



**SCHOOL OF PLANNING ARCHITECTURE  
AND DESIGN EXCELLENCE**

**CURRICULUM AND SYLLABUS**

**Under CBCS**

**(Applicable for Students admitted from Academic Year 2023-24)**

**B. DES. (Interior Design)**

**HINDUSTAN INSTITUTE OF TECHNOLOGY &  
SCIENCE  
CHENNAI**

**BACHELOR OF DESIGN – INTERIOR DESIGN, B.Des (ID)****Curriculum with Effect from Academic Year 2023- 2024**

<b>SEMESTER – I</b>									
<b>SL. NO</b>	<b>COURSE CATEGORY</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>S</b>	<b>TCH</b>
<b>THEORY</b>									
1	PC	SID21001	History of Interior Design - I	3	0	0	3	0	3
2	PC	SID21002	Basics of Theory of Design	3	0	0	3	0	3
3	BS	SID21003	Introduction to Indian Arts	3	0	0	3	0	3
4	BS	SID21004	Anthropometrics & Ergonomics	3	0	0	3	0	3
<b>THEORY CUM STUDIO</b>									
5	PC	SID21005	Drawing and Rendering	1	0	2	2	2	3
6	BS	SID21006	Fundamentals of Visualization and Representation - I	1	0	4	3	1	5
<b>STUDIO</b>									
7	PC	SID21400	Basics of Interior Design - 1	0	0	8	4	1	8
<b>PERSONALITY DEVELOPMENT</b>									
8	HS	GLS51001	Communication skills	2	0	1	2	1	3
<b>TOTAL</b>				<b>16</b>	<b>0</b>	<b>15</b>	<b>23</b>	<b>5</b>	<b>31</b>

<b>SEMESTER - II</b>									
<b>SL. NO</b>	<b>COURSE CATEGORY</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>S</b>	<b>TCH</b>
<b>THEORY</b>									
1	PC	SID21007	History of Interior Design–II	3	0	0	3	0	3
2	PC	SID21008	Advanced Theory of Design	3	0	0	3	0	3
3	PC	SID21009	Basics of Furniture Design	3	0	0	3	0	3
4	BS	SGE51001	Environmental Science	2	0	0	2	0	2
<b>THEORY CUM STUDIO</b>									
5	BS	SID21010	Fundamentals of Visualization and Representation – II	1	0	4	3	1	5
6	BS	SID21011	Basic Materials and Construction Techniques	2	0	2	3	1	4
7	EEC	SID21012	Basics of Computer Design and Digital Fabrication	1	0	4	3	0	5
<b>STUDIO</b>									
8	PC	SID21401	Basics of Interior Design – II	0	0	8	4	0	8
<b>VALUE ADDED PROGRAMME</b>									
9	EEC		Summer Internship	Minimum of 3 Weeks					
<b>TOTAL</b>				<b>15</b>	<b>0</b>	<b>18</b>	<b>24</b>	<b>2</b>	<b>33</b>

SEMESTER - III									
SL NO	COURS E CATEGO RY	COURS E CODE	NAME OF THE COURSE	L	T	P	C	S	TC H
<b>THEORY</b>									
1	PC	SID21013	History of Interior Design – III	3	0	0	3	0	3
2	PC	SID21014	Interior Landscape	3	0	0	3	0	3
3	BS	SID21015	Design Thinking and Application	3	0	0	3	0	3
4	DE	SID215**	Elective – I	3	0	0	3	0	3
<b>THEORY CUM STUDIO</b>									
5	BS	SID21016	Advanced Materials and Construction Techniques	2	0	2	3	2	4
6	BS	SID21017	Basics of Interior Services	2	0	2	3	2	4
<b>STUDIO</b>									
7	PC	SID21402	Interior Design Studio –I	0	0	8	4	2	8
<b>VALUE ADDED PROGRAMME</b>									
8	EEC	SID21800	Summer Internship - I	*	*	*	1	*	*
<b>TOTAL</b>				<b>16</b>	<b>0</b>	<b>12</b>	<b>23</b>	<b>6</b>	<b>28</b>

SEMESTER - IV									
S L. NO	COURS E CATEGO RY	COURS E CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
<b>THEORY</b>									
1	PC	SID21018	Advanced Furniture Design	3	0	0	3	0	3
2	BS	SID21019	Basics of Structural Design	3	0	0	3	0	3
3	DE	SID215**	Elective – II	3	0	0	3	0	3
<b>THEORY CUM STUDIO</b>									
4	EEC	SID21020	Advanced Computer Design and Digital Fabrication.	1	0	4	3	2	5
5	BS	SID21021	Interior Services (Intermediate)	2	0	2	3	1	4
<b>STUDIO</b>									
6	PC	SID21403	Interior Design studio – II	0	0	10	5	2	10
<b>VALUE ADDED PROGRAMME</b>									
7	EEC		Summer Internship -II	Minimum of 3 Weeks					
<b>TOTAL</b>				<b>12</b>	<b>0</b>	<b>16</b>	<b>20</b>	<b>5</b>	<b>28</b>

<b>SEMESTER - V</b>									
<b>SL NO</b>	<b>COURSE CATEGORY</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>S</b>	<b>TCH</b>
<b>THEORY</b>									
1	PC	SID21022	Sustainable Design	3	0	0	3	0	3
2	BS	SID21023	Advanced Structural Design	3	0	0	3	1	3
3	DE	SID215**	Elective – III (MOOC)	3	0	0	3	0	3
4	NE	NDE1	Non-Department Elective - I	2	0	2	3	2	4
<b>THEORY CUM STUDIO</b>									
5	PC	SID21024	Lighting and Acoustics in Interiors	2	0	2	3	0	4
6	BS	SID21025	Advanced Interior Services	2	0	2	3	1	4
<b>STUDIO</b>									
7	PC	SID21404	Interior Design Studio - III	0	0	8	4	1	8
<b>VALUE ADDED PROGRAMME</b>									
8	EEC	SID21801	Summer Internship - II	0	0	0	1	0	0
<b>TOTAL</b>				<b>15</b>	<b>0</b>	<b>14</b>	<b>23</b>	<b>5</b>	<b>29</b>

<b>SEMESTER - VI</b>									
<b>SL NO</b>	<b>COURSE CATEGORY</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>S</b>	<b>TCH</b>
<b>THEORY</b>									
1	EEC	SID21026	Professional Practice for Interior Designers	3	0	0	3	0	3
2	PC	SID21027	Green Interiors	3	0	0	3	0	3
3	BS	SID21028	Modern and Contemporary Interior Design	3	0	0	3	0	3
4	DE	SID215**	Elective – IV (MOOC)	3	0	0	3	0	3
5	NE	NDE 2	Non-Department Elective - II	2	0	2	3	2	4
<b>THEORY CUM STUDIO</b>									
6	PC	SID21029	Conservation and Renovation	2	0	2	3	2	4

<b>STUDIO</b>									
7	PC	SID21405	Interior Design Studio - IV	0	0	8	4	0	8
8	EEC	SID21802	Dissertation	0	0	4	2	2	4
<b>TOTAL</b>				<b>16</b>	<b>0</b>	<b>16</b>	<b>24</b>	<b>6</b>	<b>32</b>

<b>SEMESTER - VII</b>									
<b>SL. NO</b>	<b>COURSE CATEGORY</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>S</b>	<b>TCH</b>
<b>STUDIO</b>									
1	EEC	SID21803	Training	0	0	24	12	0	24
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>	<b>0</b>	<b>24</b>

<b>SEMESTER - VIII</b>									
<b>SL. NO</b>	<b>COURSE CATEGORY</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>S</b>	<b>TCH</b>
<b>THEORY</b>									
1	DE	SID215**	ELECTIVE – V	3	0	0	3	1	3
2	DE	SID215**	ELECTIVE – VI	3	0	0	3	1	3
<b>STUDIO</b>									
3	EEC	SID21804	Thesis	0	0	20	10	3	20
<b>TOTAL</b>				<b>6</b>	<b>0</b>	<b>20</b>	<b>16</b>	<b>5</b>	<b>26</b>

**LIST OF DEPARTMENTAL ELECTIVES GROUPING -  
SEMESTER WISE**

<b>SEM (Elec tive No.)</b>	<b>COURSE CATEGORY</b>	<b>COURSE CODE</b>	<b>NAME OF THE COURSE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>S</b>	<b>TCH</b>
<b>ELECTIVE I</b>									
III	DE	SID21500	Arts And Graphics in Interior design	3	0	0	3	0	3
III	DE	SID21501	Applied Colour Theory	3	0	0	3	0	3
III	DE	SID21502	Cultural Anthropology	3	0	0	3	0	3
III	DE	SFA11009	Textiles and Costumes of India	3	0	0	3	0	3
<b>ELECTIVE II</b>									
IV	DE	SID21503	Inclusive Interiors	3	0	0	3	0	3
IV	DE	SID21504	Visual and Performing Arts	3	0	0	3	0	3
IV	DE	SID21505	Representation of Spaces	3	0	0	3	0	3
IV	DE	SFA11502	Technical Textile	3	0	0	3	0	3
<b>ELECTIVE III</b>									
V	DE	SAR51503	Product Design	3	0	0	3	0	3
V	DE	SAR51504	Set Design	3	0	0	3	0	3
V	DE	SID21504	Digital Modelling	3	0	0	3	0	3
<b>ELECTIVE IV</b>									
VI	DE	SID21505- SID21514	MOOC - COURSES RELATED TO INTERIOR DESIGN	3	0	0	3	0	3
<b>ELECTIVE V</b>									
VIII	DE	SID21515- SID21524	MOOC – COURSES RELATED TO INTERIOR DESIGN	3	0	0	3	0	3
<b>ELECTIVE VI</b>									
VIII	DE	SCD21529	Entrepreneurship and Marketing Techniques	3	0	0	3	0	3
VIII	DE	SID21525	Project Management	3	0	0	3	0	3
VIII	DE	SGE51500	Research Methods, Patents and IPR	3	0	0	3	0	3

### SEMESTER I

<b>COURSE TITLE</b>	<b>HISTORY OF INTERIOR DESIGN - I</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21001</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>
<b>Course Description</b>	In this course, students will study about the importance of culture and tradition in interior, emphasis of elements in interior and different contemporary styles in interiors.				
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To understand the importance of culture and tradition in interior.</li> <li>2. To understand the evolution of interior spaces from ancient civilization.</li> <li>3. To understand the planning of interiors in Buddhist and Jain temples</li> <li>4. To understand the evolution and planning of Hindu temples.</li> <li>5. To understand Harmony between architecture and interior in Christian religious spaces.</li> </ol>				

<b>Course Outcome</b>	Upon completion of this course, the students will be able to
	<ol style="list-style-type: none"> <li>1. Familiarize with the importance of culture and tradition in interior.</li> <li>2. Familiarize with the evolution of planning of interior spaces in ancient civilizations.</li> <li>3. To learn about the planning of interior spaces, materials and various treatments evolved in the temples of Buddhist and Jain.</li> <li>4. To explore different features found in the Hindu temples.</li> <li>5. Familiarize with different architecture and interior in Christian religious spaces.</li> </ol>

**Prerequisites: Nil**

### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO-11	PS O-1	PSO -2	PS O -3	PSO -4	PSO -5
CO-1	2	2	2	-	2	2	1	3	1	1	1	2	1	1	2	3
CO-2	2	2	2	-	2	3	1	3	1	3	1	2	1	1	2	3
CO-3	2	3	3	-	2	2	1	1	1	1	1	2	1	1	2	3
CO-4	2	3	3	-	2	2	1	1	1	1	2	1	1	2	3	2
CO-5	2	2	1	-	-	3	1	1	1	1	1	2	1	1	2	3

**1: Weakly related, 2: Moderately related and 3: Strongly related**

### MODULE 1 : - HISTORIC DEVELOPMENT OF INTERIOR SPACES

**(9L+0P=9)**

Cave paintings – Themes and methods of cave paintings - Prehistoric interiors – expansion of interior spaces. Interiors during Egyptian - Geometric patterns, Greek, Roman, Gothic, Early Christian and Byzantine Periods, Ensemble of art, crafts like sculpture, pottery etc in each era.

**CO-1  
BTL-2**

### MODULE 2 : STRUCTURAL & NON STRUCTURAL

**(9L+0P=9)**

Timeline – types of structures. Examples of structural and non-structural. Indus valley civilization and Harappan civilization – planning, interior spaces and materials used.

**CO-2  
BTL-2**

### MODULE 3 : INTERIOR SPACE AND RELIGION - BUDDHIST AND JAIN

**(9L+0P=9)**

Buddhist and Jain faith - Harmony between architecture and interior in religious spaces – the play of light and shadow – art, sculpture, mould, wall treatments, roof treatments, floor treatments – interiors as reflection of the faith – examples and case studies across faiths.

**CO-3  
BTL-3**

### MODULE 4 : INTERIOR SPACE AND RELIGION – HINDU

**(9L+0P=9)**



Evolution of Hindu temple - Early shrines of the gupta and chalukyan periods – Tigawa temple, Ladh Khan and Durga temple, Aihole, Papanatha and Virupaksha temples, Pattadakal.		<b>CO-4</b> <b>BTL-3</b>
<b>MODULE 5: INTERIOR SPACE AND RELIGION – CHRISTIAN</b>		<b>(9L+0P=9)</b>
Christian faith - Harmony between architecture and interior in religious spaces – the play of light and shadow – art, sculpture, mould, wall treatments, roof treatments, floor treatments – interiors as reflection of the faith – examples and case studies across faiths.		<b>CO-5</b> <b>BTL-3</b>
<b>TEXT BOOKS</b>		
1	John F. Pile, A history of interior design, 2nd edition, Laurence King Publishing, 2005. Jeannie Ireland, History of Interior Design, air child publications, illustrated ed., 2009	
2	Elaine, Michael Dywer, Christopher Mackinnon, Norman A. J. BerisfordDenby , A History of Interior Design, Rhodoc International, 2000	
3	Sir Banister Fletcher, A History of Architecture, CBS Publications (Indian Edition), 21st Edition 2019.	
<b>REFERENCE BOOKS</b>		
1	GiedionSigfried, Space, Time and Architecture: The growth of a new tradition, 5th ed. HarvardUniversity Press, Cambridge, 2008.	
2	Richard Ingersoll, World Architecture: A Cross-Cultural History, Oxford University Press; 2 edition 2018	
<b>MOOC</b>		
1	<a href="https://study.com/academy/lesson/the-history-of-interior-design.html">https://study.com/academy/lesson/the-history-of-interior-design.html</a>	
2	<a href="https://www.nda.ac.uk/study/courses/fda-degree/heritage-interior-design">https://www.nda.ac.uk/study/courses/fda-degree/heritage-interior-design</a>	

<b>COURSE TITLE</b>	<b>BASICS OF THEORY OF DESIGN</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21002</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-4</b>
<b>ASSESSMENT SCHEME</b>					
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>
<b>Course Description</b>	In this course, students will learn about the basic concepts of design with respect to its composition and theory of colours. They also learn about the colour variation and its intensity with its usage in the field of design which has impact on various fields.				
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To familiarize students with basics of theory of design concepts and principles</li> <li>2. To ensure students can practice the methods, processes and tools of theory of design</li> <li>3. To enable the students to analyze the making and the composition of different compositions.</li> <li>4. To ensure students can apply theory of design approach in the field of designing the Interior Spaces</li> </ol>				

<b>Course Outcome</b>	Upon completion of this course, the students will be able to
	<ol style="list-style-type: none"> <li>1. To understand the basics elements and principles of design.</li> <li>2. To develop the understanding of shapes in reference to elements and principles.</li> <li>3. To understand space making using solid shapes creating visual composition.</li> <li>4. To develop the vision of color and color wheel in different scenarios.</li> <li>5. To develop the meaning of space in reference to color and other elements</li> </ol>

**Prerequisites: Nil**

### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PSO -1	PSO -2	PSO -3	PSO -4	PSO -5
CO-1	3	2	1	-	1	1	2	3	1	1	2	3	-	-	-	1
CO-2	2	1	1	-	1	2	2	3	1	1	2	3	-	-	-	1
CO-3	3	2	1	-	1	1	2	3	1	1	1	3	-	-	-	1
CO-4	2	2	1	-	1	1	2	3	1	1	2	3	-	-	-	1
CO-5	3	1	1	-	1	1	2	2	1	1	2	3	-	-	-	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

### MODULE 1 – INTRODUCTION TO ELEMENTS AND PRINCIPLES OF DESIGN (10L+0P=10)

<p>Definitions and meaning of design, importance of design, examples of design from nature. Fundamental elements of design in 2-D and their definitions; point, line, shape, form, space, texture, value, color and material. Introduction to the principles of design in 2-D and 3D - unity, balance, symmetry, proportion, scale, hierarchy, rhythm, contrast, harmony, focus, etc. ; use of grids, creating repetitive patterns.</p>	<p><b>CO-1</b> <b>BTL-2</b></p>
---	-------------------------------------

### MODULE 2: CONCEPTS OF GEOMETRY (8L+0P=8)

<p>Introduction to different 3-D forms and primitive shapes and forms. Transformation of 2-D to 3-D. Geometrical forms and their characteristics: regular form, irregular form, transformation of form, additive form, subtractive form, formal collisions of geometry.</p>	<p><b>CO-2</b> <b>BTL-2</b></p>
---	-------------------------------------

### MODULE 3: PRINCIPLES OF COMPOSITION (7L+0P=7)

<p>Principles of composition using grids, symmetrical/ asymmetrical, Rule Of Thirds, Center Of Interest, Gestalt's Theory of Perception and Visual Composition, Proportioning systems- Golden Ratio, Fibonacci series.</p>	<p><b>CO-3</b> <b>BTL-3</b></p>
--	-------------------------------------

<b>MODULE 4: THEORY OF COLOURS</b>		<b>(12L+0P=12)</b>
Introduction –visible spectrum, colored light, color temperature, color interaction, color-blindness. Color wheel – primary, secondary, tertiary colors, color schemes, color value, intensity, hues – tints, shades, neutralization. Color harmony, use of color harmony. Psychological impact of color – warm, cool and neutral colors, color and form, color and light, color and surface qualities, color and distances and scales.		<b>CO-4</b> <b>BTL-3</b>
<b>MODULE 5: DEFENITION OF SPACE AND SPACE MAKING ELEMENTS</b>		<b>(8L+0P=8)</b>
Vertical and horizontal elements defining space: base plane, elevated plane, vertical planes, enclosure and openings. Defining an interior space, qualities of space, scale- human scale, monumental scale, Proportion- width and heights, spatial transitions.		<b>CO-5</b> <b>BTL-3</b>
<b>TEXT BOOKS</b>		
Francis D. K. Ching, ‘Architecture - Form, Space and Order’, Van Nostrand Reinhold Company ,2007.		
V.S.Pramar, ‘Design Fundamentals in Architecture’, Somaiya Publications, New Delhi, 2007		
<b>REFERENCE BOOKS</b>		
1	Ching, Francis D.K. Architecture Form, space, and Order, 3rd ed. Van Nostrand Reinhold, New York, 2007.	
<b>MOOC</b>		
1	<a href="https://www.edx.org/course/design-theory">https://www.edx.org/course/design-theory</a>	
2	<a href="https://www.edx.org/course/design-thinking-fundamentals-ritx-think501x">https://www.edx.org/course/design-thinking-fundamentals-ritx-think501x</a>	

<b>COURSE TITLE</b>	<b>INTRODUCTION TO INDIAN ARTS</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21003</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL -3</b>

#### ASSESSMENT SCHEME

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	In this course students will learn about the basics of History of Interiors to explore the various art forms related to the design of Interior spaces. The transformation in the style of design from pre-historic times to the present times is studied with the help of various narrations and sketches.
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To ensure that the students identify different styles of Interior Design from the Early modern times to current times.</li> <li>2. To acknowledge them with the surrounding trends in the field of Interior Design.</li> <li>3. To guide them in learning different types of materials used for construction of various objects.</li> </ol>

<b>Course Outcome</b>	Upon completion of this course, the students will be able to -
	<ol style="list-style-type: none"> <li>To understand the evolution of art in interiors during the prehistoric period</li> <li>To understand the different traditional contemporary art form with different tools and techniques.</li> <li>To explore the different ornaments and accessories in historic interiors</li> <li>To understand the spatial scale in Buddhist, Islamic and Hindu art forms</li> <li>To explore the various art forms throughout the world during 9th and 20th century</li> </ol>

**Prerequisites:**

### CO, PO AND PSO MAPPING

CO	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO-1	PSO-2	PSO-3	PSO-4
CO-1	2	2	2	-	2	2	1	3	1	1	1	2	1	1	2	2
CO-2	2	2	2	-	2	3	1	3	1	3	1	2	1	1	2	2
CO-3	2	3	3	-	2	2	1	1	1	1	1	2	1	1	2	2
CO-4	2	3	3	-	2	2	1	1	1	1	2	1	1	2	3	2
CO-5	2	2	1	-	-	3	1	1	1	1	1	2	1	1	2	2

**1: Weakly related, 2: Moderately related and 3: Strongly related**

### MODULE 1 – PURPOSE AND RELEVANCE OF ART DEVELOPMENT

**(10L+0P=10)**

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.

**CO-1**

**BTL-3**

### MODULE 2: EXPLORATION OF ART FORMS

**(8L+0P=8)**

Study of traditional and contemporary art forms – painting, sculpture, architecture, decorative arts, design arts, digital art. Relationship between art and design from the earliest time.	<b>CO-2</b> <b>BTL-3</b>
<b>MODULE 3: STUDY OF ORNAMENTS &amp; ACCESSORIES</b> (7L+0P=7)	
Ornaments & Accessories in Interior Design. Different types of Ornamentation & Accessories in the interiors. Study and evaluation of artefacts, historic examples and their applicability.	<b>CO-3</b> <b>BTL-3</b>
<b>MODULE 4: NEW DIRECTIONS IN ART</b> (12L+0P=12)	
Context for new directions in art in the late 19th and early 20th century Impressionism – post Impressionism – Fauvism- Expressionism- Cubism Dadaism – Surrealism - abstract art – Futurism – Constructivism- De Stijl -Abstract Expressionism - Pop art - Op art- new forms and media of art.	<b>CO-4</b> <b>BTL-3</b>
<b>MODULE 5: WORKS OF FAMOUS ARTISTS</b> (8L+0P=8)	
Study of famous and influential Artists, Craftsmen and people who pioneered innovations in their own fields and their influence on design and other fields.  Works of Van Gogh, Dali, William Morris, Picasso, Da Vinci.  <b>Suggested Reading:</b> <a href="http://www.nios.ac.in/media/documents/dled/Block1_508.pdf">http://www.nios.ac.in/media/documents/dled/Block1_508.pdf</a>	<b>CO-5</b> <b>BTL-3</b>
<b>TEXT BOOKS</b>	
<b>1</b>	Alan Barnard & Jonathan Spencer, Encyclopaedia of social and cultural anthropology, Routledge; 1 edition, 2002
<b>2</b>	Niggel Rapport, Social and Cultural Anthropology: The Key Concepts, Routledge, 2000
<b>3</b>	Elizabeth. D. Hutchinson, Sage publications, Dimensions of Human Behavior, person and Environment, 2007.
<b>4</b>	Kumar Raj (Ed) Essays on Indian Art and Architecture. Discovery pub., New Delhi, 2003
<b>5</b>	Ghosh. A (Ed). Jain Art and Architecture Vol 1-3. BharatiyaJnanpith.New Delhi.
<b>6</b>	Christine M. Piotrowski, Becoming an Interior Designer, John Wiley and Sons, 2003.
<b>REFERENCE BOOKS</b>	
<b>1</b>	Henry Wilson, India: Decoration, Interiors, Design, Watson Guptill, First American edition,2001

2	Michael Freeman, India Modern, Periplus editions, 2005
3	Sunil Sethi, Angelika Taschen, Indian Interiors, TASCHEN America Ltd; 25th ed. edition, 2009
<b>MOOC</b>	
1	<a href="https://study.com/academy/lesson/the-history-of-interior-design.html">https://study.com/academy/lesson/the-history-of-interior-design.html</a>
2	<a href="https://www.nda.ac.uk/study/courses/fda-degree/heritage-interior-design">https://www.nda.ac.uk/study/courses/fda-degree/heritage-interior-design</a>

<b>COURSE TITLE</b>	<b>ANTHROPOMETRICS AND ERGONOMICS</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21004</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-4</b>
<b>ASSESSMENT SCHEME</b>					
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>
<b>Course Description</b>	In this course, the students will learn the basics of Anthropometrics and ergonomics which will help them to design furniture and interior according to the human proportions with respect to the end-Users of the product. This can enhance the design to promote good health and posture.				



<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To guide the students to understand human factors that need to be considered when designing products and interior.</li> <li>To ensure that the students understand the term personal preference, style, and fashion with respect to their impact of products.</li> <li>To enable the students to explore the influence of anthropometry and ergonomics in design.</li> <li>To enable the students to design a framework taking into consideration the various factors affecting behavior aspect of human in anthropometry.</li> </ol>
-------------------------	--

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to -</p> <ol style="list-style-type: none"> <li>To analyze and identify the anthropometrics and ergonomics in daily life</li> <li>To understand and analyze the stress factors on human body in various tasks</li> <li>To understand and analyze the furniture for different types of works and their effects on human body</li> <li>To be able to create a standard measurement / dimension for a given task based on percentile methods</li> <li>To understand and analyze the cognitive and behavioral aspects of humans with respect to furniture</li> </ol>
-----------------------	---

**Prerequisites: Nil**

**CO, PO AND PSO MAPPING**

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PS O-1	PSO -2	PSO -3	PSO -4	PSO -5
CO-1	2	2	3	1	1	1	2	3	1	2	1	3	1	1	1	2
CO-2	-	-	3	2	2	1	2	3	1	2	1	2	1	1	3	2
CO-3	-	-	3	2	2	1	2	3	1	2	1	2	3	2	1	2
CO-4	-	-	3	2	2	1	2	3	1	2	1	3	1	1	1	2
CO-5	-	-	3	2	2	1	2	3	1	2	2	1	1	3	2	2

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1 – NEED FOR STUDY (9L+0P=9)**

Introduction to Ergonomics, Need for study of anthropometric and ergonomics, Design today - Human aid to lifestyle.	<b>CO-1</b> <b>BTL-4</b>
---	-----------------------------

**MODULE 2: ERGONOMICS IN INDIA (9L+0P=9)**

Environmental factors influencing human performance, Ergonomics in India. Ergonomics/human Factors fundamentals, Physiology (work physiology) and stress.	<b>CO-2</b> <b>BTL-4</b>
<b>MODULE 3: HUMAN PHYSICAL DIMENSION (9L+0P=9)</b>	
Human physical dimension concern: Human body- structure and function, anthropometrics, Anthropometry: body growth and somatic types, Static and dynamic anthropometry, Stand Posture- erect, Anthropometry landmark: Sitting postures, Anthropometry: squatting and cross-legged postures, Anthropometric measuring techniques, Statistical treatment of data and percentile calculations	<b>CO-3</b> <b>BTL-4</b>
<b>MODULE 4: HUMAN BODY STRUCTURE AND FUNCTION (9L+0P=9)</b>	
Posture and job relation, Posture and body supportive devices, Chair characteristics, Vertical work surface, Horizontal work surface, movement, work Counter.	<b>CO-4</b> <b>BTL-4</b>
<b>MODULE 5: BEHAVIOUR AND PERCEPTION (9L+0P=9)</b>	
Communication and cognitive issues, Psychosocial behavior aspects, behavior and stereotype, Information processing and perception, Cognitive aspects and mental workload, Human error and risk perception.	<b>CO-5</b> <b>BTL-4</b>
<b>TEXT BOOKS</b>	
1	Alan Barnard & Jonathan Spencer, Encyclopedia of social and cultural anthropology, Routledge; 1 edition, 2002
2	Niggel Rapport, Social and Cultural Anthropology: The Key Concepts, Routledge, 2000
3	Elizabeth. D. Hutchinson, Sage publications, Dimensions of Human Behavior, person and Environment, 2007.
4	Kumar Raj (Ed) Essays on Indian Art and Architecture. Discovery pub., New Delhi, 2003
5	Ghosh. A (Ed). Jain Art and Architecture Vol 1-3. BharatiyaJnanpith.New Delhi.
<b>REFERENCE BOOKS</b>	
1	Christine M. Piotrowski, Becoming an Interior Designer, John Wiley and Sons, 2003.
2	Henry Wilson, India: Decoration, Interiors, Design, Watson Guptill, First American edition, 2001
3	Michael Freeman, India Modern, Periplus editions, 2005
4	Sunil Sethi, Angelika Taschen, Indian Interiors, TASCHEN America Ltd; 25th ed. edition, 2009
<b>MOOC</b>	

1	<a href="https://study.com/academy/lesson/the-history-of-interior-design.html">https://study.com/academy/lesson/the-history-of-interior-design.html</a>
2	<a href="https://www.nda.ac.uk/study/courses/fda-degree/heritage-interior-design">https://www.nda.ac.uk/study/courses/fda-degree/heritage-interior-design</a>

<b>COURSE TITLE</b>	<b>DRAWING AND RENDERING</b>			<b>CREDITS</b>	<b>2</b>
<b>COURSE CODE</b>	<b>SID21005</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>1-0-2-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					
<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>		
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>		
<b>Course Description</b>	The course introduces the visual language of drawing through sketching, color theory, aesthetic composition and rendering techniques. The course develops insights in the mechanisms of visual perception, how the individual components of the drawing relate to the whole and compositional organization.				
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. Introduction of drawing as a visual language and a means of communication</li> <li>2. Learn sketching and free hand drawing to scale.</li> <li>3. Learn colour theories and its application in design</li> <li>4. Learn about various aesthetic composition of drawing elements and its application.</li> </ol>				

	5. Introduction to various rendering techniques adopted in presentation.
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. Understand the role of drawing as a means of communication and a visual language.</li> <li>2. Apply sketching and free hand drawing to scale in his exercises.</li> <li>3. Analyze colour theories and its applicability in various contexts.</li> <li>4. Analyze the various aesthetic compositions and its applicability in design. Understand the various rendering techniques and their usages in presentation of sheets.</li> </ol>

Prerequisites: Nil

### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO- 6	PO -7	PO -8	PO -9	PO -10	PO- 11	PSO -1	PSO -2	PSO -3	PSO- 4	PSO -5
CO-1	3	2	1	-	2	2	1	1	1	1	-	3	-	3	-	1
CO-2	3	2	1	-	2	2	1	1	1	1	-	3	-	3	-	1
CO-3	1	2	3	-	3	1	1	1	1	1	-	3	-	3	-	1
CO-4	1	2	3	-	3	1	1	1	1	1	-	3	-	3	-	1
CO-5	2	2	2	-	1	-	-	1	1	1	-	3	-	3	-	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

#### Module:1 – Introduction to Drawing – number of periods (2L+4P=6)

General instructions on freehand drawing & lettering • Introduction of “Drawing” as a visual language • Basic information on Drawing materials & tools: - Drawing board, Drawing paper, Pencils, Eraser, Cello tape, etc. • Different types of Drawing sheets, & their use. • Gradation of Pencil & their use; Tonal gradation of lines • Freehand Lettering: - Style in lettering- Vertical & Italics; Single stroke Architectural style; Upper case & Lower case • Study of Compositions of lettering; Borderlines & Nameplate.

**CO -1**  
**BTL - 2**

#### Module: 2 – Introduction to sketching – number of periods (2L+4P=6)

Learning Sketching, Drawing, and visual thinking Free-hand drawing appropriate to visual & architectural representation, indoor & outdoor sketching, drawing from observation, terminology & abbreviations used in visual representation, Sheet layouts, line & shape, tone & texture, figure & ground, Color & value, lettering & art lettering, dimensioning, shading,

**CO – 2**  
**BTL - 3**

symbols & scale.		
<b>Module: 3 – Color – number of periods</b>		<b>(2L+4P=6)</b>
Color theory • Basic information on, Colouring materials: - Colour mixing Pallet, Brushes and Colour (Water colour, colour pencil, crayon, poster, pastel etc). • Colour Science & Basic information on use of colour		<b>CO – 3</b> <b>BTL - 4</b>
<b>Module: 4 – Aesthetic composition – number of periods</b>		<b>(2L+4P=6)</b>
Freehand Composition with set of lines &marks in pencil & color. • Aesthetic organization: Graphic representations – Visual composition and Abstraction- Exercises involving Logo design, collage, calligraphy and printing.		<b>CO – 4</b> <b>BTL - 4</b>
<b>Module: 5 – Rendering techniques – number of periods</b>		<b>(2L+4P=6)</b>
Rendering Techniques Representation technique of plan, elevation & section in architectural drawing. Kinetics & Optics, Monochromatic & different themes of rendering, architectural rendering techniques using pen & ink, color, values, tones, and general approach to rendering. Architectural representation of trees, hedges, foliage, human figures, cars, symbols etc., exposure to various mediums of presentation		<b>CO – 5</b> <b>BTL - 2</b>
<b>TEXT BOOKS</b>		
1	Atkins, B. (1986). Architectural Rendering. California : Walter Foster Art Books.	
2	Ching, F. D. K. (2011). A Visual Dictionary of Architecture. 2nd Ed. John Wiley & Sons.	
<b>REFERENCE BOOKS</b>		
1	Webb, Frank, “The Artist guide to Composition”, David & Charles, U.K., 1994.	
2	Drawing a Creative Process”, Ching Francis, Van Nostrand Reinhold, New York, 1990.	
3	Alan Swann, Graphic Design School, Harper Collins, 1991.	
4	Moivahuntly, “The artist drawing book”, David & Charles, U.K., 1994.	
<b>E-BOOKS</b>		
1	<a href="https://study.com/academy/lesson/the-history-of-interior-design.html">https://study.com/academy/lesson/the-history-of-interior-design.html</a>	
<b>MOOC</b>		
1	<a href="https://www.edx.org/learn/drawing/the-university-of-newcastle-australia-drawing-nature-science-and-culture-natural-history-illustration-101">https://www.edx.org/learn/drawing/the-university-of-newcastle-australia-drawing-nature-science-and-culture-natural-history-illustration-101</a>	

<b>COURSE TITLE</b>	<b>FUNDAMENTALS OF VISUALIZATION AND REPRESENTATION - I</b>				<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21006</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>1-0-4-1</b>	
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>	

#### ASSESSMENT SCHEME

<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>

**Course Description**  
In this course students will learn about the basics of projection and drafting techniques. They will be introduced with the basics of construction which will include projection and section of solids.

- Course Objective**
1. To ensure that the students learn about the basics of drafting the geometric shapes.
  2. To acknowledge the students with various projection techniques.
  3. To ensure that the students learn about the sections of combinations of solids in different positions.
  4. To ensure that the students learn about the perspectives with varied vanishing points.

- Course Outcome**  
Upon completion of this course, the students will be able to -
1. To understand scales and construction of various conic sections.
  2. To impart knowledge about orthogonal projection.
  3. To learn about projection of various solids and their combinations.
  4. To understand the development of surfaces and intersection of surfaces.
  5. To learn to draw the isometric projection of planes, and objects.

**Prerequisites: Nil**

#### CO, PO AND PSO MAPPING

CO	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO-1	PSO-2	PSO-3	PSO-4	PSO-5
CO-1	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-2	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-

CO-3	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-4	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-5	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1 – GEOMETRICAL CONSTRUCTIONS (3L+12P=15)**

SCALES: Construction of plain scale and diagonal scale

CONIC SECTIONS: Construction of conic sections given the distance of focus from the directrix and eccentricity. Construction of ellipse – concentric circle method, rectangular method and intersecting arc method. Construction of parabola by rectangular method and by tangent method. Construction of hyperbola – given the asymptotes and a point on the curve SPIRALS: Construction of Archimedean spiral and Logarithmic spiral HELIX : Construction of cylindrical helix ,conical helix and square helical spring

**CO-1  
BTL-3**

**MODULE 2: PROJECTIONS (3L+12P =15)**

First angle projection Points and Lines: Orthographic projection of lines for any given condition, determination of true length, traces and inclinations to the planes of projection of any given line  
Planes : Traces of planes , plane figure inclined to one or both the reference planes

**CO-2  
BTL-3**

**MODULE 3: SOLIDS (3L+12P =15)**

Solids: Simple solids in simple position, prisms, regular pyramids, tetrahedron, octahedron, cone, spheres and their combinations placed in different positions. Auxiliary projections of simple solids and their combinations. Change of position and auxiliary plane method.

**CO-3  
BTL-3**

**MODULE 4: SECTIONS & DEVELOPMENTS OF SOLIDS (3L+12P =15)**

Intersection of surfaces: Line of intersection of two prisms, two cylinders and cone Section of solids: Section of simple solids by planes inclined. True shape of sections. Development of surfaces: Development of surfaces of simple solids, prisms, cylinders, pyramids, cones, spheres and truncated solids.

**CO-4  
BTL-3**

**MODULE 5: MATERIAL PROJECTIONS (3L+12P =15)**

Isometric Projection: Isometric scale, isometric view of planes, simple solids, truncated solids, Combination of objects Perspective projection : Perspective projection of simple solids and their combinations by visual ray method and vanishing point method.

**CO-5  
BTL-3**

<b>TEXTBOOKS</b>	
1	N.D.Bhatt, 'Elementary Engineering Drawing', 53rd edition, Charotar, 2014
2	CariLaraSvensan and William Ezara Street, 'Engineering Graphics',
<b>REFERENCE BOOKS</b>	
1	Engineering Drawing And Graphics by Prof. K Venugopal, New Age International (P) Ltd., Publishers, 2020.
2	S. Rajaraman, 'Practical Solid Geometry'
<b>MOOC</b>	
1	<a href="http://nptel.ac.in/noc/individual_course.php?id=noc17-ce03">http://nptel.ac.in/noc/individual_course.php?id=noc17-ce03</a>
2	<a href="http://nptel.ac.in/courses/112103019/">http://nptel.ac.in/courses/112103019/</a>



<b>COURSE TITLE</b>	<b>BASICS OF INTERIOR DESIGN - 1</b>				<b>CREDITS</b>	<b>4</b>
<b>COURSE CODE</b>	<b>SID21400</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>0-0-8-1</b>	
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-4</b>	

#### ASSESSMENT SCHEME

<b>Continuous Assessment - 1</b>	<b>Continuous Assessment – II</b>	<b>Continuous Assessment III</b>	<b>Summative Assessment</b>
<b>20%</b>	<b>20%</b>	<b>10%</b>	<b>50%</b>

<b>Course Description</b>	In this course students will learn about the creative approaches towards the process of evolving a design from its primitive stage.
---------------------------	---

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To ensure that the students develop a clear framework towards framing the methodology to complete or continue a creative process.</li> <li>To ensure the students develop generative design thinking approaches</li> <li>To make the students understand the importance of mind mapping and brain storming</li> <li>To ensure that the students evolve the design using basic sketches for representation</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to -</p> <ol style="list-style-type: none"> <li>To integrate the understanding towards creative thinking techniques</li> <li>To develop and understand graphical representation of elements.</li> <li>To work in hands with concepts and creative thinking that represent the same</li> <li>To collaborate both technical knowledge along with creativity, theme and rendering output.</li> <li>To understand the evolution of design from basic concepts to design outputs.</li> </ol>
-----------------------	--

**Prerequisites: Nil**

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PS O-1	PSO -2	PSO -3	PSO -4	PSO -5
CO-1	3	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1
CO-2	3	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1
CO-3	3	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1

CO-4	3	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1
CO-5	3	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1 - INTRODUCTION TO BASIC DESIGN (14P+2S =16)**

Definitions of creativity, understanding components of creativity, definitions of problem solving, Theories of creativity, goals and objectives, value judgments, defining problems, information gathering, creative incubation, creative thinking and creative process. **CO-1 BTL-4**

**MODULE 2 –THINKING TECHNIQUES (14P+2S =16)**

Principles in generative, convergent, lateral, interactive, graphical thinking, check lists, analysis and Synthesis simulation, action ability and implementations of intentions. Blocks in creative thinking. **CO-2 BTL-4**

**MODULE 3: TOOLS AND TECHNIQUES OF CREATIVITY (21P+3S =24)**

Mind mapping, brain storming with related stimuli and unrelated stimuli, positive techniques for creativity, creative pause, Focus, Challenge, alternatives, concepts, sensitizing techniques, group or Individual techniques. **CO-3 BTL-4**

**MODULE 4: PROBLEM STATEMENTS (21P+3S =24)**

Brain writing with unrelated stimuli, idea mapping, random input, story boarding exercises, problem solving techniques –brain storming, lateral thinking of De Bono **CO-4 BTL-4**

**MODULE 5: CREATIVE SOLUTIONS (35P+5S =40)**

Applicable to designs – Design, Invention, opportunity, problems, improvement, planning, projects, conflicts. Simple Design exercises. Creative Design process – conceptual design, embodiment design, detail design, Iterations **CO-5 BTL-4**

Assignments: students are to design & produce at least 24 minor & 12 major basic products of day to day use and submit conceptual sketches along with a written report for internal and external assessment.

**TEXT BOOKS**

1	Geoffrey Broadbent. Design in Architecture, London:D.Fulton
2	Christopher Alexander. Pattern Language. New York: Oxford University Press & Thomas Mitchell.Redefining Designing: Form to Experience
3	Edward De Bono, Lateral Thinking
4	Design Basics for Creative Results by Bryan L.Peterson, F&W Publications, Inc.

**REFERENCE BOOKS**

Archiworld Co., Ltd., “Object-Creative Idea & Unique Design” Choseok Publishing 2010

Francis D.K.Ching , “Architecture - Form Space and Order”, Van Nostrand Reinhold Co., (Canaa), 1980

**MOOC**

<https://multisite.eos.ncsu.edu/www-ergocenter-ncsu-edu/wp-content/uploads/sites/18/2016/06/Anthropometric-Detailed-Data-Tables.pdf>

<http://www.stat.colostate.edu/~jah/papers/Irvine%20et%20al%202007.pdf>

<b>COURSE TITLE</b>		<b>Communication Skills</b>			<b>CREDITS</b>	<b>2</b>	
<b>COURSE CODE</b>		<b>GLS51001</b>	<b>COURSE CATEGORY</b>	<b>HS</b>	<b>L - T - P - S</b>	<b>2 - 0 - 1 - 1</b>	
<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>	<b>35<sup>th</sup> ACM - 6<sup>th</sup> Aug. 2022</b>		<b>LEARNING LEVEL</b>	<b>BTL 4</b>	
<b>ASSESSMENT SCHEME</b>							
<b>CIA</b>					<b>ESE</b>		
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Weekly assignment/ lab record and viva as approved by the Department Examination Committee "DEC"</b>	<b>Surprise Test / Quiz., as approved by the Department Examination Committee "DEC"</b>	<b>Attendance</b>	<b>Theory</b>	<b>Practical</b>	
<b>15 %</b>	<b>15 %</b>	<b>10 %</b>	<b>5 %</b>	<b>5 %</b>	<b>25 %</b>	<b>25 %</b>	
<b>Course Description</b>	<p>The course has been designed to improve the communication competency of the students. The course builds on students' English language skills by engaging them in listening, speaking and grammar learning activities (LSRW) that are relevant to authentic contexts. This course trains the students how to communicate accurately, appropriately and fluently in professional and social situations. The course is framed so that the students can appear for Cambridge B1 Preliminary exams and also enable them to get a certification.</p>						
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To acquire self-confidence by which the learner can improve upon their informative listening skills by an enhanced acquisition of the English language.</li> <li>2. To provide an environment to Speak in English at the formal and informal levels and use it for daily conversation, presentation, group discussion and debate.</li> <li>3. To equip the students to Read, comprehend and answer questions based on literary, scientific and technological texts.</li> <li>4. To enhance the writing skills of the students via training in instructions, recommendations, checklists, process-description, letter-writing and report writing.</li> <li>5. To equip the learners in analysing and applying creative thinking skills and participate in brainstorming, mind-mapping, audiovisual activities and excel in employability skills.</li> </ol>						
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. Acquire the accuracy through the knowledge of Syntax.</li> <li>2. Demonstrate the skill of using the vocabulary and use it in sentences</li> </ol>						

appropriately.  
 3. Infer texts and improvise its usage.  
 4. Illustrate language acquisition skills through formal correspondence.  
 5. Analyse and transcode the data and interpret it in text format.

**Prerequisites:** Plus Two English-Intermediate Level

**CO AND PO MAPPING**

CO	P O1	P O2	P O3	P O4	P O5	P O6	P O7	P O8	P O9	P O10	P O11	P O12	PS O1	PS O2	PSO 3
CO1	-	-	-	-	-	-	-	-	-	-	-	-	<b>To be marked by respective department</b>		
CO2	-	-	-	-	-	-	-	-	-	-	-	-			
CO3	-	-	-	-	-	-	-	-	-	-	-	-			
CO4	-	-	-	-	-	-	-	-	-	-	-	-			
CO5	-	-	-	-	-	-	-	-	-	-	-	-			

**1: Weakly related, 2: Moderately related and 3: Strongly related**

<b>MODULE 1 : English for Employability</b> <b>(6L + 3P)</b>	
<p><b>Grammar :</b> 1. Parts of Speech – Identification and Transformation 2. Kinds of Sentences – Identification and Transformation 3. Sentence Pattern – Framing Sentences 4. Tenses – Rules &amp; its usage – Present simple and present continuous; time expressions; state verbs – Past simple ; regular and irregular verbs and spelling of past simple forms ; past continuous.</p> <p><b>Vocabulary :</b> 1. Job titles and describing jobs ; names of company departments 2. Computer terms; email and website terms. 3. Headings for CVs Describing application Procedures</p> <p><b>Writing :</b> 1. Writing emails – formal and informal – phrases for emails &amp; letters. 2. Writing a covering letter with a resume for a job application.</p> <p><b>Reading :</b> Reading about Job and Company : 1. Changing places : job swapping at work. 2. The power of word of mouse : an article on the power of online customer options 3. Haier : an article about the history of a Chinese Company. 4. What kind of company Culture would suit you ? reading answering a quiz.</p> <p><b>Lab Activities(Speaking) :</b> 1. Self Introduction. 2. Describing jobs ; asking other people about their jobs. 3. Asking about the history of a company ; past simple questions 4. Asking questions about companies and jobs.</p> <p><b>Lab Activities(Listening) :</b> 1. Being a PA 2. Growing Pains : an interview with a business consultant about company’s Growth. 3. Describing changes in a company : a Conversation on the phone.</p>	<b>CO-1 BTL- 2</b>
<b>MODULE 2 : English for Marketing</b>	
<p><b>Grammar:</b> 1. Concord - Understanding Subject Verb agreement – Identifying the error and Correcting 2. Active and Passive Voice – Identifying the voices and Transforming Active to passive and passive to active 3. Modal Verbs – Using to express modalities – in active and passive voices 4. Words to Describe causes and effects. 5. Prepositions</p> <p><b>Vocabulary :</b> 1. Vocabulary to describe objects; component parts, shapes, dimensions, materials Describing problems with equipment 2. Verbs to Describe process 3. Vocabulary to talk about advertising and marketing, Language to describe cause and effect.</p> <p><b>Writing :</b> 1. Topic Sentence 2. Paragraph Writing 3. Developing a story with the hints 4. Promotional letter(Email)</p> <p><b>Reading :</b> Product Description and Advertisement : 1. Problems with equipment : emails and headings on a form. 2. Waratah : an article on an Australian clothing company. , Short Texts : Notices, Notes and messages 3. Selling your product abroad; an article , Workplace signs and notices 4. Descriptions of advertising media, Singapore airlines; an article on the branding of an airline.</p> <p><b>Lab Activities(Speaking) :</b> 1. Role Play – Telephone call to a supplier, 2. Describing Objects</p> <p><b>Lab Activities(Listening) :</b> 1. Describing dimensions of products : Conversations with colleagues and suppliers. – The Gizmo game : listening to the uses of a gadget. 2. Channel No.5 : an interview about a production process 3. Telephone conversations : information about orders and deliveries. 4. Descriptions of how a product is advertised.</p>	<b>CO-2 BTL- 3</b>
<b>MODULE 3 : Business Correspondence</b>	
<b>(6L)</b>	

<p><b>Grammar :</b> 1. Tenses – Present continuous for future arrangements; will and going to future forms 2. Using discourse markers ; Sentence starters - Contrast &amp; similarity words, 3. Degrees of Comparison – Framing sentences with appropriate adjectives and adverbs – transformation from one degree to another degree. 4. Infinitives and gerunds – using infinitives and gerunds in sentences as different elements. 5. Conditionals – Three types of conditionals</p> <p><b>Vocabulary :</b> 1.Vocabulary for travel 2. Synonyms and Antonyms 3. Employment Vocabulary</p> <p><b>Writing :</b> 1. A letter(Email) of invitation – Accepting the invitation and declining the invitation.</p> <p><b>Reading :</b> Transport, Working Holidays and Conferences : Travel Arrangements : notices and short messages : Eurostar : an article on train travel. 2. Netflix : an article about a company’s holiday policy; thinking outside the box: an article on offsite meetings 3. Short Texts : Feedback on conferences</p> <p><b>Lab Activities(Speaking) :</b> Discussion: How to make decisions</p> <p><b>Lab Activities(Listening) :</b> 1. Making and changing appointments : Voicemail messages and phone conversations ; Future intentions and predictions : Short Extracts. 2. A travel Anecdote 3. Half Holidays: a conversations between two employees. 4. Discussing possible venues for a conference : a conversation between colleagues; a welcome speech at a conference.</p>	<b>CO-3 BTL- 3</b>
<b>MODULE 4 : English for Business Relationships (6L + 3P)</b>	
<p><b>Grammar :</b> 1. Writing Instructions and Recommendations – Transforming instruction to recommendation and recommendation to instruction 2. Expressions of quantity – semi-negative words 3. Present Perfect : time expressions : present perfect versus Past simple. 4. Reported Speech – Direct and Indirect Speeches – Identification and Transformation</p> <p><b>Vocabulary :</b> 1. Affixes 2. Countable and Uncountable nouns 3. Global Management</p> <p><b>Writing :</b> 1.Memo 2. Notice with agenda 3. Email : Requesting information</p> <p><b>Reading :</b> Corporate gift-giving, New places, New people, Team Building and Thinking globally : 1. Career Advice : letters to an advice column 2. Promotional gifts : an article 3. Descriptions of team building events; Kaizen : an article 4. Global HR management : an Article.</p> <p><b>Lab Activities(Speaking):</b> Role Play : 1. Interviewing someone about a job change 2. Discussion : Planning a team building event 3. Promoting a city : giving a speech.</p> <p><b>Lab Activities(Listening) :</b> 1. An interview with someone who has changed career 2. An interview about corporate gift giving 3. Creating good teams : a Presentation 4. Working an international Team : short Extracts.</p>	<b>CO-4 BTL- 3</b>
<b>MODULE 5 : English for Presentation</b>	
<p><b>Grammar :</b> 1. Adjectives and adverbs 2. Pronouns and Reference Words 3. Types of Sentences – Simple, Compound and complex Sentences – Identification and transformation.</p> <p><b>Vocabulary :</b> 1. Describing Trends 2. Finance Vocabulary 3. Stocks and Shares 4. Collocation - sets and money</p> <p><b>Writing :</b> 1. Transcoding – Converting an image (Linegraph, piechart, bar chart, flowchart tree diagram etc., ) into a paragraph – Converting a paragraph into an</p>	<b>CO-5 BTL- 4</b>

<p>image(Linegraph, piechart, bar chart, flowchart tree diagram etc., ) 2. Summary writing</p> <p><b>Reading :</b> Describing Statistics, Company finances, investments and starting up :</p> <p>1. Interpreting bar charts 2. Café Coffee day : an article on the growth of the Indian coffee shop. 3. Shares and the stock exchange: a web page; short articles from the financial news; men and women investments : an article 4. Teenage entrepreneurs : reading and comparing two articles; Kalido: an article on funding.</p> <p><b>Lab Activities(Speaking) :</b> 1. Describing figures and trends 2. Discussing qualities needed in candidates for a job vacancy</p> <p><b>Lab Activities(Listening) :</b> 1. Listening to statistical information : short extracts 2. An interview with the employee of a company that helps failing business 3. An interview with someone who works in investor relations. 4. Radio interview : marketing director of a business support service.</p>	
---	--

<b>TEXT BOOK</b>	
1	Whitby, Norman (2019). Cambridge English Business Benchmark, Pre-intermediate and Intermediate. Cambridge University Press. India (Pages 208)
<b>REFERENCE BOOKS</b>	
1.	Murphy, Raymond(2021). Essential English Grammar, Cambridge University Press.
2.	Redman, Stuart(2020).English Vocabulary In Use: Pre - Intermediate And Intermediate. Cambridge University Press. India (Pages 264)
3.	Bikram K. Das. et al.,(2019) An Introduction to Professional English and Soft Skills with audio CD, Cambridge University Press. India (Pages 272)
4.	John, Dolly., (2018), English for Life and the Workplace Through LSRW&T Skills, Pearson Publications.India (Pages 263)
<b>E BOOKS</b>	
1.	<a href="https://www.cambridge.org/gb/files/9116/4138/4615/A1_Student_Book.pdf">https://www.cambridge.org/gb/files/9116/4138/4615/A1_Student_Book.pdf</a>
2.	<a href="https://www.cambridge.org/gb/files/1416/4138/4681/A1_Workbook.pdf">https://www.cambridge.org/gb/files/1416/4138/4681/A1_Workbook.pdf</a>
3.	<a href="https://www.cambridge.org/gb/files/7216/4138/1999/A2_Student_Book.pdf">https://www.cambridge.org/gb/files/7216/4138/1999/A2_Student_Book.pdf</a>
4.	<a href="https://www.cambridge.org/gb/files/6816/4138/2072/A2_Workbook.pdf">https://www.cambridge.org/gb/files/6816/4138/2072/A2_Workbook.pdf</a>
<b>MOOC</b>	
1.	<a href="https://www.edx.org/professional-certificate/tsinghuax-english-communication-skills">https://www.edx.org/professional-certificate/tsinghuax-english-communication-skills</a>
2.	<a href="https://www.britishcouncil.org/tr/en/english/mooc/english-for-the-workplace">https://www.britishcouncil.org/tr/en/english/mooc/english-for-the-workplace</a>



**SEMESTER – II**

<b>COURSE TITLE</b>	<b>HISTORY OF INTERIOR DESIGN – II</b>				<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21007</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>	
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>	

**ASSESSMENT SCHEME**

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

**Course Description**  
 In the past, interiors were put together instinctively as a part of the process of building. The practice of interior design harkens back to the Ancient Egyptians, who decorated their naive mud homes with basic furnishings enhanced by animal skins, simple textiles, graphic biographical and spiritual murals, sculptures, and painted urns.

- Course Objective**
1. To understand various architectural and interior elements from the ancient Civilizations.
  2. To review the classic styles and oriental influences from the past
  3. To understand how various styles from Europe shaped Architecture and interiors during the Middle Ages.
  4. To understand the role of decorative styles in history of architecture and interior design.
  5. To appreciate various styles learnt through individual designs across diverse range of sources.

- Course Outcome**  
 Upon completion of this course, the students will be able to
1. Explain architectural and interior elements from the ancient civilizations.
  2. Familiarize with classic styles from the past.
  3. Explain how various styles shaped architecture and interiors.
  4. Familiarize with the decorative styles in architecture and interior design.
  5. Familiarize with various styles.

**Prerequisites:**

**CO, PO AND PSO MAPPING**

<b>CO</b>	<b>P O</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PO</b>	<b>PS O-</b>	<b>PSO</b>	<b>PS O -</b>	<b>PSO</b>	<b>PSO -</b>
-----------	------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	--------------	------------	---------------	------------	--------------

	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	1	-2	3	-4	5
CO-1	2	2	2	-	2	2	1	3	1	1	1	2	1	1	2	3
CO-2	2	2	2	-	2	3	1	3	1	3	1	2	1	1	2	3
CO-3	2	3	3	-	2	2	1	1	1	1	1	2	1	1	2	3
CO-4	2	3	3	-	2	2	1	1	1	1	2	1	1	2	3	2
CO-5	2	2	1	-	-	3	1	1	1	1	1	2	1	1	2	3

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1 : - ANCIENT INDIA**

**(9L+0P=9)**

Indus Valley Civilization - Culture and pattern of settlement. Impact of Aryan culture - Vedic village and the rudimentary forms of bamboo and wood, wooden construction under the Mauryan rule. Buddhist structures.

Suggested Reading: Early Indian Architecture: Cities and City-Gates by Ananda K. Coomaraswamy.

**CO-1**  
**BTL-4**

**MODULE 2 : INTERIOR SPACE AND RELIGION - ISLAMIC**

**(9L+0P=9)**

Influences on Islamic Architecture – a Brief study on the Islamic Architectural and interior Character: the mosque, the tomb, and minaret, the madarasa, the palace, the caravanserai, vernacular architecture, the market - important principles, elements and character of Islamic architecture in terms of structure materials and methods of construction, elements of decoration, color, geometry, light.

**CO-2**  
**BTL-4**

**MODULE 3 : HINDU TEMPLE INTERIORS**

**(9L+0P=9)**

Hindu faith - Harmony between architecture and interior in religious spaces – the play of light and shadow – art, sculpture, mould, wall treatments, roof treatments, floor treatments – interiors as reflection of the faith – examples and case studies. –Dravidian Order – Brihadeeswara Temple, Thanjavur - Evolution and form of Gopuram - Complexity in temple plan due to complexity in Ritual - Meenakshi temple, Madurai. Suggested Reading: Introduction to Indian Architecture By BindiaThapar

**CO-3**  
**BTL-4**

**MODULE 4 : REGIONAL VERNACULAR INTERIORS**

**(9L+0P=9)**

Elements of style, materials and concepts of interiors in vernacular secular architecture across North and South India -Jammu and Kashmir – Gujarat – Goa - Kerala – Tamil Nadu – examples and case studies

**CO-4**  
**BTL-4**

**MODULE 5: IMPERIALISM AND COLONIALISM IN INDIA**

**(9L+0P=9)**

Elements of Style - Ornamentation and decoration – quality of space – Colonial, Regency, Indo-Sarcenic - examples and case studies		<b>CO-5</b> <b>BTL-4</b>
<b>TEXT BOOKS</b>		
1.	John F. Pile, A history of interior design, 2nd edition, Laurence King Publishing, 2005. Jeannie Ireland, History of Interior Design, air child publications, illustrated ed., 2009	
2	Elaine, Michael Dywer, Christopher Mackinnon, Norman A. J. BerisfordDenby , A History of Interior Design, Rhodex International, 2000	
3	Sir Banister Fletcher, A History of Architecture, CBS Publications (Indian Edition), 21st Edition 2019.	
<b>REFERENCE BOOKS</b>		
1	Pile. F John, Gura Judith (2013) A History of Interior Design, Wiley, New York, 4 <sup>th</sup> edition.	
2	Richard Ingersoll, World Architecture: A Cross-Cultural History, Oxford University Press; 2 edition 2018	
<b>E BOOKS</b>		
1.	<a href="https://www.yumpu.com/en/document/view/36775179/roman-architecture-notes.pdf">https://www.yumpu.com/en/document/view/36775179/roman-architecture-notes.pdf</a>	
2	<a href="https://tigerprints.clemson.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&amp;httpsredir=1&amp;article=1909&amp;context=all_theses">https://tigerprints.clemson.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&amp;httpsredir=1&amp;article=1909&amp;context=all_theses</a>	
3	<a href="http://www.nationalmuseumindia.gov.in/pdfs/Harappan-Civilization.pdf">http://www.nationalmuseumindia.gov.in/pdfs/Harappan-Civilization.pdf</a>	
4	<a href="http://www.arch.mcgill.ca/prof/mellin/articles/glassievarch.pdf">http://www.arch.mcgill.ca/prof/mellin/articles/glassievarch.pdf</a>	
5	<a href="http://iaste.berkeley.edu/pdfs/01.2b-Spr90glassie-sml.pdf">http://iaste.berkeley.edu/pdfs/01.2b-Spr90glassie-sml.pdf</a>	
<b>MOOC</b>		
1	<a href="http://www.architecturecourses.org/classical-architecture-history">http://www.architecturecourses.org/classical-architecture-history</a>	
2	<a href="https://www.edx.org/course/global-history-architecture-mitx-4-605x-0">https://www.edx.org/course/global-history-architecture-mitx-4-605x-0</a>	

<b>COURSE TITLE</b>	<b>ADVANCED THEORY OF DESIGN</b>				<b>CREDITS</b>	3
<b>COURSE CODE</b>	<b>SID21008</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>	
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-4</b>	

#### ASSESSMENT SCHEME

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	Theory of design is concerned with various theoretical approaches towards understanding and delineating design principles, design knowledge, and design practice.
---------------------------	---

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand the articulation of roof plane in interior spaces.</li> <li>To understand the articulation of wall and floor plane in interior spaces.</li> <li>To analyze and understand the organization of various forms to define spaces</li> <li>To understand the concept of function relationship and its outcome of circulation through spaces.</li> <li>To understand the design theories of Architects.</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<ol style="list-style-type: none"> <li>Upon completion of this course, the students will be able to -</li> <li>Explain the articulation of roof plane in interior spaces.</li> <li>Familiarize with articulation of wall and floor plane in interior spaces.</li> <li>Familiarize with the organization of various forms to define spaces Familiarize with the concept of function relationship and its outcome of circulation through spaces.</li> <li>Explain the design theories of Architects.</li> </ol>
-----------------------	---

**Prerequisites: Nil**

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PS O-1	PSO -2	PS O -3	PSO -4	PSO -5
CO-1	3	2	1	-	1	1	2	3	1	1	2	3	-	-	-	1

CO-2	2	1	1	-	1	2	2	3	1	1	2	3	-	-	-	1
CO-3	3	2	1	-	1	1	2	3	1	1	1	3	-	-	-	1
CO-4	2	2	1	-	1	1	2	3	1	1	2	3	-	-	-	1
CO-5	3	1	1	-	1	1	2	2	1	1	2	3	-	-	-	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: ELEMENTS AND COMPONENTS OF SPACE MAKING (12L+0P=12)**

Role of wall planes in defining the ambience of an interior space – manipulation of wall planes – example across typologies - Role of floor planes in defining the ambience of an interior space– example across typologies. Role of roof planes in defining the ambience of an interior space – manipulation of roof planes –Example across typologies.

**CO-1**  
**BTL-4**

**MODULE 2: ORGANISATION OF FORMS (9L+0P=9)**

Spatial Relationships: i) Space within space, ii) Interlocking spaces, iii) Adjacent spaces, iv) Space linked by a common space b) Spatial Organization: influencing factors and their types i) Centralized, ii) Linear, iii) Radial, iv) Clustered, v) Grid c) Articulation of forms and spaces types :I) Edges and corners, ii) Surface. A Project on Creation of forms & spaces using the principles learnt.

**CO-2**  
**BTL-4**

**MODULE 3: ORGANISATION OF SPACES AND CIRCULATION (12L+0P=12)**

Function of building circulation components of building circulation - The building approach, The building entrance, configuration of the path, path space relationship, and form of circulation space with examples. Simple circulation diagram for buildings.

**CO-3**  
**BTL-4**

**MODULE 4: SPATIAL ANALYSIS AND PLACE-MAKING (6L+0P=6)**

Function of building circulation components of building circulation - The building approach, The building entrance, configuration of the path, path space relationship, and form of circulation space with examples. Simple circulation diagram for buildings

**CO-4**  
**BTL-4**

**MODULE 5: APPLICATION OF DESIGN THEORIES (6L+0P=6)**

Small exercises to understand how theories come together to create good design – application of theories within typology and across typologies. Applied theories in case studies.

**CO-5**  
**BTL-4**

**TEXT BOOKS**

- Francis D. K. Ching, ‘Architecture - Form, Space and Order’, Van Nostrand Reinhold Company ,2007.
- Francis D.K. Ching & Corky Binggeli - INTERIOR DESIGN ILLUSTRATED (3rd Edition), John

	Wiley & Sons, New Jersey, 2012
3	Elements of Spacemaking, <a href="#">Yatin Pandya</a> , <a href="#">Vastu-Shilpa Foundation for Studies and Research in Environmental Design</a> , Mapin Publishing, 2013
<b>REFERENCE BOOKS</b>	
1	Leland M. Roth, 'Understanding Architecture', Routledge; 3 edition, 2013
2	Foundations in Architecture: An Annotated Anthology of Beginning Design Project, Van Nostrand Reinhold NY, 1993.
3	Basic Visual Concepts and Principles for Artists, Architects and Designers by Charles Wallschlagger & Cynthia Busic-Snyder, McGraw Hill, New York 1992.
4	Logic and Design in Art, Science and Mathematics by Krome Barratt, Globe Pequot Press, 2005.
<b>E BOOKS</b>	
1.	<a href="http://ndl.iitkgp.ac.in/document/OkW0j6hdRjRF9TOI-AJ6ZaxR3oaR2haCcM8brpUUVuw9jk4dMZ2lBdsVu6yFVm27NmC_d2yYd9-_dP7PfmJ6CQ">http://ndl.iitkgp.ac.in/document/OkW0j6hdRjRF9TOI-AJ6ZaxR3oaR2haCcM8brpUUVuw9jk4dMZ2lBdsVu6yFVm27NmC_d2yYd9-_dP7PfmJ6CQ</a>
2.	<a href="http://ndl.iitkgp.ac.in/document/rD3oym8UCm19P6yFn9P_jlFcu1r78QqPWhEJfrEKcO5ppiSL_L9aDFbnSyV-sWESTl1y0d3vt6-uXT7Q-NAQg">http://ndl.iitkgp.ac.in/document/rD3oym8UCm19P6yFn9P_jlFcu1r78QqPWhEJfrEKcO5ppiSL_L9aDFbnSyV-sWESTl1y0d3vt6-uXT7Q-NAQg</a>
<b>MOOC</b>	
1	<a href="https://www.edx.org/course/design-theory">https://www.edx.org/course/design-theory</a>
2	<a href="https://www.edx.org/course/design-thinking-fundamentals-ritx-think501x">https://www.edx.org/course/design-thinking-fundamentals-ritx-think501x</a>

<b>COURSE TITLE</b>	<b>BASICS OF FURNITURE DESIGN</b>				<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21009</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>	
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>	

#### ASSESSMENT SCHEME

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	In this course, students will study about the history of furniture design and theories to develop furniture in different styles.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand the usage of basic theories of design to develop furniture in different styles.</li> <li>To understand the principles of universal design.</li> <li>To understand history and other case studies.</li> <li>To understand the concepts with appropriate terms and reflect the design by developing furniture of different categories.</li> <li>To understand seating typologies and impact of culture on them.</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Formulate and design furniture in different styles.</li> <li>Formulate and design comfortable furniture in public buildings.</li> <li>Familiarize with history and evolution of furniture design.</li> <li>Formulate and design furniture of different categories.</li> <li>Familiarize with the seating typologies and impact of culture on them.</li> </ol>
-----------------------	--

#### Prerequisites:

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PO -12	PSO -1	PSO-2	PSO -3	PSO - 4
CO-1	2	2	3	1	1	1	2	3	1	2	1	3	1	1	1	2
CO-2	-	-	3	2	2	1	2	3	1	2	1	2	1	1	3	2

CO-3	-	-	3	2	2	1	2	3	1	2	1	2	3	2	1	2
CO-4	-	-	3	2	2	1	2	3	1	2	1	3	1	1	1	2
CO-5	-	-	3	2	2	1	2	3	1	2	2	1	1	3	2	2

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: FUNCTIONAL AND FORMAL ISSUES IN DESIGN (12L+0P=12)**

Study and evaluation of popular dictums such as “Form follows function”, Form and function are one”, “God is in Details”, “Less is more” or “Less is bore” etc. Evaluation of visual design: study of Gestalt theory of design – law of closure, law of proximity, law of continuity etc. Typology of furniture with respect to the different states in India.

**CO-1**  
**BTL-2,3**

**MODULE 2: ERGONOMICS AND HUMAN FACTORS (10L+0P=10)**

Human factors, engineering and ergonomic considerations: Principles of Universal Design and their application in furniture design.

**CO-2**  
**BTL-3**

**MODULE 3: EVOLUTION OF FURNITURES (10L+0P=10)**

Evolution of furniture from Ancient to present: Various stylistic transformations. Furniture designers and movements for various types of furniture.

**CO-3**  
**BTL-3,4**

**MODULE 4: ROLE OF FURNITURE (7L+0P=7)**

Furniture categories – role of furniture in interior design, exploration of the idea of furniture as elements of living units, education institutes, health facilities, street elements office, educational institutes, banks, stores, street furniture, etc.

**CO-4**  
**BTL-3,4**

**MODULE 5: SEATING (6L+0P=6)**

Seating Design: Different types of seating with Functionality, Aesthetics, Style, Human factors and ergonomics. Assignment: Design with wood, metal and combination of materials. Drawings, details. Market survey of available products and economics of products. Design of furniture for upper middle, middle and lower middle-income groups - elements of living units, educational institutes, health facilities, street elements etc. Exploration of wood, metal, glass, plastics, FRP, etc. as materials for furniture design – traditional and modular. Cost criteria of furniture design.

**CO-5**  
**BTL-3,4**

**TEXT BOOKS**

- Maureen Mitton, Interior Design Visual Presentation: A Guide to graphics, models and presentation techniques, 3rd edition, Wiley publishers, 2007
- MogaliDelgadeYanes and Ernest Redondo Dominquez, Freehand drawing for Architects and Interior



	Designers, www.Norton& co., 2005
<b>REFERENCE BOOKS</b>	
1	Bradley Quinn, Mid-Century Modern: Interiors, Furniture, Design Details, Conran Octopus Interiors, 2006.
2	Jim Postell, Furniture Design, Wiley publishers, 2007.
3	Robbie. G. Blakemore, History of Interior Design and Furniture: From Ancient Egypt to Nineteenth-Century Europe, Wiley publishers, 2005.
<b>EBOOKS</b>	
<a href="https://www.pdfdrive.com/guerilla-furniture-design-how-to-build-lean-modern-furniture-with-salvaged-materials-e175699273.html">https://www.pdfdrive.com/guerilla-furniture-design-how-to-build-lean-modern-furniture-with-salvaged-materials-e175699273.html</a>	
<b>MOOC</b>	
<a href="https://www.udemy.com/course/furniture-design-by-example-1/">https://www.udemy.com/course/furniture-design-by-example-1/</a>	

<b>COURSE TITLE</b>	<b>ENVIRONMENTAL SCIENCE</b>				<b>CREDITS</b>	<b>2</b>
<b>COURSE CODE</b>	<b>SGE51001</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>2-0-0-0</b>	
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-1</b>	

#### ASSESSMENT SCHEME

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	Environmental science is an interdisciplinary academic field that integrates physical, biological and information sciences to the study of the environment, and the solution of environmental problems. Architects and Designers need to make buildings that are friendly to the environment and greener which can be adaptable to the surroundings.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand our natural resources, energy resources and the biodiversity of the planet.</li> <li>To Obtain basic knowledge on ecosystem and types of ecosystems.</li> <li>To Understanding the social Issues and the impact of population on the environment.</li> <li>To Obtain basic knowledge on environment pollutions, its types and pollutants</li> <li>To understand the social issues and the environment.</li> </ol>
-------------------------	--

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Familiarize with bio diversity of the planet.</li> <li>Familiarize with the types of ecosystems.</li> <li>Explain the impact of pollution on the environment.</li> <li>Familiarize with the environmental pollutants and its types.</li> <li>Familiarize with the social issues and the environment.</li> </ol>
-----------------------	--

**Prerequisites: Nil**

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PSO -1	PSO -2	PSO -3	PSO -4	PSO -5
<b>CO-1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>1</b>
<b>CO-2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>1</b>

CO-3	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
CO-4	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
CO-5	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: INTRODUCTION TO WORLD ART & CULTURES (6L+0P=6)**

Definition, scope and importance, of environmental studies, Need for public awareness. Renewable and non-renewable resources: Natural resources and associated problems. Forest resources: Water resources: Mineral resources: Food resources: Energy resources: Land resources.	<b>CO-1</b> <b>BTL-2</b>
--	-----------------------------

**MODULE 2: ECO SYSTEMS(6L+0P=6)**

Structure and function of an ecosystem, Concept of an ecosystem, Producers, consumers and decomposers, Energy flow in the ecosystem, Ecological succession, Food chains, food webs and ecological pyramids, Types of Eco system	<b>CO-2</b> <b>BTL-2,3</b>
---	-------------------------------

**MODULE 3: BIODIVERSITY AND ITS CONSERVATION(6L+0P=6)**

Bio-geographical classification of India, Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values, Hot-spots of biodiversity. Threats to biodiversity. Endangered and Endemic species of India. Conservation of biodiversity	<b>CO-3</b> <b>BTL-2,3</b>
---	-------------------------------

**MODULE 4: ENVIRONMENTAL POLLUTION(6L+0P=6)**

Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, nuclear hazards, Solid waste Management, Disaster management: floods, earthquake, cyclone and Landslides.	<b>CO-4</b> <b>BTL-2,3</b>
---	-------------------------------

**MODULE 5: SOCIAL ISSUES AND THE ENVIRONMENT(6L+0P=6)**

Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case Studies. Wasteland reclamation. Consumerism and waste products. Environment Protection Act. Air (Prevention and Control of Pollution) Act. Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Issues involved in enforcement of environmental legislation. Public awareness.	<b>CO-5</b> <b>BTL-2,3</b>
--	-------------------------------

**TEXT BOOKS**

1.	Bio geo genesis, green agenda, Sustainability.
----	--

**REFERENCE BOOKS**

1	Cunningham,W.P.Cooper T.H.Gorhani, E& Hepworth, M.T. 2001, Environmental Encyclopedia,
---	--

	Jaico Publ. House, Mumbai, 1196p
2	Text Book for environmental Studies For UGC, ErachBharucha, 2004
<b>E BOOKS</b>	
1.	<a href="http://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf">http://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf</a>
<b>MOOC</b>	
1	<a href="http://academicearth.org/environmental-studies/">http://academicearth.org/environmental-studies/</a>

<b>COURSE TITLE</b>	<b>FUNDAMENTALS OF VISUALIZATION AND REPRESENTATION – II</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21010</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>1-0-4-1</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>

#### ASSESSMENT SCHEME

<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>

<b>Course Description</b>	In this course, students will study about the standards for residential furniture and learn how to apply them through drafting.
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand the spatial and stylistic qualities associated with architecture.</li> <li>To understand architecture as an outcome of various social, political and economic upheavals.</li> <li>To understand architecture as a response to the cultural and context.</li> <li>To understand the standards for residential furniture and apply them through drafting.</li> <li>To understand the standards for office furniture and apply them through drafting.</li> </ol>
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Explain the basic components of operating on menu and setup wizard.</li> <li>Familiarize with the co-ordinate systems, UCS, shortcuts in AutoCAD.</li> <li>Explain the settings of environment.</li> <li>Familiarize with the drafting, dimensioning and layers</li> <li>Familiarize with the tools on Photoshop.</li> </ol>

**Prerequisites: Nil**

#### CO, PO AND PSO MAPPING

CO	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO-1	PSO-2	PSO-3	PSO-4	PSO-5
CO-1	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-2	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-3	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-

<b>CO-4</b>	<b>2</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>CO-5</b>	<b>2</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: - FINISHES & STAIRCASE (12L+0P=12)**

Wall finishes, wall plastering, chamfered corners, dado, wall cladding, fixing of doors & windows, etc. Details of floor finishes: tiling/ stone flooring, wooden flooring, access flooring Plans, sections & elevations of staircases: Types of staircases, different materials – RCC, wood, steel staircase, etc	<b>CO-1</b> <b>BTL-3</b>
--	-----------------------------

**MODULE 2: WOOD WORK REPRESENTATION (9L+0P=9)**

All woodworks: joinery, types of doors, windows, etc. Detailed drawing of Partition walls: all types of partitions – full height, half & dwarf, double skinned, single skinned, frameless glass, etc. Wall paneling: plywood, leather, acoustic boards, etc. False Ceiling: types with full system, insulation, acoustical, etc.	<b>CO-2</b> <b>BTL-3</b>
--	-----------------------------

**MODULE 3: RESIDENTIAL FURNITURE (6L+0P=6)**

Detailed plan, sections, elevations and isometrics of the standard residential furniture like: Sofas – double, single seat Tables – peg, nested, dining, etc. Chairs study, dining, sofa chairs, etc. Beds with side tables – TW frame, box frame, with storage, etc.	<b>CO-3</b> <b>BTL-3</b>
---	-----------------------------

**MODULE 4: STORAGE REPRESENTATION (6L+0P=6)**

Storage & display units: dressing table units, showcase, china cabinets, home bar, entertainment units, book case, tall boy units, chest of drawers, etc. Bar counter with bar stool. Detailed plan, sections, elevations with one-point perspectives of kitchen with details of each unit, etc.	<b>CO-4</b> <b>BTL-3</b>
--	-----------------------------

**MODULE 5: OFFICE FURNITURE (6L+0P=6)**

Detailed plan, sections, elevations and isometric views of office furniture – hierarchy of work stations, tables, return units, filing units, Reception table, etc.	<b>CO-5</b> <b>BTL-3</b>
---	-----------------------------

**TEXT BOOKS**

1.	Shah, M G & others, Building Drawing: An Integrated approach to build Environment, 5TH edition, Tata McGraw Hill Publications Company Ltd, New Delhi, 2012
2	Kilmer, Working Drawings & Details for Interiors, John Wiley & Sons., 2009

**REFERENCE BOOKS**

1	Dr. B.C Punmia , Building construction , Laxmi publications Pvt. Ltd., New Delhi, 1993.
2	Francis D. K. Ching - Building Construction Illustrated, VNR, 1975
3	W.B.Mckay, Building construction, Longmans, UK 1981

**E BOOKS**

1.	<a href="https://www.griffith.edu.au/data/assets/pdf_file/0021/196203/13.00-Floor-Finishes-v18.pdf">https://www.griffith.edu.au data/assets/pdf file/0021/196203/13.00-Floor-Finishes-v18.pdf</a>
2	<a href="https://www.researchgate.net/publication/320800578_Interior_Finishing_Materials">https://www.researchgate.net/publication/320800578 Interior Finishing Materials</a>
3	<a href="http://www.prenhall.com/divisions/ect/app/mehta.old/MEHTMC26_0131579886.pdf">http://www.prenhall.com/divisions/ect/app/mehta.old/MEHTMC26_0131579886.pdf</a>
4	<a href="http://www.rmfgroup.com/catalog/catalog.pdf">http://www.rmfgroup.com/catalog/catalog.pdf</a>
5	<a href="https://www.fema.gov/sites/default/files/orig/plan/prevent/earthquake/fema74/pdf/chapter6_5_1/chapter6_5_1_1.pdf">https://www.fema.gov/sites/default/files/orig/plan/prevent/earthquake/fema74/pdf/chapter6_5_1/chapter6_5_1_1.pdf</a>

**MOOC**

1	<a href="https://www.finefurnituremaker.com/course-syllabus/">https://www.finefurnituremaker.com/course-syllabus/</a>
2	<a href="https://www.risd.edu/academics/furniture-design/courses/">https://www.risd.edu/academics/furniture-design/courses/</a>
3	<a href="http://ceas.uc.edu/wood/furniture-drawing-courses.html">http://ceas.uc.edu/wood/furniture-drawing-courses.html</a>

<b>COURSE</b>	<b>BASIC MATERIALS AND CONSTRUCTION</b>	<b>CREDITS</b>	3
---------------	---	----------------	---

<b>TITLE</b>	<b>TECHNIQUES</b>					
<b>COURSE CODE</b>	<b>SID21011</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>2-0-2-1</b>	
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>	

#### ASSESSMENT SCHEME

<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>

<b>Course Description</b>	Construction methods are the procedures and techniques that are used during the building process. It refers to the collection of innovative tools, machinery, modifications, software, etc. used during the construction phase of a project that enables advancement in field construction methods, including semi-automated and automated construction equipment.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To Understand the progressive function of hardware's and Its properties, application in interior and base building construction industry, to gain awareness of the existing and new trends and availability of hardware and accessories materials.</li> <li>To Understand the stone varieties and properties to use in interior building Industry.</li> <li>To Understand the rubber performance at various state and properties to use in interior building construction industry.</li> <li>To Understand properties and use of plastics in interior building industry.</li> <li>To Understand in detail about the types and use of partitions and false ceilings in interior construction industry.</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Explain the progressive function of hardware's and its properties.</li> <li>Familiarize with the types of ecosystems.</li> <li>Explain the impact of pollution on the environment.</li> <li>Familiarize with the environmental pollutants and its types.</li> <li>Familiarize with the social issues and the environment.</li> </ol>
-----------------------	---

**Prerequisites: Nil**

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PS O-1	PSO -2	PS O -3	PSO -4	PSO -5
CO-1	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-



CO-2	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-3	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-4	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-5	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: STONES, RUBBER AND PLASTIC (2L+10P=12)**

Stones: Igneous, metamorphic & sedimentary – classifications, types, properties, availability, applications, Rubber – Natural rubber, latex, coagulation, vulcanizing and synthetic rubber-properties and application. Plastics – Types, thermosetting and thermo plastics, resins, common types of moldings, fabrication of plastics, polymerization and condensation. Plastic coatings reinforced plastic, plastic laminates – properties, uses and applications.	<b>CO-1</b> <b>BTL-3</b>
---	-----------------------------

**MODULE 2: HARDWARE (2L+10P=12)**

Hardware & Accessories: all hardware required for residences, offices, other public & private spaces, etc., including all types of hinges, drawer slides, handles, locks, wire managers, etc., accessories for toilet, kitchen, office, glass patch fittings, profiles, etc.,	<b>CO-2</b> <b>BTL-3</b>
---	-----------------------------

**MODULE 3: PARTITIONS AND FALSE CEILING (2L+10P=12)**

Partition walls: all types of partitions – full height, half & dwarf, double skinned, single skinned, frameless glass, etc., Wall paneling: plywood, leather, acoustic boards, etc., False Ceiling: all types, with full system, insulation, acoustical. Detailed plan, sections, elevations with one-point perspectives of Lecture Hall, Audio Visual Rooms with details	<b>CO-3</b> <b>BTL-3</b>
---	-----------------------------

**MODULE 4: INTERIOR CONSTRUCTION OF FURNITURE STORAGE AND KITCHEN (2L+10P=12)**

Detailed plan, sections, elevations and isometrics of the standard residential furniture like: Sofas – double, single seat Tables – peg, nested, dining, etc Chairs- study, dining, sofa chairs, etc  Beds with side tables – TW frame, box frame, with storage, etc. Storage & display units : dressing table units, showcase, Kitchen china cabinets, home bar, entertainment units, book case, tall boy units, chest of drawers, etc	<b>CO-4</b> <b>BTL-3</b>
---	-----------------------------

**MODULE 5: INTERIOR OF OFFICE AND INSTITUTIONAL SPACES (2L+10P=12)**

Detailed plan, sections, elevations and isometric views of office furniture – hierarchy of work stations, tables, return units, filing units, Reception table, etc.  Detailed plan, sections, elevations and isometric views of furniture of Institutional spaces, Retail spaces & hospitality spaces – bank counters, reception counters/ tables, restaurant service	<b>CO-5</b> <b>BTL-3</b>
---	-----------------------------

counters, storage & display, awnings, etc		
<b>TEXT BOOKS</b>		
1.	Bindra, S.P. and Arora, S.P. Building Construction: Planning Techniques and Methods of Construction, 19th ed. Dhanpat Rai Pub., New Delhi, 2000.	
2	Moxley, R. Mitchell's Elementary Building Construction, Technical Press Ltd.	
<b>REFERENCE BOOKS</b>		
1	Rangwala, S.C. Building Construction 22nd ed. Charota Pub. House Anand, 2004.	
2	Sushil Kumar. T.B. of Building Construction 19th ed. Standard Pub. Delhi, 2003.	
3	Francis D. Ching, Building Construction Illustrated, Wiley publishers, 2008.	
<b>E BOOKS</b>		
1.	<a href="http://www.slcdocs.com/historicpreservation/guideres/ch2.pdf">http://www.slcdocs.com/historicpreservation/guideres/ch2.pdf</a>	
2	<a href="http://www.ouhk.edu.hk/LIPACE/Full_time/Notice/tips-201207/DESN3004EF%20Environment%20and%20Interior%20Design%20Study%20Notes.pdf">http://www.ouhk.edu.hk/LIPACE/Full_time/Notice/tips-201207/DESN3004EF%20Environment%20and%20Interior%20Design%20Study%20Notes.pdf</a>	
3	<a href="http://www.csdcindia.org/sites/default/files/QP%20-%20Chargehand%20False%20Ceiling%20%26%20Dry%20Wall%20Installer.pdf">http://www.csdcindia.org/sites/default/files/QP%20-%20Chargehand%20False%20Ceiling%20%26%20Dry%20Wall%20Installer.pdf</a>	
<b>MOOC</b>		
1	<a href="https://www.makeuseof.com/tag/learn-interior-design-8-free-online-courses/">https://www.makeuseof.com/tag/learn-interior-design-8-free-online-courses/</a>	
2	<a href="http://www.interiordesignonline.edu.au/">http://www.interiordesignonline.edu.au/</a>	
3	<a href="https://www.udemy.com/topic/interior-design/">https://www.udemy.com/topic/interior-design/</a>	

<b>COURSE TITLE</b>	<b>BASICS OF COMPUTER DESIGN AND DIGITAL FABRICATION</b>	<b>CREDITS</b>	<b>3</b>
---------------------	--	----------------	----------

<b>COURSE CODE</b>	<b>SID21012</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>1-0-4-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>

#### ASSESSMENT SCHEME

<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>

<b>Course Description</b>	In this course, students will study the basics of AutoCAD and photoshop.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To Understand the basic components of operating on menu and setup wizard.</li> <li>To Understand the co-ordinate systems, UCS, shortcuts in AutoCAD</li> <li>To Understand the settings of environment.</li> <li>To Understand drafting, dimensioning and layers</li> <li>To Understand the various tools on Photoshop.</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Explain the basic components of operating on menu and setup wizard.</li> <li>Familiarize with the co-ordinate systems, UCS, shortcuts in AutoCAD.</li> <li>Explain the settings of environment.</li> <li>Familiarize with the drafting, dimensioning and layers</li> <li>Familiarize with the tools on Photoshop.</li> </ol>
-----------------------	---

**Prerequisites: Nil**

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PS O-1	PS O-2	PS O-3	PSO -4	PSO -5
CO-1	-	-	1	1	3	1	1	1	-	-	-	1	-	3	-	-
CO-2	-	-	1	1	3	1	1	1	-	-	-	1	-	3	-	-
CO-3	-	-	1	1	3	1	1	1	-	2	-	1	-	3	-	-
CO-4	2	1	3	1	3	1	1	1	1	1	-	1	-	3	-	-
CO-5	3	1	3	-	3	1	1	1	1	1	-	1	-	3	-	-

<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>	
<b>MODULE 1: BASIC OUTLINE</b> (3L+12P=15)	
Introduction to the menu, starting drawings from scratch. Creating and using templates- starting drawings with setup wizards. Saving and closing a file.	<b>CO-1</b> <b>BTL-3</b>
<b>MODULE 2: AXIS POINTS</b> (3L+12P=15)	
Using co-ordinate systems – The UCS. Working with Cartesian and polar coordinate systems. Using displays with shortcuts.	<b>CO-2</b> <b>BTL-3</b>
<b>MODULE 3: UNITS, LIMITS AND LAYERS</b> (3L+12P=15)	
Setting up the drawing environment – setting the paper size, setting units, grid limits, drawing limits, snap controls. Use of paper space and model space. Basic commands dealing with drawing properties: Layer control, change properties, line weight control, etc.	<b>CO-3</b> <b>BTL-3</b>
<b>MODULE 4: DIMENSIONS, CALCULATIONS AND GROUPING</b> (3L+12P=15)	
Inquiry methods: Using data base information for objects, calculating distance, angle, areas etc. Dimensioning commands and blocks: Dimensioning the objects in linear, angular fashions along with quick time dimensioning etc. Creating and working with blocks, creating symbols, use of blocks in creating a layout, of a residential area- one exercise to be done as lab assignment.	<b>CO-4</b> <b>BTL-3</b>
<b>MODULE 5: BASICS OF ADOBE PHOTOSHOP</b> (3L+12P=15)	
Tool box ( Moving , marquee tool), Magic ward selection, Crop tool, Paint Brush, Opacity, Tent Styles, Blue tool, Sharpening Tool, Colour correction, Layers, moving Tool, Masking Tool.	<b>CO-5</b> <b>BTL-3</b>
<b>TEXT BOOKS</b>	
1.	Computer Design & Digital Fab.
2	Auto Desk, Revit 2017 for Architecture, Sybex, 2016 .
<b>REFERENCE BOOKS</b>	
1.	R Auto Desk, 3DS MAX comprehensive tutorial resources Wiley 2014.
2.	Sketch up for interior Design. 3D visualizing designing & space planning by Lidya Sloan, Wiley Publisher – 2014.
3.	Auto Desk Auto cad 2017 for Architecture, Sybex , 2016.
<b>E BOOKS</b>	

1.	<a href="http://toasterdog.com/files/basics_of_photoshop_full_guide.pdf">http://toasterdog.com/files/basics_of_photoshop_full_guide.pdf</a>
2	<a href="http://academics.triton.edu/faculty/fheitzman/Customizing%20AutoCAD.pdf">http://academics.triton.edu/faculty/fheitzman/Customizing%20AutoCAD.pdf</a>
<b>MOOC</b>	
1	<a href="https://www.coursera.org/learn/2d-cad#%20">https://www.coursera.org/learn/2d-cad#%20</a>
2	<a href="http://au.autodesk.com/au-online/classes-on-demand/search?full-text=autocad">http://au.autodesk.com/au-online/classes-on-demand/search?full-text=autocad</a>
3	<a href="https://www.udemy.com/introduction-to-graphic-design/">https://www.udemy.com/introduction-to-graphic-design/</a>

<b>COURSE TITLE</b>	<b>BASICS OF INTERIOR DESIGN – II</b>	<b>CREDITS</b>	<b>4</b>
---------------------	---------------------------------------	----------------	----------

<b>COURSE CODE</b>	<b>SID21401</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>0-0-8-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>		<b>LEARNING LEVEL</b>	<b>BTL-4</b>

#### ASSESSMENT SCHEME

<b>Continuous Assessment I</b>	<b>Continuous Assessment II</b>	<b>Continuous Assessment III</b>	<b>ESE</b>
<b>20%</b>	<b>20%</b>	<b>10%</b>	<b>50%</b>

**Course Description** In this course students will learn how do design residential spaces using anthropometry.

**Course Objective**

1. To understand the need of measurement for future design in spatial planning.
2. To understand design module and use anthropometry
3. To understand spaces of comfort and spatial quality.

**Course Outcome** Upon completion of this course, the students will be able to

1. Familiarize with space planning.
2. Formulate and design module and use anthropometry as a tool in design.
3. Formulate and design spaces of comfort and spatial quality.

**Prerequisites:** Nil

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PS O-1	PSO -2	PSO -3	PSO -4	PSO -5
CO-1	2	2	2	1	1	2	2	3	1	2	1	3	1	1	-	1
CO-2	1	2	1	2	1	2	2	3	1	2	1	3	1	1	-	1
CO-3	2	2	2	1	1	2	2	3	1	2	-	3	1	1	-	1
CO-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

#### MODULE 1: - BASIC ANTHROPOMETRICS (12L+0P=12)

Average measurements of human body in different postures – its proportion and graphic representation, application in the design of simple household and furniture. Role of mannequins in defining spatial parameter of design. Basic human functions and their implications for spatial planning. Minimum and optimum areas for various functions.	<b>CO-1</b> <b>BTL-4</b>
<b>MODULE 2: INTRODUCTION TO DESIGN METHODOLOGY (9L+0P=9)</b>	
Detailed study of residential spaces: such as, living, dining, bedrooms, kitchen, toilet etc. including the Furniture layout, circulation, clearances, etc. Case study of existing residential spaces and the analysis of the spaces therein, to be taken up. Preparing user profile, bubble and circulation diagrams.	<b>CO-2</b> <b>BTL-4</b>
<b>MODULE 3: VISUAL ANALYSIS DESIGNED SPACES (6L+0P=6)</b>	
Visual analysis designed spaces of noted for comfort and spatial quality; analysis of solid and void relations, positive and negative spaces. Integration of spaces and function in the design of kiosk for - traffic police, ATM center, etc; stalls inside a shopping mall, - jewellery stall, flower stall, ice cream stall, etc; booths - bus ticketing booth, smokers' booths, etc.	<b>CO-3</b> <b>BTL-4</b>
<b>TEXT BOOKS</b>	
1.	Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 3rd edition 2009
2	V.S.Pramar, 'Design Fundamentals in Architecture', Somaiya Publications, New Delhi, 2007
<b>REFERENCE BOOKS</b>	
1	Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.
2	Francis.D. Ching& Corky Bingelli, Interior Design Illustrated, 2nd edition, Wiley publishers, 2004.
<b>E BOOKS</b>	
1.	<a href="https://multisite.eos.ncsu.edu/www-ergocenter-ncsu-edu/wp-content/uploads/sites/18/2016/06/Anthropometric-Detailed-Data-Tables.pdf">https://multisite.eos.ncsu.edu/www-ergocenter-ncsu-edu/wp-content/uploads/sites/18/2016/06/Anthropometric-Detailed-Data-Tables.pdf</a>
2	<a href="http://www.stat.colostate.edu/~jah/papers/Irvine%20et%20al%202007.pdf">http://www.stat.colostate.edu/~jah/papers/Irvine%20et%20al%202007.pdf</a>
3	<a href="http://iopscience.iop.org/article/10.1088/1755-1315/95/5/052008/pdf">http://iopscience.iop.org/article/10.1088/1755-1315/95/5/052008/pdf</a>
4	<a href="https://bwrcs.eecs.berkeley.edu/Classes/IcBook/SLIDES/slides11.pdf">https://bwrcs.eecs.berkeley.edu/Classes/IcBook/SLIDES/slides11.pdf</a>
<b>MOOC</b>	
<a href="https://www.oxfordhomestudy.com/courses/interior-design-online-courses/interior-decoration-course">https://www.oxfordhomestudy.com/courses/interior-design-online-courses/interior-decoration-course</a>	

**SEMESTER – III**

<b>COURSE TITLE</b>	<b>HISTORY OF INTERIOR DESIGN – III</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21013</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>3-0-0-1</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

#### ASSESSMENT SCHEME

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	In the past, interiors were put together instinctively as a part of the process of building. The practice of interior design harkens back to the Ancient Egyptians, who decorated their naive mud homes with basic furnishings enhanced by animal skins, simple textiles, graphic biographical and spiritual murals, sculptures, and painted urns.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand various architectural and interior elements from the ancient Civilizations.</li> <li>To review the classic styles and oriental influences from the past</li> <li>To understand how various styles from Europe shaped Architecture and interiors during the Middle Ages.</li> <li>To understand the role of decorative styles in history of architecture and interior design.</li> <li>To appreciate various styles learnt through individual designs across diverse range of sources.</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Explain architectural and interior elements from the ancient civilizations.</li> <li>Familiarize with classic styles from the past.</li> <li>Explain how various styles shaped architecture and interiors.</li> <li>Familiarize with the decorative styles in architecture and interior design.</li> <li>Familiarize with various styles.</li> </ol>
-----------------------	---

**Prerequisites:**

#### CO, PO AND PSO MAPPING

CO	P O-1	P O-2	P O-3	P O-4	PO-5	P O-6	P O-7	P O-8	P O-9	P O-10	PO-11	P O-12	PS O-1	PS O-2	PSO-3	PSO-4
CO-1	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
CO-2	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
CO-3	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
CO-4	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
CO-5	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1



**1: Weakly related, 2: Moderately related and 3: Strongly related**

<b>MODULE 1 : ELEMENTS OF STYLE</b>		<b>(6L+0P=6)</b>
Elements of style and determinants of Interior environments in Ancient Civilization: emphasis shall be on Architectural elements, furniture, decorative arts, colors & materials. Egyptian - Indus Valley Civilization - The ancient Near East.		<b>CO-1 BTL-2</b>
<b>MODULE 2 : CLASSICAL WORLD AND ORIENTAL INFLUENCES</b>		<b>(9L+0P=9)</b>
Interior architectural elements of Greek Architecture, Roman architecture and Eastern - China and Japan. Cultural influences on interior spaces. Crafts, materials and space making elements of the different periods.		<b>CO-2 BTL-3</b>
<b>MODULE 3 : FROM THE MIDDLE AGES TO RENAISSANCE</b>		<b>(9L+0P=9)</b>
Interior architectural elements of Early Christian and Byzantine, Romanesque and Gothic, Renaissance. Churches and Public building interiors and the socio-cultural factors influencing the interior spaces. Crafts and technology of the different periods and their influence on Ornamentation. Residential interiors, furniture and finishes.		<b>CO-3 BTL-3</b>
<b>MODULE 4 : DECORATIVE STYLES</b>		<b>(9L+0P=9)</b>
Interior architectural elements of Baroque, Rococo, and other royal styles. Ornamental motifs and stylistic elements due to introduction of new materials like iron, glass and steel. Furniture, surface decorations and space making elements of the periods.		<b>CO-4 BTL-3</b>
<b>MODULE 5: APPLICATION OF STYLES IN INTERIORS</b>		<b>(12L+0P=12)</b>
Design exercises involving application of eclectic styles and compositions across different typologies and themes.		<b>CO-5 BTL-4</b>
<b>TEXT BOOKS</b>		
1.	John F. Pile, A history of interior design, 2nd edition, Laurence King Publishing, 2005. Jeannie Ireland, History of Interior Design, air child publications, illustrated ed., 2009.	
2	Giedion Sigfried, Space, Time and Architecture: The growth of a new tradition, 5th ed. Harvard University Press, Cambridge, 2008.	
3	<b>Sir Banister Fletcher, A History of Architecture, CBS Publications (Indian Edition), 21st Edition 2019.</b>	
<b>REFERENCE BOOKS</b>		
1	Pile. F John, Gura Judith (2013) A History of Interior Design, Wiley, New York, 4 <sup>th</sup> edition.	
<b>E BOOKS</b>		
1.	<a href="https://www.yumpu.com/en/document/view/36775179/roman-architecture-notes.pdf">https://www.yumpu.com/en/document/view/36775179/roman-architecture-notes.pdf</a>	
2	<a href="https://tigerprints.clemson.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&amp;httpsredir=1&amp;article=1909&amp;context=all_theses">https://tigerprints.clemson.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&amp;httpsredir=1&amp;article=1909&amp;context=all_theses</a>	
3	<a href="http://www.nationalmuseumindia.gov.in/pdfs/Harappan-Civilization.pdf">http://www.nationalmuseumindia.gov.in/pdfs/Harappan-Civilization.pdf</a>	
4	<a href="http://www.arch.mcgill.ca/prof/mellin/articles/glassievarch.pdf">http://www.arch.mcgill.ca/prof/mellin/articles/glassievarch.pdf</a>	
5	<a href="http://iaste.berkeley.edu/pdfs/01.2b-Spr90glassie-sml.pdf">http://iaste.berkeley.edu/pdfs/01.2b-Spr90glassie-sml.pdf</a>	
<b>MOOC</b>		
1	<a href="http://www.architecturecourses.org/classical-architecture-history">http://www.architecturecourses.org/classical-architecture-history</a>	
2	<a href="https://www.edx.org/course/global-history-architecture-mitx-4-605x-0">https://www.edx.org/course/global-history-architecture-mitx-4-605x-0</a>	

<b>COURSE TITLE</b>	<b>INTERIOR LANDSCAPE</b>				<b>CREDITS</b>	<b>3</b>										
<b>COURSE CODE</b>	<b>SID21014</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>3-0-0-1</b>											
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>											
<b>ASSESSMENT SCHEME</b>																
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>											
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>											
<b>Course Description</b>	In this course, students will study about the role of hardscape and landscaping design parameters for various types of built forms.															
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand the basic palette of design outside the premise of the built envelope.</li> <li>To understand knowledge of plant life and the science behind their life.</li> <li>To understand plants as a design element and understand its visual and physical dimensions.</li> <li>To understand the role of hardscape elements and assess their role individually.</li> <li>To understand the application of various tools in specific spatial context.</li> </ol>															
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Explain the basic palette of design outside the premise of the built envelope.</li> <li>Familiarize with the plant life and the science behind their life.</li> <li>Explain the visual and physical dimensions of plants.</li> <li>Familiarize with the role of hardscape elements.</li> <li>Familiarize with the application of various tools.</li> </ol>															
<b>Prerequisites:</b>																
<b>CO, PO AND PSO MAPPING</b>																
<b>CO</b>	<b>P O-1</b>	<b>P O-2</b>	<b>P O-3</b>	<b>P O-4</b>	<b>PO-5</b>	<b>P O-6</b>	<b>P O-7</b>	<b>P O-8</b>	<b>P O-9</b>	<b>P O-10</b>	<b>P O-11</b>	<b>P O-12</b>	<b>PS O-1</b>	<b>PS O-2</b>	<b>PS O-3</b>	<b>PSO-4</b>
<b>CO-1</b>	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
<b>CO-2</b>	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
<b>CO-3</b>	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
<b>CO-4</b>	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
<b>CO-5</b>	1	1	1	-	2	2	1	2	3	1	3	-	1	-	3	1
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>																
<b>MODULE 1:- LANDSCAPE IN INTERIORS (12L+0P=12)</b>																

Introduction and role of landscape design in interiors - Basic classification of landscape in interiors - Types of natural hardscape elements – stones, rocks, pebbles, water forms , softscape elements - plants and vegetation - Introduction to the study of plants in relation to landscape design and interiors.	<b>CO-1 BTL-1</b>
<b>MODULE 2: TYPES OF PLANTS IN INTERIORS (10L+0P=10)</b>	
Types of indoor plants -Indian context - visual characteristics: i.e., Colour, texture, foliage affects interiors -Market survey and costs, duration of availability, procurement heights - Flowers- its colours, texture and its visual perception in various indoor spaces and science of flower arrangement	<b>CO-2 BTL-2</b>
<b>MODULE 3:DESIGN WITH SOFTSCAPE (7L+0P=7)</b>	
Design with plants – Basic principles of landscape design -The physical attribute of plants and relation to design- Appearance, functional and visual effects of plants in landscape interiors - Selection and management of plant material in relation to interiors - Psychological effect of plants on humans	<b>CO-3 BTL-2</b>
<b>MODULE 4: DIMENSIONS OF LANDSCAPE IN INTERIORS (6L+0P=6)</b>	
Design concepts related to use of sculpture, lightings in courtyard spaces within buildings, terrace landscapes, furniture’s in open spaces within built environment – Four dimensions of landscape – Visual dimension ,aesthetical dimension , cultural dimension , character or sense of place dimension	<b>CO-4 BTL-3</b>
<b>MODULE 5: LANDSCAPE DESIGN PARAMETERS (10L+0P=1)</b>	
Landscaping design parameters for various types of built forms- indoor and outdoor linkage to spaces – Landscape design in different building typology – Residence, Commercial -Hospitality and Showroom, Transport hub – Railway stations, Bus terminals, Airport -Healthcare – Multi specialty hospitals , clinics , Therapeutic centers	<b>CO-5 BTL-4</b>
<b>TEXT BOOKS</b>	
1.	Joseph DeChiara, Julius Panero, and Martin Zelnik Time-Saver Standards for Interior Design and Space Planning, 2nd edition, Mc-Graw Hill Professional,2001.
2	Andreas Uebele, Signage Systems and Information Graphics, Thames and Hudson, 2007
3	Craig Berger, Wayfinding: Designing and Implementing Graphic Navigational Systems, Rotovision, 2009.
<b>REFERENCE BOOKS</b>	
1	Chris Calori, Signage and Way finding Design: A Complete Guide to Creating Environmental Graphic Design Systems, Wiley and sons, 2007.
2	David Gibson, The Way finding Handbook: Information Design for Public Places, Princeton Architectural Press; 1st edition, 2009.
3	Rayan Abdullah and Roger Hubner, Pictograms, Icons and Signs, Thames and Hudson, illustrated edition, 2006
<b>EBOOKS</b>	

1	<a href="https://rockynook.com/shop/photography/the-interior-landscape/">https://rockynook.com/shop/photography/the-interior-landscape/</a>
<b>MOOC</b>	
1	<a href="https://alison.com/course/landscape-architecture-and-site-planning-introduction-to-landscape-design">https://alison.com/course/landscape-architecture-and-site-planning-introduction-to-landscape-design</a>

<b>COURSE TITLE</b>	<b>DESIGN THINKING</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21015</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>3-0-0-3</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-4</b>
<b>ASSESSMENT SCHEME</b>					
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>
<b>Course Description</b>	This course offers an introduction to basic drawing and graphic modeling skills for architecture and interior design graphic communication. Students will receive instruction in two and three dimensional visualizations of form and space.				
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. Develop skills in drawing and presentation composition.</li> <li>2. Develop skills in 2 and 3 dimensional drawing for communication of information.</li> <li>3. Develop the skills and understanding to execute drawings standard to the profession.</li> <li>4. Develop skills in visual perception and presentation composition.</li> <li>5. Develop the skills necessary to build precise architectural models.</li> </ol>				
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>6. Understand the relevance of Context in Design Process</li> <li>7. Understand the approach and development of Content in Design Process</li> <li>8. Understand evolution and development of design through design process</li> <li>9. Understand various 2D Design Presentations</li> <li>10. Understand various tools in Digital Design Presentations</li> </ol>				

Prerequisites: Nil														
CO, PO AND PSO MAPPING														
CO	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO-1	PSO-3
CO-1	1	1	1	-	2	2	1	2	3	1	3	-	1	3
CO-2	1	1	1	-	2	2	1	2	3	1	3	-	1	3
CO-3	1	1	1	-	2	2	1	2	3	1	3	-	1	3
CO-4	1	1	1	-	2	2	1	2	3	1	3	-	1	3
CO-5	1	1	1	-	2	2	1	2	3	1	3	-	1	3
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>														
<b>MODULE 1: UNDERSTANDING THE CONTEXT (9L+0P=9)</b>														
Architectural Context, Understanding Site, Neighborhood Context, Place and Space, Landscape Context, Climate, Regional architectural characteristics, technology, local craftsmen, Architectural programming- user requirements, needs, aspirations, socio cultural factors, economic factors, understanding relevance and collecting data for Literature and Case study, Methods of Group work													<b>CO-1 BTL-2</b>	
<b>MODULE 2: DESIGN PROCESS (9L+0P=9)</b>														
Presentation of Literature Study, Case study, Illustration Techniques - Preparing Flow Charts, Tables & Diagrams, Importance of Sketching, Architectural Photography, Exterior And Interior Photography, Photo Documentation Of Buildings Highlighting Quality Of Architectural Spaces, Analysis of Literature Study& Case study, Importance of Relevant Core/ Special study													<b>CO-2 BTL-2</b>	
<b>MODULE 3 - GRAPHICAL REPRESENTATION (9L+0P=9)</b>														
Presenting Case Studies, Literature Reviews, Analysis and Inference, Experiencing Architecture: Circulation- Approach and Entry, Path Configuration And Access, Sequence Of Spaces, Proximity Analysis, Legal Restraints, User Activity Spatial Analysis, Site Analysis, Parameters to be considered in Site Analysis, Setting up Goals and Objectives for the Project, Concept Development and analysis, Form And Function, Development Of Form From Concept													<b>CO-3 BTL-2</b>	
<b>MODULE 4 PRESENTATIONMETHOD(2D) (9L+0P=9)</b>														
Understanding Composition of Sheet, Layout And Presentation, Story Boarding, Portfolio Presentation, Verbal Presentation													<b>CO-4 BTL-2</b>	
<b>MODULE 5 - DIGITAL PRESENTATION</b>														

<b>(9L+0P=9)</b>	
Multi-media presentation, Audio-visual projection and Computer based presentations, Movie making Flash movies, animation graphics, and walkthroughs.	<b>CO-5 BTL-2</b>
<b>TEXT BOOKS</b>	
1	Farrelly. Lorraine, The Fundamentals of Architecture, AVA Publishing, Switzerland (2007)
<b>REFERENCE BOOKS</b>	
1	Sam F. Miller, Design Process A Primer for Architectural and Interior Designers
2	YatinPandya, "Elements of Space making", Mapin 2007.
3	Dinsmore, G. A. (1968). Analytical Graphics. Canada : D. VanNostrand, Company Inc.
<b>E BOOKS</b>	
1.	Elizabeth Resnick, 2009, Design for Communication: Conceptual Graphic Design Basics 1st Edition, Kindle Edition, Wiley
<b>MOOC</b>	
1	<a href="https://ocw.mit.edu/courses/architecture/4-110j-design-across-scales-disciplines-and-problem-contexts-spring-2013/">https://ocw.mit.edu/courses/architecture/4-110j-design-across-scales-disciplines-and-problem-contexts-spring-2013/</a>

<b>COURSE TITLE</b>	<b>ADVANCED MATERIALS AND CONSTRUCTION TECHNIQUES</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21016</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>2-0-2-2</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-4</b>
<b>ASSESSMENT SCHEME</b>					
<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>		
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>		
<b>Course Description</b>	In this course students will learn about a few types of materials largely used in the sector of construction and their usage as façade, false ceiling, Joining systems, etc.				
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To Understand the different types and forms of steel available in the market.</li> <li>2. To apply the use of different types in building interiors in various application.</li> <li>3. To develop the plan section and elevation of aluminum frames.</li> <li>4. To understand the fixing details of cladding.</li> </ol>				

	5. Understand the different methods of fixture and materials used in false ceiling and flooring.
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to -</p> <ol style="list-style-type: none"> <li>To understand the different types and forms of steel available in the market.</li> <li>To apply the use of different types in building interiors in various application.</li> <li>To develop the plan section and elevation of aluminum frames.</li> <li>To understand the fixing details of cladding.</li> <li>Understand the different methods of fixture and materials used in false ceiling and flooring.</li> </ol>

**Prerequisites: Nil**

### CO, PO AND PSO MAPPING

CO	P O - 1	P O- 2	P O- 3	P O- 4	PO -5	P O- 6	P O- 7	PO-8	P O - 9	P O- 10	PO -11	PS O-1	PS O- 2	PS O -3	PSO -4	PSO -5
CO-1	2	2	2	1	1	2	2	3	1	2	1	3	1	1	-	1
CO-2	1	2	1	2	1	2	2	3	1	2	1	3	1	1	-	1
CO-3	2	2	2	1	1	2	2	3	1	2	-	3	1	1	-	1
CO-4	2	2	2	1	1	2	2	3	1	2	1	3	1	1	-	1
CO-5	1	2	1	2	1	2	2	3	1	2	1	3	1	1	-	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

### MODULE 1: STEEL

**(2L+10P=12)**

Steel-Types, properties and uses, various application of steel including stainless steel, Steel windows, metal flooring, Mezzanine floor construction, supports, joists, flooring, steel staircase, Sheet metal roofing, with truss, joist, purlin Case study- Industrial sheds with steel structure sheet metal wall and roofing.

**CO-1  
BTL-4**

### MODULE 2: METAL

**(2L+10P=12)**

Gates-Hinged Gates , Rolling and Sliding gates ,Collapsible Gates, Lift Doors , Rolling shutters, Balcony Railings , Staircase railings ,Balustrades, Stainless steel with wood gates , Stainless steel with glass balcony railings , Stainless steel staircase handrails and balusters – indoor and outdoor accessories.

**CO-2  
BTL-4**

### MODULE 3: ALUMINUM

**(2L+10P=12)**

Aluminum – Properties and uses, various applications in interiors ,finishes in aluminum ,Doors-open able and sliding , Windows- openable, fixed and sliding, Office Partitions-full height partition and modular partition. Case study-Different shapes in aluminum frames and fixtures.	<b>CO-3</b> <b>BTL-4</b>
<b>MODULE 4: CLADDING</b> <b>(2L+10P=12)</b>	
Aluminum as Façade Cladding material ,Fixing of cladding to exteriors –Curtain wall – Different fixing methods , Joining systems –Glazing extrusions - insulations, Aluminum composite panel -interior & exterior ,commercial applications in interior wall cladding , Shop fronts , Advertisement panels and accessories.	<b>CO-4</b> <b>BTL-4</b>
<b>MODULE 5: FALSE CEILING</b> <b>((2L+10P=12)</b>	
False ceiling –with various materials such as , Plaster of Paris in residential, Gypboard , Aluminium ,Wood in office and commercial establishments ,Acoustic Ceiling , Thermal insulation , Under deck insulation - Insulated Ceilings in factories and Fuel outlets - case study.	<b>CO-5</b> <b>BTL-4</b>
<b>TEXT BOOKS</b>	
1	Shah, M G & others, Building Drawing: An Integrated approach to build Environment, 5th edition, Tata McGraw Hill Publications Company Ltd, New Delhi, 2017
2	Kilmer, Working Drawings & Details for Interiors, John Wiley & Sons.
<b>REFERENCE BOOKS</b>	
1	W.B.Mckay, “Building Construction”, Vol. 1, 2,3- Longmans U.K 2010.
2	Dr.B.C.Punmia, “Building Construction”, Laxmi Publications Pvt. Ltd., New Delhi, 2017.
3	Harold B. Olin, Construction Principles Materials and Methods, The Institute of Financial Education, Chicago, 2012.
4	S.C.Rangwala , “Engineering Materials”, Charotar Publishing House, India, 2017.
<b>E-BOOKS</b>	
1	<a href="https://books.google.co.in/books/about/Building_Materials_and_Construction.html?id=qERxDwAAQBAJ&amp;redir_esc=y">https://books.google.co.in/books/about/Building_Materials_and_Construction.html?id=qERxDwAAQBAJ&amp;redir_esc=y</a>
<b>MOOC</b>	
1	<a href="https://www.classcentral.com/course/swayam-principles-of-casting-technology-7899">https://www.classcentral.com/course/swayam-principles-of-casting-technology-7899</a>



2	<a href="https://www.classcentral.com/course/edx-introduction-to-steel-3398">https://www.classcentral.com/course/edx-introduction-to-steel-3398</a>
---	---

<b>COURSE TITLE</b>	<b>BASICS OF INTERIOR SERVICES</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21017</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>2-0-2-2</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-6</b>
<b>ASSESSMENT SCHEME</b>					
<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>		
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>		
<b>Course Description</b>	In this course, students will study about the water supply system, waste management system, sanitary system and electrical layout for the interiors.				

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To identify the domestic water supply system and design the size of the tank</li> <li>To identify and differentiate the various sanitary fitting in the domestic setup</li> <li>To understand the appropriate sanitary system with respect to the layout and the economics</li> <li>To know the waste management system in residences and rain water harvesting.</li> <li>To understand the various electrical appliances, their symbols and their installations with respect to NBC and prepare the electrical layout for the interiors.</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Familiarize with various sanitary fitting in the domestic setup.</li> <li>Familiarize with the various sanitary fitting in the domestic setup.</li> <li>Explain the impact sanitary system with respect to the layout and the economics.</li> <li>Familiarize with the waste management system in residences and rain water harvesting.</li> <li>Familiarize with various electrical appliances, their symbols and their installations with respect to NBC and prepare the electrical layout for the interiors.</li> </ol>
-----------------------	---

**Prerequisites: Nil**

### CO, PO AND PSO MAPPING

CO	P O-1	P O-2	P O-3	P O-4	PO -5	P O-6	P O-7	P O-8	P O-9	P O-10	PO- 11	P S O-1	PS O-2	PS O-3	PSO -4	PSO -5
CO-1	2	2	2	1	1	2	2	3	1	2	1	3	1	1	-	1
CO-2	1	2	1	2	1	2	2	3	1	2	1	3	1	1	-	1
CO-3	2	2	2	1	1	2	2	3	1	2	-	3	1	1	-	1
CO-4	2	2	2	1	1	2	2	3	1	2	1	3	1	1	-	1
CO-5	1	2	1	2	1	2	2	3	1	2	1	3	1	1	-	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

### MODULE 1: WATER SUPPLY

**(6L+6P=12)**

General idea of sources of water supply. Standards for quality of water. Domestic water systems, suction and storage tanks and their capacity. Pipes and their sizes and jointing. Consumption of water. Down take supply to various fittings.

**CO-1  
BTL-4**

### MODULE 2: SANITARY FITTINGS

**(6L+6P=12)**

Types of fittings like taps, ball valves, hot water supply systems, bathtubs, showers, jets, cocks, valves etc. Faucets for kitchens, bathrooms and toilets. Check valves, foot valves, sump pump check valves.	<b>CO-2</b> <b>BTL-4</b>
<b>MODULE 3: SANITATION</b> (3L+12P=15)	
Basic principles of sanitations and disposal of waste materials from buildings. Connection to outdoor drainage system, size requirements, types of pipes available in the market. Water carriage systems, standard sanitary fittings, traps, pipes and their jointing. Flushing systems. Bathroom interior layouts, extensive market survey of products available, economies of products available, fixing of the products with other finishing materials.	<b>CO-3</b> <b>BTL-4</b>
<b>MODULE 4: SOLID WASTE</b> (6L+3P=9)	
Waste management: Refuse, different forms of refuse garbage, house refuse, refuse chutes, rain water harvesting etc	<b>CO-4</b> <b>BTL-4</b>
<b>MODULE 5: ELECTRICITY</b> (2L+7P=9)	
Electrical Installations: Building wiring system. Service wires, metering distribution boards, circuits, MCB cutouts. Conductors, wiring methods, switch boards, electrical devices in the buildings, light and power circuits. Indian electricity rules, relevant provisions of NBC. Preparation of electrical layout scheme for a interior using standard electrical symbols	<b>CO-5</b> <b>BTL-4</b>
<b>TEXT BOOKS</b>	
1	Rangwala, S.C. water supply and Sanitary Engineering : Environmental Engineering, Charotar pub house, Anand, 2008
2	Electrical wiring and contracting (vol. 1 to vol.4), London. The New era Publishing Company
<b>REFERENCE BOOKS</b>	
1	Dr Frith Abnwos and others, Electrical Engineering hand book.
2	William . J. Guinness, Mechanical and Electrical Systems for Buildings, New York : Mc Graw Hill.
<b>E-BOOKS</b>	
	<a href="http://archive.org/details/TimeSaverStandardsForBuildingTypes">archive.org/details/TimeSaverStandardsForBuildingTypes</a>
<b>MOOC</b>	

---

<b>COURSE TITLE</b>	<b>INTERIOR DESIGN STUDIO - I</b>			<b>CREDITS</b>	<b>4</b>
<b>COURSE CODE</b>	<b>SID21402</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>0-0-8-2</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-6</b>
<b>ASSESSMENT SCHEME</b>					

Continuous Assessment - 1	Continuous Assessment – II	Continuous Assessment III	Summative Assessment
20%	20%	10%	50%
<b>Course Description</b>	In this course, students will be equipped with the knowledge to design single level planning of interior space.		
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To enable student to familiarize with the given design topic by choosing, relevant and appropriate case studies within the region, visiting the sites and analyzing the same.</li> <li>To expose students to familiarize with the given topic of design by arranging special lectures from experts.</li> <li>To learn single level planning in small scale.</li> <li>To solve design solution and present in the form of drawing.</li> </ol>		
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Understand Anthropometry</li> <li>Conceptual exploration and representation of their ideas.</li> <li>Concepts sketching</li> <li>Application of design principles and elements in interior space</li> </ol>		

**Prerequisites: Nil**

### CO, PO AND PSO MAPPING

CO	P O -1	P O- 2	P O- 3	P O- 4	PO -5	P O- 6	P O- 7	P O- 8	P O- 9	P O- 10	PO- 11	P S O- 1	PS O-2	PS O -3	PSO -4	PSO -5
CO-1	2	2	2	1	1	2	2	3	1	2	1	3	1	1	-	1
CO-2	1	2	1	2	1	2	2	3	1	2	1	3	1	1	-	1
CO-3	2	2	2	1	1	2	2	3	1	2	-	3	1	1	-	1
CO-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

The primary focus should be on

- Anthropometry
- Design methodology

- Conceptual exploration and representation.
- Creativity
- Scale/proportion
- Documenting space
- Graphic design (page layout and composition)
- Concepts sketching
- Application of design principles and elements
- Portfolio development

The list of suggested topics to be covered as design problems shall be a single space like: Single room residence, Doctor’s clinic, kindergarten class room, Crèche, Architect’s studio, Lawyer’s office, small cafeteria, bank extension counter, florist shops, medical outlets, clothing store, shoe store, accessory store, book shop, waiting lounges for – hospitals, corporate, hotels, etc.

Note: At least three major exercises and four minor design/time problems should be given.

Internal marking shall be done in stages project wise:

- Schematic layouts
- Final layout
- Sectional elevations
- Typical details
- Complete project with all details 3D drawings with colour rendering

#### TEXT BOOKS

1	Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.
2	Francis.D. Ching & Corky Bingelli, Interior Design Illustrated, 2nd edition, Wiley publishers, 2004.
3	Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques. John Wiley and Sons, 2003
4	Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals ,2002

### SEMESTER IV

COURSE TITLE	ADVANCED FURNITURE DESIGN			CREDITS	3
COURSE CODE	SID21018	COURSE CATEGORY	PC	L-T-P-S	3-0-0-0
Version	1.0	Approval Details	24.02.2024	LEARNIN G LEVEL	BTL-3

<b>ASSESSMENT SCHEME</b>															
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>				<b>Surprise Test / Quiz</b>		<b>Attendance</b>		<b>ESE</b>					
<b>15%</b>	<b>15%</b>	<b>10%</b>				<b>5%</b>		<b>5%</b>		<b>50%</b>					
<b>Course Description</b>	This course introduces students to the principles and practices of sustainable design in interior design. It explores the integration of environmental, social, and economic considerations to create interior spaces that are both aesthetically pleasing and environmentally responsible. Through a combination of theoretical knowledge and hands-on projects, students will learn to make informed decisions, select sustainable materials, and implement eco-friendly design solutions.														
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. Understand the fundamental principles of furniture design.</li> <li>2. Apply design thinking to create innovative and functional furniture pieces.</li> <li>3. Demonstrate proficiency in selecting appropriate materials and construction techniques.</li> <li>4. Present and communicate furniture designs effectively, both visually and verbally.</li> <li>5. Engage with emerging trends and technologies in the field of furniture design.</li> </ol>														
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to -</p> <ol style="list-style-type: none"> <li>1. Demonstrate a deep understanding of advanced furniture design principles and techniques.</li> <li>2. Create functional and aesthetically pleasing furniture pieces for interior spaces.</li> <li>3. Apply sustainable and ergonomic considerations to furniture design projects.</li> <li>4. Communicate their design ideas effectively through visual and verbal presentations.</li> <li>5. Stay informed about contemporary trends and technologies in furniture design.</li> </ol>														
<b>Prerequisites:</b>															
<b>CO, PO AND PSO MAPPING</b>															
<b>CO</b>	<b>PO-1</b>	<b>P O-2</b>	<b>P O-3</b>	<b>P O-4</b>	<b>P O-5</b>	<b>P O-6</b>	<b>P O-7</b>	<b>P O-8</b>	<b>P O-9</b>	<b>PO-10</b>	<b>P O-11</b>	<b>PO-12</b>	<b>PS O-1</b>	<b>PS O-2</b>	<b>PS O-3</b>
<b>CO-1</b>	3	2	2	1	1	1	1	1	3	3	1	2	1	3	2
<b>CO-2</b>	3	3	1	1	1	1	1	1	3	3	1	2	3	3	1
<b>CO-3</b>	2	3	1	1	1	1	1	1	3	3	1	3	2	2	1
<b>CO-4</b>	3	3	1	1	1	1	1	1	3	3	1	2	2	2	1
<b>CO-5</b>	2	3	1	1	1	1	1	1	3	3	1	2	1	3	1
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>															
<b>MODULE 1: INTRODUCTION TO FURNITURE DESIGN (12L=12)</b>															
Introduction to Furniture Design Principles, Understanding Materials and Fabrication Techniques, Ergonomics in Furniture Design, Design Thinking and the Creative Process. Works of famous designers- Charles & Ray Eames, Eero Saarinen, Jean Prouve, Paul Mccobb, Ettore Sottass, Knoll, Jens Risom etc.													<b>CO-1 BTL-2</b>		
<b>MODULE 2: FUNDAMENTALS OF FURNITURE DESIGN (8L=8)</b>															

Typologies, Dimensions, and Proportions, Types of interior furniture and their suitable materials and fabrication techniques- storage cabinets, shelves, partition walls, seating, wall units, office cabins, reception desks, etc. Ergonomics and Anthropometry, design standards, Modular furniture and interior constructions.	<b>CO-2 BTL-2</b>
<b>MODULE 3: MATERIALS AND TECHNOLOGY (8L=8)</b>	
Terminology used in furniture constructions. Different types of Joints, its importance and application in Furniture Technology; Fabrication Methods - their merits & demerits. Structural sections, proportion, size and structural composition of frame, partitions, and in furniture construction, Fabrication techniques. Various manufacturing processes - Injection Molding, investment casting, sheet metal work, die casting, vacuum - forming etc. Advanced fabrication techniques, 3d printing, Laser/CNC cutting and milling, Robotic brick laying, advanced materials, solar integrated, polymers, nano materials.	<b>CO-3 BTL-3</b>
<b>MODULE 4: FINISHING MATERIALS AND TECHNIQUES (8L=8)</b>	
Finishing of Furniture: Different types of and other finishing techniques for Wood & Metals (Paints & pigments, lacquering, enamelling, Electroplating) etc. ply wood (laminates, veneers, PU coating, factory made), counter tops (granite, quartz, corian, etc), glass (lacquered, coloured, frosted, fluted). Textile materials and accessories. Fittings and fixtures (handles, hinges, trays,). Applications of different techniques to different typologies.	<b>CO-4 BTL-2</b>
<b>MODULE 5: FURNITURE DESIGN PROJECT AND PRESENTATION (9L=9)</b>	
Designing of product basic material wood, Metal & Glass, etc -Full size/ Model. Conceptualizing and Designing Furniture Pieces-Fabrication and Prototyping-Presentation and Visual Communication of Design Concepts- Final Furniture Design Project: Presentation and Evaluation.	<b>CO-5 BTL-2</b>
<b>TEXT BOOKS</b>	
1.	Pile, J. F. "Furniture: A Concise History." Thames & Hudson, 2013
2.	Bernhardt, A., & Huttner, A. "Furniture Design." Birkhäuser.2014
<b>REFERENCE BOOKS</b>	
1	Hinchcliffe, F. "Materials for Interior Environments." Wiley, 2014
2	Jim Postell, Furniture Design, Wiley publishers, 2007.
<b>E BOOKS</b>	
1.	<a href="https://issuu.com/cedarlanepress/docs/issuu_9781940611051_preview">https://issuu.com/cedarlanepress/docs/issuu_9781940611051_preview</a>
2.	<a href="https://issuu.com/search?q=furniture+design#google_vignette">https://issuu.com/search?q=furniture+design#google_vignette</a>
<b>MOOC</b>	
1.	<a href="https://www.domestika.org/en/courses/4944-design-fundamentals-an-introduction-to-furniture-design/course">https://www.domestika.org/en/courses/4944-design-fundamentals-an-introduction-to-furniture-design/course</a>

<b>COURSE TITLE</b>	<b>BASICS OF STRUCTURAL DESIGN</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21019</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>3 0 0 3 0 3</b>



<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>										
<b>ASSESSMENT SCHEME</b>															
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>										
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>										
<b>Course Description</b>	To enable students with a basic knowledge of structural design for buildings. The course emphasizes the understanding, development of structural form and the evolution of structural design knowledge and students will investigate the behaviour of structural systems and elements through design exercises, case studies.														
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To inform students about various element in building construction</li> <li>To inform the load transfer mechanism.</li> <li>To make student familiar with load acting on building.</li> <li>To inform the behaviour of building during action of loads.</li> <li>To inform structural properties of materials used in building.</li> </ol>														
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Aware of various built elements used in the building construction.</li> <li>Understand the concept of structural systems in building and their importance in load transfer.</li> <li>Familiar with the loads acting on building.</li> <li>Understand behaviour of buildings during the action of various loads acting on it.</li> <li>Describe the structural properties of materials used in the building.</li> </ol>														
<b>Prerequisites:</b>															
<b>CO, PO AND PSO MAPPING</b>															
<b>CO</b>	<b>PO-1</b>	<b>P O-2</b>	<b>P O-3</b>	<b>P O-4</b>	<b>P O-5</b>	<b>P O-6</b>	<b>P O-7</b>	<b>P O-8</b>	<b>P O-9</b>	<b>PO-10</b>	<b>P O-11</b>	<b>PO-12</b>	<b>PS O-1</b>	<b>PS O-2</b>	<b>PS O-3</b>
<b>CO-1</b>	1	2	-	-	-	-	-	-	-	-	-	-	1	-	-
<b>CO-2</b>	-	2	2	-	-	-	-	-	-	-	-	-	2	-	-
<b>CO-3</b>	-	2	2	-	-	-	-	-	-	-	-	-	2	-	-
<b>CO-4</b>	-	1	2	3	-	-	-	-	-	-	-	-	3	-	-
<b>CO-5</b>	-	-	-	-	3	-	-	-	-	-	-	-	3	-	-
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>															
<b>MODULE 1: BUILT ELEMENTS</b>						<b>(9L+0P=9)</b>									
Introduction to built elements – study of built elements in the interiors with respect to materials used. Basic construction methods and general specifications. General types and classification of different types of buildings: overview of different functional, structural and architectural elements.													<b>CO-1 BTL-2</b>		
<b>MODULE 2: STRUCTURAL SYSTEMS</b>						<b>(9L+0P=9)</b>									

Introduction to basic structural systems, elements of structure, their functions and behavior, beams, slabs, columns, walls, foundations, frame structures, composite structures, load bearing wall systems, trusses, rigid frames, linear and curved elements, simply supported, cantilever and overhanging beams for various loads, : effect of simple geometric forms in the overall structural behavior. Construction of elements like lintels, sunshades, staircases, arches – parts, types, types of columns – RCC, fabricated, built-up brick column, floating column, etc.,	<b>CO-2 BTL-2</b>
<b>MODULE 3: STRUCTURAL LOADS (9L+0P=9)</b>	
Primary and secondary forces acting on the structures – gravitational force, live load, wind, temperature variation, distribution of loads through the elements of the structural system.	<b>CO-3 BTL-3</b>
<b>MODULE 4: STRUCTURAL BEHAVIOUR (9L+0P=9)</b>	
Characteristic requirements of a structural design – stress and strains, strength, stiffness and stability. Discussion on factors affecting them and the ways of satisfying these requirements. Study of behaviour of structures through models and testing them for given loads.	<b>CO-4 BTL-2</b>
<b>MODULE 5: STRUCTURAL PROPERTIES &amp; ELEMENTS (9L+0P=9)</b>	
Structural properties of basic materials like masonry, timber, concrete, and steel etc. Light weight space structure, small- and large-scale surface structure, integrated display system and structural elements. Structural systems and their layout for a small building. Structural systems for elements of interior spaces – false ceilings, false flooring, suspended floors & ceilings, etc. Structural system for urban interior spaces – malls, fair grounds, exhibition spaces, etc. Awnings, space frames, etc <b>Assignments:</b> Sketches of various types of structures, trusses, arches, lintels, sections of chajjas, awnings, etc.,	<b>CO-5 BTL-2</b>
<b>TEXT BOOKS</b>	
1.	S.P.Bindra, S.P.Arora, Building Construction
<b>REFERENCE BOOKS</b>	
1	Dr.B.C.Punmia, Reinforced Concrete Structures, Laxmi publication, Delhi, 2004.
2	P.Dayaratnam, “Design of Reinforced Concrete Structures”, Oxford and IBH Publishing Co., 2002.
<b>E BOOKS</b>	
1.	<a href="https://nptel.ac.in/noc/courses/noc20/SEM1/noc20-ar03/">https://nptel.ac.in/noc/courses/noc20/SEM1/noc20-ar03/</a>
<b>MOOC</b>	
1.	<a href="https://nptel.ac.in/noc/courses/noc20/SEM1/noc20-ar03/">https://nptel.ac.in/noc/courses/noc20/SEM1/noc20-ar03/</a>

<b>COURSE TITLE</b>	<b>ADVANCED COMPUTER DESIGN AND DIGITAL FABRICATION</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21020</b>	<b>COURSE CATEGORY</b>	<b>EEC</b>	<b>L-T-P-S</b>	<b>1-0-4-2</b>

<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>			<b>24.02.2024</b>	<b>LEARNIN G LEVEL</b>			<b>BTL-3</b>							
<b>ASSESSMENT SCHEME</b>																
<b>1st Periodical Assessment</b>		<b>2nd Periodical Assessment</b>			<b>Portfolio Assessment</b>					<b>ESE</b>						
<b>15%</b>		<b>15%</b>			<b>20%</b>					<b>50%</b>						
<b>Course Description</b>		The course will introduce students to advanced Computer and design by introducing further tools and software skills. The course allows students to explore opportunities to extend digital fabrication, from the often small scale art and temporary installation context, into the design and construction of everyday projects.														
<b>Course Objective</b>		<ol style="list-style-type: none"> <li>To understand the basics of 3D drawings with sketch up software.</li> <li>To understand the theory behind 3d modelling with wireframe structures.</li> <li>To apply the various commands in REVIT and create architectural drawings.</li> <li>To explore on the solid modelling techniques in the software</li> <li>To understand the rendering and presentation techniques for a drawing</li> </ol>														
<b>Course Outcome</b>		<p>Upon completion of this course, the students will be able to,</p> <ol style="list-style-type: none"> <li>To gain knowledge on 3D Drawings with SketchUp Software</li> <li>To do 3D Modelling with wireframe structure</li> <li>To create models in REVIT architecture</li> <li>To do Solid modelling</li> <li>To do Presentation Drawings and renderings.</li> </ol>														
<b>Prerequisites: AUTOCAD</b>																
<b>CO, PO AND PSO MAPPING</b>																
<b>CO</b>	<b>PO -1</b>	<b>P O-2</b>	<b>P O-3</b>	<b>P O-4</b>	<b>P O-5</b>	<b>P O-6</b>	<b>P O-7</b>	<b>P O-8</b>	<b>P O-9</b>	<b>PO -10</b>	<b>P O-11</b>	<b>PO -12</b>	<b>PS O-1</b>	<b>PS O-2</b>	<b>PS O-3</b>	
<b>CO-1</b>	3	-	3	-	-	-	1	-	-	-	1	-	-	1	-	
<b>CO-2</b>	-	3	-	3	-	-	-	1	1	-	-	2	-	-	2	
<b>CO-3</b>	-	-	-	-	3	3	-	-	-	-	-	-	1	-	-	
<b>CO-4</b>	-	-	-	-	3	3	-	-	-	1	-	-	-	1	-	
<b>CO-5</b>	3	3	-	-	-	-	2	-	-	-	-	-	1	3	-	
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>																
<b>MODULE 1: SKETCH UP (3D)</b>																
<b>(3L+12P=15)</b>																
Mastering the basics, including the interface, navigation, drawing tools, 3D modelling with tools - Push/Pull, selecting and editing objects, and organizing your work using groups, components, layers, materials, and dimensions. Scene management for														<b>CO-1</b>		
														<b>BTL-3</b>		

presentations, exploration of extensions and plugins, rendering, and efficient exporting and importing.	
<b>MODULE 2: 3D MAX (3D)</b> (3L+12P=15)	
User interface - Ttoolbars, menus, and the main viewport. Mastering navigation tools - pan, zoom, and orbit. Create 3D models using fundamental tools like shapes, lines, and splines, and then transform them into complex objects by extrusion and modelling techniques. Tools - Move, Rotate, and Scale facilitating precise adjustments. Advanced features - modifiers, materials, lighting, animation, and rendering to create stunning 3D scenes and animations.	<b>CO-2 BTL-3</b>
<b>MODULE 3: REVIT (2D &amp; 3D)</b> (3L+12P=15)	
User interface - Ribbon, properties palette, and project browser. Creating 3D models - placement of walls, floors, roofs, and other architectural elements, utilizing precise drawing and dimensioning tools. Learning to manage views and sheets, including floor plans, elevations, and sections, is essential for documenting a project. Exploring schedules, tags, families, rendering.	<b>CO-3 BTL-3</b>
<b>MODULE 4: SOLID MODELING (TRANSFORMING SPACES)</b> (3L+12P=15)	
Creating surfaces, solids, and curves. Grasshopper - Basic parametric design. Connect nodes and components in Grasshopper to control and automate various aspects of your Rhino model, allowing for dynamic and responsive designs.	<b>CO-4 BTL-3</b>
<b>MODULE 5: RENDERING &amp; PRESENTATION TECHNIQUES</b> (3L+12P=15)	
Rendering and presentation. Printing and plotting.(V ray, In design, Illustrator, Lumion)	<b>CO-5 BTL-3</b>
<b>TEXT BOOKS</b>	
1.	"SketchUp to Layout" by Matt Donley: This book provides a comprehensive guide to using SketchUp for architectural and interior design, and it covers the integration of SketchUp with LayOut for documentation.
2.	"Mastering Autodesk Revit 2023" by Lance Kirby, Eddy Krygiel, and Marcus Kim: This comprehensive guide covers the basics and advanced features of Autodesk Revit, making it suitable for both beginners and experienced users.
3.	"3ds Max 2023 For Beginners: A Tutorial Approach" by Prof. Sham Tickoo: Geared toward beginners, this book offers step-by-step tutorials for learning 3ds Max.
4.	"Designing Parametric Furniture with Grasshopper" by Arturo Tedeschi: This book is dedicated to using Grasshopper for parametric furniture design, and it's a valuable resource for those interested in this domain.
<b>REFERENCE BOOKS</b>	
1.	"SketchUp: A Design Guide for Woodworkers" by Joe Zeh: This book is a comprehensive guide for woodworkers and provides a detailed reference for using SketchUp in woodworking projects.
2.	"Revit Architecture 2023" by Eric Wing: This book, focused on architectural applications, can be used as a reference for Revit users working in the architecture and construction industry.

3.	"3ds Max 2023: A Comprehensive Guide" by Prof. Sham Tickoo: An extensive reference guide covering various aspects of 3ds Max, from modeling to rendering.
<b>MOOC</b>	
1.	<a href="https://www.coursera.org/learn/autodesk-revit-architectural-design?query=Revit">https://www.coursera.org/learn/autodesk-revit-architectural-design?query=Revit</a>
2.	<a href="https://www.coursera.org/projects/explore-sketchup?">https://www.coursera.org/projects/explore-sketchup?</a>

<b>COURSE TITLE</b>	<b>INTERIOR SERVICES (INTERMEDIATE)</b>			<b>CREDITS</b>	<b>2</b>
<b>COURSE CODE</b>	<b>SID21021</b>	<b>COURSE CATEGOR Y</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>2-0-0-1</b>

<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>											
<b>ASSESSMENT SCHEME</b>																
<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>			<b>ESE</b>											
<b>15%</b>	<b>15%</b>	<b>20%</b>			<b>50%</b>											
<b>Course Description</b>	In this course, students will study about services like heating, ventilation and air conditioning system, fire safety and protection systems, vertical transportation system, and other safety and security system in multi- storied buildings.															
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand heating, ventilation and air conditioning systems.</li> <li>To obtain the basics concept of firefighting systems and provision of fire safety and protection systems in NBC.</li> <li>To understand the importance of vertical transportation systems in multi-storied buildings and to understand the arrangement of the service core.</li> <li>To obtain basic knowledge on the various safety and security systems.</li> <li>To understand various building automation and energy management systems.</li> </ol>															
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Familiarize with the heating, ventilation and air conditioning systems.</li> <li>Familiarize with various firefighting safety and protection systems and provision of fire safety and protection systems in NBC.</li> <li>Explain the importance of vertical transportation systems placement of service core in multi-storied buildings.</li> <li>Familiarize with the behavior of various safety and security systems.</li> <li>Familiarize with various building automation and energy management systems.</li> </ol>															
<b>Prerequisites:</b>																
<b>CO, PO AND PSO MAPPING</b>																
<b>CO</b>	<b>P O-1</b>	<b>P O-2</b>	<b>P O-3</b>	<b>P O-4</b>	<b>PO-5</b>	<b>P O-6</b>	<b>P O-7</b>	<b>P O-8</b>	<b>P O-9</b>	<b>P O-10</b>	<b>PO-11</b>	<b>P O-12</b>	<b>PSO-1</b>	<b>P S O-2</b>	<b>PS O-3</b>	<b>PS O-4</b>
CO-1	3	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1
CO-2	3	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1
CO-3	1	2	2	-	1	3	2	3	1	2	-	3	1	1	-	1
CO-4	1	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1
CO-5	1	2	2	-	1	2	2	3	1	2	-	3	1	1	-	1
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>																
<b>MODULE 1: HVAC</b>						<b>(2L+10P=12)</b>										

Heating Ventilation & Air Conditioning (HVAC) systems: Mechanical ventilation – mechanical inlet and extraction systems. Air conditioning, Functions of air conditioning, Principles of AC, capacity of AC, Types of AC systems – window AC, split, duct, central AC and their details. Air distribution systems– ducts, air inlets.	<b>CO-1 BTL-4</b>
<b>MODULE 2: FIRE SAFETY</b>	<b>(2L+10P=12)</b>
Fire – causes and spread of fire. Passive and active methods for fire safety: Design considerations for fire safety, Devices for firefighting – portable, <del>built-in</del> wet riser system, dry riser system, sprinkler system, fire hydrant. Class of fire and occupancy and travel distances, study of fire regulations as per NBC.	<b>CO-2 BTL-4</b>
<b>MODULE 3: VERTICAL TRANSPORT</b>	<b>(2L+10P=12)</b>
Introduction – Types of vertical transportation systems: staircases, lifts, escalators and travelators - Vertical & horizontal, definition, location of service core, arrangement, structure, traffic analysis, peak hour factor, supervisory control, remote monitoring.	<b>CO-3 BTL-4</b>
<b>MODULE 4: SAFETY AND SECURITY</b>	<b>(2L+10P=12)</b>
Security and safety systems – introduction, types of security system – burglar alarm, CCTV, central alarm systems, intrusion sensors and space sensors. Other services – cable TV, PABX, computer labs – Access flooring, server rooms.	<b>CO-4 BTL-4</b>
<b>MODULE 5: BUILDING AUTOMATION AND ENERGY MANAGEMENT</b>	<b>(2L+10P=12)</b>
Building automation and energy management – Introduction, History of development of BAS, typical BAS, criteria for choosing the right BAS, open system architecture. Information technology, communications & artificial intelligence in intelligent buildings. Design in computer age, engineering intelligence through nature.	<b>CO-5 BTL-4</b>
<b>TEXT BOOKS</b>	
1.	Rangwala, S.C. water supply and Sanitary Engineering: Environmental Engineering, 19th ed, Charotar pub house, Anand, 2004.
2	Electrical wiring and contracting (vol. 1 to vol.4), London. The New era Publishing Company
3	DrFrithAbnwos and others, Electrical Engineering hand book.
<b>REFERENCE BOOKS</b>	
1	William. J. Guinness, Mechanical and Electrical Systems for Buildings, New York: McGraw Hill.
2	Derek Clements-Croome, Derek J. Croome, Intelligent buildings: Design, Management and Operation, Thomas Telford Books, London, 2004.
3	Albert Ting-pat So, Wai Lok Chan, Intelligent Building Systems, Kluwer Academic Publishers, 2009.
<b>E-BOOKS</b>	
1. Building Systems for Interior Designers Third Edition By Corky Binggeli A.S.I.D. <a href="https://thearchiblog.files.wordpress.com/2011/02/architecture-ebook-building-systems-for-interior-designers.pdf">https://thearchiblog.files.wordpress.com/2011/02/architecture-ebook-building-systems-for-interior-designers.pdf</a>	
2. National building code of India 2016. <a href="https://archive.org/details/nationalbuilding01/in.gov.nbc.2016.vol1.digital/">https://archive.org/details/nationalbuilding01/in.gov.nbc.2016.vol1.digital/</a>	
3. Time saver standards for building types 2 <sup>nd</sup> Edition by Joseph De Chiara and John Callender. <a href="https://archive.org/details/TimeSaverStandardsForBuildingTypes">https://archive.org/details/TimeSaverStandardsForBuildingTypes</a>	

<b>COURSE TITLE</b>	<b>INTERIOR DESIGN STUDIO II</b>	<b>CREDIT S</b>	<b>6</b>
-------------------------	----------------------------------	---------------------	----------

<b>COURSE CODE</b>	<b>SID21403</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>0-0-10-2</b>
<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

### ASSESSMENT SCHEME

<b>Continuous Assessment - 1</b>	<b>Continuous Assessment – II</b>	<b>Continuous Assessment III</b>	<b>Summative Assessment</b>
<b>20%</b>	<b>20%</b>	<b>10%</b>	<b>50%</b>

<b>Course Description</b>	In this course, students will design an interior space using tools and software.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand spaces in urban context and be able to create concepts that will enhance the knowledge towards modernity.</li> <li>To understand spatial design with respect to different eras.</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Familiarize with spaces in urban context and be able to create concepts that will enhance the knowledge towards modernity.</li> <li>Familiarize with the solid modelling techniques in the software, rendering and presentation techniques for a drawing.</li> </ol>
-----------------------	---

### Prerequisites:

### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PO -12	PSO -1	PSO -2	PSO -3
CO-1	2	2	2	1	1	2	2	3	1	2	1	3	1	1	1
CO-2	2	1	2	2	1	2	2	3	1	2	1	3	1	1	1
CO-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

<p>primary focus should be on –</p> <ul style="list-style-type: none"> <li>Documenting space (sketch and photo documentation)</li> <li>Space planning process (block diagram, concept statement)</li> <li>Concept sketching</li> <li>Application of design principles and elements</li> </ul>	<b>CO-1 BTL-6</b>
---	-----------------------



<ul style="list-style-type: none"> <li>• Creativity/originality</li> <li>• Design Process/methodology</li> <li>• Structural integration</li> <li>• Style</li> <li>• Colour Rendering</li> <li>• Anthropometry and ergonomics</li> <li>• Furniture Design</li> <li>• Material selection</li> <li>• Graphic design (page layout and composition)</li> <li>• Portfolio development</li> </ul> <p>Design portfolio to include designs in response to today’s situation of urban society, i.e., contemporary spaces required in modern society – needs, realities, value system etc.. The spaces to be considered shall be: home, office, bank, school, college, public level spaces - restaurant, lounge (hotel),etc.</p> <p>The list of suggested topics to be covered as design problems:</p> <ul style="list-style-type: none"> <li>• Thematic space making with Art and craft forms of our own culture in India – East, West, North, Central and so on and</li> <li>• Design of built units of various geographical locations and culture by involving historical periods, styles and use of craft in its inherent quality and form - integrating craft and living environment.</li> </ul> <p>Note: At least two major exercises and three minor time problems should be given. Internal marking shall be done in stages and project wise:</p> <ul style="list-style-type: none"> <li>• Schematic layouts</li> <li>• Final layout</li> <li>• Sectional elevations</li> <li>• Designs &amp; details</li> </ul>	
---	--

**TEXT BOOKS**

1	Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques. John Wiley and Sons, 2003
2	Francis.D. Ching& Corky Bingelli, Interior Design Illustrated, 2nd edition, Wiley publishers, 2004.
3	Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.

**REFERENCE BOOKS**

1	Neufert Ernest, Architect’s Data, Granada pub. Ltd. London, 2000.
2	John F. Pile, A history of interior design, Laurence King Publishing, 2005.
3	Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals ,2002

**SEMESTER V**

<b>COURSE</b>	<b>SUSTAINABLE DESIGN</b>	<b>CREDITS</b>	<b>3</b>
---------------	---------------------------	----------------	----------

<b>TITLE</b>					
<b>COURSE CODE</b>	<b>SID21022</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

#### ASSESSMENT SCHEME

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

**Course Description**  
This course introduces students to the principles and practices of sustainable design in interior design. It explores the integration of environmental, social, and economic considerations to create interior spaces that are both aesthetically pleasing and environmentally responsible. Through a combination of theoretical knowledge and hands-on projects, students will learn to make informed decisions, select sustainable materials, and implement eco-friendly design solutions.

**Course Objective**

1. To ensure that the students learn about the introduction to the concept of sustainability
2. To familiarize students with the concepts and calculations of Green Interiors
3. To ensure that the students learn about the different principles of sustainable design
4. To familiarize students with the benefits of using green material finishes
5. To ensure that the students learn about the Indoor environmental quality and rating system.

**Course Outcome**

Upon completion of this course, the students will be able to -

1. Illustrate the impact of buildings on environment Identify the roles of lighting system in artificial lighting
2. Identify the role of human capital and interiors in indoor environment.
3. Understand the use of principles of sustainable design in interiors using real time applications
4. Explore the energy conservation techniques in interiors and to understand the benefits of green interiors
5. To know the various methods used to enhance the thermal comfort, lighting and environmental quality.

#### Prerequisites:

#### CO, PO AND PSO MAPPING

CO	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO-1	PSO-2	PSO-3
CO-1	3	2	2	1	1	1	1	1	3	3	1	2	1	3	2
CO-2	3	3	1	1	1	1	1	1	3	3	1	2	3	3	1
CO-3	2	3	1	1	1	1	1	1	3	3	1	3	2	2	1
CO-4	3	3	1	1	1	1	1	1	3	3	1	2	2	2	1
CO-5	2	3	1	1	1	1	1	1	3	3	1	2	1	3	1

1: Weakly related, 2: Moderately related and 3: Strongly related	
<b>MODULE 1: INTRODUCTION TO SUSTAINABILITY IN INTERIORS (9L+0P=9)</b>	
Concept of Sustainability, growing recognition for sustainable design ,efficient use of natural resources ,Environment and Energy cost , role of human capital , buildings impact on people and environment ,Green interiors and materials , Interiors impact on inhabitants and occupants in interior	<b>CO-1 BTL-2</b>
<b>MODULE 2: PRINCIPLES OF SUSTAINABLE DESIGN (9L+0P=9)</b>	
Environmental Responsibility, Energy Efficiency, Indoor Air Quality, Water Efficiency, Water Efficiency, Waste Reduction, Adaptive Reuse and Upcycling, Sustainable Sourcing, Biophilic Design-Incorporate nature: Integrate natural elements like plants, natural light, and organic patterns to enhance occupant well-being and connection to the environment. Eco-mimicry/Bio mimicry as a design tool.	<b>CO-2 BTL-2</b>
<b>MODULE 3: SUSTAINABLE MATERIALS, FINISHES AND FIXTURES (9L+0P=9)</b>	
Evaluation of materials –Embodied energy and operational energy, Life cycle assessment, – its concepts and calculation – Energy efficient lighting fixtures, water saving fixtures– Design process and case studies with material board .	<b>CO-3 BTL-3</b>
<b>MODULE 4: DAYLIGHTING, THERMAL COMFORT AND INDOOR ENVIRONMENTAL QUALITY (9L+0P=9)</b>	
Daylighting, energy efficient lighting, : Fenestration, lighting level and glare, amount of light, sky as a source of light and daylight factor HVAC design, Thermal Comfort in the interior environment with case studies from various climatic zones.	<b>CO-4 BTL-2</b>
<b>MODULE 5: ENERGY EFFICIENCY AND RATING SYSTEMS FOR INTERIORS (9L+0P=9)</b>	
Building energy use, Parameters affecting energy consumption in buildings, Energy conserving opportunities in interiors, Building automation and control, Green interiors and various international and national rating systems for sustainability- EAM (UK), CASBEE (Japan), LEED (US), Green Star (Australia), etc. – Indian systems – TERI GRIHA rating, LEED India rating, IGBC WELL being standard, BEE star rated of equipment and fittings.	<b>CO-5 BTL-2</b>
<b>TEXT BOOKS</b>	
1.	Susan M. Winchip. Sustainable Design for Interior Environments. 2nd Revised edition Edition – 10, 2011
2.	David Bergman, Sustainable Design, Princeton, 2012
<b>REFERENCE BOOKS</b>	
1	Corky Binggeli. Materials for Interior Environments. Wiley. 2013
2	Alastair Fuad-Luke , Ecodesign: The Sourcebook. <i>Publisher</i> , Chronicle Books, 2002
<b>E BOOKS</b>	
1.	<a href="http://ndl.ethernet.edu.et/bitstream/123456789/34378/1/114.pdf">http://ndl.ethernet.edu.et/bitstream/123456789/34378/1/114.pdf</a>
2.	<a href="http://archive.org/details/ecodesignsourceb0000fuad">archive.org/details/ecodesignsourceb0000fuad</a>
<b>MOOC</b>	
1.	<a href="https://www.coursera.org/learn/sdgbusiness">https://www.coursera.org/learn/sdgbusiness</a>

COURSE TITLE	LIGHTING AND ACOUSTICS IN INTERIORS			CREDITS	3
COURSE CODE	SID21024	COURSE	PC	L-T-P-S	3- 0- 0- 1

		<b>CATEGORY</b>			
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

### ASSESSMENT SCHEME

<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>

<b>Course Description</b>	In this course, the students will learn about the various types of lights available in designing the Interior spaces and the different types of materials used for acoustics with their application in the residential, commercial, and Office Interiors.
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To ensure that the students learn about the importance of day lighting in interiors, their effect on end-users</li> <li>To familiarize students with different types of artificial lights available in the market which will be apt in their design</li> <li>To familiarize with the type of fixtures and its positions in plan</li> <li>To ensure that the student's study about the different types of sound insulating materials and their methods of insulation</li> </ol>
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to -</p> <ol style="list-style-type: none"> <li>Illustrate the qualities of natural light</li> <li>Identify the roles of lighting system in artificial lighting</li> <li>Prepare lighting layouts, specify light , different type of applications</li> <li>Identify the qualities of sound and its behavior in different context</li> <li>Illustrate the quality of sound insulation materials and their application in interiors.</li> </ol>

### Prerequisites:

### CO, PO AND PSO MAPPING

CO	P O-1	P O-2	P O-3	P O-4	P O-5	P O-6	P O-7	P O-8	P O-9	P O-10	P O-11	PS O-1	PSO -2	P S O-3	PS O-4	PSO -5
CO-1	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-2	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-3	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-4	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-5	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

### MODULE 1 – INTRODUCTION TO LIGHTING

**(6L+6P=12)**

Introduction to day lighting and artificial lighting, Properties of light, Visual task requirements, Units of Light, Standards of Lighting and Visual comfort. The sky as a source of light, Daylight factor, Room proportions and other building elements, Daylight penetration, Calculation of daylight factor different spaces	<b>CO-1 BTL-3</b>
---	-----------------------

<b>MODULE 2: ARTIFICIAL LIGHTING -</b>		<b>(6L+6P=12)</b>
General terminologies- Luminance, Illuminance, Lumen. Lighting calculation-Lumen method, technological application in lighting calculation, General lighting system – Direct, Indirect, diffused, Task, Accent, ambient, mood - Types of light fixture- Variety of Lamps - Incandescent lamps - Tungsten Halogen lamps - Fluorescent lamps - Mercury lamps - sodium vapor lamps - Emergency lighting - Lighting Accessories – Market study on lighting systems – types, fixtures and applications with case studies		<b>CO-2 BTL-3</b>
<b>MODULE 3: LIGHTING DESIGN</b>		<b>(3L+9P=12)</b>
Artificial lighting and its design aspects: Parameters considered for lighting design, type of lighting system, fixtures. Lighting Design – Lighting Plan- Position of lighting points- fixtures used, control points for residential, commercial and office interiors planning and design.		<b>CO-3 BTL-3.4</b>
<b>MODULE 4: ACOUSTICS</b>		<b>(6L+6P=12)</b>
Sound, Nature of sound. Behavior of sound in enclosed spaces. Concept of Geometric Acoustics. Reflection of sound and their applications. Absorption of sound. Sound absorption coefficient. Properties of sound Reverberation & Reverberation Time Calculation.		<b>CO-4 BTL-3.4</b>
<b>MODULE 5: SOUND INSULATING MATERIALS</b>		<b>(3L+9P=12)</b>
Sound absorbing materials - porous materials, Panel / Membrane absorbers & Cavity / Helmholtz Resonators. Absorption coefficients of indigenous acoustical materials. Space / Functional absorbers. Mounting conditions and its impact on sound absorption. Materials used for sound insulation, Different methods of reduction & insulation of unwanted sound, etc. Design Principles of Auditorium, Electro- Acoustics & Open-Air Auditorium, Air& Structure Borne Sound Propagation Environmental Acoustics		<b>CO-5 BTL-3.4</b>
<b>TEXT BOOKS</b>		
<b>1</b>	Benjamin Evans, "Daylight in Architecture", McGraw-Hill Book Company, Newyork,	
<b>2</b>	Pritchard, D.C., "Lighting", Longman Scientific & Technical, Harlow.	
<b>3</b>	Medan Mehta.James Johnson, Jorge Rocafort, "Architectural Acoustics: Principles and Design", Prentice-Hall, New York,1998	
<b>REFERENCE BOOKS</b>		
<b>1</b>	William J. Cavanaugh, Gregory C. Tocci, Joseph A. Wilkes, Architectural Acoustics: Principles and Practice, 2nd Edition, Wiley, New York,2009.	
<b>2</b>	Marshall Long, "Architectural Acoustics", Second Edition, Academic Press, Waltham, USA,2014	
<b>E-BOOKS</b>		
<b>MOOC</b>		
<b>1</b>	<a href="https://www.mooc-list.com/tags/light">https://www.mooc-list.com/tags/light</a>	

2	<a href="https://www.mooc-list.com/tags/acoustics">https://www.mooc-list.com/tags/acoustics</a>

<b>COURSE TITLE</b>	<b>ADVANCED INTERIOR SERVICES</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21025</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>3- 0- 0- 0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

#### ASSESSMENT SCHEME

<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>

<b>Course Description</b>	In this course students will learn about the services in High rise residential, commercial and civic buildings. The services used for building a swimming pool and the site services are also explained in this course.
---------------------------	---

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To ensure that the students learn about the basics of the services needed in a high-rise apartment.</li> <li>To familiarize students with the extra services needed in a commercial building from that of a residential building.</li> <li>To ensure that the students learn about the services in a Civic Building</li> <li>To familiarize students with the different types of services needed in the construction of a swimming pool</li> <li>To ensure that the students learn about the services related to building construction site.</li> </ol>
-------------------------	--

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to -</p> <ol style="list-style-type: none"> <li>To understand about services in residential high-rise building and complexes.</li> <li>To explain about services in commercial high-rise building.</li> <li>To understand functioning of service in civic building types like shopping malls, theatres, auditoriums etc.</li> <li>To explore the functioning of service aspects of swimming pools and its influence on design</li> <li>To understand about services in site planning, drainage etc.</li> </ol>
-----------------------	---

#### Prerequisites:

#### CO, PO AND PSO MAPPING

CO	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PSO-1	PSO-2	PSO-3	PSO-4	PSO-5
CO-1	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-

CO-2	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-3	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-4	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-
CO-5	2	-	1	-	2	1	1	1	1	-	-	1	3	-	-	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

#### **MODULE 1 – INTRODUCTION**

**(3L+9P=12)**

Introduction to services in High rise building, Residential high rise: services, amenities lighting and natural ventilation services , mechanical ventilation, electrical and allied installations, acoustics, sound insulation and noise control, (already done in intermediate), water supply, gas supply , Fire safety.

**CO-1  
BTL-3**

#### **MODULE 2 :COMMERCIAL BUILDING**

**(3L+9P=12)**

High rise office building, services, basement parking, ramps, lighting and natural ventilation, mechanical ventilation, electrical and allied installations, air conditioning, acoustics, sound insulation and noise control, water supply and sewage treatment , Storm water and Rainwater collection , Water recycling

**CO-2  
BTL-3**

#### **MODULE – 3 CIVIC BUILDING**

**(3L+9P=12)**

Shopping mall theatres, auditoriums, sports halls, lighting and natural ventilation, mechanical ventilation, electrical and allied installations, acoustics, sound insulation and noise control, water supply, Fire safety and access controls.

**CO-3  
BTL-3**

#### **MODULE 4: SWIMMING POOLS**

**(3L+9P=12)**

Types of swimming pool, turnover rate, swimming pool user load, dimensions and sizes, design of swimming pool, material, floor slopes, transition point, water depth, walkway and deck areas, starting platforms, electrical installations, ventilation, shower and bathroom, water treatment system.

**CO-4  
BTL-3**

#### **MODULE 5: SITE SERVICES**

**(3L+9P=12)**

Service detailing for artificial water bodies, drainage, storm water pond, rain water collection, landscape site planning, landscape open spaces, children play areas, storm water drainage, sewage disposal system, Rain water harvesting:- Rainwater harvesting techniques, methods of recharging ground water, construction details.

**CO-5  
BTL-3**

#### **TEXT BOOKS**

**1** S.K Garg Water Supply Engineering, Environmental Engineering (Volume 1).

**2** Dr. B.C Punmia Building Construction.

**3** Duggal, K. N., Elements of Environmental Engineering, S Chand and Co. Ltd., New Delhi,2008.

#### **REFERENCE BOOKS**

1	Wise, A.F.E. and Swaffield, J.A., “Water Sanitary Services for Buildings”, Longman Scientific and Technical, Harlow.
2	Greeno, Roger, “Building Services Technology and Design”, Longman Scientific and Technical, Harlow.
<b>E-BOOKS</b>	
1. Time saver standards for building types 2 <sup>nd</sup> Edition by Joseph De Chiara and John Callender. <a href="https://archive.org/details/TimeSaverStandardsForBuildingTypes">https://archive.org/details/TimeSaverStandardsForBuildingTypes</a>	
2. Building Services Handbook Fourth edition by Fred Hall and Roger Greeno. <a href="https://saajansharma.files.wordpress.com/2013/03/building-services-handbook.pdf">https://saajansharma.files.wordpress.com/2013/03/building-services-handbook.pdf</a>	
3. National building code of India 2016. <a href="https://archive.org/details/nationalbuilding01/in.gov.nbc.2016.vol1.digital/">https://archive.org/details/nationalbuilding01/in.gov.nbc.2016.vol1.digital/</a>	
<b>MOOC</b>	
1	<a href="https://www.mooc-list.com/tags/water-supply">https://www.mooc-list.com/tags/water-supply</a>
2	<a href="https://www.mooc-list.com/tags/sanitation-policy">https://www.mooc-list.com/tags/sanitation-policy</a>



<b>COURSE TITLE</b>	<b>INTERIOR DESIGN STUDIO III</b>			<b>CREDITS</b>	<b>4</b>
<b>COURSE CODE</b>	<b>SID21404</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>0-0-8-1</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

#### ASSESSMENT SCHEME

<b>Continuous Assessment - I</b>	<b>Continuous Assessment – II</b>	<b>Continuous Assessment III</b>	<b>Summative Assessment</b>
<b>20%</b>	<b>20%</b>	<b>10%</b>	<b>50%</b>

<b>Course Description</b>	In this course, students will design an interior space using tools and software.
<b>Course Objective</b>	1. To understand spaces in urban context and be able to create concepts that will enhance the knowledge towards modernity. 2. To understand spatial design with respect to different eras.
<b>Course Outcome</b>	Upon completion of this course, the students will be able to 1. Familiarize with spaces in urban context and be able to create concepts that will enhance the knowledge towards modernity. 2. Familiarize with the solid modelling techniques in the software, rendering and presentation techniques for a drawing.

#### Prerequisites:

#### CO, PO AND PSO MAPPING

<b>CO</b>	<b>PO-1</b>	<b>P O-2</b>	<b>P O-3</b>	<b>P O-4</b>	<b>P O-5</b>	<b>P O-6</b>	<b>P O-7</b>	<b>PO-8</b>	<b>P O-9</b>	<b>PO-10</b>	<b>P O-11</b>	<b>PO-12</b>	<b>PS O-1</b>	<b>PS O-2</b>	<b>PSO-3</b>
<b>CO-1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>

<b>CO-2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>CO-3</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>CO-4</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>CO-5</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

primary focus should be on –

- Documenting space (sketch and photo documentation)
- Space planning process (block diagram, concept statement)
- Concept sketching
- Application of design principles and elements
- Creativity/originality
- Design Process/methodology
- Structural integration
- Style
- Colour Rendering
- Anthropometry and ergonomics
- Furniture Design
- Material selection
- Graphic design (page layout and composition)
- Portfolio development

Design portfolio to include designs in response to today's situation of urban society, i.e., contemporary spaces required in modern society – needs, realities, value system etc.. The spaces to be considered shall be: home, office, bank, school, college, public level spaces - restaurant, lounge (hotel),etc.

The list of suggested topics to be covered as design problems:

- Thematic space making with Art and craft forms of our own culture in India – East, West, North, Central and so on and
- Design of built units of various geographical locations and culture by involving historical periods, styles and use of craft in its inherent quality and form - integrating craft and living environment.

Note: At least two major exercises and three minor time problems should be given. Internal marking shall be done in stages and project wise:

- Schematic layouts
- Final layout
- Sectional elevations
- Designs & details

**CO-1  
BTL-6**

**TEXT BOOKS**

1	Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques. John Wiley and Sons, 2003
2	Francis.D. Ching& Corky Bingelli, Interior Design Illustrated, 2nd edition, Wiley publishers, 2004.
3	Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.
<b>REFERENCE BOOKS</b>	
1	Neufert Ernest, Architect's Data, Granada pub. Ltd. London, 2000.
2	John F. Pile, A history of interior design, Laurence King Publishing, 2005.
3	Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals ,2002

### SEMESTER VI

<b>COURSE TITLE</b>	<b>PROFESSIONAL PRACTICE FOR INTERIOR DESIGN</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21026</b>	<b>COURSE CATEGORY</b>	<b>EEC</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>
<b>Course Description</b>	Students to be oriented about professional aspects of management and to learn to execute Interior work for residential & commercial areas. They will be able develop skills in estimating interior work				

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand issues in professional practice</li> <li>To setup an individual business</li> <li>To explain about tender and its applications</li> <li>To explore materials and its application in interiors.</li> <li>To explain about volumetric estimation in interiors.</li> </ol>
<b>Course Outcome</b>	<ol style="list-style-type: none"> <li>To understand issues in professional practice</li> <li>To setup an individual business</li> <li>To explain about tender and its applications</li> <li>To explore materials and its application in interiors</li> <li>To explain about volumetric estimation in interiors.</li> </ol>

**Prerequisites:**

**CO, PO AND PSO MAPPING**

CO	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PS O-1	PS O-2	PS O-3	PSO-4	PSO-5
CO-1	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1	3
CO-2	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1	3
CO-3	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1	3
CO-4	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1	3
CO-5	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1	3

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: INTRODUCTION (9L+0P=9)**

Professional Components of Managing Interior Work -Office managing, code/conduct -Scale of professional fee & charges, -Duties of employer under labour welfare provisions, -Structure of interior designers office,

**CO-1  
BTL-2**

**MODULE 2: PROFESSIONAL PRACTICE (9L+0P=9)**

Professional Correspondence in practice, Conditions of engagement -issues of professional practice, Professional behaviour, Ethics and code of conduct , Different styles of Interior practice, Types of fees and process

**CO-2  
BTL-2**

**MODULE 3: SPECIFICATION (9L+0P=9)**

Material specification and quality control, Principles of specifications, classification of specifications, specifications writing ,

**CO-3  
BTL-3**

**MODULE 4: ESTIMATION AND BILLING (9L+0P=9)**

Measurements, Billing and Payment Certification, Volumetric estimate of interiors for commercial design

**CO-4  
BTL-2**

**MODULE 5: CONTRACT AND TENDER (9L+0P=9)**

Definition & meaning of tender & contract, tender notice, tender document, types of tender, legal aspects etc.-Types of contract, articles of agreement, execution, scope of contract, duties and liabilities of contractor, legal aspects of contract.

**CO-5  
BTL-2**

TEXT BOOKS	
1.	Drucker, Peter, <i>Innovation &amp; Entrepreneurship Practices &amp; Principles</i> , William Hernmann Ltd., London, 2018
2	Roshan, Nanavati, <i>Professional Practices Estimating &amp; Valuation</i> , Lakhani Book Depot, Bombay, 2015
REFERENCE BOOKS	
1	Laboeuf, Michael, <i>The General Management Principles in the World</i> . Barkley Books, New York
2	Drucker, Peter.F, <i>The Effective Executive</i> , William Hernmann Ltd., London, 1969
E BOOKS	
1.	<a href="https://www.yumpu.com/en/document/view/63459766/ebook-professional-practice-for-interior-design-in-the-global-marketplace-full">https://www.yumpu.com/en/document/view/63459766/ebook-professional-practice-for-interior-design-in-the-global-marketplace-full</a>
MOOC	
1.	<a href="https://utdirect.utexas.edu/apps/student/coursedocs/nlogon/download/10339375/">https://utdirect.utexas.edu/apps/student/coursedocs/nlogon/download/10339375/</a>

COURSE TITLE	GREEN INTERIORS			CREDITS	3
COURSE CODE	SID21027	COURSE CATEGORY	PC	L-T-P-S	3-0-0-0
Version	2.0	Approval Details	24.02.2024	LEARNING LEVEL	BTL-3
ASSESSMENT SCHEME					
First Periodical Assessment	Second Periodical Assessment	Seminar/ Assignments/ Project	Surprise Test / Quiz	Attendance	ESE
15%	15%	10%	5%	5%	50%
Course Description	Green interiors occupants have experienced a marked improvement in their health, stress levels and overall quality of life. interior design elements like improved lighting sources, thermal conditions, ergonomic features and even upgraded air quality will ensure a healthy living space				

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. Develop awareness and familiarity with green design and its integration with Interior Design.</li> <li>2. Assess the influence of green interior.</li> <li>3. Distinguish green materials.</li> <li>4. To evaluate and understand the role of interior designers.</li> <li>5. To understand the rating systems</li> </ol>
<b>Course Outcome</b>	<ol style="list-style-type: none"> <li>1. Develop awareness and familiarity with green design and its integration with Interior Design.</li> <li>2. Assess the influence of green interior.</li> <li>3. Distinguish green materials.</li> <li>4. To evaluate and understand the role of interior designers.</li> <li>5. To utilise rating systems in analysing projects in Interior</li> </ol>

**Prerequisites:**

**CO, PO AND PSO MAPPING**

CO	PO-1	P O-2	P O-3	P O-4	P O-5	P O-6	P O-7	P O-8	P O-9	PO-10	P O-11	PO-12	PS O-1	PS O-2	PS O-3
CO-1	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1
CO-2	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1
CO-3	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1
CO-4	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1
CO-5	1	1	3	3	2	2	1	1	1	1	1	1	1	1	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: INTRODUCTION**

**(9L+0P=9)**

Introduction to Green interiors. Definition and concept of Green interiors, aims and objectives. Importance and necessity of Green interiors. Brief history and development of green interiors. Principles of green interiors.

**CO-1  
BTL-2**

**MODULE 2: INDOOR ENVIRONMENTAL QUALITY**

**(9L+0P=9)**

Efficient use of space, energy and water in green interiors. Elements associated with Indoor Environmental Quality like indoor air quality, acoustic comfort, thermal comfort and visual comfort. Constructional guide lines for maintaining indoor environmental quality. Green indoor landscape – plants, ground covers, green pavers.

**CO-2  
BTL-2**

**MODULE 3: GREEN INTERIOR MATERIALS**

**(9L+0P=9)**

Green interior materials and their adaptation – Bamboo – cork – stone – straw – techniques in construction of these materials - Case Study

**CO-3  
BTL-3**

**MODULE 4: INTERIOR DESIGNERS ROLE**

**(9L+0P=9)**

Interior Designer's role in Green interior planning. health. Benefits of Green interiors. Effects of Green interiors on Humans

**CO-4  
BTL-2**

**MODULE 5: RATING SYSTEM**

**(9L+0P=9)**

**(6)**

Introduction to building rating systems: points system, weightage, agencies and

**CO-5**

institutions-TERI GRIHA rating, IGBC in the context of Indian sub-continent. Green Interior design by Lorrie Browne – ONGC Green building at Bandra Kurla Complex.		<b>BTL-2</b>
<b>TEXT BOOKS</b>		
1.	Design the Home You Love - An Interior Design Book (by Lee Mayer and Emily Motayed)	
2	MADE FOR LIVING: Collected Interiors for All Sorts of Styles (by Amber Lewis and Cat Chen)	
3.	The Interior Design Course (by Tomris Tangaz)	
<b>REFERENCE BOOKS</b>		
1	TIME-SAVER STANDARDS FOR INTERIOR DESIGN (by Joseph Dechiara, Julius Panero and Martin Zelnik)	
<b>E BOOKS</b>		
1.	<a href="https://www.asid.org/content/sustainable-designprinciples#.WKLWENJ97Dd">https://www.asid.org/content/sustainable-designprinciples#.WKLWENJ97Dd</a>	
<b>MOOC</b>		
1.	<a href="https://ugreen.io/sustainable-interiors-course/">https://ugreen.io/sustainable-interiors-course/</a>	

<b>COURSE TITLE</b>	<b>MODERN &amp; CONTEMPORARY INTERIOR DESIGN</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21028</b>	<b>COURSE CATEGORY</b>	<b>BS</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>
<b>Course Description</b>	In this course, students will learn about the concepts of modern and contemporary interiors, their similarities and differences.				

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To understand the history of modern interior design.</li> <li>2. To understand the materials and finishes used in modern interior design.</li> <li>3. To understand the works of designers.</li> <li>4. To understand the meaning of contemporary interior design.</li> <li>5. To understand the similarities and differences between modern and contemporary interior design.</li> </ol>
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. Familiarize with the evolution, history and influence on modern interior style.</li> <li>2. Explain the effective usage of finishes, colors and materials.</li> <li>3. Familiarize with the works of famous modernist designers.</li> <li>4. Familiarize with the elements of contemporary design.</li> <li>5. Familiarize and analyse the similarities and differences between modern and contemporary interior design.</li> </ol>

**Prerequisites:**

**CO, PO AND PSO MAPPING**

CO	PO-1	P O-2	P O-3	P O-4	P O-5	P O-6	P O-7	PO-8	P O-9	PO-10	P O-11	PO-12	PS O-1	PS O-2	PS O-3
CO-1	2	2	3	-	1	1	2	3	-	2	1	3	1	-	1
CO-2	-	-	3	2	2	1	-	-	1	2	1	2	1	1	3
CO-3	-	-	3	2	-	-	-	3	1	2	1	2	3	2	1
CO-4	-	-	3	2	2	1	2	3	1	2	1	3	1	1	1
CO-5	-	-	3	2	2	1	2	3	1	2	2	1	1	3	2

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: EVOLUTION OF MODERN INTERIOR DESIGN (9L+0P=9)**

Introduction to Modern interiors, History and influence of modern Interior design, elements of modern Interior.	<b>CO-1 BTL-2</b>
---	-----------------------

**MODULE 2: FURNITURE, LIGHTING & INTERIOR ACCESSORIES (9L+0P=9)**

Study of materials, Furniture, colors, textures, lighting, interior accessories, details used in Modern Interiors.	<b>CO-2 BTL-2</b>
--	-----------------------

**MODULE 3: WORKS OF MODERNISTS (9L+0P=9)**

Works of Frank Lloyd Wright, Marcel Breuer, Erich Mendelson etc.	<b>CO-3 BTL-3</b>
--	-----------------------

**MODULE 4: ELEMENTS OF CONTEMPORARY INTERIORS (9L+0P=9)**

Contemporary interiors, Evolution of contemporary Interior design, elements of contemporary Interior.	<b>CO-4 BTL-4</b>
---	-----------------------

**MODULE 5: MODERN & CONTEMPORARY INTERIOR DESIGN (9L+0P=9)**

Similarities and difference – modern and contemporary style, usage of planning, flooring and other design elements in both styles – case studies.	<b>CO-5 BTL-4</b>
---	-----------------------



<b>TEXT BOOKS</b>	
1.	Dominic Bradbury (2010). Atlas of Interior design, Phaidon Press (November 17, 2021)
<b>REFERENCE BOOKS</b>	
1	Henry Wilson – 2007 India Contemporary, 3rd edition, Routledge
2	IAG, Interior Architecture Group (1 January 2017) Paperback
<b>E BOOKS</b>	
1.	<a href="https://brabbu.com/blog/2020/10/modern-contemporary-interiors-ideas-the-new-book-to-curl-up-with/">https://brabbu.com/blog/2020/10/modern-contemporary-interiors-ideas-the-new-book-to-curl-up-with/</a>
<b>MOOC</b>	
1.	<a href="https://www.coursera.org/specializations/modern-contemporary-art-design">https://www.coursera.org/specializations/modern-contemporary-art-design</a>

<b>COURSE TITLE</b>	<b>CONSERVATION AND RENOVATION</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21029</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>3- 0- 0- 1</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					
<b>1st Periodical Assessment</b>	<b>2nd Periodical Assessment</b>	<b>Portfolio Assessment</b>	<b>ESE</b>		
<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>50%</b>		
<b>Course Description</b>	In this course, students will learn about the renovation and alteration of the different kinds of spaces such as Audio-visual Halls, Stadiums, Pubs, Railway stations, video games parlors, etc. which have varied differentiation between them.				

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To ensure that the students learn about the renovation of Institutional buildings</li> <li>To familiarize the students with the renovation of spaces allotted for Indoor sports</li> <li>To ensure that the students learn about the renovation of Semi-Public spaces like saloons, pubs, banks, etc.</li> <li>To familiarize students in renovation of transportation hubs</li> <li>To ensure that the students learn about the renovation of recreational buildings.</li> </ol>
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to -</p> <ol style="list-style-type: none"> <li>To understand the reusability of space</li> <li>To explore multiple activities and flexible space adaptation</li> <li>To understand recycle and reuse of materials</li> <li>To understand techniques in alteration and renovation in interiors</li> <li>To explore public behavior and spaces for renovation</li> </ol>

**Prerequisites: NIL**

**CO, PO AND PSO MAPPING**

CO	P O-1	P O-2	P O-3	P O-4	PO-5	P O-6	P O-7	P O-8	P O-9	P O-10	PO-11	PS O-1	PSO-2	P S O-3	PS O-4	PSO-5
CO-1	2	3	2	1	2	1	1	1	1	2	1	1	1	1	3	1
CO-2	2	3	2	1	2	1	1	1	1	2	1	1	1	1	3	1
CO-3	2	3	2	1	2	1	1	1	1	2	1	1	1	1	3	1
CO-4	2	3	2	1	2	1	1	1	1	2	1	1	1	1	3	1
CO-5	2	3	2	1	2	1	1	1	1	2	1	1	1	1	3	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1**

**(9L+0P=9)**

Renovation: Importance of Renovation, Need for Renovation, Advantages of renovation. Renovation of interiors for class rooms, seminar halls and AV halls – schemes for Library, smart class rooms and discussion areas.

Areas of Concern: walls, Floor, Ceiling/roof, Wood work, Electrical, plumbing, sanitary fittings, furniture and furnishing.

**CO-1  
BTL-3**

**MODULE 2**

**(9L+0P=9)**

Renovation and alteration of interior requirements for gymnasium, indoor stadium and aquatic complex – schemes for interiors of stadium with focus on materials, lighting requirements and visibility.

**CO-2  
BTL-3**

**MODULE 3**

**(9L+0P=9)**

Alterations of interiors in saloons, pubs, discotheque and banks, etc. - schemes for the same with focus on materials, lighting requirements and visibility.

**CO-3  
BTL-3**

**MODULE 4**

**(9L+0P=9)**

Renovation and alteration of interiors for airports, MRTS, railway stations and bus terminals – schemes for the same. Areas of Concern: walls, Floor, Ceiling/roof, Electrical, plumbing, sanitary fittings, furniture and furnishing.

**CO-4  
BTL-3**

<b>MODULE 5</b>		<b>(9L+0P=9)</b>	
Renovation and alteration of interiors for entertainment buildings such as clubs, multiplex and amusement parks – schemes for video games parlor, food court areas and exclusive indoor game areas of clubs materials, lighting requirements and visibility. Areas of Concern: walls, Floor, Ceiling/roof, Electrical, plumbing, sanitary fittings, furniture and furnishing.		<b>CO-5 BTL-3</b>	
<b>REFERENCE BOOKS</b>			
<b>1</b>	Edward D Mills- planning Buildings for administration, entertainment and recreation – Krieger publishers, New York, 2006		
<b>2</b>	Carlson Broto- architecture on sports facilities – pg 1 publishing, spain, 2005		
<b>3</b>	Designs for 20th century Interiors – Fiona Leolie, VH Publications, London.		
<b>4</b>	De Chiara and Callender – Time Saver Standards for interior design, Eighth edition, 2010		
<b>TEXT BOOKS</b>			
1. Arora S P & Bindra S P, Building Construction, Dhanpat Rai & Sons, New Delhi, 1990.			
2. Corky Binggeli A.S.I.D., Building Systems For Interior Designers, John Wiley & Sons, Inc., Hoboken, New Jersey 2003.			
<b>EBOOKS</b>			
1. Air mobility command Interior design guide <a href="https://wbdg.org/FFC/AF/AFDG/ARCHIVES/interior.pdf">https://wbdg.org/FFC/AF/AFDG/ARCHIVES/interior.pdf</a>			
2. A hand book on design tips towards design literacy for all <a href="https://www.iiid.in/files/upload_pdf/IIID-Design-Handbook.pdf">https://www.iiid.in/files/upload_pdf/IIID-Design-Handbook.pdf</a>			
3. W. Otie Kilmer Rosemary Kilmer, Construction Drawings And Details For Interiors: Basic Skills, John Wiley & Sons, Inc., Hoboken, New Jersey 2003. <a href="http://homes.ieu.edu.tr/iaed204/Construction%20Drawings%20and%20Details%20for%20Interiors.pdf">http://homes.ieu.edu.tr/iaed204/Construction%20Drawings%20and%20Details%20for%20Interiors.pdf</a>			
MOOC			

<b>COURSE TITLE</b>	<b>INTERIOR DESIGN STUDIO - IV</b>			<b>CREDITS</b>	<b>4</b>
<b>COURSE CODE</b>	<b>SID21405</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>0-0-8-0</b>

<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-5</b>												
<b>ASSESSMENT SCHEME</b>																	
<b>Continuous Assessment - I</b>	<b>Continuous Assessment – II</b>	<b>Continuous Assessment III</b>	<b>Summative Assessment</b>														
<b>20%</b>	<b>20%</b>	<b>10%</b>	<b>50%</b>														
<b>Course Description</b>	This studio course is designed to provide students with a comprehensive understanding of commercial space design, emphasizing functionality, context, sustainability, and lighting design. Through a combination of theoretical knowledge and practical applications, students will explore the principles and practices associated with designing commercial interiors.																
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To develop a strong understanding of commercial space design principles and their application in real-world scenarios.</li> <li>To analyze and integrate functionality, aesthetics, and context in commercial interior design projects.</li> <li>To explore sustainable design practices and their relevance to commercial spaces.</li> <li>To develop proficiency in lighting design techniques and their impact on the overall design of commercial interiors.</li> <li>To foster critical thinking and problem-solving skills in approaching design challenges within commercial spaces.</li> </ol>																
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Demonstrate a comprehensive understanding of commercial space design principles.</li> <li>Apply design thinking and problem-solving skills to address the functional and aesthetic requirements of commercial interiors.</li> <li>Integrate sustainable design practices into commercial interior projects.</li> <li>Demonstrate proficiency in lighting design concepts and techniques.</li> <li>Present and communicate design concepts effectively through visual and verbal means.</li> </ol>																
<b>Prerequisites: NIL</b>																	
<b>CO, PO AND PSO MAPPING</b>																	
<b>CO</b>	<b>PO -1</b>	<b>PO -2</b>	<b>PO -3</b>	<b>PO -4</b>	<b>PO -5</b>	<b>PO-6</b>	<b>PO-7</b>	<b>PO-8</b>	<b>PO-9</b>	<b>PO -10</b>	<b>PO -11</b>	<b>PO -12</b>	<b>PSO -1</b>	<b>PSO-2</b>	<b>PSO-3</b>	<b>PSO-4</b>	<b>PSO-5</b>
<b>CO-1</b>	1	3	3	3	1	1	3	1	3	2	1	1	3	1	1	2	2
<b>CO-2</b>	1	3	3	3	2	1	3	2	2	1	1	1	1	1	2	2	1
<b>CO-3</b>	1	3	3	3	2	1	3	1	3	1	1	1	1	1	2	2	1
<b>CO-4</b>	1	3	3	3	1	1	3	1	2	2	1	1	1	1	1	3	2
<b>CO-5</b>	3	3	3	3	1	1	3	2	1	2	2	2	3	1	2	2	2
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>																	

<p>Design projects should emphasize the theme of a commercial spaces, like showroom, restaurant, and working space. Explore various design solutions that showcase the unique features of each area.</p> <p>Students should be capable of conceptualizing a theme and developing design solutions that effectively express the theme through different contexts, materials, design language, and innovative approaches.</p> <p><b>Note:</b> One major exercise and two minor time problems should be given.</p> <p><b>Design Stages and Deliverables:</b>  Literature study and case study  Concept Development and Mood board  Schematic layouts  Final layout  Sectional elevations  Detail drawing  Views and 3D.</p>		<p><b>CO-1</b> <b>BTL-6</b></p>
<b>TEXT BOOKS</b>		
1.	"Time-Saver Standards for Interior Design and Space Planning" by Joseph DeChiara, Julius Panero, and Martin Zelnik	
<b>REFERENCE BOOKS</b>		
1	"Interior Design Illustrated" by Francis D.K. Ching and Corky Binggeli	
2	"Sustainable Design: A Critical Guide" by David Bergman	
3	"Interior Lighting for Designers" by Gary Gordon	
4	"Commercial Interior Design" by Christine M. Piotrowski	
5	"Interior Design: A Professional Guide" by Jenny Gibbs	
<b>E BOOKS</b>		
1.	"Retail Design: Theoretical Perspectives" by Clare M. Faulkner	
2.	"The Interior Design Reference & Specification Book" by Chris Grimley, Mimi Love, and Linda O'Shea	
<b>MOOC</b>		
1.	<a href="https://www.skillshare.com/en/classes/The-Fundamentals-of-Interior-Design-and-Establish-Your-Design-Identity/2007942580">https://www.skillshare.com/en/classes/The-Fundamentals-of-Interior-Design-and-Establish-Your-Design-Identity/2007942580</a>	

### SEMESTER VII

<b>COURSE TITLE</b>	<b>TRAINING</b>			<b>CREDITS</b>	<b>12</b>
<b>COURSE CODE</b>	<b>SID21803</b>	<b>COURSE CATEGORY</b>	<b>EEC</b>	<b>L-T-P-S</b>	<b>0-0-24-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-5</b>
<b>ASSESSMENT SCHEME</b>					
<b>ESE</b>					

100%

<b>Course Description</b>	In this course, students will work with Interior Designers. They will observe and document the materials, tools, techniques and process used by them in the projects.															
<b>Course Objective</b>	1. To understand the tools, techniques and design process from practitioners															
<b>Course Outcome</b>	Upon completion of this course, the students will be able to 1. Familiarize with the tools, techniques and design process from practitioners.															
<b>Prerequisites: NIL</b>																
<b>CO, PO AND PSO MAPPING</b>																
<b>CO</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>	<b>PO-8</b>	<b>PO-9</b>	<b>PO-10</b>	<b>PO-11</b>	<b>PO-12</b>	<b>PSO-1</b>	<b>PSO-2</b>	<b>PSO-3</b>	<b>PSO-4</b>
<b>CO-1</b>	2	3	3	3	3	2	2	2	1	3	3	3	1	3	3	2
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>																
<b>TITLE</b>																
Every student must work with Interior Designers, identification of the Designers to be done in discussion with the concerned faculty. The student should involve in the work of these people and observe and document the materials, tools, techniques and process used by them in the projects.														<b>CO-1 BTL-3</b>		

### SEMESTER VIII

<b>COURSE TITLE</b>	<b>THESIS</b>			<b>CREDITS</b>	<b>10</b>
<b>COURSE CODE</b>	<b>SID21804</b>	<b>COURSE CATEGORY</b>	<b>EEC</b>	<b>L-T-P-S</b>	<b>0-0-20-3</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-5</b>

<b>ASSESSMENT SCHEME</b>																
<b>Continuous Assessment - I</b>		<b>Continuous Assessment - II</b>			<b>Continuous Assessment - III</b>				<b>Thesis Report and Viva Voce</b>							
10%		20%			20%				50%							
<b>Course Description</b>		In this course, students will work on a fulltime project (technically complex project).														
<b>Course Objective</b>		1. To understand the design options in a project.														
<b>Course Outcome</b>		Upon completion of this course, the students will be able to 1. Familiarize and explore the design options in a project														
<b>Prerequisites:</b>																
<b>CO, PO AND PSO MAPPING</b>																
CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PO -12	PSO -1	PSO -2	PSO -3	PSO -4
CO-1	2	3	3	3	3	2	2	2	1	3	3	3	1	3	3	2
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>																
<b>TITLE</b>																
Students in this semester would take fulltime project (technically complex project). The students can do design degree project in house but it would be advisable for them to go to industry, design firm and do the design project. Project may be Industry-sponsored Project or a continuation of the Minor Project to implement in a practical basis.															<b>CO-1</b> <b>BTL-3</b>	

### ELECTIVES

<b>COURSE TITLE</b>	<b>ARTS AND GRAPHICS IN INTERIOR DESIGN</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21500</b>	<b>COURSE CATEGORY</b>	<b>DE</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					



First Periodical Assessment	Second Periodical Assessment	Seminar/ Assignments/ Project	Surprise Test / Quiz	Attendance	ESE											
15%	15%	10%	5%	5%	50%											
<b>Course Description</b>	In this course, students will learn about the basic concepts of art, its representation techniques and the role of form, color and composition in graphic design.															
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand the basics of art.</li> <li>To understand art as a medium of innovation in interior.</li> <li>To understand various themes based on period of art.</li> <li>To understand the representation techniques.</li> <li>To understand the role of colour, form and composition in graphic design.</li> </ol>															
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Explain the basics of art.</li> <li>Explain art as a medium of innovation in interior.</li> <li>Familiarize with various themes based on period of art.</li> <li>Explain the representation techniques.</li> <li>Explain the role of colour, form and composition in graphic design.</li> </ol>															
<b>Prerequisites:</b>																
<b>CO, PO AND PSO MAPPING</b>																
CO	PO -1	P O-2	PO -3	P O-4	PO -5	PO -6	P O-7	P O-8	PO -9	P O -10	PO -11	PS O-1	PSO -2	PS O -3	PSO -4	PSO -5
CO-1	2	1	3	3	2	2	1	1	2	2	1	1	1	1	1	3
CO-2	2	1	3	3	2	2	1	1	2	2	1	1	1	1	1	3
CO-3	2	1	3	3	2	2	1	1	2	2	1	1	1	1	1	3
CO-4	2	1	3	3	2	2	1	1	2	2	1	1	1	1	1	3
CO-5	2	1	3	3	2	2	1	1	2	2	1	1	1	1	1	3
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>																
<b>MODULE 1 – INTRODUCTION</b>					<b>(9L+0P=9)</b>											
Introduction to creative arts and crafts in India – its application in interior design –materials – Art movements through history – Traditional arts and crafts of India –Folk arts of India					<b>CO-1 BTL-3</b>											
<b>MODULE 2 :</b>					<b>(9L+0P=9)</b>											
Traditional arts and crafts of various states of India including –Tamil Nadu, Karnataka, Kerala, Andhra Pradesh, Goa, Rajasthan, Gujarat, Kutch, Uttar Pradesh, West Bengal, Orissa, Bihar, Jammu and Kashmir, etc.					<b>CO-2 BTL-3</b>											
<b>MODULE 3 :</b>					<b>(9L+0P=9)</b>											
Art Movements in Post Modern India and their influences in Interior design –Abstract Expressionism, Pop art, Minimal art, Conceptual art – Neo Expressionism – Computers in Arts.					<b>CO-3 BTL-3</b>											
<b>MODULE 4 :</b>					<b>(9L+0P=9)</b>											
To develop the sense of space and division, understanding of basic form and fundamentals of design and colour. Elements of Design: Line, Shape, Forms, Space, Colours, etc					<b>CO-4 BTL-3</b>											

<b>MODULE 5:</b>		<b>(9L+0P=9)</b>
Detailed study of visual art and its implementation in advertising for effective Communication, Designing of Logo, Emblems, Stationary, Book-jackets, Tags, leaflets, folders etc.		<b>CO-5 BTL-3</b>
<b>REFERENCE BOOKS</b>		
1.	Edith Thomory, A History of fine arts in India and the west, Orient Longmann publishers Pvt Ltd, New Delhi.	
2	Exploring the Elements of Designs : Poppy Evans, Mark Thomas	
<b>TEXT BOOKS</b>		
1	History of Graphic Design : Philip B Meggs	
2	The Elements of Graphic Design : Alexander W White	

<b>COURSE TITLE</b>	<b>APPLIED COLOUR THEORY</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID 21501</b>	<b>COURSE CATEGORY</b>	<b>DE</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNIN G LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					

First Periodical Assessment	Second Periodical Assessment	Seminar/ Assignments/ Project	Surprise Test / Quiz	Attendance	ESE
15%	15%	10%	5%	5%	50%

<b>Course Description</b>	This course provides an in-depth exploration of colour theory and its application in the context of interior design.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand the principles of colour theory and their application in interior design.</li> <li>To explore the psychological and emotional impacts of colour on spatial perception and human behavior.</li> <li>To develop skills in creating and implementing appropriate colour palettes for diverse interior design projects.</li> <li>To foster critical thinking and analytical skills through the evaluation of colour-related design challenges and case studies.</li> <li>To encourage creative experimentation and innovative use of colour in interior design solutions.</li> </ol>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Demonstrate a comprehensive understanding of the principles and applications of colour theory in the context of interior design.</li> <li>They will be equipped with the necessary skills to effectively integrate colour concepts into their design processes, creating visually engaging and functionally effective interior spaces.</li> <li>Apply their knowledge of colour psychology, harmony, and contrast to develop sophisticated and contextually appropriate colour schemes.</li> <li>Critically analyzing and evaluating the use of colour in various interior design projects, showcasing their ability to apply theoretical knowledge to practical design solutions.</li> <li>Use color effectively to communicate ideas, messages, and narratives in visual storytelling, showcasing an understanding of how color can enhance and convey meaning in visual communication</li> </ol>
-----------------------	--

**Prerequisites:**

**CO, PO AND PSO MAPPING**

CO	PO-1	P O-2	P O-3	P O-4	P O-5	P O-6	P O-7	P O-8	P O-9	PO-10	P O-11	PO-12	PS O-1	PS O-2	PS O-3
CO-1	1	1	2	2	1	2	1	1	2	3	1	2	1	2	1
CO-2	1	1	3	2	2	2	1	1	2	3	1	2	1	2	1
CO-3	1	1	2	2	1	2	1	1	2	3	1	2	1	2	1

<b>CO-4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>
<b>CO-5</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>															
<b>MODULE 1 FUNDAMENTALS OF COLOUR THEORY AND APPLICATION (9L+0P=9)</b>															
Introduction to Colour Theory -Properties of Colour - Colour Terminology and Notations -Colour Interaction and Contrast													<b>CO-1</b> <b>BTL-2</b>		
<b>MODULE 2 PSYCHOLOGICAL AND EMOTIONAL IMPACT OF COLOUR IN INTERIOR DESIGN (9L+0P=9)</b>															
Colour Psychology-Impact of Warm and Cool Colours-Creating Tranquility and Calm- Eliciting Excitement and Energy-Use of Colour in Healing Environments													<b>CO-2</b> <b>BTL-2</b>		
<b>MODULE 3 HARMONIOUS COLOUR SCHEME AND PALETTE (9L+0P=9)</b>															
Color wheel and primary, secondary, and tertiary colors- Understanding color properties- Tint , Hue ,Shade													<b>CO-3</b> <b>BTL-3</b>		
<b>MODULE 4 COLOUR IN VISUAL ART AND DESIGN (9L+0P=9)</b>															
Historical Perspectives on Color in Art-Color in Renaissance and Baroque Art-Color in Digital and Multimedia Art-Contemporary Perspectives on Color in Visual Art													<b>CO-4</b> <b>BTL-2</b>		
<b>MODULE 5 CONTEMPORARY TRENDS IN COLOUR USAGE (9L+0P=9)</b>															
Color in Fashion and Interior Design - Color in Media and Entertainment-Ethical and Cultural Considerations in Color Usage-Emerging Technologies and Color Trends-Color in Art and Visual Culture													<b>CO-5</b> <b>BTL-2</b>		
<b>TEXT BOOKS</b>															
1."The Elements of Color: A Treatise on the Color System of Johannes Itten Based on His Book the Art of Color" by Johannes Itten  2."Interaction of Color" by Josef Albers  3."Color Choices: Making Color Sense Out of Color Theory" by Stephen Quiller															
<b>REFERENCE BOOKS</b>															

	<p>1. "Color Design Workbook: A Real World Guide to Using Color in Graphic Design" by Terry Lee Stone</p> <p>2. "Color Works: The Crafter's Guide to Color" by Deb Menz</p>
<b>E BOOKS</b>	
	<p>"Interaction of Color" by Josef Albers</p> <p>"The Elements of Color: A Treatise on the Color System of Johannes Itten" by Johannes Itten</p> <p>"Pantone: The 20th Century in Color" by Leatrice Eiseman and Keith Recker</p>
<b>MOOC</b>	
1.	<p>Graphic Elements of Design: Color Theory and Image Formats</p> <p><a href="https://www.coursera.org/learn/graphic-elements-design">https://www.coursera.org/learn/graphic-elements-design</a></p>

<b>COURSE TITLE</b>	<b>CULTURAL ANTHROPOLOGY</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SID21502</b>	<b>COURSE CATEGORY</b>	<b>DE</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					
<b>First</b>	<b>Second</b>	<b>Seminar/</b>	<b>Surprise</b>	<b>Attendance</b>	<b>ESE</b>

Periodical Assessment	Periodical Assessment	Assignments/ Project	Test / Quiz		
15%	15%	10%	5%	5%	50%
<b>Course Description</b>	In this course, students will learn about the concepts of ethnography in anthropology and their relevance. People's behaviour in everyday context will also be studied.				
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To understand the human aspects and its co relation.</li> <li>To understand the concepts of ethnography in anthropology.</li> <li>To understand the relevance of anthropology and ethnography.</li> <li>To understand and analyse daily life with respect to ethnography.</li> <li>To understand the method to data collection and analysis.</li> </ol>				
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Explain the human aspects and its co relation.</li> <li>Familiarize with the concepts of ethnography in anthropology.</li> <li>Familiarize with the relevance of anthropology and ethnography.</li> <li>Familiarize and analyze daily life with respect to ethnography.</li> <li>Use the method to data collection and analysis.</li> </ol>				

**Prerequisites:**

**CO, PO AND PSO MAPPING**

CO	PO-1	P O-2	P O-3	P O-4	P O-5	P O-6	P O-7	PO-8	P O-9	PO-10	P O-11	PO-12	PS O-1	PS O-2	PS O-3
CO-1	2	2	3	1	1	1	2	3	1	2	1	3	1	1	1
CO-2	-	-	3	2	2	1	2	3	1	2	1	2	1	1	3
CO-3	-	-	3	2	2	1	2	3	1	2	1	2	3	2	1
CO-4	-	-	3	2	2	1	2	3	1	2	1	3	1	1	1
CO-5	-	-	3	2	2	1	2	3	1	2	2	1	1	3	2

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: ETHNOGRAPHY**

**(9L+0P=9)**

Introduction to Ethnography, relation to design & product, relation to the user, relation to culture, language, history.

Suggested Reading: Clifford Greetz : The Interpretation of Cultures

**CO-1  
BTL-2**

**MODULE 2: HUMAN BEHAVIOUR**

**(9L+0P=9)**

Understanding Human behaviour as a Mechanism for Change, Application of Ethnography and Use in Industry.

**CO-2  
BTL-2**

**MODULE 3: RELEVANCE**

**(9L+0P=9)**

Relevance of Anthropology in Ethnology, Cultural anthropology, relevance of Ergonomics to Ethnography.		<b>CO-3</b> <b>BTL-3</b>
<b>MODULE 4: ISSUES (9L+0P=9)</b>		
Problems of ethnocentrism, seeing things from someone else's point of view, Linking Ethnography & day to day Design		<b>CO-4</b> <b>BTL-4</b>
<b>MODULE 5: METHODOLOGY (9L+0P=9)</b>		
Methods in the study of Ethnography, People's behaviour to be studied in everyday context, the approach to data collection, the analysis of the data, Rapid ethnography Ethnographic Field Methods : case studies, analysis & inferences Every student shall take up one project and do a complete research and design a new product or re-design a day to day product. The report shall be assessed periodically & at the end of the semester.		<b>CO-5</b> <b>BTL-4</b>
<b>TEXT BOOKS</b>		
1.	Rothstein, P. (2010). Ethnographic research: teaching a young professional old trick. Innovation.	
2.	ROBERT M. EMERSON, RACHEL I. FRETZ, AND LINDA L. SHAW Writing Ethnographic Fieldnotes, 2nd Edition, © 2011 Chicago Guides to Writing, Editing, and Publishing	
<b>REFERENCE BOOKS</b>		
1	M Hammersley, P Atkinson – 2007 Ethnography: Principles in practice, 3rd edition, Routledge	
2	Kurt A. Raaflaub (Editor), Richard J. A. Talbert (Editor) :Geography and Ethnography: Perceptions of the World in Pre-Modern Societies, January 2013, Paperback, Wiley	
<b>E BOOKS</b>		
1.	<a href="https://www.amazon.in/Cultural-Anthropology-Pearson-Bonvillain-Nancy/dp/9353067499">https://www.amazon.in/Cultural-Anthropology-Pearson-Bonvillain-Nancy/dp/9353067499</a>	
<b>MOOC</b>		
1.	<a href="https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_ug/323">https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_ug/323</a>	

<b>COURSE TITLE</b>	<b>TEXTILES AND COSTUMES OF INDIA</b>					<b>CREDITS</b>	<b>3</b>				
<b>COURSE CODE</b>	<b>SFA11009</b>	<b>COURSE CATEGORY</b>	<b>PC</b>	<b>L-T-P-S</b>	<b>CO-1</b>	<b>BTL-1</b>					
<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL – 2</b>						
<b>ASSESSMENT SCHEME</b>											
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>End Semester Exam</b>						
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>						
<b>Course Description</b>	The course focus on the history and costumes which is widespread in India, in addition to origin of printings and painting involved in various traditional techniques inclusive to woven textile. The difference in costumes used in art forms have also been widely delivered.										
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>To make students understand the origin of clothing and its specialty.</li> <li>To create awareness about traditional printed clothing culture.</li> <li>To impart knowledge about the traditional painting and its impact</li> <li>To able to identify and create the various regional costumes</li> <li>To make the costumes for such activities</li> </ol>										
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Understanding the vastness and variety of the traditional textiles of India</li> <li>Understanding the present status of the traditional Indian Textiles and the practices adopted by designers to revive it</li> <li>Designing and developing collection using traditional textiles and costumes</li> <li>Exploring the possibilities of traditional textiles in terms of market trend</li> <li>Merging the traditional textile into the current fashion scenario</li> </ol>										
<b>Prerequisites: Nil</b>											
<b>CO, PO AND PSO MAPPING</b>											
<b>CO</b>	<b>PO -1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PSO-1</b>	<b>PSO-2</b>	<b>PSO-3</b>	<b>PSO-4</b>	
<b>CO-1</b>	-	-	1	-	-	-	1	-	-	1	
<b>CO-2</b>	-	3	-	1	-	1	-	1	-	-	
<b>CO-3</b>	-	2	1	-	-	-	-	-	1	-	
<b>CO-4</b>	-	1	-	-	-	1	1	-	1	-	
<b>CO-5</b>	-	1	-	1	-	3	-	-	-	1	
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>											
<b>MODULE 1: WOVEN TEXTILES OF INDIA</b>											
<b>9Hrs</b>											



Dacca Muslin, Kullu, Kinnaur and Manipur shawls. Saris of India – Kancheepuram, Dharmavaram, Kerala Kasavu, Pochampalli, Sungadi, Maheshwari, Paithani, Patola, Varanasi Brocade, Saulkuchi, Chanderi, Kota, Jamdani and Baluchar.		
<b>MODULE 2: PRINTED TEXTILES OF INDIA</b>		<b>9Hrs</b>
PabujikiPhad, Mata Ni Pachadi, Patachitra, Pichwai, Roghan and Kalamkari		<b>CO-4 BTL-2</b>
<b>MODULE 3: PAINTED TEXTILES OF INDIA</b>		<b>9Hrs</b>
Block Printed - Bagh, Sangneer, Bagru. Dabu and Ajrak,		<b>CO-3 BTL-2</b>
<b>MODULE 4: COSTUMES OF INDIA</b>		<b>9Hrs</b>
Regional Costumes of Tamil Nadu, Kerala, Karnataka, Maharashtra, Madhya Pradesh, Rajasthan, Gujarath, Manipur and Kashmir.		<b>CO-3 BTL-2</b>
<b>MODULE 5: DANCE COSTUMES OF INDIA</b>		<b>9Hrs</b>
Bharathanatayam, Mohiniattam, Bangra, Katakali, Manipuri and Odissi.		<b>CO-5 BTL-2</b>
<b>Skill Development Activities:</b> Create miniature dolls that wear various regional costumes. Drawing the traditional painting with advanced materials.		
<b>REFERENCE BOOKS</b>		
1.	Period Textile and Costumes under different era and kings	
2.	Indian Costumes, Anamika Pathak, Roil Books, 2008	
3.	Costumes of Indian Tribe, Prakash Chandramehta, Discovery Publishing, 2011	
<b>E-BOOKS / MAGAZINE / ARTICLES</b>		
1.	<a href="https://www.researchgate.net/publication/215757088">https://www.researchgate.net/publication/215757088</a> Traditional indian Costumes and Textiles	
2.	<a href="http://18lj4w45xq24rooa1c6upxke.wpengine.netdna-cdn.com/files/2014/06/4.A-composite-of-indian-textiles.pdf">http://18lj4w45xq24rooa1c6upxke.wpengine.netdna-cdn.com/files/2014/06/4.A-composite-of-indian-textiles.pdf</a>	
<b>ONLINE RESOURCES</b>		
1.	<a href="https://www.classcentral.com/subject/textiles">https://www.classcentral.com/subject/textiles</a>	
2.	<a href="https://www.udemy.com/topic/textiles/">https://www.udemy.com/topic/textiles/</a>	

<b>COURSE TITLE</b>	<b>INCLUSIVE INTERIORS</b>							<b>CREDITS</b>	<b>3</b>						
<b>COURSE CODE</b>	<b>SID21503</b>		<b>COURSE CATEGORY</b>			<b>DE</b>		<b>L-T-P-S</b>	<b>3-0-0-0</b>						
<b>Version</b>	<b>2.0</b>		<b>Approval Details</b>			<b>24.02.2024</b>		<b>LEARNING LEVEL</b>	<b>BTL-3</b>						
<b>ASSESSMENT SCHEME</b>															
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>			<b>Seminar/ Assignments/ Project</b>			<b>Surprise Test / Quiz</b>		<b>Attendance</b>			<b>ESE</b>			
<b>15%</b>	<b>15%</b>			<b>10%</b>			<b>5%</b>		<b>5%</b>			<b>50%</b>			
<b>Course Description</b>	In this course, students will study about Universal Design and concepts for barrier free design in interiors.														
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To understand about the user centered design and factors to be considered.</li> <li>2. To understand the principles of universal design.</li> <li>3. To understand the need for barrier free concepts.</li> <li>4. To understand how elements used in interior can be made barrier free.</li> <li>5. To understand the application of barrier free elements in design.</li> </ol>														
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. Explain the importance of user centered design.</li> <li>2. Familiarize with the principles of universal design and cognition.</li> <li>3. Explain the concepts of barrier free design and accessibility.</li> <li>4. Explain the usage of barrier free elements in interiors.</li> <li>5. Explain the usage and application of barrier free elements in interior spaces.</li> </ol>														
<b>Prerequisites:</b>															
<b>CO, PO AND PSO MAPPING</b>															
<b>CO</b>	<b>PO-1</b>	<b>P O-2</b>	<b>P O-3</b>	<b>P O-4</b>	<b>P O-5</b>	<b>P O-6</b>	<b>P O-7</b>	<b>PO-8</b>	<b>P O-9</b>	<b>PO-10</b>	<b>P O-11</b>	<b>PO-12</b>	<b>PS O-1</b>	<b>PS O-2</b>	<b>PS O-3</b>
<b>CO-1</b>	1	2	3	1	1	1	2	3	1	2	1	3	1	1	1
<b>CO-2</b>	2	-	3	-	2	1	2	3	-	-	1	2	-	1	3
<b>CO-3</b>	2	-	3	-	2	1	-	3	1	2	1	2	3	2	1
<b>CO-4</b>	1	1	3	2	2	1	-	3	1	2	1	3	1	1	1
<b>CO-5</b>	1	1	3	2	2	1	-	3	1	2	2	1	1	3	-
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>															

<b>MODULE 1: USER CENTERED DESIGN &amp; HUMAN FACTORS</b>		<b>(9L+0P=9)</b>
User specific, Disability-Specific Design, User-centred design tools and techniques - personas, focus groups, user consultation, task analysis, simulation, post design Evaluation.	<b>CO-1</b>	<b>BTL-2</b>
<b>MODULE 2: UNIVERSAL DESIGN &amp; COGNITIVE PROCESS</b>		<b>(9L+0P=9)</b>
Universal design, purpose, principles of universal design. Cognitive process with few examples, Psychosocial behavior aspects, posture and body supportive devices	<b>CO-2</b>	<b>BTL-2</b>
<b>MODULE 3: INTRODUCTION TO BARRIER FREE DESIGN</b>		<b>(9L+0P=9)</b>
Defining the basic concepts of barrier free design, need for barrier free concepts in interior design, concepts of universal design and types of disabilities. Design principles for barrier free design and accessibility for all.	<b>CO-3</b>	<b>BTL-3</b>
<b>MODULE 4: BARRIER FREE ELEMENTS IN INTERIORS</b>		<b>(9L+0P=9)</b>
To study the anthropometrics and dimensions of mobility devices, special fixtures for barrier free design. Barrier free construction materials and dimensions for flooring, walls, doors, windows, staircases, elevators, toilets, entrances and corridors.	<b>CO-4</b>	<b>BTL-4</b>
<b>MODULE 5: APPLICATION OF BARRIER FREE ELEMENTS IN INTERIORS</b>		<b>(9L+0P=9)</b>
Application of universal design in public buildings like institutional spaces, recreation zones, auditoriums etc. Case study examples of Barrier free design in India and across the globe.	<b>CO-5</b>	<b>BTL-4</b>
<b>TEXT BOOKS</b>		
1.	Guidelines and Space Standards for Barrier Free Built Environment for Disabled and Elderly Persons – Central Public Works Department, Ministry of Urban Affairs & Employment, India, 1998	
2.	IS – 4963 (1987), Recommendations for buildings and facilities for Physically Handicapped	
<b>REFERENCE BOOKS</b>		
1	Barrier-Free Design: Principles Planning, Examples, by Oliver Heiss, Christine Degenhardt, Johann Ebe (Birkhauser Architecture, 2010)	
<b>E BOOKS</b>		
1.	<a href="https://www.amazon.in/Inclusive-Design-Implementation-Evaluation-PocketArchitecture-ebook/dp/B076DDFB16">https://www.amazon.in/Inclusive-Design-Implementation-Evaluation-PocketArchitecture-ebook/dp/B076DDFB16</a>	
<b>MOOC</b>		
1.	An Introduction to Accessibility and Inclusive Design, <a href="https://www.coursera.org/learn/accessibility">https://www.coursera.org/learn/accessibility</a>	

<b>COURSE TITLE</b>	<b>VISUAL AND PERFORMING ARTS</b>	<b>CREDITS</b>	<b>3</b>
---------------------	-----------------------------------	----------------	----------

<b>COURSE CODE</b>	<b>SID21505</b>	<b>COURSE CATEGORY</b>	<b>DE</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

#### ASSESSMENT SCHEME

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	In this course, students will learn about various approaches to media analysis and relationship between media and culture.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To understand about basic details of mass media and its effects on culture.</li> <li>2. To understand types of media Audience analysis.</li> <li>3. To understand media as a text and various approaches to media analysis.</li> <li>4. To understand how media helps within our societies.</li> <li>5. To understand the relationship between media and culture.</li> </ol>
-------------------------	--

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. Explain the basic details of mass media and its effects on culture.</li> <li>2. Familiarize with types of media Audience analysis.</li> <li>3. Familiarize with media as a text and various approaches to media analysis.</li> <li>4. Explain how media helps within our societies.</li> <li>5. Explain the relationship between media and culture.</li> </ol>
-----------------------	--

#### Prerequisites:

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO- 8	PO -9	PO -10	PO -11	PO -12	PSO -1	PSO -2	PSO -3
CO-1	2	2	2	-	2	2	1	3	1	1	1	2	1	1	2
CO-2	2	2	2	-	2	3	1	3	1	3	1	2	1	1	2
CO-3	2	3	3	-	2	2	1	1	1	1	1	2	1	1	2
CO-4	2	3	3	-	2	2	1	1	1	1	2	1	1	2	3
CO-5	2	2	1	-	-	3	1	1	1	1	1	2	1	1	2

<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>	
<b>MODULE 1: NEED FOR STUDY (9L+0P=9)</b>	
Understanding mass media. Characteristics of mass media. Effects of mass media on individual, society and culture – basic issues. Power of mass media. Media in Indian society. Definition, nature and scope. Function of mass media.	<b>CO-1 BTL-2</b>
<b>MODULE 2: AUDIENCE ANALYSIS (9L+0P=9)</b>	
Media Audience analysis (mass, segmentation, product, social uses). Audience making. Active Vs Passive audience: Some theories of audience - Uses and Gratification, Uses and Effects, etc.	<b>CO-2 BTL-2</b>
<b>MODULE 3: MEDIA AS TEXT (9L+0P=9)</b>	
Media as text. Approaches to media analysis - Marxist, Semiotics, Sociology, Psycho analysis. Media and realism (class, gender, race, age, minorities, children, etc.)	<b>CO-3 BTL-3</b>
<b>MODULE 4: MEDIA AND SOCIETY (9L+0P=9)</b>	
Media as consciousness Industry. Social construction of reality by media. Rhetoric of the image, narrative, etc. Media myths (representation, stereotypes, etc.) -- Cultural Studies approach to media, audience as textual determinant, audience as readers, audience positioning, establishing critical autonomy	<b>CO-4 BTL-4</b>
<b>MODULE 5: MEDIA AND CULTURE (9L+0P=9)</b>	
Media and Popular culture — commodities, culture and sub-culture, popular texts, popular discrimination, politics and popular culture, popular culture Vs people's culture, celebrity industry-personality as brand name, hero-worship, etc. Acquisition and transformation of popular culture	<b>CO-5 BTL-4</b>
<b>TEXT BOOKS</b>	
1.	Media Literacy. Sage Publications Potter, James W (2016).
2.	Media-Making: Mass Media in a Popular Culture. Sage Publications Grossberg, Lawrence et al (2005).
<b>REFERENCE BOOKS</b>	
1	Media Analysis Techniques. Sage Publications Berger, AsaAuthur (2017).
<b>E BOOKS</b>	

1.	Visual and Performing Arts Collaborations in Higher Education, <a href="https://link.springer.com/book/10.1007/978-3-031-29811-0">https://link.springer.com/book/10.1007/978-3-031-29811-0</a>
<b>MOOC</b>	
1.	<a href="https://onlinecourses.nptel.ac.in/noc23_hs127/preview">https://onlinecourses.nptel.ac.in/noc23_hs127/preview</a>

<b>COURSE TITLE</b>	<b>REPRESENTATION OF SPACES</b>									<b>CREDITS</b>	<b>3</b>				
<b>COURSE CODE</b>	<b>SID 21505</b>	<b>COURSE CATEGORY</b>			<b>DE</b>	<b>L-T-P-S</b>			<b>3-0-0-0</b>						
<b>Version</b>	<b>2.0</b>	<b>Approval Details</b>			<b>24.02.2024</b>	<b>LEARNING LEVEL</b>			<b>BTL-3</b>						
<b>ASSESSMENT SCHEME</b>															
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>			<b>Surprise Test / Quiz</b>	<b>Attendance</b>			<b>ESE</b>						
<b>15%</b>	<b>15%</b>	<b>10%</b>			<b>5%</b>	<b>5%</b>			<b>50%</b>						
<b>Course Description</b>	In this course, students will learn ways to convert spaces from literature with various examples. They will also learn to understand spaces.														
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1.To understand ways to represent space as a phenomenon in literature.</li> <li>2. To understand ways to convert spaces from literature with various examples.</li> <li>3. To understand about the threshold spaces relating to films and mythology.</li> <li>4. To understand public realm and public spaces and right to place.</li> <li>5. To understand various spaces for kids in fiction and novel.</li> </ol>														
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. Explain how to represent space as a phenomenon in literature.</li> <li>2. Explain how to convert spaces from literature with various examples.</li> <li>3. Familiarize with the threshold spaces relating to films and mythology.</li> <li>4. Explain public realm and public spaces and right to place.</li> <li>5. Explain various spaces for kids in fiction and novel.</li> </ol>														
<b>Prerequisites:</b>															
<b>CO, PO AND PSO MAPPING</b>															
<b>CO</b>	<b>PO -1</b>	<b>P O-2</b>	<b>P O-3</b>	<b>P O-4</b>	<b>P O-5</b>	<b>P O-6</b>	<b>P O-7</b>	<b>P O-8</b>	<b>P O-9</b>	<b>PO -10</b>	<b>P O-11</b>	<b>PO -12</b>	<b>PS O-1</b>	<b>PS O-2</b>	<b>PS O-3</b>
<b>CO-1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>

<b>CO-2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>
<b>CO-3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>3</b>
<b>CO-4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>
<b>CO-5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>															
<b>MODULE 1 FUNDAMENTALS OF SPATIAL REPRESENTATION</b>														<b>(9L+0P=9)</b>	
Representing space as a pervasive phenomenon in literature-Two-Dimensional Spatial Representation - Three -Dimensional Spatial Representation -Philosophical cultural and social aspects of spaces in literature, cinema, theatre													<b>CO-1 BTL-2</b>		
<b>MODULE 2: SPATIAL PERCEPTION AND COGNITION</b>														<b>(9L+0P=9)</b>	
Space as discourse in literature and exercise - sketching spaces from literature eg: Windows as frames of reference describing use of spaces in literary texts such as “ Alice in Wonderland “- Space in middle of nowhere ,space and the mythical quality it holds conceptualizing space from sound and smell.													<b>CO-2 BTL-2</b>		
<b>MODULE 3: TECHNIQUES IN REPRESENTATION</b>														<b>(9L+0P=9)</b>	
Threshold and liminal space exercise: Find and collect picture and draw threshold spaces -Discussion on images of threshold spaces, threshold spaces in films and Mythology													<b>CO-3 BTL-3</b>		
<b>MODULE 4: SPATIAL REPRESENTATION</b>														<b>(9L+0P=9)</b>	
Spatial Representation in Visual Storytelling - Democracy and space public sphere, public realm and public space, rights of people over space-Portrayal of emotions through literary descriptions of space													<b>CO-4 BTL-2</b>		
<b>MODULE 5 SPACE IN FICTION</b>														<b>(9L+0P=9)</b>	
Narrative power of space and its impact on human experience -Fictional worlds and their influence on architectural and interior design													<b>CO-5 BTL-2</b>		
<b>TEXT BOOKS</b>															



	<p>1."Interior Design Illustrated" by Francis D. K. Ching and Corky Binggeli</p> <p>2."Color Drawing: Design Drawing Skills and Techniques for Architects, Landscape Architects, and Interior Designers" by Michael E. Doyle</p> <p>3."Sketching for Architecture and Interior Design" by Stephanie Travis</p>
<b>REFERENCE BOOKS</b>	
	<p>1."Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques" by Maureen Mitton</p> <p>2."Sketching for Architecture and Interior Design" by Stephanie Travis</p>
<b>E BOOKS</b>	
	<p>1."Architectural Representation Handbook: Traditional and Digital Techniques for Graphic Communication" by Paul Laseau</p> <p>2."Architectural Graphics" by Francis D.K. Ching</p>

<b>COURSE TITLE</b>	<b>TECHNICAL TEXTILES</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SFA11502</b>	<b>COURSE CATEGORY</b>	<b>DE</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL – 2</b>

**ASSESSMENT SCHEME**

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>End Semester Exam</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	Technical textiles focus on the various fields such as sports, transport, medical, survival, defence etc. This will give clear knowledge about the usage of textiles in various forms and to understand the characteristics and functional properties of textile materials and their implementation.
---------------------------	--

<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To make students know about the types of clothing used for various fields.</li> <li>2. To create awareness about clothing culture at home.</li> <li>3. To impart knowledge of clothing in medical and survival field.</li> <li>4. To be able to know the various usage of textiles in transport and geotextiles.</li> <li>5. To create awareness about the textiles in defense field.</li> </ol>
-------------------------	--

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. Know the variety of clothes used in various fields.</li> <li>2. To design and develop textile furnishing homes.</li> <li>3. To be able to know the various textile materials used in the medical field.</li> <li>4. To identify the usage and types in various transportation.</li> <li>5. To know about the usage of textiles in defense and how it protects.</li> </ol>
-----------------------	---

**Prerequisites:** Nil

**CO, PO AND PSO MAPPING**

<b>CO</b>	<b>PO -1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PSO-1</b>	<b>PSO-2</b>	<b>PSO-3</b>	<b>PSO-4</b>
<b>CO-1</b>	1	2	1	-	-	1	1	-	1	1
<b>CO-2</b>	-	1	-	1	2	3	-	1	3	3
<b>CO-3</b>	1	2	1	-	3	3	-	-	2	-
<b>CO-4</b>	-	1	-	-	2	2	1	1	1	-
<b>CO-5</b>	-	1	-	1	2	3	-	-	2	1

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: INTRODUCTION TO TECHNICAL TEXTILES**

**9Hrs**

Introduction, definition and scope of technical textiles. Technical fabric structure-Woven and non-woven.	<b>CO-1 BTL-1</b>
<b>MODULE 2: HOME TEXTILES</b> <b>9Hrs</b>	
Definition, Bed linens, Floor covering, Wall coverings Door and window treatments, Table and kitchen linens.	<b>CO-4 BTL-2</b>
<b>MODULE 3: MEDICAL AND SURVIVAL TEXTILES</b> <b>9Hrs</b>	
Introduction. Non implantable materials, Implantable materials, Health care and hygiene, textiles. Tents, helmets, gloves, sleeping bag, Survival bags and Suits.	<b>CO-3 BTL-2</b>
<b>MODULE 4: TEXTILES IN TRANSPORTATION AND GEO TEXTILES</b> <b>9Hrs</b>	
Introduction, Textiles in Cars, Road vehicles, Rail ways, Aircraft and Marine applications. Essential properties of Geo Textiles, Applications of Geo Textiles, Natural fiber for soil strengthening.	<b>CO-3 BTL-2</b>
<b>MODULE 5: DEFENCE TEXTILES</b> <b>9Hrs</b>	
Textiles for Protection, Thermal insulation materials, Camouflage concealment and deception, Flame and Heat protective textiles, Ballistic protective materials, Intelligent textiles-use of Wearable electronics	<b>CO-5 BTL-2</b>
<b>Skill Development Activities:</b> Sustainability study about the usage of textiles in day-to-day life and create reports about the waste and recycling of textiles.	
<b>REFERENCE BOOKS</b>	
1.	Horrocks, A.R. and Anand, S.C., Handbook of Technical Textiles, The Textiles Institute, Wood Head Publishing Ltd., England, 2000.
2.	Pandy, S.N., Potential for the use of Natural Fibres in Civil Engineering, Jute Technological Research Laboratory, 2002
3.	Grosick, Z.J. Wilson's, Advanced Textile Design-compound woven structures, Wohead Publishing, England, 2004.
	Murphy W.S, Textile Finishing, Abhishek Publications, Chandgarh, 2000.
<b>E-BOOKS / MAGAZINE / ARTICLES</b>	

1.	<a href="https://www.sciencedirect.com/book/9781782424581/handbook-of-technical-textiles">https://www.sciencedirect.com/book/9781782424581/handbook-of-technical-textiles</a>
2.	<a href="https://ftp.idu.ac.id/wp-content/uploads/ebook/tdg/ADVANCED%20MATERIAL%20DESIGN/handbook_of_technical_textile_.pdf">h https://ftp.idu.ac.id/wp-content/uploads/ebook/tdg/ADVANCED%20MATERIAL%20DESIGN/handbook_of_technical_textile_.pdf</a>

### **ONLINE RESOURCES**

1.	<a href="https://www.technical-textiles.net/">https://www.technical-textiles.net/</a>
2.	<a href="https://onlinecourses.nptel.ac.in/noc23_te02/preview">https://onlinecourses.nptel.ac.in/noc23_te02/preview</a>

<b>COURSE TITLE</b>	<b>PRODUCT DESIGN</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	SAR51503	<b>COURSE CATEGORY</b>	DE	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>
<b>ASSESSMENT SCHEME</b>					
<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>
<b>Course Description</b>	Product Architecture is the process of creating a schematic for a product and its various functions. Rather than representing the product as a prototype, the product is broken down into its base components and expressed geometrically				
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. To understand the foundational principles of product design and its role in addressing real-world problems.</li> <li>2. To understand research and empathy skills essential for creating user-focused, innovative designs.</li> <li>3. To acquaint students with materials and manufacturing processes, emphasizing sustainable design practices and effective collaboration with industry partners.</li> <li>4. Understand theoretical and practical aspects of user testing and product audits for continuous improvement.</li> <li>5. Explore advanced concepts and emerging trends in product design, integrating theory into practice.</li> </ol>				
<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. Gain a comprehensive understanding of the foundational principles of product design, recognizing its vital role in addressing real-world problems.</li> <li>2. Develop research and empathy skills essential for creating user-focused, innovative designs, ensuring a deep appreciation for user needs and experiences.</li> <li>3. Acquire knowledge of materials and manufacturing processes, with a strong emphasis on sustainable design practices, preparing students for effective collaboration with industry partners.</li> <li>4. Understand both theoretical and practical aspects of user testing and product audits, enabling students to implement continuous improvement strategies for product development.</li> <li>5. Explore advanced concepts and emerging trends in product design, integrating theoretical knowledge into practical applications and equipping students to navigate evolving industry landscapes.</li> </ol>				
<b>Prerequisites:</b>					

<b>CO, PO AND PSO MAPPING</b>															
<b>CO</b>	<b>PO -1</b>	<b>PO -2</b>	<b>PO -3</b>	<b>PO -4</b>	<b>PO -5</b>	<b>PO -6</b>	<b>PO -7</b>	<b>PO -8</b>	<b>PO -9</b>	<b>PO -10</b>	<b>PO -11</b>	<b>PO- 12</b>	<b>PSO -1</b>	<b>PSO -2</b>	<b>PSO-3</b>
<b>CO-1</b>	1	1	3	1	3	3	2	1	1	1	2	1	1	3	2
<b>CO-2</b>	2	3	1	1	1	3	1	1	1	1	2	1	2	3	2
<b>CO-3</b>	3	3	1	1	3	3	2	1	1	1	3	1	1	3	1
<b>CO-4</b>	2	3	1	1	3	3	2	1	1	1	3	1	2	2	2
<b>CO-5</b>	1	3	1	1	3	3	1	1	1	1	2	1	2	2	1
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>															
<b>MODULE 1: INTRODUCTION TO PRODUCT DESIGN</b>															
Overview of product design principles and processes- Historical perspectives on product design- Importance of design thinking in product development -Introduction to influential product designers and their works													<b>CO-1</b> <b>BTL-2</b>		
<b>MODULE 2: DESIGN RESEARCH AND USER-CENTERED DESIGN</b>															
Recognize the importance of user research in product design.-Identify the purpose and utility of creating user personas and scenarios.- Understand the fundamental principles of user-centered design (UCD) and its role in shaping design processes.													<b>CO-2</b> <b>BTL-2</b>		
<b>MODULE 3: MATERIALS AND MANUFACTURING PROCESSES</b>															
Understanding different materials and their properties-Overview of common manufacturing processes- Sustainable design considerations- Collaboration with manufacturers and supplier													<b>CO-3</b> <b>BTL-3</b>		
<b>MODULE 4: USER TESTING AND PRODUCT AUDITS</b>															
Learning about Testing methodologies- overview of usability theories and application-ethical considerations while testing- user well-being,													<b>CO-4</b> <b>BTL-2</b>		
<b>MODULE 5: EMERGING TECH AND PRODUCT APPLICATIONS</b>															
Recognize and describe key emerging technologies relevant to product design.- Identify potential applications of emerging technologies in product development.- Analyze the impact of emerging technologies on current and future product design trends.													<b>CO-5</b> <b>BTL-2</b>		
<b>TEXT BOOKS</b>															
1.	The Design of Everyday Things" by Donald A. Norman,Author: Donald A. Norman Publisher: Basic Books Publication Year: 2013 ISBN-13: 978-0465050659														

**REFERENCE BOOKS**

1 Subhash.C.Saxena, “A Course in Traffic Planning and Design”, Dhanpat Rai& Sons,2010.

2 "Observing the User Experience: A Practitioner's Guide to User Research" by Mike Kuniavsky, Elizabeth Goodman, and Andrea Moed

**E BOOKS**

1. "Universal Principles of Design" by William Lidwell, Kritina Holden, and Jill Butler

<b>COURSE TITLE</b>	<b>SET DESIGN</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE CODE</b>	<b>SAR51504</b>	<b>COURSE CATEGORY</b>	<b>DE</b>	<b>L-T-P-S</b>	<b>3- 0- 0- 0</b>
<b>Version</b>	<b>5.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

#### ASSESSMENT SCHEME

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments / Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	The course enables students to understand the approaches to theatre and cinema set with conceptualizing the design, understanding of design elements through light, color and materials through graphical representations.
<b>Course Objective</b>	<ol style="list-style-type: none"> <li>1. Describe the history of set design and identify people and movements which influenced its development.</li> <li>2. Identify and describe the process set designers use to create sets for productions.</li> <li>3. Students will also explore, learn, and use the various process materials available to communicate effectively with all members of the production team</li> </ol>
<b>Course Outcome</b>	<ol style="list-style-type: none"> <li>1. To create awareness and provide exposure about the design potential in theatre &amp; cinema set design to architecture students.</li> <li>2. To inculcate the ability to translate the requirements of the script to physical manifestations according to the traditions followed in the theatre &amp; cinema industry.</li> <li>3. Understand the different approaches in graphics design and its applications</li> <li>4. Understand the process of conceptualizing the designs to develop the sets with visual and creative process</li> <li>5. Understanding stage setting through language, color, and architectural analysis.</li> </ol>

**Prerequisites: ARC4455– SET DESIGN**

#### CO, PO AND PSO MAPPING

CO	PO -1	PO -2	PO- 3	PO -4	PO -5	PO -6	PO- 7	PO-8	PO- 9	PO - 10	PO - 11	PO -12	PSO-1	PSO- 2	PSO- 3	PSO-4	PSO- 5
CO-1	2	2	3	-	-	3	3	-	-	-	2	3	3	1	3	2	2
CO-2	2	2	3	-	-	3	3	-	-	-	2	3	3	1	3	2	2
CO-3	2	2	3	2	-	3	3	-	-	-	2	3	3	1	3	2	2
CO-4	2	2	3	2	-	3	3	-	-	-	2	3	3	1	3	2	2
CO-5	2	2	3	2	-	3	3	-	-	-	2	3	3	1	3	2	2

**1: Weakly related, 2: Moderately related and 3: Strongly related**



<b>MODULE 1 - FILM AND SOCIETY</b> <b>(9L)</b>	
Examination of the 20th century culture and society through film. Critical analysis of cultural and social conflicts are portrayed and worked out in popular films, and examination of how motion pictures create a window into modern society. Film as cultural text to better understand history and cultural manifestations.	<b>CO-1</b> <b>BTL-4</b>
<b>MODULE 2 - HISTORY AND THEATRE FILM SET DESIGN</b> <b>(9L)</b>	
Investigation the production methods, dramatic theory and conventions, and scene design of various performance media since the popularization of the motion picture, and how it has influenced all entertainment design in the 20th and 21st centuries.	<b>CO-2</b> <b>BTL-2</b>
<b>MODULE 3 - GRAPHIC DESIGN AND TYPOGRAPHY FOR EXHIBIT DESIGN</b> <b>(8L)</b>	
Principles of layout for creating effective visual signage and explore the unique problems, technique, theory, and approaches of signage in film, theatre, and other forms of mediated exhibition. Introduction to the design applications for building signage.	<b>CO-3</b> <b>BTL-2</b>
<b>MODULE 4 - SET DESIGN AND CONCEPT WRAP</b> <b>(8L)</b>	
Introduction to the basic concepts, through theory and practice, of scene design in theatre, film, and other fine arts and entertainment media. Students will learn how to analyze scripts for proper scenery, how to conceptualize designs that will translate into actual sets, and develop visual thinking within the creative process.	<b>CO-4</b> <b>BTL-2</b>
<b>MODULE 5 - STAGE DESIGN</b> <b>(8L)</b>	
Stage design process from inception to performance, script analysis, visual arts analysis, research skills, and the application of principles and elements of design. Understanding stage setting through language, color, and architectural analysis.	<b>CO-5</b> <b>BTL-3</b>
<b>TEXT BOOKS</b>	
1	Baiche Bousmaha & Walliman Nicholas. Neufert Architect's data. Blackwell science ltd.
2	Chiara De Joseph & crosbie.J.Michael. 1990. Time saver standards for building types. McGraw Hill company
<b>REFERENCE BOOKS</b>	
1	Behind the Scenes: Contemporary Set Design, <u>Black Dog Publishing</u> , London, UK, 2012, English Design, General

<b>COURSE</b>	<b>DIGITAL MODELLING</b>	<b>CREDITS</b>	<b>3</b>
---------------	--------------------------	----------------	----------

<b>TITLE</b>					
<b>COURSE CODE</b>	<b>SID21528</b>	<b>COURSE CATEGORY</b>	<b>DE</b>	<b>L-T-P-S</b>	<b>3-0-0-0</b>
<b>Version</b>	<b>1.0</b>	<b>Approval Details</b>	<b>24.02.2024</b>	<b>LEARNING LEVEL</b>	<b>BTL-3</b>

**ASSESSMENT SCHEME**

<b>First Periodical Assessment</b>	<b>Second Periodical Assessment</b>	<b>Seminar/ Assignments/ Project</b>	<b>Surprise Test / Quiz</b>	<b>Attendance</b>	<b>ESE</b>
<b>15%</b>	<b>15%</b>	<b>10%</b>	<b>5%</b>	<b>5%</b>	<b>50%</b>

<b>Course Description</b>	Digital modelling refers to the process of creating virtual representations of objects or systems using computer software. It is widely used across various industries, including architecture, engineering, entertainment, product design, and more. Digital models can range from simple 2D sketches to complex 3D simulations, and they serve several purposes
---------------------------	---

<b>Course Objective</b>	<p>Provide a foundational understanding of digital modelling's theoretical principles in interior design.</p> <p>Foster critical thinking by evaluating the impact of digital tools on design processes.</p> <p>Teach how meaning is conveyed through digital representations of interior spaces.</p> <p>Explore cultural influences and ethical considerations in digital design practices.</p> <p>Enable the application of theoretical knowledge to propose innovative design solutions in practice.</p>
-------------------------	---

<b>Course Outcome</b>	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>6. Demonstrate a deep understanding of digital modelling's theoretical principles in interior design.</li> <li>7. Develop critical analysis skills to assess the impact of digital tools on design processes.</li> <li>8. Proficiently communicate design concepts through digital representations of interior spaces.</li> <li>9. Show awareness of cultural influences and ethical considerations in digital design practices.</li> <li>10. Apply theoretical knowledge to propose innovative design solutions in practical scenarios.</li> </ol>
-----------------------	--

**Prerequisites:**

**CO, PO AND PSO MAPPING**

<b>CO</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>	<b>PO-8</b>	<b>PO-9</b>	<b>PO-10</b>	<b>PO-11</b>	<b>PO-12</b>	<b>PSO-1</b>	<b>PSO-2</b>	<b>PSO-3</b>
<b>CO-1</b>	-	-	1	1	3	1	1	1	-	-	-	1	-	3	-

CO-2	-	-	1	1	3	1	1	1	-	-	-	1	-	3	-
CO-3	-	-	1	1	3	1	1	1	-	2	-	1	-	3	-
CO-4	2	1	3	1	3	1	1	1	1	1	-	1	-	3	-
CO-5	3	1	3	-	3	1	1	1	1	1	-	1	-	3	-

**1: Weakly related, 2: Moderately related and 3: Strongly related**

**MODULE 1: Fundamentals of Digital Modelling (9L+0P=9)**

Introduction to the principles and concepts of digital modelling in the context of interior design.- Understanding the role of digital tools in the design process and how they impact design workflows.- Exploring the historical evolution of digital modelling tools and their significance in contemporary interior design practices.	<b>CO-1</b> <b>BTL-2</b>
---	-----------------------------

**MODULE 2: Theoretical Frameworks in Digital Design (9L+0P=9)**

Study of theoretical frameworks and methodologies applied in digital modelling for interior spaces.- Analysis of digital modelling processes, from ideation and conceptualization to visualization and presentation.- Discussion on the theoretical underpinnings of 3D modelling, rendering, and virtual reality technologies in design.	<b>CO-2</b> <b>BTL-2</b>
---	-----------------------------

**MODULE 3: Digital Representation and Semiotics in Design (9L+0P=9)**

Understanding the principles of visual representation and communication in digital design.- Semiotics and symbolism in digital representations of interior spaces- analyzing how meaning is conveyed through visuals.-Exploring the language of digital modelling and how it influences the perception and interpretation of design ideas.	<b>CO-3</b> <b>BTL-3</b>
--	-----------------------------

**MODULE 4: Critical Perspectives on Digital Design Tools (9L+0P=9)**

Critically examining the impact of digital tools on design thinking and creativity in interior design.-Ethical considerations and challenges associated with the use of digital modelling tools.- Exploring debates surrounding the use of technology in design, addressing issues of standardization, automation, and creativity.	<b>CO-4</b> <b>BTL-2</b>
--	-----------------------------

**MODULE 5: Digital Design and Cultural Context (9L+0P=9)**

Analyzing how digital modelling tools influence and are influenced by cultural contexts in interior design.- Study of diverse cultural perspectives and their representation in digital design practices.- Exploring how digital tools can be used to preserve, reinterpret, or challenge cultural heritage in interior design.	<b>CO-5</b> <b>BTL-2</b>
---	-----------------------------

**TEXT BOOKS**

1.	<b>"Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques" by Maureen Mitton and Courtney Nystuen</b>
----	---

**REFERENCE BOOKS**

1	<b>"Digital Design Exercises for Architecture Students" by Jason S. Johnson</b>
---	---

2	Digital Drawing for Designers: A Visual Guide to AutoCAD" by Douglas R. Seidler
<b>E BOOKS</b>	
1.	"Universal Principles of Design" by William Lidwell, Kritina Holden, and Jill Butler
<b>MOOC</b>	
1.	<a href="https://www.mooc-list.com/tags/3d-modeling">https://www.mooc-list.com/tags/3d-modeling</a>
2.	<a href="https://www.coursera.org/learn/introduction-to-3d-modeling">https://www.coursera.org/learn/introduction-to-3d-modeling</a>

<b>COURSE TITLE</b>	<b>PROJECT MANAGEMENT</b>			<b>CREDITS</b>	<b>3</b>
<b>COURSE</b>	<b>SID51230</b>	<b>COURSE</b>	<b>DE</b>	<b>L-T-P-S</b>	<b>3-0-0-</b>

CODE		CATEGORY													
Version	1.0	Approval Details	24.02.2024	LEARNING LEVEL	BTL-3										
<b>ASSESSMENT SCHEME</b>															
First Periodical Assessment	Second Periodical Assessment	Seminar/ Assignments/ Project	Surprise Test / Quiz	Attendance	ESE										
15%	15%	10%	5%	5%	50%										
Course Description	The course enables students to identify the project management techniques and apply the techniques of scheduling, monitoring and safety management in interior projects														
Course Objective	<ol style="list-style-type: none"> <li>To identify the framework of interior projects.</li> <li>Describe the roles of interior designers and predict the functions of affiliated professionals</li> <li>Discuss interior contract and recognize the stages of interior construction process</li> <li>Apply the concept of scheduling for monitoring and control of interior projects</li> <li>Use the estimating techniques and apply the quality and management plan in interior project.</li> </ol>														
Course Outcome	<p>Upon completion of this course, the students will be able to</p> <ol style="list-style-type: none"> <li>Identify the framework of project and interior design</li> <li>Identify interior project players and predict the functions of associated professionals</li> <li>To complete interior contract and recognize the stages of completion process</li> <li>Manage scheduling for monitoring and control of interior projects</li> <li>To utilize estimating techniques and apply the quality and management plan in interior project</li> </ol>														
<b>Prerequisites:</b>															
<b>CO, PO AND PSO MAPPING</b>															
CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO -10	PO -11	PO -12	PSO -1	PSO -2	PSO -3
CO-1	2	2	3	2	1	-	3	-	2	2	2	-	2	-	-
CO-2	2	2	3	2	-	-	3	-	2	2	-	1	2	-	-
CO-3	2	2	3	2	-	-	3	3	2	2	-	1	2	-	-
CO-4	2	2	3	2	1	-	3	-	2	2	1	-	2	-	-
CO-5	2	2	3	2	-	1	3	-	2	2	-	1	2	-	-
<b>1: Weakly related, 2: Moderately related and 3: Strongly related</b>															
<b>MODULE 1: PROJECT MANAGEMENT</b>															
<b>(9L+0P=9)</b>															

Concepts of project-Elements of projects-Stages in project life cycle-Classification of projects-Project management –Importance- Organisation	<b>CO-1</b> <b>BTL-2</b>
<b>MODULE 2: INTERIOR PROJECT MANAGEMENT (9L+0P=9)</b>	
Interior project types- The project players, Primary, Secondary-Infrastructure management – Infrastructure project, project values, Scope of work,-Project programming-Project management functions-	<b>CO-2</b> <b>BTL-2</b>
<b>MODULE 3: INTERIOR CONTRACT AND STAGES (9L+0P=9)</b>	
Public projects, Private projects, Public private partnerships -Source of information- Competitive bidding-Selection methods, Making the decision to bid – Construction contract, Contract documents, The project manual – Contract types.	<b>CO-3</b> <b>BTL-3</b>
<b>MODULE 4: PROJECT PLANNING FOR INTERIORS AND SCHEDULING (9L+0P=9)</b>	
Steps and stages of planning-Types of schedules, Gant Charts, Net work diagrams, Purpose of schedule, Stages of schedule- Communicating and updating the schedule - Project control cycle, Factors impacting project performance, Tracking quality, cost and time – Documenting the project performance.	<b>CO-4</b> <b>BTL-2</b>
<b>MODULE 5: PROJECT SAFETY &amp; QUALITY ((9L+0P=9)</b>	
Estimation -Types of estimates, The estimating process –Work break down structure- Calculating quantities-Contract administration - Defining quality, Objectives, The QA/QC functions, safety as a component of quality, safety manager role,	<b>CO-5</b> <b>BTL-2</b>
<b>TEXT BOOKS</b>	
1.	William Ramroth ,Project management for design professionals,Kaplan AEC,2006
2	Virginia I smith ,Interior Design Project Manager - Challenges, Solutions, and Golden Rules 2019
3	Project Management for Interior Projects <a href="#">Mangesh Joshi</a> , April 10, 2021
4	Project Management Checklist: A Complete Guide For Exterior and Interior Construction, 978-0-442-01072-0, Published: 30 September 2020:Edtion
5	Moder.J., C.Phillips and Davis, " Project Management with CPM ", PERT and Precedence Diagramming, Van Nostrand Reinhold Co., Third Edition, 1983.
<b>REFERENCE BOOKS</b>	
1	Chris Hendrickson and Tung Au, “Project Management for Construction - Fundamentals Concepts for Owners ", Engineers, Architects and Builders, Prentice Hall, Pittsburgh, 2000.
2	Interior Design: Principles And Practice (by M. Pratap Rao)
3	Willis., E.M., " Scheduling Construction projects ", John Wiley and Sons 1986.
<b>E BOOKS</b>	
1.	Virginia I smith ,Interior Design Project Manager - Challenges, Solutions, and Golden Rules 2019
<b>MOOC</b>	

1.	<a href="https://www.projectmanagement.com">https://www.projectmanagement.com</a>
2.	