knowledge of Basic Geometry	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Present a framework to understand the design process.
2. Understand the elements and principles related to interior design.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the basic elements & principles that are used in any design process.	K1
CO2	Understand the impact of manipulation of individual design elements on the overall design composition.	K2
CO3	Apply the design principles such as Unity, Balance, Emphasis, Harmony, and Rhythm etc. in creating specific designed impact.	K3
CO4	Analyze the various factors that influence design process, perception and impact.	K4
CO5	Evaluate the design outcome and process involved in design.	K5
CO6	Create 2D and 3D patterns with the understanding of elements and principles of design	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION	8 hours

What is design? Meaning, Purpose; Factors affecting Design: Context - shaping force, Research - material, process; The role of taste in Design -Objectives of Aesthetic Planning - Beauty, Expressiveness, Functionalism; Basic Design, 2-dimensional, 3-dimensional Design; Ways of seeing: Attentive observation, Similarities and differences, Connections, Tactile sensation.

Unit:2	DESIGN ELEMENTS	8 hours

Gestalt and Perceptual Theories, Design Elements– Point, Line, Plane -natural/ geometric shapes, Texture; Perception modified by Scale, Light, Contrast, Pattern and Space, Form and Volume - Solids and Voids, Colour - Hue, Value and Saturation, Colour Systems, Colour Perception - Light, Simultaneous Contrast, Space, Colour Schemes.

Unit:3	DESIGN PRINCIPLES	9 hours

Design Principles: Proportion- Proportioning Systems- Fibonacci Series and Golden section, Scale - visual scale, human scale, Balance - Visual Balance - Symmetrical Balance, Asymmetrical Balance, Radial Balance. Creating Harmony, Visual Unity, Ways to achieve Unity - proximity, repetition, and continuation, Rhythm - Visual Rhythm, Spatial Rhythm, Unity and Variety, Emphasis - by contrast/ placement/ isolation, Degrees of Emphasis.

Unit:4	DESIGN PROCESS	10 hours

Design Process- Analysis, synthesis, design evaluation; Design criteria – function and purpose, utility and economy, form and style; human factors – human dimensions, distance zones, activity relationships, Space requirements – spatial planning, function, aesthetics.

Unit:5	ANTHROPOMETRICS	10 hours

Interior Space – Definition; Elements structuring interior space – wall, floor, ceiling/roof,

articulation; spatial form and dimension – square, rectangular, curvilinear spaces, height of spaces, transitions and openings – doorways, windows, stairways.	
Total Lecture hours	**45 hours**

Text Book(s)	
1	Interior design principles and practice, Pratap R.M, Standard Publishers distribution, Delhi, 1988.
2	Interior Design, Chaudhari S.N, Jaipur: Aavishkar Publishers, India, 2005.
Reference Books	
1	Designing Interiors, Rosemary Kilmer, W. Otie Kilmer, Wley, 2014.
2	Beginnings of Interior Environments, Phyllis S. Allen, Lynn M Jones, Miriam F Stimpson, Pearson Prentice Hall, 9th ed, 2004.
3	Design Basics, Stephen Pentak, David A Lauer, Cengage Learning Inc, 2014.
4	Principles of Form and Design, Wucius Wong, Wiley Publications, 1993.
5	Interior Design Illustrated, Francis D. K. Ching, John Wiley & Sons, 3rd Edition, 2012.
6	Elements of Space making, Yatin Pandya, Grantha Corporation, 2013.
7	A History of Interior Design, Judith Gura, John Pile, Laurence King Publishing; 4th Revised edition, 2013.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.academia.edu/19251847/The_Role_of_Aesthetics_in_Design_Thinking
2	https://www.youtube.com/watch?v=xHGOZimYaU8&t=1s
3	https://www.youtube.com/watch?v=2YMCQAUnfm4
4	https://www.youtube.com/watch?v=9s1FlzRqck4
5	https://www.decordesignshow.com.au/apply-colour-theory-psychology-interior-design/
6	https://interiordesignstudent.com/category/study-notes/
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	S	S	S	L	S	L	S	S	S
CO2	M	S	S	S	L	S	L	S	M	M
CO3	M	S	M	S	L	M	L	L	L	L
CO4	M	M	M	S	L	M	L	L	L	L
CO5	L	L	L	M	L	L	L	L	L	L
CO6	L	S	L	L	L	L	M	L	L	L

*S-Strong; M-Medium; L-Low

Course code	13B	ART AND INTERIOR DESIGN	L	T	P	C
Core		Paper II	3	-	-	3
Pre-requisite		English Reading & Writing, High School Level Indian and World History.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Develop knowledge of and appreciation for Art.
2. Analyze various art forms and understand its application in interiors.
3. Understand the socio-cultural influences on art and its reflection on interior design.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the need for appreciation for Art in interior design	K1
CO2	Understand human culture and experience is grounded in the investigation of creativity, continuity and invention of art practices.	K2
CO3	Apply the knowledge of art and artefacts to study the objectives and ethos of each cultural period.	K3
CO4	Analyse various art forms to explore significant contributions to the development of cultural expression.	K4
CO5	Evaluate historical and contemporary expressive practices through critical encounters with visual and cultural productions.	K5
CO6	Create a comprehensive design solution with broader social and cultural contexts for design problems affecting the built environment.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION	8 hours

What is Art? Purpose of Art; Art and Aesthetics; Essential Concepts in Context and Perspective; Why it matters; How we see; Critical Modalities.

Unit:2	ART THROUGH TIME	9 hours

Development of art: A survey of history of art forms: pre historic times to present times: changing nature of art through time in terms of content: form and material.

Unit:3	ART FORMS	8 hours

Exploration of art forms – study of traditional and contemporary art forms – painting, sculpture, architecture, decorative arts, design arts, digital art; Relationship between art and design from earliest time; Study of famous and influential Artists, Craftsmen and people who pioneered innovations in their own fields and their influence on design and other fields. For eg: Van Gogh, Dali, William Morris, etc.

Unit:4	ORNAMENT	10 hours

Study of ornament in Interior Design. Different types of ornamentation in the interiors. Study and evaluation of artifacts and historic examples and their applicability.

Unit:5	HERITAGE INTERIORS	10 hours

Introduction to Heritage Interiors: Evolution of Interiors in different regions of India with examples. Heritage and identity at different spatial scales. Dimensions and scope of Heritage Interiors. Users and uses of Heritage interiors

	Total Lecture hours	45 hours

Text Book(s)	
1	Encyclopaedia of social and cultural anthropology, Alan Barnard & Jonathan Spencer, Taylor & Francis,1996.
2	Social and Cultural Anthropology: The Key Concepts, Niggel Rapport, Routledge, 2000.
Reference Books	
1	Understanding Culture: An Introduction to Anthropological Theory, Philip Carl Salzman, Waveland press, 2001.
2	The Interpretation of Cultures, Clifford Geertz, BasicBooks, 1977.
3	Studies in Indian society, culture and Religion, Charles. V. Stanford, South Asia Books, 1988.
4	Human Behaviour in the Social Environment: A Social Systems Approach, Gary Lowe, Irl Carter, Ralph Anderson, Aldine Transaction, 1999.
5	Dimensions of Human Behaviour -Person and Environment, Elizabeth. D Hutchinson, Sage publications, 2007.
6	Essays on Indian Art and Architecture, Kumar Raj(Ed), Discovery Publications, New Delhi, 2003.
7	Buddhist Art and Architecture, Fisher E. Robert. Thames and Hudson, London, 1993.
8	Jain Art and Architecture Vol 1-3, Ghosh.A(Ed)., Bharatiya Janpath, New Delhi, 1974.
9	Becoming an Interior Designer, Christine M. Piotrowski, John Wiley and Sons, 2003.
10	Interior Design, Arnold Friedmann, Forrest Wilson, John F. Pile, Elsevier Publishing company, 3rd edition, 1982.
11	India: Decoration, Interior Design, Henry Wilson, Watson Guptill, First American edition, 2001.
12	India Modern, Michael Freeman, Periplusedition, 2005.
13	Indian Interiors, Sunil Sethi, Angelika Taschen, TASCHEN America Ltd; 25th ed, 2009.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/124/107/124107006/
2	https://nptel.ac.in/courses/109/104/109104176/
3	https://nptel.ac.in/courses/109/104/109104122/
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	L	M	M	L	L	L	L	L	M
CO2	S	L	M	L	L	L	L	L	L	M
CO3	S	L	S	L	L	L	L	L	L	M
CO4	S	L	L	L	L	L	L	L	L	M
CO5	S	L	L	L	L	L	L	L	L	S
CO6	M	S	M	S	L	L	L	L	L	M

*S-Strong; M-Medium; L-Low

Course code	13P	BASIC DESIGN STUDIO	L	T	P	C
Core		Practical I	-	-	6	4
Pre-requisite		High School level Drawing and Craft Skills	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Provide a framework for understanding the role of design in creating meaning and function.
2. Sensitize students to the conceptual, visual and perceptual issues involved in the design process.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember to incorporate the basics of design, the elements and principles of design.	K1
CO2	Understand the fundamental design principles through visual composition and manipulation of design that can be later transferred to the context of interior design.	K2
CO3	Apply the inspiration received from external sources to develop designs through process of abstraction.	K3
CO4	Analyze different hands on skills by experimenting 2d relief works and designs using various materials and colours.	K4
CO5	Evaluate all the experiments through proper design development and communication.	K5
CO6	Create a design process in creating 2D/3D designs.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

Unit:1	2D DESIGN	23 hours

Designs involving various elements such as point, line, shape, colour and texture – use principles of design, grids, Golden section – apply to pattern creation & compositions such as mural design, fabric design, mosaics, linocut printing, collage etc.

Unit:2	3D DESIGN	23 hours

Exploring form creation: from 2D to 3D -- platonic solids (boards, paper), structural frames/joints (wood/misc), Solid and Void compositions, Organic or free flowing Forms, Enclosing Space, Light and Texture. Use different materials such as clay, POP, metal etc.

Unit:3	DESIGN BY ABSTRACTION	22 hours

Study and analysis of forms, patterns and colour schemes in nature. Abstraction of natural forms and design of three-dimensional objects and two-dimensional patterns inspired by them.

Unit:4	OBJECT DESIGN	22 hours

Study and critical analysis of man-made objects – their purpose, functional suitability, formal appeal, etc – evolving suggestions for improvement of the same in light fixture, mobile, chair etc.

*All Projects are evaluated based on Concept clarity, Design development, Design effectiveness, Execution and Presentation

	Total hours	90 hours

Text Book(s)	
1	Interior Design Visual Presentation-A Guide to Graphics, Models and Presentation Techniques", Maureen Mitton, John Wiley and Sons, USA, 2004.
2	"Interior Design and Decoration", Seetharaman.P and Pannu.P, CBS Publishers, New Delhi, India, 2009.
Reference Books	
1	Graphic Thinking for Architects and Designers, Laseau, Paul, Wiley; 3 edition, 2000.
2	Design Basics: 2D and 3D, Stephen Pentak, Richard Roth, 8th Ed, Wadsworth Publishing Co Inc, 2012.
3	The Design of Everyday Things, Don Norman, Edition, 2013.
4	Design Graphics, David Fair, Hodder and Stoughton, 1987.
5	Architectural arts and Sculpture, Guild Source Books, 2001.
6	Discovering the Inner Eye, Virginia Cobb Watson, Guptill Publication, 1988.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://medium.com/@anahatrawal/10-basic-principles-of-graphic-design-b74be0dbdb58
2	https://vanseodesign.com/web-design/design-concept-thoughts/
3	https://creativemarket.com/blog/10-basic-elements-of-design
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	S	M	M	L	S	L	S	S	M
CO3	L	S	L	S	L	S	L	S	M	M
CO3	L	S	L	L	L	M	L	L	L	L
CO4	L	S	M	M	L	M	L	L	L	L
CO5	L	S	L	L	L	L	L	L	L	L
CO6	L	S	M	M	L	L	M	L	L	L

*S-Strong; M-Medium; L-Low

Course code	1AP	SKETCHING AND DRAFTING PRACTICAL	L	T	P	C
Allied		Paper I	-	-	4	4
Pre-requisite		School level Drawing and Colouring skills	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. To improve sketching ability of students
2. Enable students to learn and understand techniques of various methods of drawing representation.
3. Develop ability to use colour and varied media effectively in design drawing presentations.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the need for understanding basic forms and compositions to create effective drawings.	K1
CO2	Understand different drawing media and demonstrate skill in illustrating environmental spaces using different rendering techniques and to understand the basic of standers drawings	K2
CO3	Apply architectural representation techniques to represent the daily objects	K3
CO4	Analyze the Sciography for basic shapes	K4
CO5	Create design drawing for architectural elements and furniture.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

Unit:1	INTRODUCTION TO FREEHAND DRAWING	12 hours

Why we need to Draw – Seeing and Looking – Sketching to Scale; Introductory Pencil Exercises with different pencil point sizes and tone building exercises, Drawing what you see – Contour drawing, Shape and Proportion, Perspective, Tone, Detail, Texture and Shadow; Basic exercises – Compositions of Still life, Plant forms, Daily objects; Perspective Sketches: Types of perspective views using vanishing points, Exercise – single object from multiple views; Shading exercises- study of light and shadow; Textures - Represent different textures and surfaces such as glass, water, stone, wood, metal and fabric. Use pencil, pen, charcoal.

Unit:2	SKETCHING	12 hours

Outdoor Sketching including Landscape – trees, foliage (pen, colour pencil); Details such as stone carving, wood or metal work, ornament on furniture, gates, fixtures (pen, pencil, charcoal); Landscape, water bodies and built structures in different media (pen, colour pencil, water colour). Interiors Sketching - perspectives, lighting and composition, textures and details, material expressions, individual furniture, elevations & plans etc. (pen with colour pencils /markers/pastels) Drawing from Photograph.

Unit:3	DRAFTING BASICS	10 hours

Drafting Tools – Sheet types & sizes, Layout and Scale. Simple exercises in drafting, point and line, line types, line weights, straight and curvilinear lines, Hierarchy of lines in Multi-view drawings, dimensioning, lettering, borders, title panels, using pencil & ink and different types of sheets. Architectural symbols – representation of building elements, openings, materials, accessories etc., terminology and abbreviations used in architectural presentation.

Unit:4	MEASURED DRAWING	12 hours

2D drafting - Orthographic Projection of simple objects, furniture: Multi-view Drawings - Plan,

Elevations, the Cross Section; Measuring and drawing to scale – scales and construction of scales, simple objects, furniture, doors and windows etc. in plan, elevation and section etc. reduction and enlargement of drawings.		
Unit:5	**3D PROJECTIONS & ARCHITECTURAL REPRESENTATIONS**	**14 hours**
Isometric Views of Tables, Chairs, Cylindrical & Spherical elements, interior space etc. using simple isometric grid; Axonometric Construction of interior space or arrangement of objects. Sketching: Representation of landscape elements such as trees, indoor plants, planters, hedges, foliage, human figures in different postures, vehicles, street furniture and material textures, to scale; and their integration in 3D drawings. Sciography: Principles of Shade and Shadow- Shade and Shadows of Architectural Elements in Interiors. Shadows of Circular/ Cylindrical/ Spherical elements.		
	Total Lecture hours	**60 hours**

Text Book(s)	
1	Drawing a Creative Process, Francis D.K.Ching, Wiley;1ed, 1989.
2	Free hand Sketching: An Introduction, Paul Laseau, W.W. Norton& Company, 2004.
Reference Books	
1	Sketching for Architecture and Interior Design, Stephanie Travis, Laurence King Publishing, 2015.
2	Interior Design Drawing, Alan Hughes, The Crowood Press, 2008.
3	Design Process: Hand Sketching for Interiors, Rick Bartholomew, SDC Publications, 2013.
4	Perspective and Sketching for Designers, Jessica Newman, Jack Beduhn, Prentice Hall, 1 edition, 2012.
5	Freehand Drawing For Architect sand Interior Designers, Magali Delgado Yanes, W.W. Norton & Company, 2005.
6	How to Draw What You See, Rudy De Reyna, Watson-Guptill Publications, 1996.
7	Geometrical drawing for art students, I.H.Morris, Orient Longman, Calcutta, 2nd revised edition, 1995.
8	Architectural drawing for Interior Designers, Lydia Sloan Cline, Bloomsbury Academic USA, 2014.
9	Building Planning and Drawing, M.V. Chitawadagi, S.S. Bhavikatti, Dreamtech Press, 2019.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.youtube.com/watch?v=O5A58npxsps&list=RDCMUCTXl-UsgE9QhxRjppNchR-w&index=2
2	https://www.youtube.com/watch?v=a0mLX_WvH2w
3	https://www.youtube.com/watch?v=ERusQsCMWOw
4	https://freehandarchitecture.com/
Course Designed By: Ms. Varunya Devi	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	M	L	L	L	L	L	M	L	L
CO2	S	S	L	L	L	L	L	L	L	L
CO3	M	S	M	L	L	L	L	L	L	L
CO4	S	S	L	L	L	L	L	L	L	L
CO5	M	M	L	L	L	L	L	L	L	L

*S-Strong; M-Medium; L-Low

Second Semester

Course code	23A	HISTORY OF INTERIOR DESIGN I	L	T	P	C
Core		Paper III	3	-	-	3
Pre-requisite		High School level Indian and World History.	Syllabus Version	2021-2022		

Course Objectives:

The main objectives of this course are to:

1. Understand the historic and cultural context of interior design spatial planning, articulation, patterns, ornament and furniture from prehistoric to middle ages.
2. Learn about the Modern Movement and Contemporary developments in Interior Design

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the style, visual elements, forms, patterns, geometry and proportions of various periods in architecture, interior design and furniture and display a clear vocabulary for specific description of architecture and interior elements	K1
CO2	Understand the implications of study of history on current practice of interior design and use	K2
CO3	Evaluate building typologies and their evolution over various periods through time	K5
CO4	Analyse the importance of technologies and materials in determining design, and infer their influence during different periods	K4
CO5	Evaluate how social, cultural, political, and geo-physical factors transform and affect the design of the built environment	K5
CO6	Analyse current implications in interior design that have evolved over a period of time, and the impact of individual designers in the field of building and interior design.	K4

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

Unit:1	EARLY CLASSICAL PERIOD	8 hours

Importance and uses of learning history. Prehistoric - forms and patterns - dolmens, tribal cultures in Africa, Americas and Arctic; Ornamentation and Interior Decoration in caves;

Unit:2	EARLY EGYPTIAN	8 hours

Early settlements - Ancient Mesopotamian, North, Central and South American Designs. Ancient Egypt - Geometry and Proportion - temples and houses - furniture and furnishings;

Unit:3	MIDDLE AGES	8 hours

Greece: Minoan, Mycenaean, Greek - temple and secular interiors, Rome: Roman arches, vaults and domes, orders of architecture, Building types - amphitheaters, baths, temples, secular halls, furniture and furnishings,

Unit:4	EARLY CHRISTIAN & GOTHIC	10 hours

Early Christian, Byzantine and Romanesque - Churches, fortresses and castles, abbeys, houses, furniture and furnishings. Gothic Design - cathedrals- gothic arch, flying buttress, Furnishings.

Unit:5	THE RENAISSANCE PERIOD	10 hours

Renaissance Design - interiors and furniture, Elements of Baroque style, interiors & furnishings.

America - Early colonial interiors & furniture, American Georgian and Queen Anne, Federal period designs.		
	Total Lecture hours	**45 hours**
Text Book(s)		
1	History of Architecture, Sir Banister Fletcher, CBS Publishers & distributors, New Delhi, 1996	
2	History of Interior Design, Jeannie Ireland, Fairchild Books; 2008.	
3	A History of Interior Design, Judith Gura, John Pile, Laurence King Publishing; 4th Revised edition, 2013.	
Reference Books		
1	Interior Design Since 1900, Anne Massey, Thames & Hudson; Third Edition, 2008.	
2	Key Interiors since 1900 , Graeme Brooker, Laurence King Publishing, 2013.	
3	History of Design - Decorative Arts and Material Culture, 1400-2000, Pat Kirkham, Susan Weber, Bard Center, 2013.	
4	Interior Design Course, Mary Gilliat Coyran, Octopus Ltd., London, 2001.	
5	Interior Design & Decoration, Sherril Whiton, Prentice Hall, 2001.	
6	Interior Design, Francis D.K. Ching, John Wiley & Sons, New York, 2018.	
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]		
1	https://www.britannica.com/art/interior-design/Origins-of-interior-design	
2	http://www.visual-arts-cork.com/architecture-history.htm	
Course Designed By: Dr. Lakshmipriya		

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	S	L	L	L	L	L	L	M
CO2	M	L	S	L	L	L	L	L	L	L
CO3	L	L	S	L	L	L	L	L	M	L
CO4	L	L	L	M	L	L	L	L	M	L
CO5	S	L	L	L	L	L	L	L	L	L
CO6	L	L	L	M	L	L	L	L	L	L

*S-Strong; M-Medium; L-Low

Course code	23B	MATERIALS AND CONSTRUCTION I	L	T	P	C
Core		Paper IV	3	-	-	4
Pre-requisite		High School Physics, Chemistry, Maths and Drawing	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Understand materials & construction methodology in interior and building design.
2. Understand basic components of the building envelope for small buildings.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Understand the various building components and categorize the building materials used in it.	K2
CO2	Apply various types of masonry and laminates in construction.	K3
CO3	Analyze various flooring and roofing materials available in the market	K4
CO4	Evaluate various joinery used in wood, glass, plastic and fabrics and make the right choice for construction	K5
CO5	Create structures and explain their behaviours by drawing its components and forces acting on it	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

Unit:1	BUILDING COMPONENTS & MATERIALS	9 hours

Drawings of the Components of a Building - indicating foundation, plinth, superstructure, lintel, slab; Different types of Structural systems: Load bearing – brick or stone masonry, Framed structure -- RCC construction, Steel framing with light roofing; Building Materials: Brick – Classification & Types, Clay products – clay tiles, terracotta, porcelain, stoneware, earthenware, Glazing and their uses – Glazed ceramic Tiles, Cement- types and use, Sand, Timber - Classification, storage and use, Steel and Glass - types, properties and applications.

Unit:2	FOUNDATION & WALL CONSTRUCTION	9 hours

Brick masonry: Sizes, types of bonds, wall thickness, strength and defects, typical structures; Stone masonry – rubble and ashlar- joints in stone masonry, safe loads; Brick- Stone Composite Masonry, Concrete Masonry, Reinforced Brick Masonry, Hollow Bricks; Load bearing walls, Cavity walls, Partition walls, Plastering - materials, composition and method; Wall cladding materials & systems –Polycarbonate , HPL (High Pressure Laminate) boards; Cement fibre boards.

Unit:3	FLOOR & ROOF	9 hours

Ground Floor Construction – Plain Cement Concrete, Flooring Finishes – Brick Flooring, Cement Concrete, Terrazzo, Mosaic, Marble, Tile, Wood, Asphalt, Rubber, Linoleum; Upper Floors: RCC, Steel joist & precast Concrete, Timber, Hollow Block; Lintels and Arches– RCC and Brick; Stairs- Dimensions, Types, Construction, Materials– RCC, Steel and Wood, Steel and Tile/ Stone; Roof Types - Flat terraced, Pitched - basic elements, materials- galvanized zinc, galvanized aluminum, Polycarbonate, Asphalt, Shingles, Terracotta / Cement Tiles.

Unit:4	JOINERY & MISC MATERIALS	8 hours

Wood - Soft and hardwood, plywood, laminated wood and particle boards – properties & uses; Synthetic Materials – Different types of Glass, their properties and uses; Plastics – injection molding & other manufacturing methods; Polycarbonate , HPL (High Pressure Laminate) boards for decking / cladding; Fabrics – textile, Jute, leather etc. different types and their uses.

Unit:5	STRUCTURAL SYSTEMS	10 hours
Structural Systems: Design Loads - Live load, Dead load, Wind load, Snow load, Earthquake loads. Framed structures- load bearing structural components- columns and beams- steel, concrete; Load bearing walls- Masonry structures, Prefabrication, cast–in site construction. Brief design concepts for earthquake loads.		
	Total Lecture hours	**45 hours**

Text Book(s)	
1	Building Materials Products, Properties and Systems, M.Gambhir, Neha Jamwal, McGraw Hill Education (India) Private Limited, 2011.
2	Building Construction, Dr. B.C. Punmia, Ashok Kumar Jain, Laxmi; Tenth ed, 2008.
3	Ching - Building Construction Illustrated, Francis D.K. VNR, 1975.
Reference Books	
1	Building Materials, S.K. Duggal, New Age International Publishers, 4th Ed., 2012.
2	Building Construction, S.C.Rangwala, Charotar Publishing House, 30th Ed., 2012.
3	Engineering materials, S.C.Rangwala - Charotar Publishing, 2017.
4	Building construction Vol1 –Longmans, W.B.Mckay – UK, 1981.
5	Building construction Vol 3 –Longmans, W.B.Mckay – UK, 1981.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/124/105/124105013/
2	https://nptel.ac.in/courses/105/102/105102088/
3	https://swayam.gov.in/nd1_noc20_ar04/preview
Course Designed By: Ms. Sudha	

Mapping with Programme Outcomes										
CO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	S	M	S	L	L	L	L
CO2	L	L	M	S	L	S	L	L	S	L
CO3	L	L	L	L	M	S	L	L	S	M
CO4	L	L	M	M	M	S	L	L	S	L
CO5	L	L	L	L	M	S	L	L	S	M

*S-Strong; M-Medium; L-Low

Course code	23P	INTERIOR DESIGN STUDIO I	L	T	P	C
Core		Practical II	-	-	6	4
Pre-requisite		B. Sc. Interior Design, Semester 1 - Basic Design Studio	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Familiarize students with spatial planning as pertaining to residential interior design.
2. Providing them a structured approach to the design process including study of the context, user, materials and construction, concept and design development.
3. Develop Design ideation and inspiration methods.
4. Develop design drawing and presentation skills.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the basic design elements and principles and the results of their manipulation.	K1
CO2	Understand the Space Standards, Anthropometry, Ergonomics, Services and Systems as related to users and activities in the Residential environment.	K2
CO3	Apply knowledge of the design elements and principles, space standards and human factors, to the given design context to create desired impact on perception, comfort and use.	K3
CO4	Analyze the various factors like culture, climate, material, technology, comfort, aesthetics and performance that influence design process, perception and impact.	K4
CO5	Evaluate the design outcome with respect to criteria based on space, comfort and aesthetic requirements to accommodate function; response to environmental and socio-cultural context.	K5
CO6	Create various typology of interior designs and their applications in the residential spaces	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

Unit:1	USER & TYPOLOGY STUDY	15 hours

Study of Residential Spaces: Component spaces; Activity Analysis & Space Standards; Climatic Cultural Associations – Symbols and Meaning; Access & Enclosure; Circulation, Openings & Articulation; Structure, Materials & Construction; Surface, Colour & Texture.

Unit:2	CASE STUDIES	12 hours

Book Case Studies, Real Life Case Studies – Documentation, Analysis, and Inference for Design.

Unit:3	SITE ANALYSIS – CONTEXTUAL STUDY	15 hours

Analysis of Project Context – Site Analysis; Geographic, Topographic, Soil, Climatic, Wind and Sun direction, Cultural, Landscape, Access, Services & Utilities, Existing views, structures, materials, colours, service lines, circulation, water body, special features, wildlife and vegetation.

Unit:4	CONCEPTUAL & SCHEMATIC DESIGN	30 hours

Adjacency Matrix, Bubble Diagram – Showing Spaces, Circulation, Access etc. Concept Stage: Design Concept presented as sketches (ink & colour pencil) showing 2D and 3D versions of the idea evolution. Spatial distribution shall be to proportion and can be shown as single line drawing. Conceptual models are optional.
Scheme Stage: Drawings to Scale - Detailed Plan with furniture layout & fixtures, circulation,

flooring level & finishes, Elevations and Sections and detail sketches as needed to clarify design idea. Colour scheme, material choices.		
Unit:5	**DESIGN PRESENTATION**	**18 hours**
Detailed Drawings to include: Double line Detailed Plan showing Furniture and Fixture layouts, Flooring levels & Finishes, Elevations, Sections, Detail sketches – 3D perspective / isometrics. Final Presentation on Cartridge paper, rendered in Ink & Colour. Colour scheme, Mood board and model to be included.		
	Total hours	**90 hours**

Text Book(s)	
1	Time Saver Standards for Building Types, Joseph De Chiara, Michael J Crosbie, McGraw Hill Education; 4th edition, 2014.
2	Time Saver Standards for Interior Design and Space Planning, Joseph De Chiara, Julius Panero, Martin Zelnik, McGraw Hill 2011.
Reference Books	
1	Materials and Interior Design (Portfolio Skills), Lorraine Farrelly, Rachael Brown, Laurence King Publishing, 2012.
2	Elements of Space making, Pandya, Yatin, Grantha Corporation, 2013.
3	Construction and Detailing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing, 2010.
4	Drawing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing, 2009.
5	Drawing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing 2009.
6	Interior Design; The New Freedom, Barbaralec Diamonstein, Rizzoli International Publications, New York, 1982.
7	Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.
8	The Fundamentals of Interior Design, Stephen Anderson, Simon Dodsworth, Bloomsbury Academic; 2nd Revised edition, 2015.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://swayam.gov.in/nd1_noc20_de12/preview
2	https://www.thespruce.com/basic-interior-design-principles-1391370
3	http://ecoursesonline.iasri.res.in/course/view.php?id=658
4	http://ecoursesonline.iasri.res.in/course/view.php?id=653
5	https://swayam.gov.in/nd1_noc20_ar16/preview
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	S	M	S	L	L	L	L	L	L
CO2	L	L	L	S	S	M	L	L	M	L
CO3	L	S	L	S	L	L	L	L	M	L
CO4	M	L	L	S	S	L	L	L	L	L
CO5	S	M	L	S	L	L	L	L	L	L
CO6	S	S	M	S	S	L	L	L	M	L

*S-Strong; M-Medium; L-Low

Course code	2AP	INTERIOR DRAWING AND CAD PRACTICAL	L	T	P	C
Allied		Paper II	-	-	4	4
Pre-requisite		BSc Interior Design, Semester 2- Sketching & Drafting.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. To effectively and accurately communicate design details through drawings for client approval and site execution.
2. Use CAD software for effective Design Communication
3. Use Word and Image processing software for office communication and presentation purposes.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember drawing as a medium to visualize and communicate design ideas.	K1
CO2	Demonstrate understanding and ability to draw orthographic views of a given building component.	K2
CO3	Apply the skill in geometric constructions and develop into more complex forms.	K3
CO4	Prepare pictorial drawings using the principles of isometric and perspective projections to visualize objects in three dimensions.	K6
CO5	Understand and analyse the AutoCAD interface and foundational concepts.	K4
CO6	Create design representation in the form of Orthographic Multi-view Drawings using CAD.	K6
CO7	Explore the fundamentals of word & image processing techniques using digital software.	K5

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

Unit:1	DIAGRAMS AND 2D DRAWING	15 hours

Diagrams and Programming Analysis Graphics - Bubble Diagram, Blocking Diagrams, Fit and Stacking Plans, Conceptual Design, Mood – Inspiration Boards, Schematic Presentation Graphics, 2D drafting - Orthographic Projection Drawings for Interiors: Plans, Elevations, Sections, Reflected Ceiling Plans, Dimensions, Lettering. Paraline and Perspective Drawings; Rendering for 2D drawings – Material representations, Use of different Media – Colour pencils, Water colours or pen & ink.

Unit:2	PARALINE & PERSPECTIVE DRAWING	15 hours

3D representations - Isometric drawing, Plan Oblique drawing of Interiors and Objects drawn to scale; Interior Perspective Drawings - One point, Two-point and Three-point Perspective views using grid method. Drawing Ellipses. Rendering of 3D Drawings - Material representations, colour, light and objects; use of hybrid or composite presentation techniques.

Unit:3	CAD DRAFTING	15 hours

CAD Basics: Simple Exercises in 2D CAD software (AutoCAD/ArchiCAD) specifically or proficiency in drawing/ editing objects, texts, dimensioning, making and inserting blocks, understanding of units settings, scale, limits, line type, line weight, layers, colours and print commands. Complete design representation in the form of Orthographic Multi-view Drawings using CAD.

Unit:4	WORD & IMAGE PROCESSING	15 hours

Word Processing: Basic templates for creating text documents, editing, formatting, spelling/

grammar check, dictionary and thesaurus, page layout, fonts, indentation, inserting tables and images, document review and annotation in software like MSWord. Image Processing: Basic image Sourcing, editing and insertion for desktop publishing in Adobe Photoshop or similar software.		
	Total Lecture hours	**60 hours**
Text Book(s)		
1	Design Drawing, Francis D. K. Ching, Steven P. Juroszek, Wiley; 2 edition, 2010.	
2	Interior Design Drawing, Alan Hughes, The Crowood Press, 2008.	
3	Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques, Maureen Mitton, John Wiley and Sons, 2012.	
4	Geometrical Drawing for Art Students; I.H. Moris, Universities Press 2012.	
5	Teach yourself Auto CAD, Gibbs, BPE Publications, New Delhi, 1994.	
Reference Books		
1	Geometrical drawing for art students, 2nd revised edition - I.H. Morris, Orient Longman, Calcutta,1995.	
2	Architectural drafting and design, 4th edition– Ernest R. Weidhaas, Allyn and Bacon, Boston, 1981.	
3	AutoCAD 2015 beginning and intermediate by Munir m. Hamad, 2015.	
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]		
1	https://drawingarchitecture.tumblr.com/	
2	https://www.cadtutor.net/tutorials/autocad/learning-autocad-2014.php	
3	https://nptel.ac.in/courses/112/104/112104172/	
Course Designed By: Mr. Ashly Fabin		

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	M	L	S	S	L	L	M
CO2	L	M	M	M	L	S	S	L	L	M
CO3	M	M	L	M	L	S	L	L	L	M
CO4	L	S	L	L	L	S	M	L	L	M
CO5	L	M	L	M	L	L	S	L	L	S
CO6	L	M	L	M	L	L	S	L	L	S
CO7	L	L	L	L	L	M	S	L	L	S

*S-Strong; M-Medium; L-Low

Third Semester

Course code	33A	MATERIALS AND CONSTRUCTION II	L	T	P	C
Core		Paper V	-	4	-	4
Pre-requisite		BSc Interior Design, Semester 2 - Materials and Construction I	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Develop a thorough knowledge of materials used for construction and finishing of interior wall, floor and ceiling surfaces and for door, window and ventilator openings.
2. Create efficient and elegant detailing for interior material junctions
3. Choose appropriate materials for different components of the interior structure basedon aesthetics, functionality and cost.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Understand the concept of building components, types of structures and rules of thumb.	K2
CO2	Classify different types of wall systems and apply the correct choice of materials used in wall systems	K3
CO3	Analyze various types of flooring and floor finishes and make the right choice	K4
CO4	Evaluate different openings and ceiling systems and their functions in a structure	K5
CO5	Create a comprehensive list of materials and structures for a commercial or residential establishment	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

Unit:1	STRUCTURE	12 hours

Existing walls - basic principles: load bearing walls- masonry - creating openings in load bearing walls, controlling moisture ingress - lining external walls, non-load bearing walls, Structural principles - materials in compression and tension, orientation of structural elements, cantilevers, beams, stability, rule of thumb sizing.

Unit:2	WALL SYSTEMS	12 hours

Interior Wall materials, construction – framing (steel, wood), paneling (Plywood, MDF, Gypboard, Cement particle boards, HPL boards), Filling (insulation, air), Surface finish – Plaster, Paint, tile, Wood, glass, metal, stone, brick, Plywood, wall paper, fabric, - texturing marble, granite, white wash, color wash. Exterior Wall finishes - Stone, rubble, tiles, fresco, murals, glass and metals, paints. Alternative partitions - Free standing walls, Floating walls, glazed partitions.

Unit:3	FLOORS	12 hours

Planning new structures- Installing mezzanines, Raising the floor, Openings in floors. Interior floor finishes - Hard floor finishes, Resilient – asphalt tile, linoleum, cork, rubber, Soft floors – carpets and rugs, Exterior floors – Concrete slabs, tiles, mosaic, terrazzo and terracotta, Selection and characteristics of exterior floor finishes.

Unit:4	OPENINGS	12 hours

Introduction to Openings – Openings/arches technical terms – types of arches – materials used for construction – Lintels - types of lintels- materials used for construction.

Unit:5	CEILING SYSTEMS	12 hours

Ceilings - Basic Principles, Types - Suspended ceilings, Angled and curved ceilings, Proprietary

ceiling systems- hanging methods, Timber/steel and clay tile ceilings, other considerations. Materials - Gyp-board, Acoustical tile, Metal, Glass, Wood, Clay tile - Finish Treatment- plastering, embossing, fresco, plaster of Paris		
	Total Lecture hours	**60 hours**
Text Book(s)		
1	Construction and Detailing for Interior Design, Drew Plunkett, Laurence King Pub, 2014.	
2	Building Construction, Dr. B.C. Punmia, Ashok Kumar Jain, Laxmi; Tenth ed, 2008.	
3	Materiality and Interior Construction, Jim Postell, Nancy Gesimondo, Wiley, 2011.	
4	Interior Detailing: Concept to Construction, David Kent, John Wiley & Sons, 2010.	
5	Ching - Building Construction Illustrated, Francis D. K. VNR, 1975.	
Reference Books		
1	Materials and Components of Interior Architecture, J.Rosemary Riggs, Prentice Hall; 8 edition, 2013.	
2	Interior Architecture Now Paperback – Import, 27 Sep 2007 by Jennifer Hudson (Author) Laurence King Publishing, 2007.	
3	The Gypsum Construction Handbook, RS Means; 7 edition, 2014.	
4	Building Materials, S.K. Duggal, New Age International Publishers, 4th Ed, 2012.	
5	Ultimate Wall Book: A Step-by-step Guide to Creating Over 50 Design Solutions, Victoria Ellerton, Collins & Brown, 1998.	
6	Engineering Materials, S.C. Rangwala - Charotar Publishing, 2017.	
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]		
1	https://nptel.ac.in/courses/124/105/124105015/	
2	https://www.accessengineeringlibrary.com/content/book/9780071360227	
3	https://www.buildersmart.in/blogs/arches-and-lintels/	
Course Designed By: Ms. Sudha		

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	M	L	S	S	S	L	L	S	L
CO2	L	M	L	S	S	S	L	L	S	L
CO3	L	M	M	S	S	S	L	L	S	L
CO4	L	L	M	M	M	M	L	L	M	L
CO5	L	M	M	S	S	S	L	L	S	S

*S-Strong; M-Medium; L-Low

Course code	33B	HISTORY OF INTERIOR DESIGN II	L	T	P	C
Core		Paper VI	4	-	-	3
Pre-requisite		BSc Interior Design, Semester 2 - History of Interior Design I	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Understand the Implications of various Styles and their applications over the centuries
2. To have a detailed understanding on the Modern Movement and Contemporary developments in Interior Design

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the style, visual elements, forms, patterns, geometry and proportions of various periods in architecture, interior design and furniture and display a clear vocabulary for specific description of architecture and interior elements	K1
CO2	Understand the implications of study of history on current practice of interior design and use	K2
CO3	Evaluate building typologies and their evolution over various periods through time	K5
CO4	Analyse the importance of technologies and materials in determining design, and infer their influence during different periods	K4
CO5	Evaluate how social, cultural, political, and geo-physical factors transform and affect the design of the built environment	K5
CO6	Analyse current implications in interior design that have evolved over a period of time, and the impact of individual designers in the field of building and interior design.	K4

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

Unit:1	INDIAN, CHINESE & JAPANESE	12 hours

Islamic Tradition- Mosques and Palaces, Furnishings, decorations. India - Buddhist, Hindu and Jain Architecture, Islamic influence, Indian furnishings, China - architecture, interiors & furniture. Japanese Architecture - material, structure, furnishings.

Unit:2	REVIVAL	12 hours

Regency Style - Furniture, Greek Revival, Gothic Revival, Industrial Revolution & Interiors - Iron and Glass, Victorian Style - Shaw & Queen Anne Revival, Vernacular House styles, Shaker Design.

Unit:3	ART MOVEMENTS	12 hours

Arts & Crafts Movement, Art Nouveu - Characteristics, Artists and Architects associated; Ecole-des Beaux Arts - Eclecticism for the masses- Rise of the Interior Decorator.

Unit:4	BAHAUS TO POST MODERNISM	12 hours

Emergence of Modernism - F.L. Wright, De Stijl. International Style - Walter Gropius/ Bauhaus, Mies Van DerRohe, Le Corbusier, Aalto. Art Deco, Industrial Style, Industrial Design, Postwar Modernism, Contemporary Design, 1990-present.

Unit:5	NEW AREAS OF INTERIOR DESIGN & CASESTUDIES	12 hours

New areas of exploration in interior design- Sustainability, Technology, Adaptive Reuse,

Historic Preservation, Style directions, Building and Interior types; Project Case Studies		
	Total Lecture hours	**60 hours**
Text Book(s)		
1	History of Architecture, Sir Banister Fletcher, CBS Publishers & distributors, New Delhi, 2017.	
2	History of Interior Design, Jeannie Ireland, Fairchild Books, 2008.	
3	A History of Interior Design, Judith Gura, John Pile, Laurence King Publishing; 4th Revised edition, 2013.	
Reference Books		
1	Interior Design Since 1900, Anne Massey, Thames & Hudson; Third Edition, 2008.	
2	Key Interiors since 1900, Graeme Brooker, Laurence King Publishing, 2013.	
3	History of Design - Decorative Arts and Material Culture, 1400-2000, Pat Kirkham, Susan Weber, Bard Center, 2013.	
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]		
1	https://nptel.ac.in/courses/124/106/124106009/	
2	http://www.visual-arts-cork.com/architecture-history.htm	
Course Designed By: Dr. Lakshmipriya		

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	M	S	L	L	L	L	L	L	L
CO2	M	L	S	L	L	L	L	L	L	L
CO3	L	L	S	L	L	L	L	L	L	L
CO4	L	L	L	M	L	L	S	L	L	L
CO5	S	L	L	L	L	L	L	L	L	L
CO6	L	L	L	M	L	L	L	S	L	L

*S-Strong; M-Medium; L-Low

Course code	33C	HUMAN FACTORS IN DESIGN	L	T	P	C
Core		Paper VII	3	-	-	3
Pre-requisite		B. Sc. Interior Design, Semester 2 – Interior Design Studio: Residential Design	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Comprehend the human factors to be considered in designing of interior spaces, furniture and products for human occupation and use.
2. Design interiors and furniture that positively affect user well-being and improve efficiency.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember User psychological needs, response and Proxemics withrespect to Design.	K1
CO2	Understand the relevance of Anthropometric Data and apply appropriately Anthropometric data in design of spaces and furniture.	K2
CO3	Apply practical understanding of Human factors to design ofResidential, Commercial, Healthcare & Educational Design.	K3
CO4	Analyze Universal and Inclusive design and its importance.	K4
CO5	Evaluate practical knowledge in designing for Diversity as inCultures, Elderly & Children.	K5
CO6	Understand Ergonomics for design of healthy productive interiorenvironments	K2

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	PROXEMICS	10 hours

Psychology of the client/user as crucial factors - influence of such factors in the design of the environment and interior architecture. Study of proxemics – effect of cultural and psychological factors on design

Unit:2	ANTHROPOMETRICS	10 hours

Issues of anthropometrics – shape and size of human beings - critical dimensions relating to human form such as height, width and length of reach- application of such data in design. Use of anthropometrics in residential spaces - healthcare spaces - audiovisual spaces-recreational spaces and public spaces-eating and drinking spaces

Unit:3	ERGONOMICS	9 hours

Concept of ergonomics – Meaning, importance, factors involved – worker, workplace, equipment, environment, climate. Work environment– Location, space, indoor and outdoor climate, furniture, lighting and ventilation, flooring, noise, storage facilities. Design of workplace – Activity analysis –Designing for work based on ergonomics principles.

Unit:4	UNIVERSAL DESIGN	8 hours

Universal Design, Human Diversity - Facts about the interaction of the environment and user - culture, gender, stage of life cycle, and physical characteristics, Designing for children, elderly and physically disabled. Environmental considerations.

Unit: 5	HUMAN FACTORS	8 hours

Human Factors in Residential, Commercial, Healthcare and Educational Design.

	Total Lecture hours	45 hours

Text Book(s)	
1	Human factors in the Built Environment, Linda L. Nussbaumer, Fairchild Books, 2013.
2	Human Dimension & Interior Space: A Source Book of Design Reference Standards, Julius Panero, Martin Zelnik, Watson-Guptill; New edition, 1979.
Reference Books	
1	Time-Saver Standards for Interior Design and Space Planning, Julius Panero, Martin Zelnik, McGraw-Hill Professional; 2nd edition, 2001.
2	Building Construction, Dr. B.C. Punmia, Ashok Kumar Jain, Laxmi; Tenth Edition, 2008.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/124/107/124107008/
2	https://www.youtube.com/watch?v=LAKlmdMHpdE
Course Designed By: Ms. Sudha	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	S	L	L	L	L	L	L
CO2	L	L	M	S	L	L	L	L	L	L
CO3	L	L	L	L	L	L	L	L	M	S
CO4	L	L	L	S	L	L	M	S	M	L
CO5	L	L	L	L	L	L	L	S	L	M
CO6	L	L	L	S	L	L	L	L	L	M

*S-Strong; M-Medium; L-Low

Course code	33P	INTERIOR DESIGN STUDIO II	L	T	P	C
Core		Practical - III	-	-	8	4
Pre-requisite		BSc Interior Design, Semester 2- Interior Design Studio I - Residential Design, Interior Drawing and CAD, Materials and Construction I	SyllabusVersion			2021-2022

Course Objectives:

The main objectives of this course are to:

1. Become familiar with Activities and related Space Standards, Anthropometry, Ergonomics, Furniture, Fixtures, Services and Systems as pertaining to Commercial Spaces such as Offices, Clinics, Kindergarten, Classrooms, etc.
2. Understand wall, ceiling and floor finish options for these spaces including coverings.
3. Develop Design ideation and development ability
4. Develop design drawing and presentation skills

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the standards, anthropometrical data, ergonomics and Proxemics	K1
CO2	Understand all the Elements and Principles of Design, their variations, application in different contexts and its impact on perception, comfort and use.	K2
CO3	Apply the composition of colours and create major impact in interiors	K3
CO4	Analyse the various services like acoustics, lighting and ventilation	K4
CO5	Evaluate how the elements of interior environments are modulated and organised by following the above-mentioned criteria	K5
CO6	Create various typology of interior designs and their applications in thespaces	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	TYPOLOGY, USER & CASE STUDIES	25 hours

Study of Commercial Spaces; Activity Analysis & Space Standards; Designing for Action, Connection and Awareness; Collective Symbols and Meaning; Designing for Choice and Autonomy, for physical comfort, Safety, Accessibility and connection to nature. Book Case Studies, Real Life Case Studies – Documentation, Analysis, and Inference for Design.

Unit:2	CONTEXT AND SITE ANALYSIS	30 hours

Analysis of Project Context – Site Analysis; Geographic, Topographic, Soil, Climatic, Wind and Sun direction, Cultural, Landscape, Access, Services & Utilities, Existing views, structures, materials, colours, service lines, circulation, water body, special features, wildlife and vegetation. – Inference for Design. Design Program, Bubble Diagram, Adjacency Matrix, Program Analysis Graphics.

Unit:3	CONCEPTUAL DESIGN	30 hours

Development of Design Concept presented as sketches with colours showing 2D and 3D versions of the idea evolution. Mood and Inspiration Board. Spatial distribution shall be to proportion and can be shown as single line drawing along with a Conceptual model

Unit:4	SCHEMATIC DESIGN	20 hours

Plan developed with a detailed layout, showing circulation, individual furniture groupings to scale, Elevations and Sections. Double line plan with elevations/ sections as needed to clarify design idea.

Unit:5	DESIGN PRESENTATION	15 hours
Final Rendered Presentation Sheets, with Plan, Elevations, Sections, 3D views, Model		
Workshop on Model making, Guest Lecture by Architects, Site Visits to Schools and Multiplexes		
	Total hours	**120 hours**

Text Book(s)	
1	Museum Exhibition Planning and Design, Elizabeth Bogle, 2013
2	Creating Exhibitions: Collaboration in the Planning, Development, and Design of Innovative Experiences 1st Edition - Polly McKenna – Cress, 2013
3	Office Furniture Design - Oscar Asenio, 2006
Reference Books	
1	Time-Saver Standards for Interior Design and Space Planning, Julius Panero, Martin Zelnik, McGraw-Hill Professional; 2nd edition, 2001.
2	Materials and Interior Design (Portfolio Skills), Rachael Brown, Lorraine Farrelly, Laurence King Publishing, 2012.
3	Construction and Detailing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence
	King Publishing, 2010.
4	Drawing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing, 2009.
5	Designs for 20th century Interiors – Fiona Leolie, VH Publications, London, 2000.
6	Interior Design; The New Freedom, Barbara lecDiamonstein, Rizzoli International Publications, New York, 1982.
7	Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.
8	Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.
9	The Fundamentals of Interior Design, Stephen Anderson, Simon Dodsworth, Bloomsbury Academic; 2nd Revised edition, 2015.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	http://www.interiordesign.net/projects/institutional/
2	https://www.ldbdesign.com/institution-interior-design
3.	http://www.interiordesign.net/projects/institutional/
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	L	L	S	L	L	S	L	L	L
CO2	L	S	L	M	L	L	L	L	L	L
CO3	L	L	L	S	L	L	L	L	L	L
CO4	L	L	L	L	S	L	L	L	L	L
CO5	L	S	L	M	M	L	L	L	L	L
CO6	S	L	L	L	L	M	L	M	M	M

*S-Strong; M-Medium; L-Low

Course code	3AA	COLOUR AND LIGHTING	L	T	P	C
Allied		Paper III	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 1 - Theory of Design, High School Math and Physics.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Select colour of specific hue, tint, shade to create desired ambience in an interior space.
2. Combine colours effectively to vary the mood and feel of an interior space by the type of colour composition chosen, the level of contrasts and intensity and extent of the same.
3. Design lighting layouts, select light fittings, luminaries and light colours depending on the degree illumination, direction and nature of light desired for the task.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember recent trends in use of colour and lighting in functional contexts.	K1
CO2	Understand the qualities of colour and lighting as design elements	K2
CO3	Apply a combination of colours effectively to vary the mood and feel of an interior space by the type of colour composition chosen, the level of contrasts and intensity and extent of the same	K3
CO4	Analyze colours to specific hue, tint and shade to create desired ambience in an interior space.	K4
CO5	Evaluate theoretical knowledge gained on colour and lighting to practical situations in interior design	K5
CO6	Create or design lighting layouts by selecting light fittings, luminaries and light colours depending on the degree illumination, direction and nature of light desired for the task.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	COLOUR	12 hours

Concept of colour - Colour in the interiors and exteriors; Dimensions of colour– Hue, value and intensity; Effects of hue, value and intensity; Colour systems–Prang, Munsell and Ostwald; Colour harmonies- Factors considered in selecting colour harmonies. Effect of light on colour; Psychology of colour.

Unit:2	LIGHT FUNDAMENTALS	12 hours

Physics of light - Reflection, Transparency, Filters, Lens, Refraction, Shadows, Luminance, Candela, Lumen, Flux, Lux, Illuminance. Human factors - sensing light, adaption, light and psychology. Natural light - direction, intensity, colour - daylight control.

Unit:3	LIGHTING BASICS	12 hours

Importance of lighting; Artificial lighting–Light sources; Types–based on material, reflection, uses; Specific factors in lighting– measurement of lighting, location and direction, size and shape and colour - Economy in lighting - Psychological aspects of lighting. Glare-its types, causes and prevention.

Unit:4	LIGHT FIXTURES	12 hours

Accessories-Meaning, Types-functional, decorative, both functional and decorative - Lighting accessories-fixtures, Lighting for areas and specific activities - Sources of electric light - dispersive, concealed, directional, visualising patterns of light, lighting control systems.

Unit:5	LIGHTING DESIGN	12 hours

Lighting principles - change and variation, visual hierarchy, layers, drama, changing and

controlling light, Application of lighting design concepts and colour selection to interiors. Case study analysis. Selection of colour and light to create specific moods, effects, and work conditions.		
	Total Lecture hours	**60 hours**
Text Book(s)		
1	Fundamentals of Lighting, Susan M. Winchip, Fairchild Books; 2 edition, 2011.	
2	Modern Concepts of Colour and Appearance , Choudhar, A. K. R., Oxford and IBH Publishing Co. Pvt. Ltd, New Delhi, 2000.	
Reference Books		
1	Designing With Light: The Art, Science and Practice of Architectural Lighting Design, Jason Livingston, John Wiley & Sons, 2014.	
2	Lighting Design Basics, Mark Karlen, James R. Benya, Wiley; 2 edition, 2012.	
3	Colour in Interior Design, John. F.P, McGraw Hill company, New York, 1997.	
4	The Secret Language of Colour: Science, Nature, History, Culture, Joann Eckstut, Arielle Eckstut, Leventhal Publishers; First Edition, 2013.	
5	Architectural Lighting: Designing with Light and Space, Hervé Descottes, Cecilia Ramos, Princeton Architectural Press, 2011.	
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]		
1	https://dengarden.com/interior-design/interiorlighting-internalwallscolours	
2	https://www.blueistyleblog.com/how-lighting-affects-interior-design/	
3	https://www.benjaminmoore.ro/en/interior-design/light-in-interior-design/	
Course Designed By: Ms. Sudha		

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	L	S	L	L	S	L	M	M
CO2	L	M	L	S	L	L	L	L	L	L
CO3	L	M	L	S	L	L	L	L	L	L
CO4	L	M	L	S	L	L	L	L	L	L
CO5	L	M	L	S	L	L	L	L	L	L
CO6	L	M	L	S	L	L	L	L	L	L

*S-Strong; M-Medium; L-Low

Course code	3ZP	COMPUTER APPLICATIONS I - PRACTICAL	L	T	P	C
Skill Based Subject		Skill Based Subject I	-	-	5	3
Pre-requisite		BSc Interior Design, Semester 2- Interior Drawing and CAD	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. To improves basic proficiency in architectural office software; transposing textual, numerical and graphic information across software platforms and devices to describe concepts holistically
2. To covers fundamentals in 3D Visualization (SketchUp)
3. Develop advanced perspective rendering techniques and to use in the expression of conceptual ideas and images

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember basics of SketchUp for 3D modelling and MS Excel for data analysis	K1
CO2	Understanding of basic working knowledge of Basic 3D modelling in SketchUp and presentation software	K2
CO3	Apply the learnt architecture knowledge in digital for to have a good presentation skill	K3
CO4	Analysis analytical data‟s like BOQ using the MS Excel	K4
CO5	Evaluating the realistic experience of the material in design	K5
CO6	Create 3D modelling form advanced 2D work with emphasis on integration of design project presentation and documentation standard.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	NUMERICAL PROCESSING	12 hours

Numerical Processing: Preparing and editing spreadsheets in software like MS Excel, Collating raw data into numbers for analytical use. Presentation of data as tables, charts and graphs. Inserting tables, texts and images in drawings for print and projection formats.

Unit:2	SLIDE PRESENTATIONS	13 hours

Slide Presentations: Using software like MS PowerPoint to create effective presentations, insertion of drawings, video clips, formatting and setting up presentation.

Unit:3	SKETCHUP 1	25 hours

Interface basics, Creating Scenes, Manipulating Objects, Advanced selection tools, Drawing shapes and altering,3D text, Measuring and Labelling, Creating sections, Working with Components, Working with the Solid Tools, Using Boolean operations. Exercises -- furniture, fixtures and artifacts.

Unit:4	SKETCHUP 2	25 hours

Introducing the 3D Warehouse, Organizing Scenes, Creating Textures and Materials, Material Editor, Mapping textures on straight and curved objects, Creating and sculpting Terrain, Using Photo Match and Google Earth, Introduction to animation. Exercises -- interior spaces.

	Total Lecture hours	75 hours

Text Book(s)

1	MS-Office 2010 Training Guide by Prof. Satish Jain, M. Geetha
2	Microsoft PowerPoint 2016 Step By Step Paperback – 2016 by Lambert Joan
3	The Sketchup Workflow for Architecture by Michael Brightman

Reference Books	
1	Illustrated Microsoft Office 365 & Excel 2016 – 17, Elizabeth Eisner Reding (Author), Lynn Wermers (Author) ,2016.
2	SketchUp for Interior Design: 3D Visualising, Designing, and Space Planning, Lydia Cline, John Wiley and Sons, 2014.
3	Interior Design Visual Presentation: A Guide to Graphics, Models and Presentation Techniques, Maureen Mitton, 2012.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.udemy.com/course/microsoft-excel-2013-from-beginner-to-advanced-and-beyond/
2	https://www.udemy.com/course/case-study-powerpoint-2013-presentation-slide-by-slide/
3	https://www.udemy.com/course/sketchup-for-interior-design/
Course Designed By: Mr. Ashly Fabin	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	M	L	M	L	L	S	L	L	M
CO3	L	L	L	M	L	M	S	L	L	L
CO3	L	L	L	L	L	L	S	L	L	L
CO4	L	L	L	L	M	L	S	L	M	M
CO5	L	L	L	L	L	M	S	L	L	L
CO6	L	M	L	L	L	M	S	L	L	L

*S-Strong; M-Medium; L-Low

Fourth Semester

Course code	43A	MATERIALS AND CONSTRUCTION III	L	T	P	C
Core		Paper VIII	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 3 - Materials And Construction II	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Develop a wide knowledge of the kind of materials used in interior design.
2. Select materials and manipulated them creatively to satisfy design needs formulating unique design solutions.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Understand the various types of doors, windows, ventilators and materials used in them	K2
CO2	Understand different types of stairs and components of staircase.	K2
CO3	Analyze various materials and joinery in furniture and fittings	K4
CO4	Evaluate the materials used in finishes of doors/windows, floors, wall and ceilings and make the right choice	K5
CO5	Create a list with appropriate choice of materials and finishes for various types of construction.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	ACCESS, WINDOWS, VENTILATORS	12 hours

Doors-types, materials used, detailing, finishing; Windows/ Ventilators- types, materials used, detailing, finishing.

Unit:2	STAIRWAY, MEZZANINE CONSTRUCTION & MATERIALS	12 hours

Stairs - Timber, Steel, Stone and Concrete, Handrails, cantilevered treads, glass stairs.

Unit:3	FURNITURE & FITTINGS	12 hours

Furniture & Fixtures - Basic principles - base structures, joints, decorative joints, veneer, finishes, built-in seating, floating furniture, Shelving, Cabinet Countertop– Solid Surfacing, Lacquered Glass, Laminate, Veneer, Solid Wood, Plywood, MDF, Hardware– Fittings, Locks, Handles, Sliders, Hinges, bolts. Cabinet Hardware.

Unit:4	FINISHES	12 hours

Wall – Paint, Stain & Polish, Wall Paper, Art, Print, Glass, Panel, Mural; Ceiling Paint, Stain & Polish, Gyp, Glass, Wood, Metal; Floor – Paint, Polish, Tile, Vinyl, Carpet.

Unit:5	ADVANCED CONSTRUCTION TECHNIQUES AND MATERIALS	12 hours

Advanced concrete building components and construction techniques. To include folded plates, shell structures, vaults, domes, pneumatic structures, tensile structures. Their composition, construction and finishing.

	Total Lecture hours	60 hours

Text Book(s)

1	Construction and Detailing for Interior Design, Drew Plunkett, Laurence King Pub, 2014.
2	Building Construction, Dr. B.C. Punmia, Ashok Kumar Jain, Laxmi; Tenth ed, 2008.
3	Materiality and Interior Construction, Jim Postell, Nancy Gesimondo, Wiley, 2011.
4	Interior Detailing: Concept to Construction, David Kent, John Wiley & Sons, 2010.
5	Ching - Building Construction Illustrated, Francis D. K. VNR, 1975.

Reference Books	
1	Materials and Components of Interior Architecture, J.Rosemary Riggs, Prentice Hall; 8 edition, 2013.
2	Interior Architecture, Jennifer Hudson, Laurence King Publishing, 2007.
3	USG, The Gypsum Construction Handbook, RS Means; 7 edition, 2014.
4	S.K. Duggal, Building Materials, New Age International Publishers, 4th Ed., 2012.
5	Ultimate Wall Book: A Step-by-step Guide to Creating Over 50 Design Solutions, Victoria Ellerton, Collins & Brown, 1998.
6	Engineering materials, S.C.Rangwala - Charotar Publishing, 2014.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/124/107/124107011/
2	https://www.windowmaster.com/solutions/natural-ventilation/natural-ventilation-design-guidelines
3	https://www.homify.in/ideabooks/5101013/7-tips-for-cross-ventilation-in-indian-homes
Course Designed By: Ms. Sudha	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	M	L	M	S	S	L	L	M	L
CO2	L	M	L	M	S	S	L	L	M	L
CO3	L	M	M	M	S	S	L	L	M	L
CO4	L	L	M	M	S	S	L	L	M	L
CO5	L	M	M	S	S	S	L	L	M	S

*S-Strong; M-Medium; L-Low

Course code	43B	BUILDING SERVICES	L	T	P	C
Core		Paper IX	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 3 - Interior Design Studio II Materials and Construction II Human Factors in Design	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Understand the engineering behind all services systems in built environment.
2. Ability to incorporate effective service systems in the building interiors.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Expose to the fundamentals of environmental factors affects building system.	K1
CO2	Understand the water supply and sanitation engineering.	K2
CO3	Ability to design electrical, communication and acoustical systems in various built environment.	K3
CO4	Gain knowledge in various air- conditioning systems and fire safety design.	K4
CO5	Knowledge on the basic design principles of vertical distributions systems within a building.	K3

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	BUILDING AND ENVIRONMENT	12 hours

Building and Enclosure- Environmental Factors- Environment control– importance of environment control advantages, elements to be controlled in the interiors – Temperature, Humidity and moisture, wind, air movement and quality, Day lighting and illumination, sound and Acoustics, sanitation, movement and accessibility.

Unit:2	WATER SUPPLY AND DRAINAGE SYSTEMS	12 hours

Water supply systems – quality and distribution – protecting the water supply – hot water– retaining rainwater–waste piping and vent piping – waste water treatment– plumbing systems, piping layouts, sanitary fixtures, fittings and standards for kitchen, toilet and bath, appliances and equipment.

Unit:3	FUNDAMENTALS OF ELECTRICAL & ELECTRONIC SYSTEMS, ACOUSTICS	12 hours

Electricity: Electrical distribution and safety systems in buildings; fixtures, equipment, and Appliances; electrical circuitry and internal wiring; electrical loads, peak demand, operational costs; Communication: Intercoms, Wi-Fi, broad band data cabling, and CCTV systems - Acoustics: Basic concepts of sound and acoustics; sound insulation and transmission; absorption,reverberation, noise control and attenuation; acoustical requirements for different space types and design planning; site planning for noise control; exposure to acoustics design software.

Unit:4	DESIGN ASPECTS OF AIR-CONDITIONING AND FIRE SAFETY SYSTEMS	12 hours

Air-conditioning: Principles and components of mechanical ventilation and air- conditioning systems; calculation based on design conditions and system sizing, design considerations for chiller rooms, cooling plants, AHUs; integration with natural ventilation, and other energyconserving technologies - Fire Safety: Fire sources, spreading, and growth decay curve; material fire response and fire retardant materials; fire hydrants, fire escapes, refuge areas,fire tender access; smoke detector, alarm, and sprinkler systems; representation of fire considerations in drawings.

Unit:5	MECHANICAL TRANSPORTATION / CONVEYING SYSTEMS	12 hours
Access and movement systems - Elevators and escalators - Types and applications, Estimating the load, and size requirements, special and custom elevators - domestic elevators, chair lifts. Ramps and accessibility, recommended ramp slopes for accessibility in interiors.		
	Total Lecture hours	**60 hours**

Text Book(s)	
1	Water Supply and Sanitary Engineering (Environmental Engineering) Rangwala,P.B, Charotar Publishing House, 2005
2	Architectural Utilities 3: Lighting &Acoustics, Salvan, George S., JMC Press, 1999
3	Manual of Tropical Housing and Building, Koenigsberger, lngersoll & Mayhew, Orient Longman, Universities Press Pvt Limited, 1975.
4	Lifts, Elevators, Escalators and Moving Walkways/Travelators, Bangash, M.Y.H. & Bangash T, CRC Press; 1st Edition, 2007.
Reference Books	
1	National Building Code, Bureau of Indian Standards, 2016.
2	ASHRAE Fundamentals Handbook, 2013.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/105/107/105107156/
2	https://www.youtube.com/watch?v=5y_VBiTiuAY
3	https://www.youtube.com/watch?v=1jfNIBtfWDY
Course Designed By: Ms. Sudha	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	M	L	L	H	M	H	M	M	M
CO2	L	L	L	L	H	H	H	M	M	M
CO3	L	M	L	H	H	H	H	M	M	M
CO4	L	L	L	M	H	M	M	M	M	M
CO5	L	M	L	M	H	H	H	M	M	M

*S-Strong; M-Medium; L-Low

Course code	43P	INTERIOR DESIGN STUDIO III	L	T	P	C
Core		Practical IV	-	-	8	4
Pre-requisite		BSc Interior Design, Semester 3 - Colour and Lighting; Materials and Construction II; Human Factors in Design; Interior Design Studio II; Computer Applications I	Syllabus Version		2021-2022	

Course Objectives:

This studio course guides student in identifying relevant data to inform the design of Retail Spaces. It is structured to lead investigations and design process to develop an understanding of the retail behavior patterns, visual display systems, materials, lighting and design trends in the retail industry and related fields such as advertising, film, graphic design and fashion.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Understand fundamentals of Merchandising and Retail Display	K2
CO2	Use form, orientation, material, colour and light to direct attention towards retail space and eventually the product on display–while establishing a unique memorable brand identity.	K3
CO3	Manipulate materials, surface finishes, colour and lighting to create the intended sensorial impact and memory.	K3
CO4	Analyze Design ideas and develop a strong relevant Design Concept	K4
CO5	Evaluate the concept under varied conditions to develop design details	K5
CO6	Create Detailed design presentation drawings and model	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	**INTRODUCTION**	**15 hours**

Study of Retail Spaces; Activity Analysis & Space Standards; Designing for Emphasis, Impact, Memory. Collective Symbols and Meaning; Display and Storage Requirements, Consumer and Seller Survey to inform Design. Space Standards, Anthropometric and Ergonomic Data.

Unit:2	**CASE STUDIES**	**20 hours**

Book Case Studies, Real Life Case Studies – Documentation, Analysis, and Inference for Design.

Unit:3	**SITE ANALYSIS – CONTEXTUAL STUDY**	**25 hours**

Analysis of Project Context – Site Analysis; Geographic, Topographic, Soil, Climatic, Wind and Sun direction, Cultural, Landscape, Access, Services & Utilities, Existing views, structures, materials, colors, service lines, circulation, water body, special features, wildlife andvegetation.

Unit:4	**CONCEPTUAL DESIGN**	**30 hours**

Development of Design Concept presented as sketches with colors showing 2D and 3D versions of the idea evolution. Spatial distribution shall be to proportion and can be shown as single line drawing along with a Conceptual model

Unit:5	**SCHEMATIC DESIGN**	**20 hours**

Plan developed with a detailed layout, showing circulation, individual furniture groupings to scale, Elevations and Sections. Double line plan with elevations/ sections as needed to clarify design idea.

Unit:6	**DESIGN PRESENTATION**	**10 hours**

Final Rendered Presentation Sheets, with Plan, Elevations, Sections, 3D views, and Model for the Viva Voce Presentation.

	Total Lecture hours	**120 hours**

Text Book(s)	
1	Interior design principles and practice, Pratap R.M Standard Publishers Distribution, Delhi, 1988.
2	"Interior design", Chaudhari, S. N, Jaipur: Aavishkar Publishers, India, 2005.
Reference Books	
1	Time-Saver Standards for Interior Design and Space Planning, Julius Panero, Martin Zelnik, McGraw-Hill Professional; 2nd edition, 2001.
2	Materials and Interior Design (Portfolio Skills), Lorraine Farrelly, Rachael Brown, Laurence King Publishing, 2012.
3	Construction and Detailing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing, 2010.
4	Drawing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing, 2009.
5	Designs for 20th century Interiors–Fiona Leolie, VH Publications, London, 2000.
6	Interior Design; The New Freedom, Barbara lecDiamonstein, Rizzoli International Publications, New York, 1982.
7	Interior Colour by Design, Jonathan Poore,Rockport Publishers, 1994.
8	Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.
9	The Fundamentals of Interior Design, Stephen Anderson, Simon Dodsworth, Bloomsbury Academic;2nd Revised edition, 2015.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.slideshare.net/renurajbahak/presentation-on-furniture-design
2	https://www.shopify.in/retail/120057795-how-to-create-retail-store-interiors-that-get-people-to-purchase-your-products
3	https://www.dezeen.com/2020/07/17/forte-forte-shop-interiors-madrid/
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	M	L	L	S	M	L	L	L	M
CO3	S	M	L	L	S	M	L	L	L	M
CO3	S	M	L	L	S	M	L	L	L	M
CO4	S	M	L	L	S	M	L	L	L	M
CO5	S	M	L	L	S	M	L	L	L	M

*S-Strong; M-Medium; L-Low

Course code	4AA	LANDSCAPE FOR INTERIORS	L	T	P	C
Allied		Paper IV	4	-	-	4
Pre-requisite		High School History and Science, BSc Interior Design, Semester 1 - Theory of Design; Semester 2 and Semester 3 - Materials and Construction I and II.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Develop interior landscape design layouts integrating built environment with nature.
2. Identify and select plants appropriate to the context and design intent.
3. Create maintenance and water management systems for optimal performance.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember to identify and select plants appropriate to the context and design intent.	K1
CO2	Understand various principles associated with the interiors and landscape and the relevance of landscape and culture throughout the history and various types of lawn.	K2
CO3	Apply basic knowledge on selection of Indoor plants and enumerate the conditions of plant growth.	K3
CO4	Analyze practical understanding of interior decoration and interior design	K4
CO5	Evaluate maintenance and water management systems for optimal performance.	K5
CO6	Create interior landscape design layouts integrating built environment with nature and aesthetically pleasing flower arrangements.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION	12 hours

Landscaping –Meaning and importance, Types of garden, garden components, garden design– formal and informal layouts, principles of landscape design- factors affecting design of landscape in interiors.

Unit:2	LANDSCAPE DESIGN AROUND THE WORLD	12 hours

Landscape design concepts across cultures - the English garden, the Japanese garden, the Mughal garden, Factors affecting approach to landscape design - space availability, climate and soil, design intent and use, stylistic purpose and scale. Lawn–importance, preparation, methods of cultivation, use, maintenance, Types of lawn.

Unit:3	INDOOR PLANTS	12 hours

Indoor plants– Selection of plants based on location, purpose, design effect and maintenance, principles of growing, potting and repotting techniques, pot culture potted plants, display and placement, upkeep and maintenance.

Unit:4	FLOWER ARRANGEMENT	12 hours

Use of flowers and containers for Interior Decoration–Importance, basic shapes, styles in flower arranging traditional, oriental, modern, free expression, dried and pressed flowers, fundamentals of Ikebana and styles of Ikebana.

Unit:5	TRENDS IN INTERIOR GARDEN	12 hours

Modern trends in gardening– Terrace garden, Rock garden, water garden, Bonsai culture, terrarium, developing ornamental plants in Home garden for flats –roof garden, hanging garden, Kitchen garden; Hard landscape – materials and construction details

	Total Lecture hours	60 hours

Text Book(s)	
1	Competitive Book on Floriculture and Landscaping, Sathyanarayana. E.A, Jain Brothers, New Delhi, 2019.
2	Manual of Interior Plantscaping – A guide to design, installation and maintenance, Fediw. K. Timber Press, 2015.
Reference Books	
1	Gardening with containers, Carter, G. Ryland peters and small, London, 1997.
2	Creating boundaries and Screens, Bird, R, Ryland peters and Small, London, 1998.
3	Grasses and Bamboos, Kingsburry. N. Ryland Peter and small, London, 2000.
4	BONSAI– The Art of growing miniature trees, Dey, S.C. Agrobios (India) publishers, Jodhpur, (2001).
5	House plant style, Conder, S, Michael O‟mara Books limited, London, 1993.
6	Dried flower Arranging, Lawrence, M. Anaya publishers, London, 1994.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/124/105/124105001/
2	https://www.groundsguys.com/blog/2017/september/the-beautiful-benefits-of-interior-landscaping/
3	https://cdn.ymaws.com/www.lcamddcva.org/resource/resmgr/Docs/d_lca_pt3_Interior_Landscape.pdf
Course Designed By: Ms. Sudha	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	S	S	L	M	L	S	L
CO3	L	L	L	S	S	L	M	L	S	L
CO3	L	L	L	S	S	L	M	L	S	L
CO4	L	L	L	S	S	L	M	L	S	L
CO5	L	L	L	S	S	L	M	L	S	L
CO6	L	L	L	S	S	L	M	L	S	L

*S-Strong; M-Medium; L-Low

Course code	4ZP	COMPUTER APPLICATIONS II - PRACTICAL	L	T	P	C
Skill Based Subject		Skill Based Subject II	-	-	8	3
Pre-requisite		BSc Interior Design, Semester 3 – Computer Applications I	Syllabus Version		2021-2022	

Course Objectives:

This course provides advanced proficiency in software for design, presentation and building information management. Ability to make photorealistic imagery of architectural objects 3D CAD software through rendered perspective and walk-through rendered perspective and walk-through presentations. Basic programming and scripting for architectural applications will be introduced.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Create 3D objects by working with and navigating the unique features of the digital 3D modelling workspace	K6
CO2	Create a 3D environment featuring lighting and textures	K6
CO3	Create basic 3D models and animations	K6
CO4	Create and render a 3D image and photorealistic render	K6
CO5	Evaluating the realistic experience of the material in design	K5
CO6	Create 3D modelling form advanced 2D work with emphasis on integration of design project presentation and documentation standard.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

UNIT I	ADVANCED CAD	30 hours

Advanced CAD features for operational efficiency: 2D Isometric drawing, Isometric dimensioning, creating tool palettes, External reference drawing files, creating and using Dynamic Blocks, Viewports- controlling layers, colour, line weight.

UNIT II	BASIC 3D MODELING IN CAD	30 hours

Basic Exercises in 3D CAD software (AutoCAD/3DS Max/Revit), Understanding the co-ordinate system, 3D primitives, solid modelling and surface modelling, - meshes, complex solids and surfaces, solid editing, 3D modifying, converting and sectioning.

UNIT III	RENDERING	30 hours

Rendering 3D views using material palettes, colours, textures, shades and shadows. Inserting objects from digital libraries and other sources, using software such as Lumion/ Blender/ Vray; Rendering 3D models: Material Browser, Assigning materials, material mapping, creating your own material - reflectivity, transparency, cut-outs, environment settings, Using render plugins in various software.

UNIT IV	ANIMATION	30 hours

Setting the Scene, Camera move/pan/ tilt animation, 3D animation, walk-through sequence, superimposing animated videos over base images.

	Total Lecture hours	120 hours

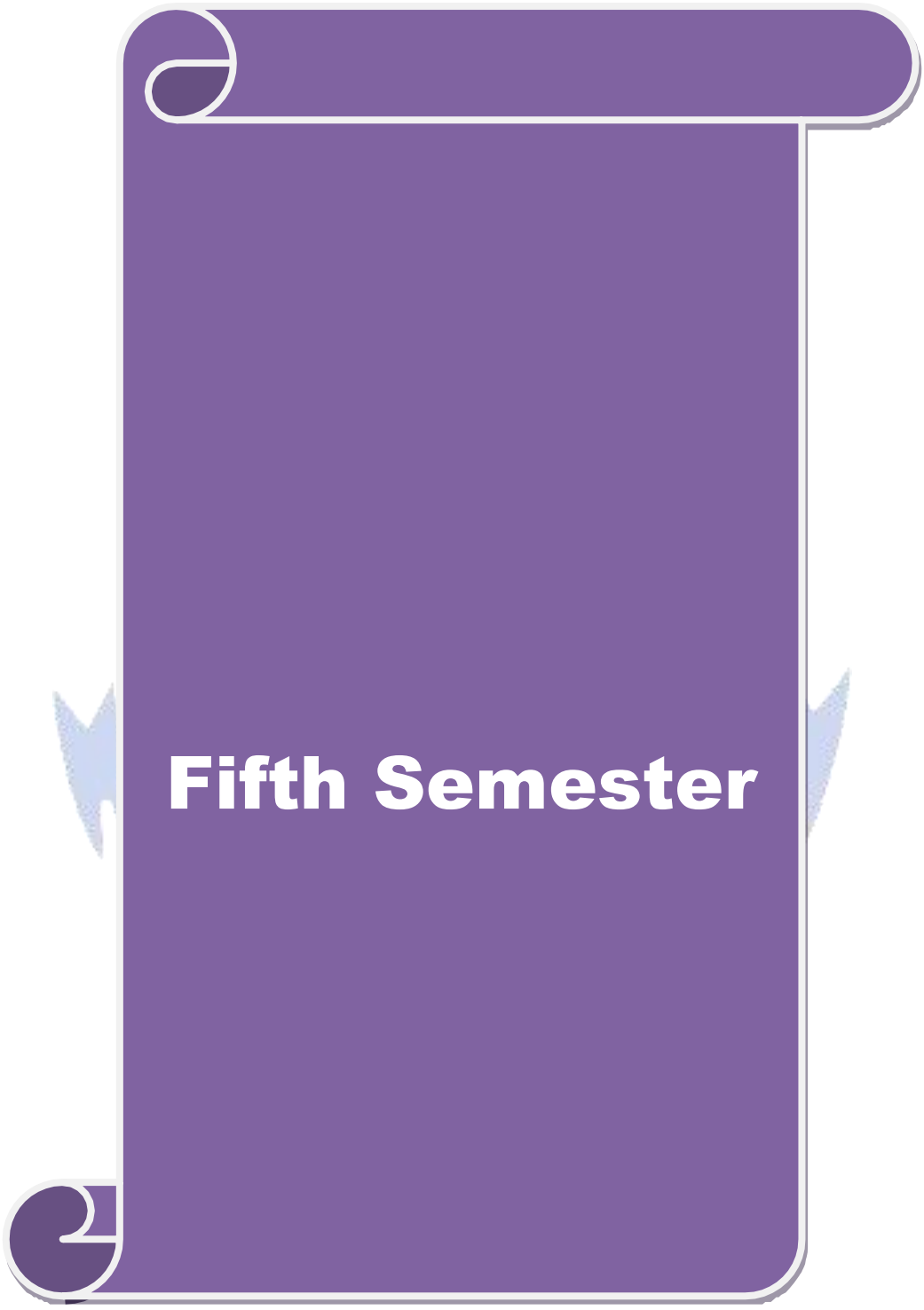
Text Book(s)

1	Interior Design Visual Presentation: A Guide to Graphics, Models and Presentation Techniques, Maureen Mitton, John Wiley & Sons, 2012.
2	Mastering AutoCAD 2018 and AutoCAD LT 2018, George Omura, Brian C. Benton, Autodesk Official Press, Sybex, 2017.
3	SketchUp 2014 for Architectural Visualization, Thomas Bleicher, Robin de Jongh, 2010.
4	Autodesk 3ds Max 2018: A Comprehensive Guide, Sham Tickoo, BPB Publishing, 2018.

Reference Books	
1	SketchUp for Interior Design: 3D Visualising, Designing, and Space Planning, Lydia Cline, John Wiley and Sons, 2014.
2	AutoCAD 2021 for the Interior Designer, Dean Muccio, SDC Publications, 2020.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.youtube.com/watch?v=eMdCDFISkiw
2	https://www.udemy.com/course/autocad-2018-course/
3	https://www.udemy.com/course/3ds-max-vray-advanced-architectural-exteriors/
Course Designed By: Mr. Ashly Fabin	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	M	L	M	L	L	S	L	L	M
CO2	L	L	L	M	L	M	S	L	L	L
CO3	L	L	L	L	L	L	S	L	L	L
CO4	L	L	L	L	M	L	S	L	M	M
CO5	L	L	L	L	L	M	S	L	L	L
CO6	L	M	L	L	L	M	S	L	L	L

*S-Strong; M-Medium; L-Low


Fifth Semester

Course code	53A	BASICS IN ARCHITECTURE	L	T	P	C
Core		Paper X	5	-	-	4
Pre-requisite		High School History of India and the World, BSc Interior Design, Semester 1- Theory of Design, Semester 2, 3 – History of Interior Design I, II; Semester 2, 3 – Materials and Construction I, II	Syllabus Version		2021-2022	

Course Objectives: Awareness of Architecture through the ages, Material and Construction I, Basic Math & Physics concepts

The main objectives of this course are to:

1. Enable the students to gain an overview of Architectural History from ancient times to now.
2. Understand the Fundamentals of Architecture that guide design decisions.
3. Recognize the Elements of Design and Forms of Construction.
4. Identify features of modern architecture as modified by current cultural changes and material & construction technologies, and cultural implications.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the development of architecture from pre historic time till now and the cultural and contextual determinants that produced that architecture.	K1
CO2	Understand architecture as evolving within specific cultural contexts including aspects of politics, society, religion, climate, the tools used and the different uses of building materials.	K2
CO3	Apply the knowledge of the development of architectural form with reference to Technology, Style and Character from the history of world architecture in creating specific designed impact.	K3
CO4	Analyze the spatial, structural and stylistic qualities associated with architecture and their contribution to the development of arches, post, lintel, truss, vaults, domes and orders.	K4
CO5	Evaluate how social, cultural, political, and geo-physical factors transform and affect the design of the built environment	K5
CO6	Examine the evolution of architects work and at the same time try to understand how they react to current challenges and opportunities in the profession and society.	K5
CO7	Create a knowledge for designing a space by understanding why a building was created a certain way in any given point in history.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION – EARLY HISTORY	15 hours

Introduction – definition of Architecture; The Beginnings – Early History: Elementary forms of construction – arch, post, lintel, cantilever roofing techniques – truss, vaults and domes. Egyptian and Mesopotamian architecture – Formation & Development; characteristic features, typical examples - Greek - Acropolis and Parthenon; development of post and lintel system- doric, ionic and Corinthian orders; Roman Forum, Pantheon and colosseum; development of arches and domes; Gothic- Chartres cathedral; vaults & buttresses.

Unit:2	INDIAN ARCHITECTURE	15 hours

Introduction, Ajantha and Ellora Caves; Buddhist Architecture – Characteristic features- Sanchi stupa, Sthamba, Viharas and chaityas. Hindu Architecture (North) -Sun temple - Konark, (South) – Brihadeshwar temple, Meenakshi Amman Temple, Rock cut Temples – Mahabalipuram.

Islamic architecture – characteristic features. Taj Mahal, Charminar, Buland-Darwaza-FatepurSikri; Gateway of India, Victoria Memorial, The Open Hand, Lotus Temple-its architectural features.		
Unit:3	**MORDERN ARCHITECTURE**	**15 hours**
Renaissance – Industrial Revolution - Modern architecture- modern materials and new techniques, Great Architects of modern age- Le Corbusier, Mies Vander Rohe, Frank Lloyd Wright, Charles Correa, BV Doshi, Laurie Baker.		
Unit:4	**FUNDAMENTALS OF ARCHITECTURE**	**15 hours**
Form; Space; Order; Elements of Architecture – Types, Systems and Components that inform design; The Design Process – Tools and Techniques for Generating Ideas.		
Unit:5	**MATERIALS, CONSTRUCTION & PRACTICE**	**15 hours**
Material qualities, Characteristics and Behaviours; Methods of Construction – Building structure – Reusing the forces that act against the Buildings; Building systems. Architectural Practice and Communication; Allied Disciplines – Interior Design, Urbanism, Landscape Design.		
	Total Lecture hours	**75 hours**

Text Book(s)	
1	A History of Architecture, Sir Banister Fletcher, CBS Publications (Indian Edition), 20th Edition, 2002.
2	A Global History of Architecture, Francis D.K. Ching, Mark M. Jarzombek, and Vikramaditya Prakash, 3rd Edition, John Wiley, 2013.
3	Architecture-Form, Space and Order, Francis D.K.Ching, Van Nostrand Reinhold Company, New York, 2007.Art Students; Universities Press, 2012.
Reference Books	
1	Introduction to Architecture, Francis D. K. Ching, James F. Eckler, Wiley; 1 edition, 2012.
2	Handbook of Indian Architecture, Satyamurthy, Ashish publishing house, New Delhi, 1991.
3	Advances in building materials and construction, Rai,M. and Jaisingh, M.P, Roorkhee Central Building Research Institute, 1986.
4	Vastu- The User‟s Manual, Prabhakar,L.U, The Avenue Press, Chennai, 1998.
5	Indian Temples, Oxford University Press, London, 1995.
6	The Principles of Architecture: styles, structure and design, Foster.M, New Burlington, London, 1989.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://centerfordiagonality.org/the-ancients/
2	https://swayam.gov.in/nd1_noc20_ar02/preview#:~:text=From%20the%20Indus%20Valley%20Civilization,one%20aspect%20of%20material%20expression.
3	https://swayam.gov.in/nd1_noc20_ar08/preview
4	https://nptel.ac.in/courses/124/107/124107012/
5	https://nptel.ac.in/courses/124/106/124106009/
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	M	S	S	L	M	L	L	L	L
CO2	S	M	S	S	L	S	L	L	L	L
CO3	S	M	M	M	L	M	L	L	L	L
CO4	S	M	M	S	L	M	L	L	L	L
CO5	S	M	M	S	L	L	L	L	M	L
CO6	S	M	M	S	L	S	L	M	M	L
CO7	S	S	M	S	L	L	L	L	L	M

*S-Strong; M-Medium; L-Low

Course code	53B	ESTIMATION AND COSTING	L	T	P	C
Core		Paper XI	4	-	-	3
Pre-requisite		BSc Interior Design, Semester 2, 3, 4 – Materials and Construction I, II & III	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Estimate quantity of each individual type of interior work to be done within the larger project
2. Calculate the materials needed for each work – for purchase of the same
3. Arrive at an estimate of the Project Cost from agreed unit rates for each work involved and material selected.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the importance of estimation while planning for a building project.	K1
CO2	Understand to calculate the materials needed for each work – for purchase of the same.	K2
CO3	Apply the estimation quantity of each individual type of interior work to be done within the larger project.	K3
CO4	Analyze the difference in quality and quantity of materials utilised in Interior Design	K4
CO5	Evaluate to arrive at an estimate of the Project Cost from agreed unit rates for each work involved and material selected.	K5
CO6	Create a detailed estimation and costing for a particular interior project	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	WALL AND CEILING	12 hours

Estimation for Wall Construction, Estimation for Partitions, Doors, Fixed Glass/ Windows. Estimation for Wall and Ceiling Treatments, Paint –Calculation of prices for Wall coverings – Introduction to other wall materials such as wall tiles and panelling - Estimation and costing of Suspended Ceilings.

Unit:2	FLOOR	12 hours

Flooring Estimation - Plank and Tile Flooring –Resilient Flooring and Soft Flooring, Area Rugs– Explanation of product, product sizing and packaging – Commonly used flooring products and their estimation and costing.

Unit:3	CABINETRY & FURNITURE	12 hours

Introduction to Built-In work, Discussion of Countertops and Cabinetry – Product sizing and packaging. Pricing of Cabinetry using pricing grids, Construction and Finish Costing of all components of Countertops and Cabinetry.

Unit:4	WINDOW TREATMENTS	12 hours

Window Treatments –Common types of window treatments – specifications and pricing– Top Treatments, Window Shades and Hard Treatments- Curtains and Drapery – Pattern and material estimation, Blinds and other coverings,

Unit:5	SOFT FURNISHINGS & ARTIFACTS	12 hours

Soft Furnishing and upholstery, Bedding: Spreads, Shams, Coverings; Reupholstered and Slipcovered Furniture – Calculate pricing from an upholstery manufacturer‟s price list – Issues designer must consider when issuing an estimate.

	Total Lecture hours	**60 hours**
Text Book(s)		
1	A Text book of Estimation and Costing (Civil), Kohli. R. C., S. Chand Publishing, New Delhi, 2012.	
2	Electrical Wiring Estimation and Costing, Uppal, S. L., and Garg. G. C. Khanna Publishers, New Delhi, 1986	
Reference Books		
1	Estimation construction costs, Peurifoy. R. L., and Oberlender, G. D. McGraw Hill, New York, 2013	
2	Estimating and Costing for Interior Designers: A Step-by-Step Workbook, Diana Allison, Bloomsbury Publishing India Private Limited, 2014.	
3	Estimating for Interior Designers, Carol Sampson, Watson-Guptill; 2nd Revised edition, 2001.	
4	Professional Practice for Interior Designers Hardcover – Import by Christine M. Piotrowski (Author) Publisher: John Wiley & Sons; 3rd Edition, 2001.	
5	Interior Design Reference Manual: Everything You Need to Know to Pass the NCIDQ Exam Paperback – Import by David Kent Ballast (Author) Publisher: Professional Pubns Inc; 6 edition, 2013.	
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]		
1	https://www.youtube.com/watch?v=r0aDjTLxy5c	
2	https://happho.com/interior-design-estimates/	
3	http://nsmarjiwe.blogspot.com/2012/10/estimation-in-interior-designing.html	
Course Designed By: Ms. Sudha		

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	M	M	M	M	S	M	S
CO3	L	L	L	M	M	M	M	S	M	S
CO3	L	L	L	M	M	M	M	S	M	S
CO4	L	L	L	M	M	M	M	S	M	S
CO5	L	L	L	M	M	M	M	S	M	S
CO6	L	L	L	M	M	M	M	S	M	S

*S-Strong; M-Medium; L-Low

Course code	53C	FURNITURE IN INTERIORS	L	T	P	C
Core		Paper XII	4	-	-	3
Pre-requisite		BSc Interior Design; Semester 1- Theory of Design; Semester 2, 3 – History of Interior Design, I, II; Semester 2, 3, 4 – Materials and Construction I, II & III	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Understand selection care and placement of furniture
2. Design and production of furniture
3. Selection and Coordination of furnishings

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the developmental stages of furniture design and the reason for particular trend or the cultural context behind it.	K1
CO2	Understand the role of furniture in Interior Design and its importance towards the general development of society, and also to the psychology of the individual.	K2
CO3	Apply various design factors such as ergonomics and anthropometrics for furniture design and incorporating the knowledge in designing a prototype furniture	K3
CO4	Analyze various furniture pieces based on their function and utility and assess their role in the interior of any space	K4
CO5	Evaluate various furniture materials and furnishing materials available by visiting local markets and acknowledging their property and cost in effective designing of any furniture	K5
CO6	Create or design life size furniture models	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION	12 hours

Styles of furniture– traditional, contemporary and modern design; Furniture for different purpose–meaning, need; Factors influencing design – climatic condition, family needs and preferences, availability, principles of design and financial limit.

Unit:2	HISTORY AND ERGONOMICS	12 hours

Furniture through the ages – Overview; Development of Furniture design, Furniture for various spaces and functions – Selection and arrangement; Ergonomics, anthropometrics and spatial conventions in furniture design - furniture dimensions.

Unit:3	FURNITURE MATERIALS	12 hours

Familiar furniture materials – Wood–teak, rosewood, walnut, cedar, mahogany, pine, birch, sal, plywood, bamboo, cane, metals, plastics, leathers, PVC - Manufacturing process, materials, prototyping and innovation - Custom and mass production in furniture.

Unit:4	FURNITURE CONSTRUCTION	12 hours

Construction features of furniture - Process in wood furniture: shaping, carving, turning, fluting, reeding, joining & finishes; Upholstering– techniques and designs - Metal and Glass furniture - methods and finishes - Ornament in furniture.

Unit:5	FURNITURE AND FURNISHINGS	12 hours

Furnishings – Types, Design, Selection and Layout - Care and maintenance – wooden

furniture, wicker and cane, metal furniture, PVC. plastic, upholstered furniture – Wood finishes and furniture polishes - Window coverings - Drapes, blinds and curtains - materials, patterns and construction.		
	Total Lecture hours	**60 hours**
Text Book(s)		
1	Textbook of Home science, Mullick. P, Kalyani publishers, New Delhi, 2000.	
2	Inside today‟s home, Faulkner. R and Faulkner. S, Rinehart Winston, New York, 1987.	
Reference Books		
1	Furniture Design: An Introduction to Development, Materials and Manufacturing, Stuart Lawson, Laurence King Publishing, 2013.	
2	Design of the 20th Century, Charlotte & Peter Fiell, Taschen, 2012.	
3	Furniture for Interior Design, Sam Booth, Drew Plunkett, Laurence King Publishing, 2014.	
4	Introduction to Home furnishings, Stepat, D.D, The MacMillan Co, New York, 1971.	
5	Contemporary Decorating, Wilhide, E and Copestick,I. Conron Octopus Ltd., London, 2000.	
6	Living rooms, Levine M, Rockport publishers, USA, 1998.	
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]		
1	https://www.sofasandsectionals.com/the-history-of-furniture#:~:text=Early%20Modern%20Europe%20%E2%80%93%20Furniture%20from,was%20very%20artistic%20and%20detailed.	
2	https://www.wanderglobe.org/importance-of-furniture-in-interior-design/	
3	https://www.girltalkhq.com/the-role-of-furniture-in-interior-design/	
Course Designed By: Dr. Lakshmipriya		

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	S	S	M	S	L	M	L	L	L
CO3	S	S	S	M	S	L	M	L	L	L
CO3	S	S	S	M	S	L	M	L	L	L
CO4	S	S	S	M	S	L	M	L	L	L
CO5	S	S	S	M	S	L	M	L	L	L
CO6	S	S	S	M	S	L	M	L	L	L

*S-Strong; M-Medium; L-Low

Course code	53P	INTERIOR DESIGN STUDIO IV	L	T	P	C
Core		Practical V	-	-	8	4
Pre-requisite		BSc Interior Design, Semester 1- Theory of Design, Semester 2- Human Factors in Design; Semester 2, 3 – History of Interior Design I, II Semester 2, 3, 4 – Materials and Construction I, II & III Semester 3, 4 - Computer Applications I & II	Syllabus Version		2021-2022	

Course Objectives:

This hands-on Design Studio course explores the intersection of architecture, art, and design. Students will work in groups of two and three, combining methods of the hand, machine and computer to develop a family of design pieces building a clear understanding of ergonomics, anthropometrics, materials and processes that are involved.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Analyse a material and its industrial production technology	K4
CO2	Understanding the industrial production processes to design an effective product that can be produced efficiently.	K2
CO3	Manipulate material in a manner that is expressive of its essential characteristics.	K3
CO4	Analyze Ergonomic data and activity requirements to arrive at optimal form.	K4
CO5	Evaluate the concept under varied conditions to develop design details	K5
CO6	Create detailed design presentation drawings and model	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyse; **K5** - Evaluate; **K6** - Create

Unit:1	RESEARCH	15 ours

Furniture Design- Form and Structure for similar functional need; Materials and their suitability for use as components of the furniture; Processes of making – jointing, bending, cutting, mould casting etc. and consider suitability - Material science and Fabrication process- both historical and contemporary material and fabrication processes. From this collective research and discussions, students will work together to develop a line of inquiry regarding material form and process.

Unit:2	CASE STUDIES	20 hours

Book Case Studies, Real Life Case Studies – Documentation, Analysis, and Inference for Design

Unit:3	CONTEXTUAL STUDY	25 hours

Contextual Study can be User Study – Flexible designs can accommodate potential user variation, or special features can be added to accommodate a special need by a user; Study the Physical context in which furniture will be used – select materials and construction appropriate to the context; The selections will also influence visual impact, luxury, comfort, maintenance or flexibility– priorities deliberately.

Unit:4	CONCEPTUAL DESIGN	30 hours

Creative process: Material, process, user and context study will lead to their individual design concept. Show 2D and 3D versions of the idea evolution and present development of Design Concept as colored sketches. Submission: Line sketches with Concept Model

Unit:5	SCHEMATIC DESIGN	20 hours
Detailing: The design concept is further developed and detailed to include material, jointing, finishing, color and texture - with sketches, part models, and detailed drawings. **Submission:** Detailed Plan, Elevations, and Section with connection details. Double line plan with elevations/ sections as needed to clarify design idea.		
Unit:6	**DESIGN PRESENTATION**	**10 hours**
Construction: Scaled Prototype model of furniture is constructed using identical or similar material and processes. It is supported with a detailed set of drawings for the final presentation and review. Submission for the Viva Voce Presentation: Prototype model, Final detailed set of Drawings – completed, formatted, dimensioned and rendered. (Sheets: Plan, Elevations, Sections and Jointing Details as needed to communicate the design unambiguously)		
	Total Lecture hours	**120 hours**

Text Book(s)	
1	Interior design principles and practice, Pratap R.M, Standard Publishers distribution, Delhi, 1988.
2	"Interior design", Chaudhari, S. N, Jaipur: Aavishkar Publishers, India, 2005.
Reference Books	
1	Time-Saver Standards for Interior Design and Space Planning, Julius Panero, Martin Zelnik, McGraw-Hill Professional; 2nd edition, 2001.
2	Materials and Interior Design (Portfolio Skills), Lorraine Farrelly, Rachael Brown, Laurence King Publishing, 2012.
3	Construction and Detailing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing, 2010.
4	Drawing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing, 2009.
5	Designs for 20th century Interiors–Fiona Leolie, VH Publications, London, 2000.
6	Interior Design; The New Freedom, Barbara lec Diamonstein, Rizzoli International Publications, New York, 1982.
7	Interior Colour by Design, Jonathan Poore, Rock port Publishers, 1994.
8	Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.
9	The Fundamentals of Interior Design, Stephen Anderson, Simon Dodsworth, Bloomsbury Academic; 2nd Revised edition, 2015.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://youtu.be/eX1vSyj_ilU
2	https://www.slideshare.net/Pradeepagrwal/role-of-furniture-in-interior-decoration-madscreations
3	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj6ysCc4vHqAhV28HMBHXxiDlUQFjAMegQIBBAB&url=https%3A%2F%2Fthearchiblog.files.wordpress.com%2F2011%2F02%2Finterior-furnitures.ppt&usg=AOvVaw0Qn2RTaW6f7cIaOoDKg3mm&cshid=1596002017701710
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	M	L	M	L	L	M	L	L	M
CO3	S	M	L	M	L	L	M	L	L	M
CO3	S	M	L	M	L	L	M	L	L	M
CO4	S	M	L	M	L	L	M	L	L	M
CO5	S	M	L	M	L	L	M	L	L	M
CO6	S	M	L	M	L	L	M	L	L	M

*S-Strong; M-Medium; L-Low

Course code	5ZP	FLORICULTURE AND LANDSCAPING PRACTICAL	L	T	P	C
Skill Based Subject		Skill Based Subject III	-	-	5	3
Pre-requisite		BSc Interior Design, Semester 4- Landscape for Interiors; Semester 3, 4 – Computer Applications I, II.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Present a vivid scenario of the need and importance of interior scaping.
2. Identification of plants, propagation methods, creation of different styles of flower arrangements and drawing landscape design layouts.
3. Understand the plant kingdom, developing, drawing and designing landscape both indoor and outdoor and uplifting the aesthetic value of any kind of building.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember a variety of interior plants and ornamental flowers that can be used to enhance the quality of the interior environment.	K1
CO2	Understand the methods of cultivation of plants and flowers	K2
CO3	Apply knowledge of design theory and hands on interior design experience to create an Interior garden layout or flower arrangement.	K3
CO4	Analyze the basic knowledge on selection of Indoor plants and enumerate the conditions of plant growth.	K4
CO5	Evaluate the importance of flower arrangement to improve the aesthetics	K5
CO6	Create a compiled portfolio to exhibit your understanding and ideas on floriculture	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	**ORNAMENTAL PLANTS**	**15 hours**

Identification of important flowering plants, shrubs and other ornamental plants.

Unit:2	**PLANT PROPAGATION**	**20 hours**

Preparation of cutting, layering, budding and grafting.

Unit:3	**FLOWER ARRANGEMENTS**	**20 hours**

Making different kinds of flower arrangements.

Unit:4	**LANDSCAPE LAYOUT**	**20 hours**

Creating Landscape Design Layouts with detailed drawings for hard landscape and planting diagrams.

Total Lecture hours	**75 hours**

Text Book(s)

1	Floriculture in India. Randhawa. G. S. and Mukhopadhyay. A, New Delhi, 1986.
2	A Textbook of Floriculture and Landscaping, Singh. A. K. and Sisodia. A. New India Publishing Agency, 2017.

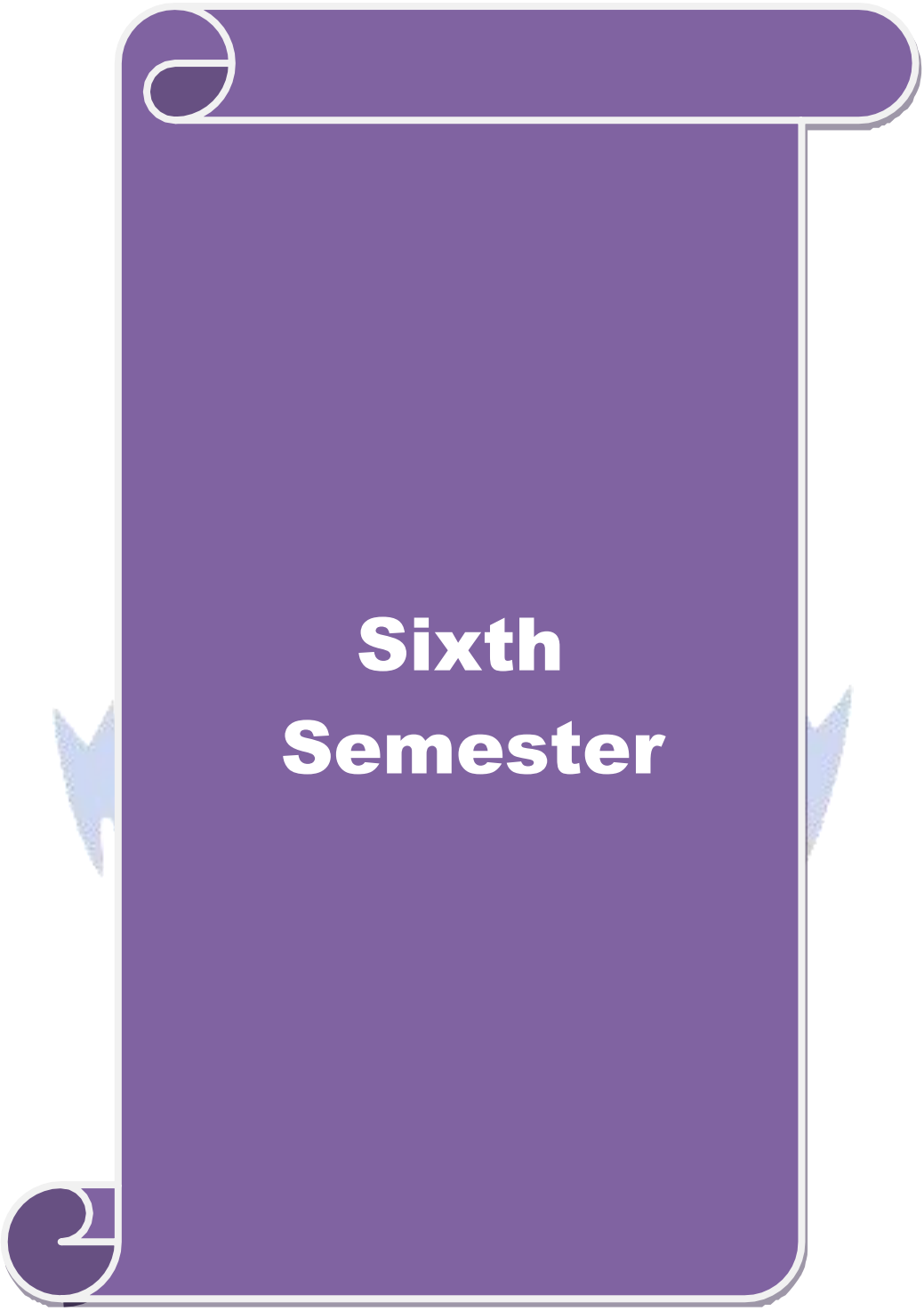
Reference Books

1	An Illustrated Dictionary of Floriculture and Landscaping. Ranchana. P. Kannan. M. and Vinodh. S, 2017.

2	Floriculture, Landscaping and Turf Management, Devi. A. N., Kumar. A. R and Lakshmanan. V, Lambert Academic Publishing, 2012.
3	Floriculture and Landscaping at a glance, Somani. L. L, Agrotech Publishing company, 2010.
4	Flower Arranging – A complete guide for beginners, Judith. B. The Flower Press Ltd., 2012
5	The Ultimate Flower Arrangement Book, Katherine. T. S. Create Space Independent Publishing Platform, 2011
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.archdaily.com/935822/indoor-landscaping-30-projects-that-bring-life-into-interiors
2	https://www.doc-developpement-durable.org/file/paysagisme/design/Landscape-Design-Elements-and-Principles.pdf
3	http://www.hillagric.ac.in/edu/coa/vegetables/lectures/VSF_231_Flori/VSF_231_Flori_Lect_6-10_Plants.pdf
Course Designed By: Ms. Sudha	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	S	S	L	M	L	S	L
CO3	L	L	L	S	S	L	M	L	S	L
CO3	L	L	L	S	S	L	M	L	S	L
CO4	L	L	L	S	S	L	M	L	S	L
CO5	L	L	L	S	S	L	M	L	S	L
CO6	L	L	L	S	S	L	M	L	S	L

*S-Strong; M-Medium; L-Low


Sixth
Semester

Course code	63A	SUSTAINABLE INTERIORS	L	T	P	C
CORE		PAPER XIII	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 2, 3, 4 – Interior Design Studio I, II & III; Materials and Construction I, II, III; Building Services	Syllabus Version		2021 - 2022	

Course Objectives:

The main objectives of this course are to:

1. Adopt strategies for energy efficiency in interior design
2. Create Healthy interior environments
3. Select materials and apply them in an environmentally responsible manner
4. Design and Create Sustainable Interior Environments

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the need for sustainability in built environment, green building technologies and the policies incentives of green buildings	K1
CO2	Understand various components of the green building, identifying the green building materials and construction methods in application.	K2
CO3	Apply while design an interior space using the green building concepts and sustainable materials.	K3
CO4	Analyse how to reduce consumption of non-renewable resources, minimize waste, and create healthy, productive interior environments	K4
CO5	Evaluate various materials and finishes property used in green buildings	K5

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyse; **K5** - Evaluate; **K6** - Create

Unit:1	ENERGY EFFICIENCY	9 hours

Passive Methods: Orientation, Shading, Ventilation, Activity Placement, Insulation, Landscape, Water body, Earth cooling; Choice of Wall Systems, Roof, Glazing to minimize heat gain - Renewable energy resources– meaning and importance, solar energy– advantages, principles and functions of solar devices –solar room heater, solar lights, solar water heater, solar air conditioners.

Unit:2	MATERIAL SELECTION / WASTE REDUCTION/ LONG DESIGN LIFE	9 hours

Materials and finishes used in green building– Eco friendly materials - Bamboo, straw, wood, dimension stone, Recycled stone, non-toxic metals, Earth blocks -compressed, rammed, baked; vermiculites, flax linen, sisal, wood fibres, cork, coconut, polyurethane blocks etc; Use of recycled, up cycled, repurposed and „cradle to cradle" materials; Increased design life cycle – good material and construction quality, design flexibility

Unit:3	GREEN BUILDING TECHNOLOGY	9 hours

Meaning, Concepts of Green Building Technology, Need, Benefits of Green buildings. Policies and incentives encouraging sustainability - Green building practices and technologies. Details and specifications for Roof, walls, floors – electrical, plumbing, windows, and doors, heating, ventilation and air conditioning (HVAC), insulation, Interior finishes, landscaping.

Unit:4	WATER CONSERVATION	9 hours
Water conservation technologies. Recharge of ground water - flooding issues. Rain water harvesting- importance, requirements of rainwater harvesting structure, types of rain water harvesting systems, advantages of water conservation strategies		
Unit:5	**HEALTHY ENVIRONMENTS**	**9 hours**
Indoor Air Quality, No Toxic (VOC) Materials, Good Ventilation, Humidity levels maintained and air exchanges, Environmentally Responsible Lighting Design; Day lighting: Indirect / diffused; Design for Movement – Activity and Connection - Connect to nature –views and interior landscaping -oxygenate the air and remove toxins.		
	Total Lecture hours	**45 hours**

Text Book(s)	
1	Environmentally Responsible Design: Green and Sustainable Design for Interior Designers. Jones, Louise, John Wiley & Sons, 2008.
2	Materials and components of Interior Design, Riggs, J.R. Regents Halls, New Jersey, 1992.
Reference Books	
1	Solar Energy Utilization, Rai G.D, Khanna Publishers, Delhi, 1996.
2	Inside Today's Home, Faukaner, R., and Faulkner.S, Rinehart publishing House, New York, 1987.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/124/107/124107011/
2	https://swayam.gov.in/nd1_noc19_ce40/preview
3	https://www.udemy.com/course/intro-green-buildings/
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	M	M	S	S	L	M	S	M
CO3	L	L	S	L	M	S	L	L	S	L
CO3	L	L	S	S	M	S	L	M	M	S
CO4	L	L	M	L	S	L	M	L	S	L
CO5	L	L	M	L	S	S	L	L	S	L

*S-Strong; M-Medium; L-Low

Course code	63B	PROFESSIONAL PRACTICE	L	T	P	C
CORE		PAPER XIV	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 2, 3, 4 – Interior Design Studio I, II & III; Materials and Construction I, II, III; Estimation and Costing	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Enable the students to gain a clear idea of the processes involved in setting up an independent professional practice.
2. Understand the opportunities and responsibilities associated with the profession.
3. Make ethical and informed decisions in organizing themselves for success in their professional lives.
4. Understand the duties and liabilities of an Interior designer along with knowledge of bye-laws that relate to the building & the environment in the Indian context.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the role and responsibilities of interior design profession and the role of professional bodies and statutory bodies as well as ethics of the profession.	K1
CO2	Understand the basic aspects of running an interior design practice.	K2
CO3	Apply the processes involved in taking up and completing an interior project	K3
CO4	Display knowledge of preparation of tenders, quotations and contracts.	K3
CO5	Analyze the legal aspects and legislations associated with the profession.	K4
CO6	Evaluate the importance of fire safety standards, accessibility and stability requirements.	K5
CO7	Create the ability to develop work ready skills in the areas of written and oral communication, intercultural communication, client service, problem solving and self-management.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION	9 hours

Defining the Profession - The Business of Interior Design - Indian Institute of Interior Designers - Rules and Regulations, Code of conduct - Legal Responsibilities – Code Compliance, Intellectual Property – Copyright;

Unit:2	SETTING UP THE PRACTICE	9 hours

Creating and Managing an Interior Design Practice - Business formations – Sole Proprietorship, Partnership, LLC, Pvt. Ltd Corporation - Strategic Planning – basics, mission statements, business analysis, goals-objectives-strategies, budgeting, measuring performance, benchmarking - Money Management – maintain records, control overheads - Marketing – Branding, Marketing Plan; Portfolio, Competitions, Website, Publications

Unit:3	OPERATIONS	9 hours

Preparing Design Proposals and Contracts, Estimating Design Fees - Design Presentations; Tenders and quotations–Tenders–meaning types, preparation of tenders, quotations, contracts -

Documentation of works, managing manual resources, and digital resources – Employee Management – Contracts, Compensation and Benefits, Job classifications, descriptions, Performance Evaluation, Employee Handbook.

Unit:4	FIRE SAFETY	9 hours

Fire Safety Codes: Fire – combustibility – NBC – fire resistant rating of materials –

firefighting requirements – wet riser, dry riser, fire zones, fire escape stair case, fire alarms, smoke detectors and fire lifts. Codes For Barrier Free Environment: Requirement of toilets, corridors, etc. for handicapped persons – wheel chair clearances – ramps for handicapped according to ISO 9001 Standards		
Unit:5	**OTHER CODES**	**9 hours**
Codes For Electrical Layout: Typical electrical layout for a building – location requirement for switch rooms and distribution panels – codes for fan points, power points and light points – PVC sheathed wiring system – protective earthing – earth electrode; Codes For Lighting: Measurement of illumination and luminous intensity – day light factor – sky luminance – ERC, IRC – light output ratio – recommended illumination levels for various spaces such as library, class room, garment factory, etc. Energy conservation in lighting. Codes For Ventilation: Ventilation rates – air changes per hour – relative humidity – cross ventilation, stack effect, recommended ventilation rates for kitchen, toilet, etc.		
	Total Lecture hours	**45 hours**

Text Book(s)	
1	Professional Practice for Interior Designers, 5th ed, Piotrowski, Christine M., Wiley Publications, 2014.
2	Indian Standards Institutions, National building code of India ISI rol.1, New Delhi, 1983.
3	Specifying Interiors: A Guide to Construction and FF&E for Commercial Interiors Projects, Maryrose McGowan, John Wiley & Sons; annotated edition, 1996.
Reference Books	
1	Space Planning for Commercial and Residential, Sam Kubba, McGraw-Hill Professional, 2003.
2	Estimating and Costing for Interior Designers: A Step-by-Step Workbook, Diana Allison, Bloomsbury Publishing India Private Limited, 2014.
3	Estimating and costing, Arul Manickam A.P. and T.K. Palaniappan, Pratheeba Publishers, Coimbatore, 1993.
4	Fire Safety in Buildings, V.K.Jain, New age International (Pvt Ltd) publishers, Chennai, 2007.
5	IS 9668 : 1990 – Fire fighting code of practice - Bureau of Indian Standards, 1990.
6	National Building code of India 2005 – Bureau of Indian Standards
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://designshack.net/articles/business-articles/what-are-design-ethics-and-why-are-they-important/
2	https://info.designmanager.com/how-to-start-an-interior-design-business
Course Designed By: Mr. Libeesh	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	L	M	M	L	S	S	S
CO2	L	L	L	L	L	S	L	S	L	S
CO3	L	L	L	M	M	S	S	L	M	M
CO4	L	L	L	L	L	S	S	L	L	S
CO5	L	L	L	L	L	L	L	L	S	S
CO6	L	L	L	M	S	L	L	L	L	L
CO7	L	L	L	L	L	M	S	M	M	S

*S-Strong; M-Medium; L-Low

Course code	63P	INTERIOR DESIGN CAPSTONE	L	T	P	C
Project		Project	-	-	10	4
Pre-requisite		BSc Interior Design, Semester 1 to Semester 5 – all courses.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to develop student ability to

1. Identify a Need for design in the environment around them and define the purpose of Design.
2. Follow a structured, self-initiated process of research in identifying the user needs, functional requirements, contextual factor and all influences that would inform design decisions.
3. Develop design solutions for a real life situation and developing details accordingly.
4. Communicate the design process and the final design outcome in a forum through drawings, 3D visualizations, models and verbal presentations.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Understand the processes involved in narrowing down a design problem into its most essential questions.	K2
CO2	Understand how to effectively conduct user and contextual studies and draw practical inferences from the same.	K2
CO3	Apply inferences from research to concept development, form and space exploration and material and method choices.	K3
CO4	Analyse the suitability of various forms, materials and technologies researched to the design solutions considered.	K4
CO5	Create quality design solutions that are human cantered and environmentally friendly.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	Project Definition	16 hours

Project Proposal - Topic of study, site plan, location, existing building plan if any and any other relevant information pertaining to the project site. Description of the Interior Design project proposed fo the site: Name, Use, a tentative list of facilities to be accommodated and Design goal.

Unit:2	Literature Research	30 hours

Conduct Research on Building typology and related case studies - Anthropometric & Ergonomic Data, Climatic Data; Materials, detailing and technologies relevant to building function; Topic of interest such as User psychology, Colour theory, sensorial design, landscape for healing and sustainable interior detailing.

Unit:3	Context and User Study	30 hours

Prepare and Conduct Survey and Study - Current users of the Space & Future users of the Design Proposal – Their existing use patterns, problems and/or limitations, needs/wants, conflicting demands, user typologies, User timings and frequency, health, accessibility and maintenance issues, special considerations; Existing Site Conditions – Detailed Site Drawings, Materials and Finishes, the construction and condition or state of repair, Building Service connections, Natural Lighting and Ventilation, Existing Building Architecture and Detailing, Accessibility and Circulation/ Movement through the site, advantages and constraints, Climatic considerations, surrounding facilities, their usage, connection to the new proposal and physical appearance.

Unit:4	Programme Development & Design Concept	40 hours
Develop a Design Brief or Programme that details – Spaces to be provided, Areas for each, facilities to be accommodated in each of the spaces and functional and qualitative requirements for these spaces in terms of – activity accommodation, equipment needed, lighting ventilation needs, proximity needs etc.; Develop the main Design Idea or Concept – The Basic Design theme for you Design. A simple space planning layout and sketches that will guide further development of your design.		
Unit:5	**Design Development**	**40 hours**
Forms and details - Detailed double line plans, sections, elevation, 3D sketches, furniture details, ceiling design and landscape details if any - Material selections, mood boards, colour palettes and lighting is also worked on to arrive at the final design proposal. Details will indicate method of assembly or construction - Perspective sketches or 3D renders are used to visualise the design		
Unit:6	**Presentation**	**24 hours**
Design Drawings should include Literature Study, Case Studies & Inference User & Context Study & Inference Design Programme& Concept Detailed plans, sections, wall elevations, ceiling details, furniture/fixture details Ornament details Graphics if any 3D visualizations (digital or hand constructed perspective drawings) Captions and Write-ups for all of the above These are rendered and composed into presentation boards. Digital drawings can be made using SketchUp, or AutoCAD, 3dsmax and Photoshop. Hand drawings can also be presented. Presentation should include, Mood boards of materials and textures.		
	Total Lecture hours	**180 hours**

Text Book(s)	
1	Space Planning for Commercial and Residential, Sam Kubba, McGraw-Hill Professional, 2003.
2	Furniture Design: An Introduction to Development, Materials and Manufacturing, Stuart Lawson, Laurence King Publishing, 2013.
Reference Books	
1	Specifying Interiors: A Guide to Construction and FF&E for Commercial Interiors Projects, Maryrose McGowan, John Wiley & Sons; annotated edition, 1996.
2	Environmentally Responsible Design: Green and Sustainable Design for Interior Designers. Jones, Louise, John Wiley & Sons, 2008.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.ndsu.edu/cule/pdfs/capstone/syllabi/pdf/ADHM%20_450_Senior_Project_Booklet_2011_082211[1].pdf
2	https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1147&context=archthesis

3	https://www.chhs.colostate.edu/dm/programs-and-degrees/b-s-in-interior-architecture-and-design/iad-senior-show/capstone-projects/

Course Designed By: Dr. Lakshmipriya

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	L	L	L	M	L	L	L	M	S
CO2	L	L	S	L	M	M	M	L	L	S
CO3	S	S	M	S	S	S	M	M	S	L
CO4	L	M	L	L	L	L	S	L	L	S
CO5	S	M	M	S	S	M	L	S	S	L

*S-Strong; M-Medium; L-Low

Course code	6ZA	APPLIED ARTS	L	T	P	C
Skill Based Subject		Skill Based Subject IV	4	-	-	3
Pre-requisite		BSc Interior Design, Semester 1 – Theory of Design, Art in Interior Design; Semester 2, 3 - History of Interior Design I, II	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Understand the process of making involved in the creating of various art & craft products and customized materials used in interior design.
2. Develop an appreciation for the art and craft and promote the same through selective sensitive application.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the different tools and techniques used in varied forms of applied arts.	K1
CO2	Understand the processes of making involved in the creation of different forms of applied arts.	K2
CO3	Apply clear knowledge in the process of creating objects of Art and Ornament for Interiors.	K3
CO4	Create art and craft forms as design elements and their relevant application in Interiors.	K6
CO5	Evaluate the awareness of the historic and cultural significance of various forms of art and craft, and their use in Interiors.	K5
CO6	Analyze uses and maintenance of art and artifacts based on the material, method of making and environment.	K4

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	WOOD AND METAL WORKING	12 hours

Wood working - tools and techniques for shaping, carving, turning, bending, Materials for frames, Sawn curves, bending, panels, Methods of cutting shapes - straight edged, curved, complex, decorative. Decorating -Painting, Varnish, shellac, lacquer. Metals and Alloys - Tools for cold cutting metal, Shaping with Power tools, Solder joints, Forging, Welding and Cutting with Oxyacetylene torch, Surface finishes and repairs.

Unit:2	CERAMIC AND GLASS DESIGN	12 hours

Ceramics Design and ornamentation - earthenware, stoneware, china, porcelain and terracotta, Processes - Coiling, slab building, throwing, profiling, turning, slip casting. materials and glazes. Glass - glass etching, engraving, cutting, enameling, stained glass techniques, use of glass in homes.

Unit:3	SCULPTURE	12 hours

Ceramic Sculpture - Making Faces essential steps, Modelling and Sculpting Animals - Symbolism in cultural representation of animals, general principles and method - use of sculpture - care and maintenance.

Unit:4	FABRIC PRINTING AND DYEING	12 hours

Fabric Aesthetics - Texture, Colour, Pattern. Application - Windows, Furniture, Walls, Ceilings. Properties - Cloth, Fiber, Yarn, Construction, Finishing, Dyeing and Printing– Dyeing–Definition and classification – Printing - Hand, Block printing, Tie and Dye, Screen

Machine - Discharge, Resist, Stencilling, Fabric painting tools and techniques.		
Unit:5	**MACRAME, DECOUPAGE AND GLASS PAINT**	**12 hours**
Crafts - Macramé - , Decoupage - Design and Process, Decorating with decoupage, Decorative Mosaic - materials and tools, Planning and Designing, Working Methods -Direct techniques, Double direct techniques, Glass painting.		
	Total Lecture hours	**60 hours**

Text Book(s)	
1	A Text Book of Applied Art, Borkar, S. Himalaya Publishing House, Karnataka, 2003.
2	Introduction to Art: Design, Context and Meaning, Sachant. P., University of North Georgia Press, 2016.
Reference Books	
1	Basic Pottery Making: All the Skills and Tools You Need to Get Started, Linda Franz (Editor), Stack pole Books; Spi edition, 2009.
2	Complete Illustrated Guide to Shaping Wood, Lonnie Bird, Taunton Press Inc, 2014.
3	Understanding Wood Finishing: How to Select and Apply the Right Finish, Bob Flexner, Pan Macmillan, 1993.
4	Metal Working: Real World Know-How You Wish You Learned in High School, Skills Institute Press, Fox Chapel Publishing, 2011.
5	300+ Mosaic Tips, Techniques, Templates and Trade Secrets, Bonnie Fitzgerald , Trafalgar Square Books, 2012.
6	The Complete Guide to Glass Painting: Over 90 Techniques with 25 Original Projects and 400 Motifs, Alan D. Gear, Barry L. Freestone, Collins & Brown, 2000.
7	Sculpture: Technique, Form, Content, Arthur Williams, Davis Publications Inc., U.S.; 2nd Revised edition, 1994.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://en.wikipedia.org/wiki/Applied_arts
2	http://www.visual-arts-cork.com/definitions/applied-art.htm
3	https://www.scienceabc.com/humans/different-mediums-used-art.html
Course Designed By: Ms. Varunya Devi	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	M	L	S	L	L	L	S	S	L
CO3	S	M	L	S	L	L	L	S	S	L
CO3	S	M	L	S	L	L	L	S	S	L
CO4	S	M	L	S	L	L	L	S	S	L
CO5	S	M	L	S	L	L	L	S	S	L
CO6	S	M	L	S	L	L	L	S	S	L

*S-Strong; M-Medium; L-Low

Elective Course

Course code	5EA	KITCHEN DESIGN	L	T	P	C
ELECTIVE		PAPER I A	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 2, 3, 4- Interior Design Studio I, II, III; Materials and Construction I, II, III; Computer Applications I, II; Colour and Lighting, Building Services Semester 5 - Estimation and Costing	Syllabus Version	2021-2022		

Course Objectives:

The main objectives of this course are to:

1. Understand fundamentals of practical kitchen design
2. Gained knowledge of different materials used for various surfaces in kitchen
3. Developed skill in planning different layouts

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remembering the basic planning principles of kitchen	K1
CO2	Understanding how users interact with the room and how the designer can create a layout that is more efficient and intuitive	K2
CO3	Applying the kitchen services, material and construction methods in design	K3
CO4	Analyse the various measurement of kitchen cabinet and human anthropometric measurements	K4
CO5	Create the best kitchen layout for the given requirements	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	KITCHEN PLANNING	12hours

Kitchen planning – Functions performed in a kitchen, types of kitchen, principles of planning kitchen – orientation and location, ventilation, storage needs, work triangle, colour, light and safety.

Unit:2	KITCHEN ANTHROPOMETRIC	12 hours

Kitchen geometry – work heights and space dimension of different work areas and storage areas, anthropometric measurements of an individual worker and its application to kitchen layout designing.

Unit:3	MATERIAL AND FINISHES	12 hours

Materials and finishes – Various materials and finishes used in kitchen – floor, walls, sink, ceiling, platforms, storage and their characteristics,

Unit:4	SERVICES	12 hours

Essential services needed in a kitchen. Water supply – hot and cold, taping, water purifiers. - Electricity services – electric current, exhaust fans, electrical equipment and their locations. - Drainage services – Waste water drainage system, waste disposal.

Unit:5	ACCESSORIES AND MAINTENANCE	12 hours

Kitchen storage – principles of kitchen storage, storage areas in kitchen and its dimensions, hand operated tools and their location. Care and maintenance of storage

	Total Lecture hours	60 hours

Text Book(s)

1	Ergonomics in Kitchen design, Varghese.M.A. et al., Bombay, 1994.

2	Architect's Pocket Book of Kitchen Design (Routledge Pocket Books), Charlotte Baden-Powell, 2005
Reference Books	
1	Ultimate Kitchen Design, PacoAsensio (Editor), Mireia Casanovas (Illustrator), Alejandro Bahamon, 2005.
2	150 Best New Kitchen Ideas, Manel Gutierrez, 2015.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.udemy.com/course/how-to-design-your-dream-kitchen/
2	https://www.houseplanshelper.com/kitchen-design-layout.html
3	https://www.livspace.com/in/magazine/kitchens101-kitchen-cabinet-materials
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	S	M	M	S	M	L	L	M	L
CO2	L	S	L	S	M	M	L	L	L	L
CO3	L	M	L	M	S	S	L	L	M	L
CO4	L	M	L	M	M	M	L	L	L	L
CO5	L	S	L	M	S	S	L	M	L	L

*S-Strong; M-Medium; L-Low

Course code	5EB	INTRODUCTION TO TEXTILES AND CLOTHING	L	T	P	C
ELECTIVE		PAPER I B	4	-	-	4
Pre-requisite		BSc Interior Design Semester 4.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Learn about the various textile fibers, weave and finishes.
2. Learn basic sewing operation
3. Gain knowledge of different dyeing, and printing methods.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the need for textile studies for producing a creative solutions for interior design problems	K1
CO2	Understand the process of weaving, knitting, dyeing and various textile processing techniques.	K2
CO3	Apply various printing techniques for surface enrichment.	K3
CO4	Analyze the various tools and techniques involved in sewing operations	K4
CO5	Evaluate Body measurements and fitting principles for pattern drafting.	K5
CO6	Create basic bodice and sleeve pattern	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	WEAVING	12 hours

Introduction to textiles-fibre- definition, classification, uses, Yarn-definition, classification, spinning-definition and importance, Fabric-definition, classification, Basic weaves-plain, rib, basket, twill, satin and sateen, weaving-definition.

Unit:2	KNITTING AND DYEING	12 hours

Knitting-Definition, types, difference between weaving and knitting, Textile processing- singeing, desizing, scouring, bleaching, mercerizing, stiffening and softening. Dyeing-Definition of dyes, classification, suitability.

Unit:3	PRINTING	12 hours

Printing-definition,variousstyles-block,tieanddye,batik,stencil,screen-printing. Introduction to clothing, basic sewing operations-major parts, their functions and tools needed for sewing.

Unit:4	INTRODUCTION TO CLOTHING CONSTRUCTION	12 hours

Seams, plackets, sleeves, collars, fasteners. Definition, types, preparation of samples.

Unit:5	PATTERN DRAFTING	12 hours

Body measurements-fitting principles, drafting of a line frock, drafting-definition, principles and pattern drafting. Drafting of adult‟s bodice pattern and sleeve.

	Total Lecture hours	60 hours

Text Book(s)

1	Textbook of Home Science, Mullick. P, Kalyani Publishers, Delhi, 2000.
2	Textile-Fiber to fabric, Corbman.P.B. McGraw Hill International Editions, 1983.

Reference Books	
1	Zarapkar system of cutting, Zarapkar, Navneet Publications, Gujarat.
2	Marry practical constructions-I& II, Mathews, 1991.
3	"Knitting Technology: A Comprehensive hand book and practical guide", DavidJ.Spencer,2001, CRCPress.ISBN:1587161214
4	Textile Design– Theory & Concepts, Charusami, New Age International Publishing, ISBN:978-81-224-3053-0
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	www.fibre2fashion.com
2	https://www.youtube.com/watch?v=xEWbKSjzTN0
Course Designed By:Dr.Poongodi	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	L	L	L	L	L	L	S
CO3	L	L	L	L	L	L	L	L	L	S
CO3	L	L	L	L	L	L	L	L	L	S
CO4	L	L	L	L	L	L	L	L	L	S
CO5	L	L	L	L	L	L	L	L	L	S

*S-Strong; M-Medium; L-Low

Course code	5EC	GREEN BUILDING TECHNOLOGY	L	T	P	C
ELECTIVE		PAPER I C	4	-	-	4
Pre-requisite		Environmental Studies, BSc Interior Design, Semester 2, 3, 4 – Materials and Construction I, II, III Building Services	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Understand the need and importance of sustainable design approach in buildings
2. Expose the students to green building materials and services in built environment.
3. Gain knowledge on renewable resources and construction techniques in buildings.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Understand the importance of environment by assessing its impact on humans and the need of green building practices.	K2
CO2	Apply knowledge on natural, renewable and recycled building materials.	K3
CO3	Apply sustainable service practices in all contexts.	K3
CO4	Analyse solar renewable energy resources in built environment.	K4
CO5	Understand importance of water conservation and its applications.	K2

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate

Unit:1	GREEN BUILDING AND ENVIRONMENT	12 hours

Green building technology – Meaning, concept, impact of green building on human health and natural environment, need, importance and benefits of green buildings.

Unit:2	GREEN BUILDING MATERIALS	12 hours

Materials and finishes used in green building – Bamboo, straw, wood, dimension stone, Recycled stone, non-toxic metals, Earth blocks-compressed, rammed, baked; vermiculites, flax linen, sisal, wood fibres, cork, coconut ,polyurethane block.

Unit:3	GREEN BUILDING SERVICES	12 hours

Green building practices and technologies. Roof, walls, floors – electrical, plumbing, windows, and doors, heating, ventilation and air conditioning (HVAC), insulation, Interior finishes, landscaping.

Unit:4	RENEWABLE ENERGY	12 hours

Renewable energy resources – meaning and importance, solar energy – advantages, principles and functions of solar devices – solar room heater, solar lights, solar water heater, solar air conditioners.

Unit:5	WATER CONSERVATION	12 hours

Water conservation technologies. Rain water harvesting-importance, requirements of rain water harvesting structure, types of rain water harvesting systems, advantages.

	Total Lecture hours	60 hours

Text Book(s)

1	Solar Energy Utilization, Rai G.D Khanna Publishers, Delhi, 1996.
2	Interior design, principles and practice, Roa, M.P. standard publishers, Delhi, 1998.
3	Materials and components of Interior Design, Riggs, J.R. Regents Hall , New Jersey, 1992.

4	Build your own home, Despande, R.S, United book corporation, Poona, 1974.
Reference Books	
1	Green Building Construction; Thomas E Glavinich; Wiley, 2008.
2	"Man, Climate and Architecture", Givonji B., Elsevier, Amsterdam, 1986.
3	Inside Today"s Home, Faulkner, R., and Faulkner. S, Rinehart publishing House, New York, 1987.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/105/102/105102195/
2	https://swayam.gov.in/nd1_noc19_ce40/preview
4	https://nptel.ac.in/courses/124/107/124107011/
Course Designed By: Ms. Sudha	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	M	L	M	M	S	S	M	M	S	M
CO2	M	L	M	L	S	S	M	M	S	M
CO3	L	L	M	L	S	S	M	M	S	M
CO4	L	L	M	L	S	S	M	M	S	M
CO5	L	L	M	L	S	S	M	M	S	M

*S-Strong; M-Medium; L-Low

Course code	6EA	FURNITURE CONSTRUCTION AND DETAILING	L	T	P	C
ELECTIVE		PAPER II A	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 5 - Furniture in Interiors, Interior Design Studio IV	Syllabus Version		2021-2022	

Course Objectives:

To familiarize the students of Interior Design on materials used in furniture and its construction and detailing

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Understanding the analytical process of craftsmanship of a specified material.	K1
CO2	Understanding of industrial procedure of from making and utilization	K2
CO3	Understanding of wood and its specified qualities and its industrial treatments	K3
CO4	Analysis of techniques and details for the design	K4
CO5	Develop design drawing and presentation skills.	K5
CO6	Create a block model of furniture	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION TO WOOD	12 hours

Wood as a building material: Identification, selection, application, types of wood, commercial Classification, nomenclature, structure Anatomy and Ultra structure, Conversion figure and natural defects, availability of wood products, wood based panels such as plywood , MDF, HDF, Particle board , pre laminated boards etc .

Unit:2	THE BASICS OF FURNITURE CONSTRUCTION & TOOLS	12 hours

Measurement and measurement systems, Furniture Construction: Drawers, Cadenza, dining chairs, sofa, settee, cots detail. Preparation for finishing, Furniture Materials specifying timber, finishes etc . Detailed construction drawings & explaining construction and material finishes.

Unit:3	PLYWOOD CONSTRUCTION TECHNIQUES	12 hours

Plywood as a building material, Layout techniques and machining plans. _ Fabrication techniques - stapling, gluing. Furniture Joinery - screw joinery, nail joinery, Mortise & tenon joints, Dovetail joints, Dowel joints, Edge joints.

Unit:4	MODULAR KITCHENS	12 hours

Modular kitchens, components basis of Construction involving, layouts, carcasses, hardware selection, fixing details finishes and special types such as tall units, grain trolleys and carousels fold outs etc. A detailed project involving the design of a small kitchen using modular components.

Unit:5	FURNITURE MODEL MAKING	12 hours

Preparation of block models of furniture using wood, boards, leather, fabric, thermacol, clay, soap/wax etc

	Total Lecture hours	60 hours

Text Book(s)

1	Engineering materials - S. C. Rangwala - Charotar Publishing, 2008.
2	Building Construction Illustrated, Ching, Francis D. K. VNR, 1975.

Reference Books	
1	Furniture: World styles from classical to contemporary, David Linley and Judith Miller, DK Publishing, 2010.
2	Masters & Their Pieces Best of Furniture Design, Manuela Roth, Braun Publishing, 2011.
3	Construction and Detailing for Interior Design (Portfolio Skills), Drew Plunkett, Laurence King Publishing, 2010.
4	Time-Saver Standards for Interior Design and Space Planning, Julius Panero, Martin Zelnik, McGraw-Hill Professional; 2nd edition, 2001.
5	Materials and Interior Design (Portfolio Skills), Lorraine Farrelly, Rachael Brown, Laurence King Publishing, 2012.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.slideshare.net/Pradeepagrwal/role-of-furniture-in-interior-decoration-madscreations
2	https://www.slideshare.net/SaifulIslamTT/141-40105-presentation-on-furniture
3	https://www.slideshare.net/FuToThong/furniture-designer-51631684
Course Designed By: Dr. Lakshmipriya	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	S	M	L	M	S	M	L	L	L	M
CO3	S	M	L	M	S	M	L	L	L	M
CO3	S	M	L	M	S	M	L	L	L	M
CO4	S	M	L	M	S	M	L	L	L	M
CO5	S	M	L	M	S	M	L	L	L	M
CO6	S	M	L	M	S	M	L	L	L	M

*S-Strong; M-Medium; L-Low

Course code	6EB	MERCHANDISING AND DISPLAY	L	T	P	C
ELECTIVE		PAPER II B	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 3- Colour and Lighting, Semester 4- Interior Design Studio IV- Retail Design	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. To learn about the need and use of commercial art.
2. To encourage the student to apply theoretical knowledge in arranging the interior and window of a store.
3. To know the current trends in commercial art.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the principals involved in Commercial art and merchandising.	K1
CO2	Understand consumer preferences and target markets.to choose appropriate products that are best for the local market.	K2
CO3	Apply techniques of salesmanship to drive sales.	K3
CO4	Analyze the various factors that influence sales.	K4
CO5	Evaluate various advertising techniques to make appropriate selection.	K5
CO6	Create attractive visual displays to attract customers.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION TO MERCHANDISING	12 hours

Concept of commercial art and merchandising - Meaning, classification, development - recent trends-art, architecture and display.

Unit:2	CONSUMER AND MERCHANDISING	12hours

Consumer and Merchandising - Meaning, significance and classification of consumer, Consumer rights and responsibilities, classification of consumer goods, elements involved in merchandising-grading, branding, labelling, packaging and standardization. Merchandising and distribution-Importance, selection of channels, channels of distribution of goods, techniques of merchandising-selling methods.

Unit:3	SALESMANSHIP	12 hours

Salesmanship-concept -definition, types and qualities of salesmen: techniques of Salesmanship

Unit:4	ADVERTISEMENT	12 hours

Advertisement-definition, importance, classification, features of good advertisement, preparation and techniques, advertisement media-selection, classification and types, poster- importance, characteristics-steps and techniques in poster making.

Unit:5	MERCHANDISE DISPLAY	12 hours

Merchandise Display– Interior display– principles and requirements– types of merchandise - Display– window display-meaning, principles and factors and rules. Window arrangement - art and psychology, principles-techniques in window display.

	Total Lecture hours	60 hours

Text Book(s)	
1	Marketing, Pattanchetti C.C., Reddy P.N., Rainbow publishers, Coimbatore, 1995.
2	Marketing, Nair, R, Sultan chand and sons educational publishers, New Delhi, 1994.
Reference Books	
1	Sales promotion and advertising management, Nisra,M.N, Himalaya publishing house, Bombay, 1994.
2	Marketing management, Sherlekar,S.A, Himalaya publishing House, Bombay, 1997.
3	Foundations of advertising Theory and practice, Chunnawalla.S.A, Sethia.K.C Himalaya publishing House, New Delhi, 1995.
4	Marketing and Sales Management, Thakur,D. Deep and Deep publications, New Delhi, 1990.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.edx.org/professional-certificate/dartmouthx-retail-and-omnichannel-management
2	https://www.edx.org/course/consumer-behaviour
3	https://www.youtube.com/watch?v=us0jQ_NGwqY
Course Designed By: Dr. Geetha	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	L	L	L	L	L	L	S
CO2	L	L	L	L	L	L	L	L	L	S
CO3	L	L	L	L	L	L	L	L	L	S
CO4	L	L	L	L	L	L	L	L	L	S
CO5	L	L	L	L	L	L	L	L	L	S
CO6	L	L	L	L	L	L	L	L	L	S

*S-Strong; M-Medium; L-Low

Course code	6EC	ENTREPRENEURIAL DEVELOPMENT	L	T	P	C
ELECTIVE		PAPER II C	4	-	-	4
Pre-requisite		Interest in Entrepreneurship; Basic management skills.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Comprehend to provide thorough understanding of the conceptual and theoretical aspects of entrepreneurship and entrepreneurial environment.
2. Understand the process and procedures of setting up of small enterprise and develop management skills for entrepreneurship development.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Identify the scope of entrepreneurship as career, income generation and problems in entrepreneurship.	K1
CO2	Understand the important factors affecting entrepreneurship.	K2
CO3	Highlight the Central and State Government agencies supporting entrepreneurial development program.	K3
CO4	Analyses on project identification and classification	K4
CO5	Evaluate project formulation, planning commission guidelines and to develop project report	K5

K1 - Identify; **K2** - Understand; **K3** - Highlight; **K4** - Analyze; **K5** – Evaluate

Unit:1	ENTREPRENEURSHIP	12 hours

Entrepreneurship – Entrepreneur, Enterprise and Entrepreneurship – meaning, need, transition from income generation to self-employment and Entrepreneurship, qualities of a good Entrepreneur, problems of Entrepreneurs.

Unit:2	ENTREPRENEURIAL DEVELOPMENT	12 hours

Factors influencing entrepreneurial development – Economic, Legal Socioeconomic, Psychological and Environmental factors.

Unit:3	ENTREPRENEURIAL DEVELOPMENT PROGRAMME	12 hours

Agencies supporting entrepreneurial development programme –SIDO, DIC, TIIC, SIPCOT, KVIC. Institutional finance to Entrepreneurs – IDBI, ICICI, RBI, LIC.

Unit:4	PROJECT IDENTIFICATION AND CLASSIFICATION	12hours

Project identification and classification – Meaning of Projects, Project identification, Project Classification, internal and external constraints, Project objectives.

Unit:5	PROJECT FORMULATION	12 hours

Project formulation – concept, need, elements. Project selection, appraisal format, check list for feasibility report, planning commission guidelines.

	Total Lecture hours	60 hours

Textbooks:

1. Entrepreneurial Development, Khanka SS, S Chand Publishers, 2007.

2. The Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, 2011.

References:

1. Entrepreneurship development in India, Gupta C.B, and Srinivasan N.P, Sultan Chand & Sons, New Delhi, 2004.
2. Sales Management, Chunawalla S.A, Himalayan Publishing House, New Delhi, 1991.
3. Project Management and Entrepreneurship, Vasant Desai, Himalayan Publishing House, New Delhi, 2000.
4. Entrepreneurship, David H. Moll, Prentice Hall of India, New Delhi, 1999.
5. Advertising, Frank Jerkins, Prentice Hall of India, New Delhi, 2000.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://onlinecourses.swayam2.ac.in/cec20_mg19/preview
2. https://onlinecourses.swayam2.ac.in/cec19_mg39/preview
3. https://nptel.ac.in/courses/110/106/110106141/

Course Designed By: Dr. Geetha

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	L	L	L	L	L	L	L	M	S
CO2	L	L	L	L	L	L	L	L	M	S
CO3	L	L	L	L	L	L	L	L	M	S
CO4	L	L	L	L	L	L	L	L	M	S
CO5	L	L	L	L	L	L	L	L	M	S

Course code	6ED	ERGONOMICS	L	T	P	C
ELECTIVE		PAPER III A	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 3 - Human Factors in Design	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Apply ergonomic principles to the creation of safer, healthier and more efficient activities in the workplace.
2. Understand the basic requirements of work environment to create effective workplace.
3. Explore design of a workplace according to good ergonomic principles.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Gain knowledge in the relationship of human behaviour and ergonomics as applied to workplace safety.	K2
CO2	Understand the basic knowledge of physical factors affecting human beings in relation to light, sound and climate.	K3
CO3	Gain knowledge in the basics of anthropometry in setting up a workstation.	K1
CO4	Understand the goals of occupational ergonomics including improved work efficiency and productivity.	K4
CO5	Apply concepts and principles of ergonomics to identify, develop, implement and evaluate design solutions to ergonomic challenges in the work environment.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION TO ERGONOMICS	12 hours

Concept of ergonomics – Meaning, importance, factors involved – worker, work place, tools and equipment, environment, climate.

Unit:2	BASICS OF WORK ENVIRONMENT	12 hours

Work environment – Location, space, indoor and outdoor climate, furniture, lighting and ventilation, flooring, noise, storage facilities, kitchen layouts.

Unit:3	ANTHROPOMETRY	12 hours

Anthropometry – Anthropometric dimension of workers at work and at rest, normal and maximum vertical and horizontal reaches, work heights when seated and standing, worker in relationship with workspace and activities.

Unit:4	EFFICIENCY IN ERGONOMICS	12 hours

Improving work efficiency- Concept of efficiency, principles and work and implication technique, effective use of body mechanics, posture involved in difference activities, Mundel‟s classes of change.

Unit:5	DESIGN BASED ON ERGONOMICS	12 hours

Design of work place – Activity analysis – Designing work areas based on ergonomics principles.

	Total Lecture hours	60 hours

Text Book(s)

1. Motion and Time Study, Design and Measurement of work, Barner, R.M., John Wiley, New York, 1980.
2. Introduction to Ergonomics, 2nd Edition, Bridger, RS: Taylor & Francis, 2003.

3	Indian Anthropometric Dimensions for ergonomic design practice, D. Chakrabarti, National Institute of Design, Ahmedabad, 1997.
Reference Books	
1	Housecraft – Principles and Practices, Borgert, E. Issac Pitman, London, 1982.
2	Occupational Biomechanics, Chaffin, D.B. and Andersson, G.B.J. John Wiley, New York, 1984.
3	Biomedical Instrumentation and Measurements, Cromwell, L. Weibell, F.J. and Pfeirffer, E.A. Prentice Hall, New Delhi, 1991.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://nptel.ac.in/courses/112/104/112104222/
2	https://nptel.ac.in/courses/107/103/107103004/
3	https://ocw.tudelft.nl/courses/elementary-ergonomics/?view=lectures
Course Designed By: Ms. Sudha	

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	M	H	H	H	M	M	M	M	L
CO2	L	M	H	H	H	M	M	M	H	M
CO3	L	M	H	H	H	L	M	M	L	M
CO4	M	H	H	H	H	M	H	M	H	M
CO5	M	H	H	H	H	H	H	M	H	M

*S-Strong; M-Medium; L-Low

Course code	6EE	FASHION DESIGNING	L	T	P	C
ELECTIVE		PAPER III B	4	-	-	4
Pre-requisite		BSc Interior Design, Semester 1- Theory of Design, Sketching and Drafting	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Familiarize with fashion designing
2. Acquaint with the steps involved in the dress designing
3. Gain knowledge in wardrobe planning

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Remember the need of design basics for producing a perfect look.	K1
CO2	Understand the impact of manipulation of individual design elements on the overall design composition of the garment.	K2
CO3	Apply the design principles such as Unity, Balance, Emphasis, Harmony, and Rhythm etc. in creating specific designed impact.	K3
CO4	Analyze the various factors that influence the shape and silhouette of a garment.	K4
CO5	Evaluate various factor that influence the wardrobe planning.	K5
CO6	Create stylised wardrobe collection for any fashion season.	K6

K1 - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** - Create

Unit:1	INTRODUCTION TO FASHION	12 hours

Terms related to the fashion industry–fashion, style, fad, classic and collection, chic – Custom made, mannequin, fashion, show, trend, forecasting, high fashion, haute, couture, fashion director, fashion editor, line, knock-off, avant-garde, apparel, fashion merchandising, sample.

Unit:2	DESIGN ELEMENTS	12 hours

Design–definition and types–structural and decorative design, requirements of a good structural and decorative design. Elements of design–line, shape or form, colour, size and texture. Application of structural and decorative design in dress selection and application f trimmings and decorations - Fashion accessories– shoes, handbags, hats, ties– different types.

Unit:3	DESIGN PRINCIPLES	12 hours

Principles of design–Balance–formal and informal, Rhythm–through repetition, Radiation and gradation, Emphasis, Harmony, Proportion- Application of principles of designing a dress, Colour – colour harmonies and applications of colour in dress design.

Unit:4	SHAPES AND SILHOUTTES	12 hours

Designing dresses for unusual figures–becoming and unbecoming–for the following figure types–Stout figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat-chest, large hip, large abdomen, round face, large face, small-face, prominent chin and jaw, prominent forehead.

Unit:5	FASHION STYLING	12 hours

Wardrobe planning for different age groups, factors influencing wardrobe selection, Fashion and season, designing dresses for different occasions – business meetings, parties, leisure hours, marriage functions, sports, uniforms for civil services, airhostess, hoteliers, schools–girls and boys.

	Total Lecture hours	60 hours

Text Book(s)	
1	Fashion Sketch Book– Bina Abling, Fair Child Publications, New York, 2012.
2	Strategies for Women– Judith Rasband, Delmar Publishers, London, 2001.
Reference Books	
1	Fundamentals of Textiles and their care–Susheela Dantyagi, 5th edition, Orient Longman Ltd., New Delhi, 1996.
2	Inside the Fashion Business –Heannette A Jarnowet-al, Macmillan Publishing Company, New York, 1996.
3	A Complete Guide to Fashion Designing, Jenny Davis, Bharat Bhushan Abhishek Publication, 2006.
4	Encyclopaedia of Fashion Details, Patric John Ireland, Prentice Hall, NJ, 1987.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	https://www.coursera.org/learn/fashion-design
2	https://www.youtube.com/watch?v=qB_W4gnSvtk
3	https://www.youtube.com/watch?v=LATo_ZdzUE8
Course Designed By: Ms. Varunya Devi	

Mapping with Programme Outcomes										
COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**
CO1	L	L	L	L	L	L	L	L	L	S
CO2	L	L	L	L	L	L	L	L	L	S
CO3	L	L	L	L	L	L	L	L	L	S
CO4	L	L	L	L	L	L	L	L	L	S
CO5	L	L	L	L	L	L	L	L	L	S
CO6	L	L	L	L	L	L	L	L	L	S

*S-Strong; M-Medium; L-Low

Course code	6EF	PROJECT MANAGEMENT	L	T	P	C
ELECTIVE		PAPER III C	4	-	-	4
Pre-requisite		Estimation & Costing, Professional Practice.	Syllabus Version		2021-2022	

Course Objectives:

The main objectives of this course are to:

1. Appreciate and understand various tools and techniques of project management to plan and execute design projects within stipulated time and resources.
2. Aware of latest trends and techniques to manage the project effectively.

Expected Course Outcomes:

On the successful completion of the course, student will be able to:

CO1	Outline the basic concepts of Project Management and role of human factor in it.	K1
CO2	Understand and apply network diagram for project to deduce interdependency of activities in the project	K2
CO3	Estimate project duration and analyze critical factors of project using CPM/PERT.	K4
CO4	Apply various project optimization techniques to considerably reduce the slack time and resources in the project.	K4
CO5	Evaluate real time resources with updated data and use computer application to get insights to manage it effectively.	K5

K1 - Identify; **K2** - Understand; **K3** - Highlight; **K4** - Analyze; **K5** – Evaluate

Unit:1	INTRODUCTION TO PROJECT MANAGEMENT	10 hours

Project Planning and Project scheduling and project controlling – Role of decision in project management – Method of planning and programming – Human aspects of project management – work breakdown structure – Life cycle of a project – Disadvantages of traditional management system

Unit:2	ELEMENTS OF NETWORK	10 hours

Events – Activity – Dummy – Network rules – Graphical guidelines for network – numbering of events

Unit:3	CRITICAL PATH METHOD AND PERT ANALYSIS	14 hours

CPM network analysis & PERT time estimates, Time computation & network analysis

Unit:4	PROJECT TIME REDUCTION AND OPTIMIZATION	14 hours

Project cost – Indirect project cost – Direct project cost – Slope of the direct cost curve – Total project cost and optimum duration – Contracting the network for cost optimization – Steps in cost-time optimization

Unit:5	PROJECT UPDATING AND ALLOCATION	12 hours

When to update? Data required for updating – Steps in the process of updating – Resource usage profile: Histogram, Resource smoothing and Resource levelling – Computer applications in project management

	Total Lecture hours	60 hours

TEXT BOOKS:

1. Project Management, K. Nagarajan, New Age International Publishers, 2017.
2. Project Management, Clifford F. Gray, Erik. W. Larson, Gautam V. Desai, McGraw Hill, 6th Edition, 2017.

REFERENCES:

1. Project Planning and Control with PERT and CPM, Dr. B.C. Punmia et al., Laxmi Publications
2. A Management Guide to PERT and CPM, Jerome D. Wiest and Ferdinand K. Levy, Prentice Hall of India Publication, New Delhi, 1982.
3. Building Production and Project Management, R.A. Burgess and G. White, The Construction Press, London, 1975.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://onlinecourses.swayam2.ac.in/cec20_mg07/preview#
2. https://onlinecourses.nptel.ac.in/noc19_mg30/preview
3. https://nptel.ac.in/courses/110/104/110104073/

Course Designed By: Dr. Geetha

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	L	L	L	L	L	M	M	L	S
CO2	L	L	L	L	L	L	M	M	L	S
CO3	L	L	L	L	L	L	M	M	L	S
CO4	L	L	L	L	L	L	M	M	L	S
CO5	L	L	L	L	L	L	M	M	L	S

*S-Strong; M-Medium; L-Low

Annexure

B. Sc Interior Design

Syllabus
(With effect from 2021 -2022)

Program Code: 22U

Bharathiar University
(A State University, Accredited with "A" Grade by NAAC and 13th Rank among Indian Universities by MHRD-NIRF)
Coimbatore 641 046, INDIA