ALAGAPPA UNIVERSITY

(Accredited with A+ Grade by NAAC (CGPA: 3.64) in the Third Cycle,
Graded as Category-I University and granted autonomy by MHRD-UGC)

DIRECTORATE OF COLLABORATIVE PROGRAMMES

B. Des. in Interior Design

Regulations and Syllabus

[For those who join the Course in July 2023 and after]

CHOICE BASED CREDIT SYSTEM

ALAGAPPA UNIVERSITY

Vision

Achieving Excellence in all spheres of Education, with particular emphasis on Pedagogy, Extension, Administration, Research and Learning (PEARL).

Mission

Affording a High-Quality Higher Education to the learners so that they are transformed into intellectually competent human resources that will help in the uplift of the nation to Educational, Social, Technological, Environmental and Economic Magnificence (ESTEEM).

Objectives

Providing instructions and training in such branches of learning, as the University may determine. Fostering research for the advancement and dissemination of knowledge.

COLLABORATIVE PROGRAMMES

BACHELOR OF DESIGN – INTERIOR DESIGN

Name of the Programme : **B. Des. (Bachelor of Design)**
Pattern : Semester System
Mode : Collaborative Programs
Medium : English
Duration : Four Years
Eligibility : Candidate for admission to **B. Des.** in Interior Design shall be required to have passed Higher Secondary (10+ 2) or its equivalent in any stream from any recognized Institution.
Eligibility of candidates applying from abroad shall be evaluated for equivalence on case-to-case basis.

STANDARD OF PASSING AND AWARD OF DIVISION:

a) Students shall have a minimum of 40% of total marks of the University examinations in each subject. The overall passing minimum is 40% both in aggregate of Continuous Internal Assessment and External Assessment in each subject.
b) The minimum marks for passing in each external assessment of Theory/Practical course shall be 40% of the marks prescribed for the course.
c) The minimum marks for passing in each internal assessment of Theory/Practical course shall be 40% of the marks prescribed for the course.
d) The total marks for theory courses shall have a contribution of 25% from Continuous Internal Assessment and 75% from External Assessment.
e) The total marks for practical courses shall have a contribution of 75% from Continuous Internal Assessment and 25% from External Assessment.
f) A candidate who secures 40% or more marks but below 50% of the aggregate marks shall be awarded **THIRD CLASS.**
g) A candidate who secures 50% or more marks but less than 60% of the aggregate marks shall be awarded **SECOND CLASS.**
h) A candidate who secures 60% or more of the aggregate marks shall be awarded **FIRST CLASS.**
i) A candidate who secures 80% and above marks will be awarded **FIRST CLASS WITH DISTINCTION** (Provided the student pass all the courses in the first attempt)
j) The Practical / Project shall be assessed by a minimum of two examiners comprising of an Internal Examiner and External Examiner.

CONTINUOUS INTERNAL ASSESSMENT:

The respective course faculty will continuously assess the performance of students in each course. The continuous Internal Assessment marks shall be awarded by the concerned course faculty based on the performance of the students in case studies, presentations, quizzes, practical, tests and other assignments.

ATTENDANCE:

<table>
<tr><td colspan="4">ATTENDANCE GUIDELINES</td></tr>
<tr><td>0 - 59 %</td><td>60 - 69 %</td><td>70 - 74 %</td><td>75 - 100 %</td></tr>
<tr><td>Not Eligible To Appear For Examination</td><td>Condonation Fee + Medical Certificates</td><td>Condonation Fee</td><td rowspan="2">Meeting The Attendance Requirements</td></tr>
<tr><td>Semester Drop</td><td colspan="2">If Not Deposited / Submitted Then Subject Arrear</td></tr>
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UNIVERSITY EXAMINATIONS:

The University theory examinations will be held at the end of each Semester that has a theory paper for a duration of three hours for each subject.

EVALUATION OF ANSWER PAPERS:

Answer papers of the University Examinations shall be subjected to evaluation by a Board of Examiners constituted by Alagappa University.

INTERNSHIP:

The course being professional, the students are required to undergo industrial exposure at the end of the 6th semester of the program for a period of minimum one and half month or 45 days.

Assessment for internship shall be done by a team of one internal examiner and one external examiner.

DEGREE PROJECT:

The degree project can be executed either in an industrial studio or as an in-house project in the institute. The internal assessment shall be done in the form of two internal reviews and one pre-jury. Attending all the three assessments is mandatory.

The external assessment for degree project shall be done by a minimum of one internal examiner and one external examiner.

The student shall be allowed to appear for the final degree project if and only if he/she has cleared all the previous courses.

AWARD OF DEGREE:

Students who successfully complete the program by meeting all the academic requirements within the stipulated period of six years from the year of admission shall be awarded the degree of B. Des. (Bachelor of Design).

The course of study shall comprise the following subjects according to the syllabus prescribed from time to time.

B.Des Interior Design-Course Structure

Sem	Part	Course Code	Sub. Code	Title of the Paper	T/P	Credits	Hours/ Week	Marks		Total
								Int.	Ext.	
I	I	T/OL	81211	Tamil / Other Languages - I	T	3	3	25	75	100
	II	E	81212	General English-I	T	3	3	25	75	100
	III	CC	81213	Creativity and Mind Mapping	P	2	3	75	25	100
		CC	81214	Foundation Drawing	P	4	5	75	25	100
		CC	81215	Elements of Design I	P	4	5	75	25	100
		CC	81216	Colour Theory	P	2	4	75	25	100
		Allied	81217	Introduction to Materials	P	4	5	75	25	100
	IV	SEC-I	81218	Value Education	T	2	2	75	25	100
				Library			2			
			Total			**24**	**32**	**500**	**300**	**800**
II	I	T/OL	81221	Tamil / Other Languages - II	T	3	3	25	75	100
	II	E	81222	English Communication – II	T	3	3	25	75	100
	III	CC	81223	Introduction to Photography	P	2	4	75	25	100
		CC	81224	Product Sketching and Drawing	P	4	6	75	25	100
		CC	81225	Design Process	P	4	6	75	25	100
		Allied	81226	Elements of Design II	P	4	6	75	25	100
	IV	SEC-II	81227	Environmental Studies	T	2	2	25	75	100
				Library			2			
			Total			**22**	**32**	**375**	**325**	**700**
	Students are required to learn AutoCAD									
III	I	T/OL	81231	Tamil / Other Languages - III	T	3	3	25	75	100
	II	E	81232	English Communication – III	T	3	3	25	75	100
	III	CC	81233	Elements of Interior Design	P	3	3	75	25	100
		CC	81234	Fundamentals of Interior Design	P	3	3	75	25	100
		CC	81235	Components and Systems for Interior Design - I	P	4	6	75	25	100
		CC	81236	Interior Design Studio - I	P	6	8	75	25	100
		SEC-III	81237	Entrepreneurship	T	2	2	75	25	100
	IV	NME-I	81238A	1) Adipadai Tamil I	P	2	2	25	75	100
			81238B	2) Advance Tamil I	T			25	75	
			81238C	3) IT Skills for Employment/	T			25	75	
				4) MOOC'S	T					
			Total			**26**	**30**	**500**	**475**	**800**
	Students are required to learn 3D modeling and rendering software									
IV	I	T/OL	81241	Tamil / Other Languages – IV	T	3	3	25	75	100
	II	E	81242	English Communication – IV	T	3	3	25	75	100
	III	CC	81243	Interior Landscape Design	P	3	3	75	25	100
		CC	81244	Interior Services - I	P	3	3	75	25	100
		CC	81245	Components and Systems for Interior Design - II	P	4	6	75	25	100
		CC	81246	Interior Design Studio - II	P	6	10	75	25	100
	IV	NME-II	81247A	1) Adipadai Tamil II	P	2	2	25	75	100
			81247B	2) Advance Tamil II	T			25	75	
			81247C	3)Small Business Management	T			25	75	
				4) MOOC'S	T					
			Total			**24**	**30**	**425**	**475**	**700**
V	III	CC	81251	Furniture Construction and	P	3	3	75	25	100

				Detailing						
		CC	81252	Interior Services - II	P	3	3	75	25	100
		CC	81253	Fundamentals of Furniture Design	P	3	3	75	25	100
		CC	81254	Lighting and Color in Interiors	P	3	3	75	25	100
		CC	81255	Components and Systems for Interior Design - III	P	4	6	75	25	100
		CC	81256	Interior Design Studio - III	P	6	12	75	25	100
			Total			**22**	**30**	**450**	**150**	**600**
VI	III	CC	81261	Estimation and Costing	P	3	3	75	25	100
		CC	81262	Adaptive reuse and recycling	P	3	3	75	25	100
		DSE	81263A 81263B	(A) Retail Interior Design (B) Pioneer Interior Designers	P	3	3	75	25	100
		CC	81264	Graphic Communication & Signage Design	P	3	3	75	25	100
		CC	81265	Interior Skeleton and Surface Finishes	P	4	6	75	25	100
		CC	81266	Interior Design Studio - IV	P	6	12	75	25	100
			Total			**22**	**30**	**450**	**150**	**600**
VII	III	Industrial internship of 45 days (between VI and VII semester break)								
		CC	81271	Project Management	P	2	2	75	25	100
		CC	81272	Sustainability in Interior Design	P	3	3	75	25	100
		CC	81273	Set design	P	3	3	75	25	100
		Allied	81274	Interior Photography	P	4	6	75	25	100
		CC	81275	Portfolio skills	P	2	2	75	25	100
		CC	81276	Advanced Design Studio	P	8	14	75	25	100
			Total			**22**	**30**	**450**	**150**	**600**
VIII	III	CC	81281	Graduation Project Work	PR	18	30	75	25	100
			Total			**18**	**30**	**75**	**25**	**100**
Grand Total						**180**	**244**	**3300**	**2050**	**4900**

Note

GLOSSARY

MIL	Modern Indian Language
E	English
CC	Core course (*Core competency, critical thinking, analytical reasoning, research skill & team work*)
GEC (Allied)	Exposure beyond the discipline
AECC	Ability Enhancement Compulsory Course ((*Professional English & Environmental Studies*) - *Additional academic knowledge, psychology and problem solving etc*.,)
OE	Open Elective
SEC	Skill Enhancement Course (*Exposure beyond the discipline -Value Education, Entrepreneurship Course, Computer Application for Science, etc.,*)
NME	Non-Major Elective (*Exposure beyond the discipline*)
DSE	Discipline Specific Elective
MOOC	Massive Open Online Course
IT	Information Technology

Programme Educational Objectives (PEOs)

Programme Educational Objectives	**On the successful completion of B.Des. the graduate student is expected to the below after graduation**
PEO1	To provide the students with a solid foundation in the combination of technical design and aesthetics, necessary for solving projects and also for higher studies and research.
PEO2	The students shall be trained with good design breadth including material knowledge to understand, analyse, design and create design solutions for real life projects.
PEO3	The students will be equipped to excel in computer applications in order to present their design ideas in a working format and succeed in industry/technical fields.
PEO4	The students will be groomed with a professional and ethical attitude, effective communication skills, a multidisciplinary approach, and the ability to place design issues in a broader social context.
PEO5	The students shall be provided with an academic environment focused on excellence, leadership, and continuous learning, technology, and trends necessary for a successful career.

Programme Specific Outcomes (PSOs)

Programme Specific Outcomes	After the successful completion of the Interior Design Program
PSO1	Students will be able to conceive and coordinate a design that follows a systematic process of analysing, evaluating and synthesizing ideas that incorporate parameters related to social, cultural, environmental, and technological aspects of an interior space.
PSO2	As designers, they will use modern software tools and other appropriate and alternative innovative techniques in a wide range of documentation, presentation, analysis and applications for the design development of interior spaces in a building.
PSO3	As graduates, they will create a sustainable and responsive built environment by responding to the climate of the region, adapting appropriate technologies, preserving ecology, environment and landscape to achieve sustainable development for the future.
PSO4	As design practitioners, they will have an understanding of how history, art, and culture have shaped the modern world through many different kinds of creative works and human experiences, raising questions about value and meaning.
PSO5	Graduates will demonstrate knowledge of professional and ethical responsibilities. They will also have the confidence to self-educate, the ability to keep abreast of trends and technologies, and the attitude to excel in their field.

Programme outcomes (POs)

Programme Outcomes	On the successful completion of B. Des Interior design
PO1	Students will gain knowledge of design, digital fundamentals, design concepts, materials, and a broader understanding of services and execution.
PO2	Will be able to design and execute experiments, analyze and interpret design data, and produce appropriate drawings and 3D visualizations for execution.
PO3	Students will practically identify, formulate, and implement design solutions and enter the mainstream of professional practice.
PO4	Students will be able to design a variety of projects based on user study analysis and formulate requirements and design types along with styles and aesthetics related to the above.
PO5	Ability to understand interior design trends, market trends, client needs and project potential and work with an interdisciplinary team.
PO6	Understand building and safety codes, principles and practices for environmentally sound and sustainable interior design.
PO7	Development of self-confidence and awareness of general problems in society.
PO8	Engage in a research and design process for a holistic contribution to the profession.
PO9	Students will incorporate elements of cost estimating and project execution and recognize and implement related new disciplines.
PO10	Students will be able to effectively communicate design language in both oral and written forms.

CC:81213	Creativity and Mind Mapping	P	Credits -2	Hours - 3
Objectives	1. To gain insights on personal creative abilities. 2. To recognize importance of collective creative design endeavours. 3. To understand basic ideation related techniques. 4. To get introduced to basic design constructs and creative thinking tools. 5. To explore creativity through projects.			
Unit I	Understanding Creativity – Realising personal creative capabilities and uniqueness through interdisciplinary activities – Definition of Abstract-Definition of Concrete – Creativity using language- Story writing – Story boarding- Acting- Enacting through theatre. Creating art through unconventional medium.			
Unit II	What is Design? – Design Thinking- Boosting Visual Representations using metaphors. Figures of speech - Emphasis on Empathy - Emphasis on Teamwork - Individual contribution to collective cause-Understanding non-verbal communication.			
Unit III	Mind mapping - Brain storming techniques – Applications of Mind Mapping – Creating Mind map Models - Real life problems – Grassroot design – Context Mapping – Data Collection – Analysis – Grouping information.			
Unit IV	Introduction to Creative Techniques in Design, SCAMPER Creative Technique, Six thinking hats by Edward De Bono Technique for Creative Thinking, 6-8-5 Technique			
Unit V	Team-based design projects – Individual/Team Presentations – Use of Visual Medium – Feedback Analysis – Critical Analysis – Listening and Reading Comprehension – Report Writing.			

Reference and Text books

- *Hisako Ichiki (2005); Takao Umehara, Extra ordinary: An amusing way for unleashing your creativity, Rockport Publishers*
- *Joyce Wycoff (1991), Mind Mapping: your Personal guide to Exploring Creativity and Problem-Solving, Berkley Books, New York*
- *Ed Catmull (2014), Creativity, INC: Overcoming the unseen forces that Stand in the way of True Inspiration, Bantam Press*
- *Edward De Bono (2016), Six Thinking Hats (RIE): The multi-million bestselling guide to running better meetings and making faster decisions, Penguin Publishers*

Web Resources

https://www.psychologytoday.com/us/basics/creativity
https://www.sciencedirect.com/journal/journal-of-creativity
https://www.tandfonline.com/journals/hcrj20
https://onlinelibrary.wiley.com/journal/21626057
https://www.adelaide.edu.au/writingcentre/sites/default/files/docs/learningguide-mindmapping.pdf
https://libguides.umn.edu/c.php?g=921727&p=8499064

Course Outcomes		Knowledge Level
CO1	Understand and identify personal creative boundaries.	K2
CO2	Recognize the importance of collective efforts through individual creative contributions.	K2
CO3	Apply ideation techniques to analyse and synthesize information.	K3
CO4	Utilize creative thinking tools in design efforts.	K5
CO5	Evaluate creative skills and tools through project execution.	K5

Mapping Course Outcome VS Programme Outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	1	-	-	-	-	1	2	1	2
CO2	3	2	-	-	-	2	1	3	3	2
CO3	3	3	1	-	-	1	1	1	1	2
CO4	3	1	-	2	1	1	1	1	2	2
CO5	3	1	-	2	1	1	2	2	3	3
W. AV	**3**	**1.6**	**0.2**	**0.8**	**0.4**	**1**	**1.2**	**1.8**	**2**	**2.2**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	1	1
CO2	2	3	3	3	1
CO3	2	2	3	3	3
CO4	2	2	3	3	2
CO5	2	2	3	3	2
W. AV	**2.2**	**2.4**	**2.8**	**2.6**	**1.8**

Course Designed By	BOS Date	Approved By
Dr Aravind.S Mr.Ariharasunthan. R	07.08.2023	BOS

CC:81214		Foundation Drawing	P	Credits - 4	Hours -5
Objectives	1. To understand and appreciate drawing as a medium of communication. 2. To gain insights into personal drawing capabilities through basic exercises. 3. To understand the various perspectives in drawing. 4. To familiarize with the techniques to create authentic drawings of objects in natural settings. 5. To gain a critical appreciation for the expressive power of drawing to communicate significant content and form.				
Unit I	Elements of Art – Line. Exercise with different types of lines, i.e., Horizontal lines, Vertical Lines, Diagonal lines, understanding its applications and design orientations. Realization of personal style.				
Unit II	Perspective drawing study - 1 point, 2 points, and 3 points perspectives, (Arial View- Bird Eye View, Worm Eye View, Foreshortening). Understanding the design drawing with perspective applications.				
Unit III	Understanding Light and Shadow, Gray Scale - basic geometrical forms- Cuboid, Cone, Sphere, and others. Rendering natural and man-made objects using traditional and novel mediums.				
Unit IV	**Nature drawing study - Drawing organic forms from life and/or images. Understanding the light and shadow, textures, materials, rendering styles and techniques. Indoor / Outdoor Study.**				
Unit V	Study of human body, develop a Male and female proportion understanding, study the basic anatomy, understand the humans in motions and poses Sketching.				

Reference and Text books

- *Scott Robertson & Thomas Bertlin (2013), How to Draw: Drawing And Sketching Objects and Environments From Your Imagination, Design Studio Press*
- *Koos Eissen & Rosilin Steur (2009), Sketching: Drawing Techniques for Product Designers, BIS Publishers*
- *Steven B. Reddy (2018), Everyday Sketching and Drawing: Five Steps to a Unique and Personal Sketchbook Habit, Monacelli Press*
- *Andrew Loomis (2011), "Drawing the Head and Hands", Titan Publisher*
- *Alan Pipes (1990), Drawing for 3-dimensional design: Concepts, Illustration, Presentation, Thames & Hudson Publication.*

Web Resources

https://artmuseum.princeton.edu/learn/art-making/online-drawing-classes

Course Outcomes		Knowledge Level
CO1	Understand and realize personal drawings styles and skills.	K2
CO2	Create authentic perspective drawings of objects.	K6
CO3	Create drawing compositions with vivid emphasis on the basic visual constituents of an object.	K6
CO4	Demonstrate skills to draw in natural settings.	K2
CO5	Show skills in drawing human figures.	K2

Mapping Course Outcome VS Programme Outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	-	-	-	2	1	2	2	2
CO2	3	3	-	-	-	2	1	2	2	2
CO3	3	3	1	-	-	2	1	2	2	2
CO4	3	3	1	-	2	1	1	2	2	2
CO5	3	2	-	3	1	1	1	1	2	2
W. AV	**3**	**2.8**	**0.4**	**0.6**	**0.6**	**1.6**	**1**	**1.8**	**2**	**2**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	1	3	3
CO2	3	3	1	1	2
CO3	3	3	3	1	2
CO4	3	3	1	1	2
CO5	1	2	3	2	1
W. AV	**2.4**	**2.8**	**1.8**	**1.6**	**2**

Course Designed By	BOS Date	Approved By
Dr Aravind.S Mr.Ariharasunthan. R	07.08.2023	BOS

CC:81215		Elements of Design – I	P	Credits - 4	Hours -5
Objectives	1. To educate about the elements of Design. 2. To educate about the Principles of Design. 3. To emphasize on the cognitive theories governing design. 4. To develop a practical understanding of order and space in design. 5. To learn the foundations of aesthetics in design.				
Unit I	Elements of design: Point – Lines – Straight, curvy, bold and expressive lines; Shapes – Geometric, Organic and Abstract shapes; Form – Contours; Space – Negative-Positive space; Value – high value, low value; Colors – hue and shades; and Texture - patterns.				
Unit II	Principles of design: Emphasis - Balance and Alignment - Repetition – Unity - Proportion- Movement - White Space. Figure-Ground Relationship- 2D monochrome/colour model creations to understand space.				
Unit III	Gestalt theory; Principles- Applications of principles in design; Law of closure, Law of common region, Figure-Ground, Law of proximity, Symmetry, and order. Basic introduction to the human senses – visual, aural, and haptic- physiology				
Unit IV	Order and Space: Fibonacci curve - Platonic solids - Archimedean solids – Polyhedral Fractals – Constructing solids with paper - Wire. Fusion of symmetric and asymmetric objects.				
Unit V	Aesthetics: Hierarchy, Balance, Scale, Repetition, Contrast, Proximity, Pattern. Golden Ratio, Von Restorff Effect – Cognitive understanding. Aesthetics and Usability.				

Reference and Textbooks

- *William Lidwell, Kritina Holden & Jill Butler (2010), Universal Principles of Design, 2nd Edition, Rockport Publishers*
- *Agoston (1987), G. A., Color Theory and Its Application in Art and Design, Springer, Berlin, Heidelberg*
- *Hisako Ichiki & Takao Umehara (2005), Extra Ordinary: An amusing way for unleashing your creativity, Rockport Publishers*
- *Joyce Wycoff (1991), Mind Mapping: your Personal guide to Exploring Creativity and Problem-Solving, Berkley Books, New York*
- *Ed Catmull (2014), Creativity, INC: Overcoming the unseen forces that Stand in the way of True Inspiration, Bantam Press*

Web Resources

https://www.extension.iastate.edu/4hfiles/statefair/eehandbook/eehjpdesign4h634.pdf
https://guides.lib.berkeley.edu/c.php?g=920740&p=6634741
https://www.wichita.edu/services/mrc/OIR/Creative/1Design/design-elements.php

Course Outcomes		Knowledge Level
CO1	Demonstrate thorough knowledge in elements of design.	K3
CO2	Demonstrate thorough knowledge in principles of design	K3
CO3	Adept in utilizing Gestalt theory for design applications.	K3
CO4	Create designs using order and space effectively.	K6
CO5	Analyze designs for their aesthetic content.	K4

Mapping Course Outcome VS Programme Outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	2	2	1	1	2	1	3	3
CO2	3	2	2	2	1	1	2	1	3	3
CO3	3	2	2	2	1	1	2	1	3	3
CO4	3	2	2	2	1	1	2	1	3	3
CO5	3	2	2	2	1	1	2	1	3	3
W. AV	**3**	**2**	**2**	**2**	**1**	**1**	**2**	**1**	**3**	**3**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	1	2	1	2
CO2	3	1	2	1	2
CO3	3	1	2	1	2
CO4	3	1	2	1	2
CO5	3	1	2	1	2
W. AV	**3**	**1**	**2**	**1**	**2**

Course Designed By	BOS Date	Approved By
Dr Aravind.S Mr.Ariharasunthan. R	07.08.2023	BOS

CC:81216		Colour Theory	P	Credits -2	Hours -4
Objectives	1. To educate on the basics of colour theory. 2. To familiarize on the basics of values of colour. 3. To understand the emotional aspects of colour. 4. To recognize the sensitivity to the importance of colour in daily life. 5. To develop designs by employing colour theories.				
Unit I	Introduction to Colour and its Uses - Primary & Secondary Colours - Understanding Hue, Value, Tint, and shade - Meaning and understanding of colour intensity by making a chart.				
Unit II	Greyscale, Tonal values - 2D Achromatic Composition- High, Middle, and Low contrast - Space Division, Emphasis, Balance. Colour schemes - Analogous, Complimentary, Monochrome, Achromatic, Adjacent, Warm and Cool Colours.				
Unit III	Physical and emotional reaction of colours. - Colour Balance - Colour Interpretation– Expression, Mood, Seasons. Introduction to Josef Alber's Interaction of Colour. Introduction to the Bezold Effect.				
Unit IV	Visual compositions derived from themes -Colour harmony - Colour symbolism in various cultures and ethnicities with marked differences. Colour as signifiers in multiple contexts: Colour and emotions, Colours and seasons, Colour and Food, Colour and Spaces.				
Unit V	Colour in popular media and films - Colours and genres – Colour in publication design – Colour coding in signage and wayfinding, colour in web/app designing for digital media. Colour as a dominant aspect of fashion. - Gender classification of colour. – Colour sophistication and colour trends in fashion. Colour signifiers in products and and their psychological influences, colour coding in industrial processes. (factory/workplace, machine, equipment, uniforms, tools etc.)				

Reference and Textbooks

- *Patti Mollica (2013), Colour Theory, Walter Foster Publishing*
- *Jose Maria Parramon (1993), The Book of Color: The History of Color, Color Theory, and Contrast; The Color of Forms and Shadows; Color Ranges and Mixes; And the Practice of Pai, Watson-Guptill Publications*
- *Faber Birren (2013),Colour Psychology and Colour Therapy: Faber Birren, Lushena Books*
- *John Gage (1995),Colour and Culture, Thames & Hudson*
- *Kassia St Clair (2017),The Secret Lives of Colour, Penguin Books*

Web Resources

https://web.mit.edu/22.51/www/Extras/color_theory/color.html
https://online.maryville.edu/liberal-arts-degrees/the-art-of-color/

Course Outcomes		Knowledge Level
CO1	Utilize the basics of colour theory in design creations	K3
CO2	Employ/evaluate values of colour in designs	K3
CO3	Apply/ Assess emotional aspects of colour in designs	K3
CO4	Identify the effects of colour in daily life.	K1
CO5	Create designs with colour as an important factor of consideration.	K6

Mapping Course Outcome VS Programme Outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	1	1	1	1	2	3	3
CO2	3	3	2	1	1	1	1	2	3	3
CO3	3	3	2	1	1	1	1	2	3	3
CO4	3	3	2	1	1	1	1	2	3	3
CO5	3	3	2	1	1	1	1	2	3	3
W. AV	**3**	**3**	**2**	**1**	**1**	**1**	**1**	**2**	**3**	**3**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	2	2
CO2	3	3	2	2	2
CO3	3	3	2	2	2
CO4	3	3	2	2	2
CO5	3	3	2	2	2
W. AV	**3**	**3**	**2**	**2**	**2**

Course Designed By	BOS Date	Approved By
Dr Aravind.S Mr.Ariharasunthan. R	07.08.2023	BOS

Allied	CC:81217	Introduction to Materials	P	Credits -4	Hours -5
Objectives	1. To educate the characteristics of materials such as clay, plaster of paris, wood and metal. 2. To understand the methods of preparations and relevant tools of operation based on the material. 3. To develop basic forms/structures out of various materials using appropriate tools and machines. 4. To recognize the right choice of material based on the job. 5. To apply material know-how to develop a basic form.				
Unit I	Introduction to materials – Materials suitable for prototyping – Material study based on products and industry- Traditional materials – hybrid materials – composites – applications. Methods of handling each material. Material Operations				
Unit II	Workshop Practices – Safety Equipments - tool handling – Machine handling- Measuring Instruments – Sketches and Documentation – Workshop Etiquettes – Workspace Management				
Unit III	Metal– working with Aluminium, Steel – Sheet Metal – Wire- Welding – Bending Operations - Creating a simple form – Surface Treatments in Metal - Buffing Painting - Polishing				
Unit IV	Wood: - types of wood – Hard, Soft, Man-made wood – Grains, Tone, Density – Joints – Types of joints – Wooden block, cutting in various angles, interlocking method – Surface Treatment in wood – Polishing and Painting.				
Unit V	Traditional/Common Plastic Materials - Plaster of Paris - carving, making basic forms. Clay- Types of Clay - Kneading – Curing – Natural Composites - Pottery – carving – toys and sculptures- Display.				

Reference and Textbooks

- *Chris Lefteri (2005), Wood: Materials for Inspirational Design, Rotovision Publication*
- *Mike Ashby & Kara Johnson (2014), Materials and Design: Art and science of material selection in product design, 3rd Edition, Butterworth – Heinemann*
- *Inna Alesina and Ellen Lupton (2010), Exploring Materials: Creative Design for Everyday Objects, Princeton Architectural Press*
- *Chris Lefteri, Metals (2004): Material for Inspirational Design, Rotovision Publication*

Web Resources

http://www.ijdesign.org/index.php/IJDesign/article/view/129/78
https://www.sciencedirect.com/journal/materials-and-design

Course Outcomes		Knowledge Level
CO1	Understand the various types of material based on its characteristics and applications.	K2
CO2	Demonstrate good workshop and material handling practices	K2
CO3	Demonstrate material specific processes in prototype making.	K2
CO4	Create basic models using various types of materials like clay, metal and wood.	K6
CO5	Demonstrate product finishing skills appropriate to the material used.	K2

Mapping Course Outcome VS Programme Outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	1	2	2	2	1	2	3
CO2	3	3	3	1	2	1	1	-	2	3
CO3	3	3	3	1	2	1	1	-	2	3
CO4	3	3	3	1	2	1	1	-	2	3
CO5	3	3	3	1	2	1	1	-	2	3
W. AV	**3**	**3**	**3**	**1**	**2**	**1.2**	**1.2**	**0.2**	**2**	**3**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	3	2
CO2	3	3	1	3	2
CO3	3	3	1	1	2
CO4	3	3	1	1	2
CO5	3	3	1	1	2
W. AV	**3**	**3**	**1.2**	**1.8**	**2**

Course Designed By	BOS Date	Approved By
Dr Aravind.S Mr.Ariharasunthan. R	07.08.2023	BOS

I-Semester					
SECI	**Course code:81218**	**VALUE EDUCATION**	**T**	**Credits:2**	**Hours:2**
Course Objectives	1. To impart humanism values among the student under various religious thoughts 2. To make them awareness of ethics and civil rights 3. To familiarities the students with basic features of extra curricular activities such NSS and NCC and relevance of Abdul Kalam and Mother Teresa efforts to teach values 4. To impart skills by preparing project works such as writing poems and stories				
Unit I	Definition – Need for value Education – How important human values are – humanism and humanistic movement in the world and in India – Literature on the teaching of values under various religions like Hinduism, Buddhism, Christianity, Jainism, Islam, etc. Agencies for teaching value education in India – National Resource Centre for Value Education – NCERT–IIT sand IGNOU.				
Unit II	Influence of Buddhism and Jainism – Hindu Dynasties – Islam Invasion – Moghulinvasion – British Rule – culture clash – Bhakti cult – social Reformers – Gandhi –Swami Vivekananda–Tagore–theirroleinvalueeducation.				
Unit III	**ValueCrisis** Independence-After Independence – democracy – Equality – fundamental duties – Fall of standards in all fields –Social,Economic,Political,ReligiousandEnvironmental–corruptioninsociety.Politics without principle – Commerce without ethics – Education without Character – Science without humanism –Wealthwithoutwork–Pleasurewithoutconscience–Prayerwithoutsacrifice–steps taken by the Governments – Central and State – to remove disparities on the basiso fclass, creed, gender.				
Unit IV	Transition from school to college – problems – Control – free atmosphere – freedom mistaken for license – need for value education – ways of inculcating it – Teaching of etiquettes – Extra-Curricular activities –N.S.S., N.C.C., Club activities – Relevance of Dr.A.P.J. Abdual Kalam's efforts to teach values–Mother Teresa.				
Unit V	PROJECT WORK 1. Collecting details about value education from news papers, journals and magazines. 2. Writing poems, skits, stories centering around value-erosion in society. 3. Presenting personal experience in teaching values. 4. Suggesting solutions to value– based problems on the campus.				

Text book

1. Radhakrishnan,S."Religionandculture"(1968),OrientPaperbacks,NewDelhi.

References

1. Satchidananda.M.K.(1991),"Ethics,Education,Indianunityandculture"–Delhi,Ajantha publications.
2. Saraswathi.T.S.(ed)1999.Culture",SocialisationandHumanDevelopment:Theory,ResearchandApplicationinIndia"–NewDelhiSagepublications.
3. Venkataiah.N(ed)1998,"ValueEducation"NewDelhiPh.PublishingCorporation.
4. Chakraborti,Mohit(1997)"ValueEducation:ChangingPerspectives"NewDelhi:KanishkaPublications.
5. "ValueEducation–Needofthehour"TalkdeliveredintheHTEDSeminar–Govt.ofMaharashtra,Mumbaion1-11-2001byN.Vittal,CentralVigilance Commissioner.
6. "Swami Vivekananda's Rousing call to Hindu Nation":EKnathRanade (1991)Centenary Publication

Course Outcomes		Knowledge level
CO-1	Knowledge about Humanism and Humanistic Movements in the World and in India	K2
CO-2	Understand the Social Reformers and Their Role in Value Education	K2
CO-3	Explore the theories of Fundamental Duties, Ethics, Extra-Curricular Activities –N.S.S.,N.C.C	K3
CO-4	Know the concept of Value Education on College Campus	K5
CO-5	To Develop the Project Work regarding Writing Poems, Skits, Stories	K2

Mapping Course Outcome VS Programme Outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	P11	P12
CO 1	3	2	2	2	1	3	2	2	2	2	1	2
CO 2	2	2	1	1	1	2	1	1	2	1	2	2
CO 3	2	3	2	2	2	2	2	2	1	1	2	2
CO 4	2	2	1	1	2	2	2	2	2	2	2	1
CO 5	2	2	3	2	2	2	1	2	1	1	3	2
W.AV	**2.2**	**2.2**	**1.8**	**1.6**	**1.6**	**2.2**	**1.6**	**1.8**	**1.6**	**1.4**	**2**	**1.8**

S–Strong(3),M-Medium 2,L-Low(1)

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	2	2	2
CO2	2	1	1	2	2
CO3	2	1	2	3	2
CO4	1	2	1	2	1
CO5	2	2	2	3	2
W.AV	**1.8**	**1.6**	**1.6**	**2.4**	**1.8**

S–Strong(3),M-Medium 2,L-Low(1)

SEMESTER II

CC	81223	Introduction to Photography	P	Credits- 2	Hours -4
Objectives	1. To introduce the history and fundamentals of photography 2. To introduce the functions of camera and its handling. 3. To educate the elements and principles of photography 4. To familiarize with various types of photography 5. To explore the photography through a project.				
Unit I	Introduction to Photography: Definition - History of photography, Black and White Photography, Colour Photography, Different genres of photography digital cameras – Types – Image editors – File formats.				
Unit II	Types of cameras - Usage of lens, lights, filters, flash, and other useful accessories - Camera handling - usage of aperture, Shutter speed, ISO standards, Equipment maintenance				
Unit III	Composition – frame, shot, angle, rule of third, light and shadow observations- lighting – nature light – studio light usages - exposures- depth of field and focusing.				
Unit IV	Types of Photography – Project Documentation - Introduction to portrait - Landscapes – Street photography – Product photography – concept photography.				
Unit V	Explore a selected genre through project - photo graphcuration and presentation. Photo exhibition of the course outcomes.				
Reference and Text books ● David Prakel, (2010), Fundamentals of Creative Photography, AVA Publishing ● Michael Freeman, (2005), Digital photography Expert Colour, Ilex Press Ltd ● Michael Freeman, (2006), The complete guide to Light and Lighting in Digital Photography, Ilex Press Ltd.					
Web Resources http://edit.educ.ttu.edu/site/jcheon/manual/digital_photography.pdf https://www.cs.cmu.edu/afs/cs/academic/class/15462-f09/www/lec/lec4.pdf https://www.nfi.edu/when-was-the-camera-invented/					

Course Outcomes		Knowledge Level
CO1	Understand the history and fundamentals of photography	**K2**
CO2	Utilize the learnt functions /handling of camera.	**K3**
CO3	Demonstrate the knowledge of elements and principles of photography	**K3**
CO4	Utilize the knowledge to practice the various genres of photography	**K3**
CO5	Explore a selected genre through a project.	**K6**

Mapping Course Outcome VS Programme Outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	2	2	1	1	1	2	3	3
CO2	3	2	2	2	1	1	1	2	3	3
CO3	3	2	2	2	1	1	1	2	3	3
CO4	3	2	2	2	1	1	1	2	3	3
CO5	3	2	2	2	1	1	1	2	3	3
W. AV	**3**	**2**	**2**	**2**	**1**	**1**	**1**	**2**	**3**	**3**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	2	2
CO2	3	2	2	1	1
CO3	3	3	3	3	2
CO4	3	3	3	3	1
CO5	3	2	2	2	2
W. AV	**3**	**2.6**	**2.4**	**2.2**	**1.6**

CC	81224	Product Sketching and Drawing	P	Credits -4	Hours-6
Objectives	1. Educate about the various types of sketches involved in product development. 2. Learn to express product evolution through sketches. 3. Learn product rendering to authentically express the details of a product. 4. Develop capabilities to present a product through sketches. 5. Demonstrate skills to render an ideated product.				
Unit I	Types of Sketches: Ideation Sketches - Process Sketches - Explanatory Sketches and Persuasive or Presentation Sketches - Scale and proportion – viewing angles.				
Unit II	Retrospective sketching of a product - Process, Ideation and Explanatory Sketches - Analytical object drawing – product user flow sketches – parts to whole sketches – product ecosystem sketches.				
Unit III	Traditional medium rendering techniques: Water colour, poster colour, markers, pen and ink. Digital techniques - Elements of shadow, depth and texture in product rendering.				
Unit IV	Presentation Sketches – Detailed drawing of a product. Rendering using manual and digital methods. Emphasis on choice of visual angle, source of light and product feature to assert, material emphasis through textural rendering.				
Unit V	Final Project – Presentation of detailed sketches and final rendered drawing of an ideated product- Feedback Analysis – Critical Analysis – role of sketches in product planning and prototype improvement.				

Reference and Text books

- James Craig, (1990), Production for the Graphic Designers, Watson-Guptill
- Francis D K Ching with steven P. Juroszek, (2019) Design Drawing, 3rd Edition, John Wiley Publication
- Koos Eissen&RosilinSteur (2009), Sketching: Drawing Techniques for Product Designers, BIS Publishers
- Erik Olofsson & Klara Sjölén, (2005), Design Sketching
- RoselienSteur&KoosEissen, (2011), Sketching: The Basics (2nd printing) [Hardcover], BIS Publishers

Web Resources

http://www.delftdesigndrawing.com/uploads/2/0/4/9/20493508/reader_final5_lqq.pdf

Course Outcomes		KnowledgeLevel
CO1	Demonstrate skills to communicate product evolution through sketches.	K2
CO2	Outline product formulation stages in detail through sketches.	K4
CO3	Explore best fit sketching mediums for the product being developed.	K5
CO4	Develop skills to render and present a product authentically and appropriately.	K3
CO5	Relate the importance of sketches with product planning and prototyping.	K2

Mapping Course Outcome VS Programme Outcomes

CO	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	1	1	2	2	3	3	3
CO2	3	3	3	1	1	2	2	3	3	3
CO3	3	3	3	-	1	1	1	2	3	3
CO4	3	2	1	1	-	1	2	3	3	3
CO5	3	3	3	2	2	2	2	3	3	3
W. AV	**3**	**2.8**	**2.6**	**1**	**1**	**1.6**	**2.2**	**2.8**	**3**	**3**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	1	2
CO2	3	3	3	1	2
CO3	3	3	2	1	2
CO4	3	3	2	1	2
CO5	3	3	3	3	3
W. AV	**3**	**3**	**2.6**	**1.4**	**2.2**

CC	81225	Design Process	P	Credits - 4	Hours-6
Objectives	1. Educate on the details of design process 2. Familiarise with various data presentation and abstraction techniques 3. Develop an understanding of various brain storming techniques 4. Familiarize with methods to present a concept. 5. Employ design process techniques to conduct a mini project.				
Unit I	Introduction to design process, design premise, design brief, constraints, and criteria for designing. User Studies- Maps – ecosystem map- affinity map- empathy map. Design space, solution space, prototyping, iterative design, divergence and convergence in design process. User in design.				
Unit II	Working board: Preliminary concepts using storyboard, material board, form board, Mood boards. User flow, Context mapping, Primary research, Secondary research data, Data analysis and synthesis, basic statistics, sample space.				
Unit III	Brain storming, mind mapping, research, market study, forecast, inspiration and doodling – field visit and case study, prototypes – rough- medium- high fidelity prototypes. User testing – KPI. Sustainability.				
Unit IV	Concept of presentation, surface development, exploratory drawings, illustration, specification sheet, cost sheet and technical packages. Product rendering.				
Unit V	Development of a product through detailed practice of design, creating mock-up, Design drawing, Presentation, Transition from brief to detailed design brief				
Reference and Text books ● Bryan Lawson, (2005), How Designers Think: The Design Process Demystified, Om Books ● Richard Morris, (2009), Fundamentals of Product Design, Academic Press ● Tim Parsons, (2009), Thinking: Objects Contemporary Approaches to Product Design, Academic Press.					
Web Resources https://arl.human.cornell.edu/PAGES_Delft/Delft_Design_Guide.pdf https://web.stanford.edu/~mshanks/MichaelShanks/files/509554.pdf					

	Course Outcomes	KnowledgeLevel
CO1	Demonstrate knowledge of design process	**K2**
CO2	Effectively collect, group, analyse data and synthesize information	**K3**
CO3	Concretization of information as prototypes	**K4**
CO4	Development and presentation of the final concept	**K6**
CO5	Effectively employ design process to execute a project.	**K6**

Mapping Course Outcome VS Programme Outcomes

CO	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	-	-	2	1	1	2	3	3
CO2	3	3	-	-	1	-	1	2	3	3
CO3	3	3	-	-	-	1	1	2	3	3
CO4	3	3	-	-	-	-	-	3	3	3
CO5	3	3	-	-	1	1	2	2	3	3
W. AV	**3**	**3**	**-**	**-**	**0.8**	**0.6**	**1**	**2.2**	**3**	**3**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	**3**	**2**	**2**	**3**	**2**
CO2	**3**	**2**	**2**	**3**	**2**
CO3	**3**	**2**	**2**	**3**	**2**
CO4	**3**	**2**	**2**	**3**	**2**
CO5	**3**	**2**	**2**	**3**	**2**
W. AV	**3**	**2**	**2**	**3**	**2**

Allied	81226	Elements of Design II	P	Credits- 4	Hours -6
Objectives	1. Educate the various attributes of colour. 2. Educate space and form through 3D compositions. 3. Understand the importance of forms in nature and their relevance to design. 4. Understanding of minimalism and aesthetics in design. 5. Explore form synthesis.				
Unit I	Attributes of Colours; 2D Achromatic and Chromatic Schemes; Compositions, Values, Colour Saturation, Colour temperature, Gray Scale. Colour on various surfaces, Effects on Textures. Effects of colours on Forms. Creating a colour palate for a 3D Object.				
Unit II	3D Composition: 3D composition using various materials and forms – Balance – Emphasis - Shape language – Form language – Space understanding. Study of organic and geometric forms. Hybrid forms. Tessellation: Techniques and application – Tiling – Symmetry- Translation, Reflection, Rotation, Glide reflection. Rectangle, triangle, and other shapes. Metamorphosis and form Transformation. Fractals				
Unit III	Effect of form in human behaviour. Visual and Physical affordance. Form and emotion. Form and Space, Emphasis and Movement. Rhythm. Symmetry-Form and Time Forms in nature- Bio Mimicry. Nature inspired forms. Form and material relationship.				
Unit IV	Minimalism, Fluency and Aesthetics. Form identity and communication. Brand Identity- Minimalism-Maximum Utility. Noise Limitation. Product form manipulation and translation. Context based form synthesis and design.				
Unit V	Execute the synthesis of a Form and present it by charting its each evolutionary stage. Development of form based on a theme.				
Reference and Text books ● Wucius Wong, (1993), Principles of form and design,John Wiley & Sons, Inc. ● Wucius Wong, (1972), Principles of Two-Dimensional Design, John Wiley & Sons, Inc. ● Pipes & Alan, (1990), Drawing for 3-dimensional design: Concepts, Illustration, Presentation, Thames & Hudson, New York, NY, U.S.A. ● Weinschenk Susan, (2011), 100 Things Every Designer Need to Know about People, 1st edition, New Riders					
Web Resources https://guides.lib.berkeley.edu/design https://www.wichita.edu/services/mrc/OIR/Creative/1Design/design-elements.php					

Course Outcomes		KnowledgeLevel
CO1	Demonstrate capabilities to employ appropriate color schemes in product creation.	**K2**
CO2	Demonstrate capabilities to synthesize 3D forms	**K2**
CO3	Interpret the essence of natural forms through 3D form synthesis	**K4**
CO4	Design products that are aesthetically pleasing.	**K6**
CO5	Design a form based on a theme	**K6**

Mapping Course Outcome VS Programme Outcomes

CO	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	1	2	-	1	2	2	3	3
CO2	3	3	1	2	-	1	2	2	3	3
CO3	3	3	1	2	3	1	2	2	3	3
CO4	3	3	1	2	3	1	2	2	3	3
CO5	3	3	2	2	1	2	2	2	3	3
W. AV	**3**	**3**	**1.2**	**2**	**1.4**	**1.2**	**2**	**2**	**3**	**3**

Mapping Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	1	1	2
CO2	3	3	1	1	2
CO3	3	3	2	3	3
CO4	3	2	3	2	3
CO5	3	3	2	2	3
W. AV	**3**	**2.8**	**1.8**	**1.8**	**2.6**

SEMESTER III

CC	81233	Elements of Interior Design	P	Credits -3	Hours - 3
Objectives	Objective: ● To develop an understanding of how wall planes define an enclosure ● Understanding of the various effects that could be created by manipulating the enclosing elements such as roof planes ● Understanding of the various effects that could be created by manipulating the enclosing elements such as floor planes ● To develop an understanding of openings in an enclosure ● To learn and observe the various elements of interior design in an enclosure				
Unit I	WALL PLANES Use of wall planes to create architectural effects - Natural patterns and textures obtained in masonry walls – articulation of openings in wall planes – effect of tilting the vertical axis of wall planes - niches and alcoves - cornices and moldings.				
Unit II	ROOF PLANES Different types and their visual impact – articulation of skylights and roof apertures – false ceiling – materials, finishes & patterns - types of false ceiling – various types of lighting.				
Unit III	FLOOR PLANES Various types of flooring – mosaic, tile, stone etc. – aesthetic effects created by flooring material and pattern - graphic patterns and their visual effects – construction details – skirting, molding, embossing etc. Floor finishes and floor Coverings.				
Unit IV	DOORS, WINDOWS AND VENTILATORS, ETC. Doors – types – flush doors, paneled doors, braced doors, carved wooden doors, metal embossed doors, glazed doors and their relevance – various materials and articulation. Windows – various types (casement, horizontal sliding, vertical sliding, hopper, pivoted) – various shapes (arched, circular, triangular etc) various materials (wood, aluminium, steel, pvc) and their suitability to that space – ventilators – louvered, paneled.				
Unit V	CASE STUDIES Case studies for manipulation of wall, floor and roof planes to create various architectural effects – case studies of various doors, windows and ventilators – case studies of columns, beams etc for interior effects.				
Reference and Text books ● The making of interiors – An introduction- Allen Tate- Harper & Row Publishers, New York, 1987. ● Interior Design & Decoration, Fourth Edition, Sherrill Whiton- Prentice Hall, 1974. ● Interior lighting for Designers, Third edition – Gary Gordon &Jamco L. Nuckolls – John Wiley & Sons, New York, 1995. ● The Encyclopedia of Decorative Styles – William Hardy & Steve Adams – New Burlington books, London, 1988.					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	● To classify wall planes that define an enclosure	**K2**
CO2	● To outline various effects that could be created by manipulating the enclosing elements such as roof planes	**K2**
CO3	● To outline various effects that could be created by manipulating the enclosing elements such as floor planes	**K2**
CO4	● To develop an understanding of openings in an enclosure	**K3**

CO5	● To determine various elements of interior design in an enclosure	**K5**

CC	81234	**Fundamentals of Interior Design**	**P**	**Credits - 3**	**Hours - 3**
Objectives	Objective: ● To Understand the elements and principles of design ● To understand the evolution of history through ages in interior design and its influence in the contemporary context ● To understand the evolution of history through ages in interior design and its influence in the contemporary context ● To understand the spatial qualities and its impact in interior design ● To Remember and define spaces according to human factors.				
Unit I	ELEMENTS & PRINCIPLES OF DESIGN ELEMENTS- Form – point, line, volume, shape, texture & color – in relation to light, pattern etc. and application of the same in designing interiors. PRINCIPLES- Ratio; proportions – golden section; relationships; scale; Balance – symmetrical, radial, occult; harmony; unity; variety; rhythm; emphasis.				
Unit II	HISTORY OF INTERIOR DESIGN - I EARLY CLASSICAL PERIOD Prehistoric Cave paintings – Primitive Designs- Interiors during Egyptian, Greek, Roman, Gothic, Early Christian & Renaissance Periods. MIDDLEAGES - Interiors in Romanesque, Gothic, and renaissance periods				
Unit III	HISTORY OF INTERIOR DESIGN COLONIAL TO POST WAR MODERNISM Colonial, Victorian designs, Arts & Crafts movement, Art Nouveau, Eclecticism, Frank Lloyd Wright. Walter Gropius/ Bauhaus, De Stijl, Mies Van Der Rohe, Le Corbusier, Art Deco, Postwar Modernism. NON - EUROPEAN TRADITIONS - Interiors in China, Japan & the Islamic World – Influences of Pre-Columbian American art & culture, African influences in interiors. Scandinavian traditions, Indian traditional designs				
Unit IV	INTERIOR SPACE Space – definition; Interior space – spatial qualities: form, scale, outlook; Structuring space with interior design elements; spatial form; spatial dimension – square, rectangle, curvilinear spaces; height of space; spatial transitions – openings within wall planes, doorways, windows, stairways.				
Unit V	DESIGN STANDARDS AND CONTROL Definition, theory of standard dimension based on human figures for activities, functions, circulation, furniture design, spatial requirements etc. Design process – Analysis, synthesis, design evaluation; Design criteria – function and purpose, utility and economy, form and style; human factors - human dimensions, distance zones, activity relationships; fitting the space – plan arrangements, function, aesthetics.				

Reference and Text books

- A History of Interior Design -John Pile; Harry .N.Abraham, Inc. Publishers.
- Interior design Illustrated; Francis. D.K.Ching.
- History of Interior Design – 2nd edition – 2005 – John Wiley &Sons. Inc
- Handbook of Human Factors & Ergonomics – Gavriel Salvendy
- Geoffrey Broadbent – Design in Architecture – Architecture & the human sciences – John Wiley &Sons , New York
- Nigel Cross – Developments in Design Methodology, John Wiley & Sons.1984
- Time Saver Standards for Interior Design, Joseph De Chiara, McGraw Hill, New York.
- History of Architecture, Sir Banister Fletcher, CBS Publishers & distributors, New Delhi

Web Resources

Course Outcomes		KnowledgeLevel
CO1	By understanding the elements and principles of design students would be able to create interesting concepts	**K2**
CO2	To understand the evolution of history through ages in interior design and its influence in the contemporary context	**K2**
CO3	To understand the evolution of history through ages in interior design and its influence in the contemporary context	**K2**
CO4	To understand the spatial qualities and its impact in interior design	**K2**
CO5	To Remember and define spaces according to human factors.	**K1**

CC	81235	Components and Systems for Interior Design - I	P	Credits - 4	Hours - 6
Objectives	● Understanding different materials used in the interior ● Understanding the basic components of the buildings envelope for small buildings: Foundations, Walls, Openings, and Roofs. ● Understanding the construction and representation of tiled roof ● Understanding the construction and representation of Load bearing wall, RCC, columns, etc ● Understanding the construction and representation of basic services of toilet and bathroom				
Unit I	INTRODUCTION TO MATERIALS Wood - Soft and hardwood, plywood, laminated wood and particle boards – properties, manufacture & uses. Synthetic Materials – Different types of Glass, their properties, manufacturing processes and uses. Plastics – injection molding & other manufacturing methods. Fabrics – textile, Jute, leather etc. different types and their uses				
Unit II	BUILDING COMPONENTS Drawings of the components of a building indicating Foundation – brick footing, stone footing & rcc column footing, Concrete flooring, plinth beam & floor finish Superstructure- brickwork with sill, lintel, windows & sunshade Flat RCC roof with weathering course, parapet & coping.				
Unit III	TILED ROOFS Drawings indicating various types of sloped & hipped roof Types of sloping roof – lean to & couple roof with Mangalore tiles, country tiles & pan tiles.				
Unit IV	STRUCTURAL SYSTEMS Structures – Components of a load bearing wall & RCC slab roof system – rcc beams, columns and framed structure				
Unit V	BASIC SERVICES Components of a toilet & bathroom – sanitary ware - w.c, wash basin, bidet, bathtub, jacuzzi Sanitary fittings – taps, mixers, shower units				
Reference and Text books					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	● Understanding different materials used in the interior	**K2**
CO2	● Understanding the basic components of the building's envelope for small buildings: Foundations, Walls, Openings, and Roofs.	**K2**
CO3	● Understanding the construction and representation of tiled roof	**K2**
CO4	● Understanding the construction and representation of Load bearing wall, RCC, columns, etc	**K2**
CO5	● Understanding the construction and representation of basic services of toilet and bathroom	**K3**

CC	81236	Interior Design Studio - I	P	Credits -6	Hours -8
Objectives	● To develop an understanding of the scale, function and options existing when designing small-scale spaces in residences such as toilets, kitchens, living, bedrooms etc. ● Development of ideas with regard to false ceiling, wall paneling, flooring, floor coverings, curtains, windows, doors and other elements of residential Interiors.				

Reference and Text books

- Designs for 20th century Interiors – Fiona Leolie, VH Publications, London, 2000.
- Interior Design; The New Freedom, BarbaralecDiamonstein, Rizzoli International Publications, New York, 1982.
- Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.
- Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.

Web Resources

Course Outcomes		KnowledgeLevel
CO1	Create accurate floor plans and sectional elevations for small-scale residential spaces.	**K6**
CO2	Detail furniture layouts optimizing space and addressing functional needs.	**K3**
CO3	Identify and select appropriate materials for ceilings, walls, and floors.	**K3**
CO4	Design efficient services layouts, incorporating technology and smart home solutions.	**K6**
CO5	Develop effective communication skills to interpret and incorporate client preferences.	**K3**

SEMESTER – IV

CC	81243	Interior Landscape Design	P	Credits -3	Hours -3
Objectives	● To develop an understanding about the design of interior landscape with special emphasis on the choice and care of plant materials used in the interior spaces ● To understand the significance of flower arrangement and visual perception ● To learn different types of irrigation system ● To study about the various landscaping elements and their application in interior spaces ● Assignment to learn and apply landscape design in a space				
Unit I	LANDSCAPE AND BUILT ENVIRONMENT Introduction and role of landscape design in the built environment. Types of natural elements – stones, rocks, pebbles, water forms, plants and vegetation. Introduction to the study of plants in relation to landscape design and interiors.				
Unit II	KNOWING YOUR PLANT Plant biology, soil, moisture, light nutrient, atmospheric conditions, growing medium, pests & diseases. Botanical nomenclature, anatomy and physiology of plant growth. Physical requirements of plants – light, temperature, water, planting medium, soil & maintenance. Techniques to meet physical requirements.				
Unit III	DESIGN WITH PLANTS Design with plants – Basic principles of designs. The physical attribute of plants and relation to design. Appearance, functional and visual effects of plants in landscape design and built environment. Design guidelines- plant texture &colour, plant height, plant spacing.				
Unit IV	HARDSCAPE Design concepts related to use of sculpture, lightings, garden furniture, architectural feature and grouping them into meaningful composition s for visual and functional effects.				
Unit V	ROOF AND DECK LANDSCAPE Protection of the integrity of the roof and structure, provisions for drainage, light weight planting medium, irrigation, selection of materials, water proofing, provision for utilities and maintenance.				

Reference and Text books

- Joseph DeChiara, Julius Panero, and Martin Zelnik Time-Saver Standards for Interior Design and Space Planning, 2nd edition, Mc-Graw Hill Professional,2001.
- Andreas Uebele, Signage Systems and Information Graphics , Thames and Hudson, 2007
- Craig Berger, Wayfinding: Designing and Implementing Graphic Navigational Systems, Rotovision, 2009. Chris Calori, Signage and Wayfinding Design: A Complete Guide to Creating Environmental Graphic Design Systems, Wiley and sons, 2007.
- David Gibson, The Wayfinding Handbook: Information Design for Public Places, Princeton Architectural Press; 1st edition, 2009.
- Rayan Abdullah and Roger Hubner, Pictograms, Icons and Signs, Thames and Hudson, illustrated edition, 2006

Web Resources

Course Outcomes		KnowledgeLevel
CO1	To develop an understanding about the design of interior landscape with special emphasis on the choice and care of plant materials used in the interior spaces	**K2**
CO2	To understand the significance of flower arrangement and visual perception	**K1**
CO3	To learn and remember different types of irrigation system	**K1**
CO4	To study about the various landscaping elements and their application in interior spaces	**K3**
CO5	Assignment to learn and create landscape design in a space	**K6**

CC	81244	Interior Services - I	P	Credits -3	Hours -3
Objectives	● To remember and summarize of water supply system in buildings ● Remember and summarize Plumbing systems in buildings ● To enable students in understanding the concept of Sanitation systems in buildings ● To enable students to gain knowledge in solid waste disposal ● To create a detailed and functional plumbing layout.				
Unit I	WATER SUPPLY 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.				
Unit II	PLUMBING Common hand tools used for plumbing and their description and uses, Joints for various types of pipes, Sanitary fitting standards for public conveniences Different types of pipes and accessories for water supply, controlling fixtures like valves, taps, etc. Fittings and Choice of materials for piping: cast iron, steel, wrought iron, galvanized lead, copper, cement concrete and asbestos pipes, PVC pipes Sizes of pipes and taps for house drainage, Testing drainage pipes for leakage - smoke test, water test etc, CI pipes for soil disposal and rain water drainage, Wrought iron, steel and brass pipes. Rain water disposal drainage pipes spouts, sizes of rainwater pipes				
Unit III	SANITATION 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 pro				
Unit IV	SOLID WASTE DISPOSAL Solid wastes collection and removal from buildings. On-site processing and disposal methods. Aerobic and Anaerobic decomposition				
Unit V	SERVICES STUDIO Preparation of plumbing layout of a single storeybuilding of various fittings and fixtures of water supply and sanitary installations.				

Reference and Text books

TEXTBOOK

- S.C. Rangwala, Water supply and sanitary engineering, Charotar publishing House

References:

- Charangith shah, Water supply and sanitary engineering ,Galgotia Publishers
- A Kamala & DL Kanth Rao, Environmental Engineering, Tata McGraw – Hill publishing Company Limited
- Technical teachers Training Institute (Madras), Environmental Engineering, Tata McGraw – Hill Publishing Company Limited
- Marrimuthu, Murugesan, Padmini, Balasubramanian, Environmental Engineering, Pratheeba publishers

Web Resources

Course Outcomes		KnowledgeLevel
CO1	To understand the concept of water supply systems	**K2**
CO2	Remember the information regarding the plumbing systems in buildings	**K1**
CO3	To understand the concept of Sanitation	**K2**
CO4	To remember the different solid waste disposal systems	**K1**
CO5	To understand and create a functional services layout with detailing	**K6**

CC	81245	Components and Systems for Interior Design - II	P	Credits -4	Hours -6
Objectives	● To enable students to understand different types of masonry ● To remember different types of flooring and its finishes ● To enable students to understand different techniques of false ceiling ● To remember different types of materials used in wall panelling ● To understand different types of surface finishes				
Unit I	WALLS - TYPES OF MASONRY Different types - Stone walls – random rubble, coursed rubble, square rubble, polygonal rubble & Ashlar. Brick masonry -Types of bonds - single & double Flemish bond, header bond, stretcher bond, rat trap bond, ornamental bonding.				
Unit II	FLOORS Floor coverings- - softwood, hardwood- resilient flooring - linoleum, asphalt tile, vinyl, rubber, cork tiles - terrazzo , marble & granite – properties, uses & laying. Floor tiles- ceramic glazed, mosaic and cement tiles- properties, uses and laying, details for physically handicapped.				
Unit III	FALSE CEILING Construction of various kinds of false ceiling such as thermacol, plaster of paris, gyp-board, metal sheets, glass and wood Construction of domes, vaults, & other special ceilings				
Unit IV	WALL PANELING Panelling – Using wooden planks, laminated plywood, cork sheets, fibre glass wool & fabric for sound insulation and wall paneling for thermal insulation.				
Unit V	FINISHES Paints- enamels, distempers, plastic emulsions, cement based paints- properties, uses and applications- painting on different surfaces – defects in painting , clear coatings & strains- varnishes, lacquer, shellac, wax polish & strains- properties, uses and applications. Special purpose paints- bituminous, luminous, fire retardant and resisting paints- properties, uses and applications				
Reference and Text books **TEXTBOOKS** ● S.C Rangwala – engineering materials – Charotar publishing, Anand 1982 ● W.B Mckay, building construction, VOL 1-4 , Longmans, u.k 1981, Laxmi publications Pvt. Ltd., New Delhi, 1993. **References:** ● Dr. B.C Punmia , building construction , Laxmi publications Pvt. Ltd., New Delhi, 1993. ● M.S Shetty , concrete technology , S. Chand & co . Ltd ., New Delhi , 1986 .					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	● To enable students to understand and apply different types of masonry	**K3**
CO2	● To remember different types of flooring and its finishes	**K1**
CO3	● To enable students to understand different techniques of false ceiling	**K2**
CO4	● To remember and apply different types of materials used in wall panelling	**K3**
CO5	● To understand different types of surface finishes	**K2**

CC	81246	Interior Design Studio - II	P	Credits -6	Hours -10
Objectives	● Concentrates on the planning of small-scale commercial spaces, instilling skills in spatial organization and layout optimization. ● Examine and establish the link between abstract design principles and their practical manifestation in the physical and visual environments, promoting a holistic understanding of design concepts. ● The emphasis lies on anthropometry, design methodology, conceptual exploration, creativity, scale/proportion, space documentation, graphic design, concept sketching, application of design principles, and portfolio development.				

Reference and Text books

- Designs for 20th century Interiors – Fiona Leolie, VH Publications, London, 2000.
- Interior Design; The New Freedom, BarbaralecDiamonstein, Rizzoli International Publications, New York, 1982.
- Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.
- Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.

Web Resources

Course Outcomes		KnowledgeLevel
CO1	Optimize retail floor plans for impactful brand merchandising.	**K6**
CO2	Show expertise in elevations, emphasizing art integration in commercial interiors.	**K3**
CO3	Develop advanced skills in detailing furniture layouts specific to versatile commercial spaces.	**K3**
CO4	Design innovative services layouts for commercial spaces, considering the role of art and display techniques in enhancing the overall customer experience.	**K6**
CO5	Create the design of commercial spaces, including shops, retail interiors, exhibition spaces, institutional spaces, and office spaces, showcasing versatility in conceptualization and layout planning to meet diverse business needs.	**K3**

SEMESTER –V

CC	81251	Furniture Construction and Detailing	P	Credits -3	Hours -3
Objectives	● To enable students to understand different types of solid wood and engineered wood for furniture construction ● To enable students to understand different types of tools used in furniture construction ● To enable students to understand different types of construction techniques using plywood ● To understand the concept of modular kitchens ● To explore and create furniture model				
Unit I	INTRODUCTION TO WOOD Wood as a building material: Identification, selection, application, types of wood, commercial Classification, nomenclature, structure Anatomy and Ultrastructure, Conversion figure and natural defects, availability of wood products, wood based panels such as plywood , MDF, HDF, Particle board , pre laminated boards				
Unit II	THE BASICS OF FURNITURE CONSTRUCTION & TOOLS Measurement and measurement systems, Furniture Construction: Drawers, Cadenza, dining chairs, sofa, settee, cots detail. Preparation for finishing, Furniture Materials Specifying timber, finishes. Detailed construction drawings & explaining construction and material finishes				
Unit III	PLYWOOD CONSTRUCTION TECHNIQUES Plywood as a building material, Layout techniques and machining plans. Fabrication techniques - stapling, gluing. Furniture Joinery - screw joinery, nail joinery, Mortise & tenon joints, Dovetail joints, Dowel joints, Edge joints.				
Unit IV	MODULAR KITCHENS Modular kitchens, components basis of Construction involving, layouts, carcase, hardware selection, fixing details finishes and special types such as tall units, grain trolleys, and carousels fold outs. A detailed project involving the design of a small kitchen using modular components.				
Unit V	FURNITURE MODEL MAKING Preparation of block models of furniture using wood, boards, leather, fabric, thermocol, clay, soap/wax.				
Reference and Text books ● S. C. Rangwala - Engineering materials - Charotar Publishing, Anand ● Francis D. K. Ching - Building Construction Illustrated, VNR, 1975, ● Fevicol Furniture series **References:** ● W.B.Mckay –Building construction Vol1 –Longmans, UK 1981 ● W.B.Mckay –Building construction Vol 3 –Longmans, UK1981					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	To understand different types of solid wood and engineered wood for furniture construction	**K2**
CO2	To understand and distinguish different types of tools used in furniture construction	**K2**
CO3	To understand and evaluate different types of construction techniques using plywood	**K5**
CO4	To apply the concept of modular kitchens	**K3**
CO5	To explore and create furniture model	**K6**

CC	81252	Interior Services - II	P	Credits -3	Hours -3
Objectives	● To develop an understanding of HVAC systems in buildings ● To outline fire protection standards and to understand various fire protection installations ● To outline Acoustics standards and to understand various acoustics and sound insulation installations ● To develop an understanding of building wiring systems ● To understand the importance of automation systems in building design				
Unit I	HVAC Heating Ventilation & Air Conditioning (HVAC) systems: Air conditioning, Mechanical ventilation – mechanical inlet and extraction systems. Functions of air conditioning, Principles of AC, capacity of AC, Types of AC systems – window AC, split, ductable, central AC and their details. Air distribution systems – ducts, air inlets.				
Unit II	FIRE SAFETY Mechanism of fire spread in building and prevention – Fire safety standards – Concepts in fire protection- Firefighting installation and requirements – Heat sensitive detectors – Smoke detectors – Automatic water sprinkler system- Foam Systems.				
Unit III	ACOUSTICS AND SOUND INSULATION Room acoustics- resonance, reverberation, echo, reverberation time, simple exercise using Sabine's formula- Acoustical requirements of different types of building. -Sound absorption, absorption co-efficient and their measurements, Absorbing materials used and their choices, exercises involving reverberation time and absorption co-efficient. Sound insulation materials				
Unit IV	ELECTRICAL SYSTEMS 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 interior using standard electrical symbols.				
Unit V	BUILDING AUTOMATION AND ENERGY MANAGEMENT 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.				
Reference and Text books **References:** ● M.H.Lulla, Air conditioning ● V.K.Jain, Fire Safety in Buildings. ● Peter templeton& Saunders – Detailing for architectural acoustics – Architectural press, 1994 ● R.G.Hopkinson and J.D.Kay, the Lighting of Buildings, Faber and Faber, London					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	● To develop an understanding of HVAC systems in buildings	**K2**
CO2	● To outline fire protection standards and to understand various fire protection installations	**K2**
CO3	● To outline Acoustics standards and to understand various acoustics and sound insulation installations	**K2**
CO4	● To develop an understanding of building wiring systems	**K6**
CO5	● To understand the importance of automation systems in building design	**K1**

CC	81253	Fundamentals of Furniture Design	P	Credits -3	Hours -3
Objectives	● To remember furniture design evolution in the early and Middle Ages ● To remember furniture design evolution in modern age ● To understand the importance of form, material and its influence in furniture design ● To understand and to determine appropriate furniture layout ● To apply the above learnt information in different categories of furniture design				
Unit I	HISTORY OF FURNITURE DESIGN- I Furniture designs during Egyptian, Greek, Roman, Romanesque, Gothic, Renaissance, and Industrial Revolution.				
Unit II	HISTORY OF FURNITURE DESIGN - II Contributions in the beginning of the 20th century by the four pioneer architects in furniture design – Bauhaus, De Stijl & other modern furniture designs.				
Unit III	DESIGN & DETAILINGS Form – Colour - Symbols Materials & finishes – Wood, Glass, Metal, Plastics and Upholstery – include various finishes. Fabrication Techniques involved Multiple Utility Oriented Approaches to Furniture Design.				
Unit IV	ROOM PLANS AND FURNITURE ARRANGEMENT Types of furniture – Built in furniture – Movable furniture – Systems furniture – Specially Designed furniture – Readymade furniture – Modular, Knockdown & Economy Furniture. Traffic pattern and furniture layout for residence, commercial and office areas				
Unit V	PROJECTS Designing & detailing of Residential Furniture – Seating, Sleeping, Storage & Children's furniture, Commercial furniture – Showcases, Counters, Display units, Restaurant furniture, Bar furniture Office furniture – Adjustable desks & storage, Mobile & Resilient chairs, Portable chairs, Movable Tables, Lounge seating.				
Reference and Text books ● Interior Design, John F. Pile, Harry N.Abrams Inc Publishers, New York ● Interior Design Course, Mary Gilliat Coyran, Octopus Ltd., London ● The Encyclopaedia of Funriture, Joseph Aronson, Crwon Publishers, New York ● Interior Design & Decoration, Sherril Whiton, Prentice Hall ● Interior Design, Francis D.K. Ching, John Wiley & Sons, New York ● Office Furniture, Susan S.Szenasy, Facts on file Inc, New York ● Time Saver Standards for Interior Design, Joseph De Chiara, McGraw Hill, New York.					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	● To recall furniture design evolution in the early and middle ages	**K1**
CO2	● To outline furniture design evolution in modern age	**K2**
CO3	● To classify the importance of form, material and its influence in furniture design	**K4**
CO4	● To understand and to determine appropriate furniture layout	**K2**
CO5	● To apply the above learnt information in different categories of furniture design	**K3**

CC	81254	Lighting and Color in Interiors	P	Credits -3	Hours -3
Objectives	● To understand the need of day lighting in interiors ● To understand the need of artificial lighting in interiors ● To understand the psychological effects of color and lighting in interior ● To understand technological advancements in building automation for energy efficient design ● To do a case study to analyze and distinguish effects of lighting in interior design.				
Unit I	INTRODUCTION TO DAY LIGHTING Nature of light – Wavelength, Photometric quantities – intensity, Flux, illumination and luminance, visual efficiency, sources of light, day light factor concept, design sky concept, day lighting requirements.				
Unit II	ARTIFICIAL LIGHTING Electric lamps – incandescent, fluorescent, sodium vapor, mercury, halogen and neon. Different types of lights in interior and exterior - task lighting, special purpose lighting. Calculation of artificial lighting, guidelines for lighting design, Glare in artificial lighting.				
Unit III	EFFECT OF COLOR IN LIGHTING Colors, color schemes - Monochromatic, analogous, complementary colour schemes, triadic and tetradic schemes, effects of color in different areas, color temperature, psychological effects of colour in interiors, factors affecting colour, Prang theory – Colour wheel, Munsell system and Oswald system.				
Unit IV	LUMINARES & FIXTURES Definition, different luminaries for lighting, lighting control system- benefits & application, Impact of lighting, fixture types - free standing or portable, fixed, light fixture control. Lighting accessories- switches, sockets, fused connection units, lamp holders, ceiling roses.				
Unit V	CASESTUDY Study of projects based on different lighting concepts used in interiors and exteriors.				
Reference and Text books ● The Art of living- Randall whitehead, ● Lighting design, source book- Randall whitehead, ● Light right- M.K.Halpeth, T.Senthilkumar, G.Harikumar ● Concepts of lighting, Lihting design in Architecture- Torquil Barker					
Web Resources					

	Course Outcomes	KnowledgeLevel
CO1	To understand and apply the need of day lighting in interiors	**K3**
CO2	To understand and apply the need of artificial lighting in interiors	**K3**
CO3	To understand and evaluate the psychological effects of color and lighting in interior	**K5**
CO4	To understand the technological advancements in building automation for energy efficient design	**K2**
CO5	To do a case study to analyze and distinguish effects of lighting in interior design.	**K4**

CC	81255	Components and Systems for Interior Design - III	P	Credits -4	Hours -6
Objectives	● To classify and illustrate different types of doors and its anatomy ● To classify and develop different types of partitions and its construction detail ● To classify and illustrate timber windows and its anatomy ● To classify and illustrate steel and aluminum windows and its anatomy ● To understand construction details of different types of stair case.				
Unit I	DOORS Types including, openable, sliding, folding pivoted Lodged and braced, panelled doors, glazed doors, Joinery details for doors.				
Unit II	PARTITIONS Details of fixed, sliding and sliding and folding partitions with wood, steel and aluminium frames & panels in glass, particle board, MDF, gypboard and plywood.				
Unit III	TIMBER WINDOWS Types – Casement, fixed, horizontal sliding, vertical sliding, pivoted, and top hung types Ventilators- top hung, bottom hung, pivoted, louvered, fixed types. Joinery details for windows, ventilators				
Unit IV	WINDOWS IN STEEL AND ALUMINIUM Details of sliding and openable windows in aluminium and steel frames with glazed panels				
Unit V	STAIRCASE Types according to profile – straight flight, doglegged, quarter turn, half turn, bifurcated, spiral & helical. Types based on materials (timber, wood, steel, synthetic materials). Details of handrails & balusters. Designing and detailing for physically handicapped				
Reference and Text books **TEXTBOOKS** ● S.C Rangwala – engineering materials – Charotar publishing, Anand 1982 ● W.B Mckay, building construction, VOL 1-4 , Longmans, u.k 1981 ● Laxmi publications Pvt. Ltd., New Delhi, 1993. **References:** ● Dr. B.C Punmia , building construction , Laxmi publications Pvt. Ltd., New Delhi, 1993. ● M.S Shetty , concrete technology , S. Chand & co . Ltd ., New Delhi , 1986 .					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	● To classify and illustrate different types of doors and its anatomy	**K3**
CO2	● To classify and develop different types of partitions and its construction detail	**K1**
CO3	● To classify and illustrate timber windows and its anatomy	**K2**
CO4	● To classify and illustrate steel and aluminum windows and its anatomy	**K3**
CO5	● To understand construction details of different types of stair case.	**K2**

CC	81256	Interior Design Studio - III	P	Credits -6	Hours -12
Objectives	● Focus on three distinct phases of workplace design, particularly emphasizing the planning of office spaces. ● Develop visual literacy, honing skills in analytical thinking, conceptualization, and navigating the problem-inquiry and solution cycle. ● Identify the interplay between abstract design principles and the tangible aspects of the physical and visual environments.				
Reference and Text books ● Designs for 20th century Interiors – Fiona Leolie, VH Publications, London, 2000. ● Interior Design; The New Freedom, Barbaralec Diamonstein, Rizzoli International Publications, New York, 1982. ● Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994. ● Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	Design compact offices for professionals like architects, interior designers, lawyers, and auditors, focusing on personalized layouts, modular units, creative level variations, and crafting lighting and color schemes using both natural and artificial light sources.	**K6**
CO2	Create interior designs for multifunctional spaces, incorporating detailed planning for various workspaces and interaction zones.	**K3**
CO3	Emphasize on anthropometry, design methodology, conceptual exploration, creativity, scale/proportion, space documentation, graphic design, concept sketching, application of design principles, and portfolio development.	**K3**
CO4	Identify the principles of designing corporate environments, including BPOs and corporate offices with multi-level structures.	**K6**
CO5	Foster innovation in proposing design solutions for office spaces, exploring creative approaches that align with contemporary trends and client needs.	**K3**

SEMESTER – VI

CC	81261	Estimation and Costing	P	Credits -3	Hours -3
Objectives	● To understand the definition for estimate and different types of estimation ● To understand different methods to do rate analysis for various materials used in interiors ● To understand and prepare a detailed estimate ● To understand and prepare estimate for accessories ● To understand the methods on drafting tender and BOQ				
Unit I	INTRODUCTION TO ESTIMATION Estimation – definition, purpose, types of estimate, and procedure for Estimating the cost of work in order to implement an interior design project or to make products related to interior design like furniture, artifacts.				
Unit II	RATE ANALYSIS & ESTIMATION FORMAT Rate Analysis – definition, method of preparation, quantity &labour estimate for woodwork, steelwork, Aluminum work, glass & its rate for different, thickness & sections, finishing (enamel paint, ducopaints, melamine, DU coats, Hand polishing, veneering and laminating) for walls & ceilings. Electrical & plumbing products, wiring, ducting, and laying of tiles & wall paneling in the estimate format of the project.				
Unit III	DETAILED ESTIMATE Detailed Estimate – data required, factors to be considered, methodology of preparation, abstract of Estimate, contingencies, labour charges, bill of quantities, different methods of estimate for interior design works, methods of measurement of works.				
Unit IV	COSTING OF FIXTURES & FITTINGS Cost of the following items: electrical fitting like, luminaries, fan, cables, switches, tiles in skirting & dado, cement plaster, joinery in wood, steel & aluminium, painting to walls – cement paint, oil paints, distemper acrylic emulsion, enamel paint painting to joinery, varnishing, French polishing plumbing equipment like piping, shower panels ,cubicles, tubs, Jacuzzis , taps, motors, fountains, false ceiling of aluminum panels, steel & wooden frame work, thermocol. Wall panelling of ceramic tiles & other tiles of materials suitable for the same, partitions made of materials like aluminum wood, steel.				
Unit V	INTRODUCTION TO SPECIFICATION Specification – Definition, purpose, procedure for writing specification for the purpose of calling tenders, types of specification. Specification for different item related to interior design project – woodwork for furniture window frames & pelmets, partitions etc also of materials like steel aluminum glass of various kind. Wall paneling & false ceiling of materials like aluminum, steel, wood, electrical, plumbing, air-conditioning &fire fighting equipments.				
Reference and Text books **TEXTBOOKS** ● M. Chakraborti, .Estimation, Costing, Specification and Valuation in Civil engineering. ● Dutta, Estimating and Costing, S. Dutta and Co., Lucknow 1983 **References:** ● S. C. Rangwala, Elements of Estimating and costing, Charoter publishing House, Anand, India, 1984. ● The interior designers guide: to pricing, estimating budgeting. By Theo Susan					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	To understand the definition for estimate and different types of estimation	**K2**
CO2	To understand different methods to do rate analysis for various materials used in interiors	**K2**
CO3	To Draft a detailed estimate	**K6**
CO4	To Create an estimate for accessories	**K6**
CO5	To understand the methods on drafting tender and BOQ	**K2**

CC	81262	Adaptive Reuse and Recycling	P	Credits -3	Hours -3
Objectives	● To recall the need for adaptive reuse of existing resources ● To analyse and understand the importance of recycling Materials ● To remember the concept of sustainability and its rating system ● To discuss the need for recycling liquid waste. ● To understand and outline the need for conservation				
Unit I	NEED FOR ADAPTIVE REUSE Cultural inheritance – heritage buildings and old structures – ascertaining the structural stability – estimation of the prolonged life of the building – strategies of adaptive reuse – investigation into material finishes.				
Unit II	NEED FOR RECYCLING OF MATERIALS The logic behind recycling – recycling of steel, wood, glass etc - estimation of the quality of recycled timber – criteria for recycling of steel, glass.				
Unit III	CONCEPT OF SUSTAINABILITY Earth summit declaration – definition of sustainability – economic, social and environmental issues – green rating of buildings – criteria for LEED rating.				
Unit IV	RECYCLING OF WASTE WATER Sullage and sewage – techniques of water purification for sullage – treatment plant for sewage – techniques of biological and chemical purification.				
Unit V	NEED FOR CONSERVATION Architectural conservation – conservation of heritage and important buildings – levels of intervention – structural, construction related, finishes etc. Revival of old building techniques and finishes.				

Reference and Text books

References:

- Harimohan Pillai – Heritage conservation and cultural continuity – Saraswatham publishers, 2002.
- Sustainable building design manual – TERI publication, 2004.
- Waste management and recycling – Compiled by C.T. Lakshmanan, SRM University.
- Sandra F Mendler - The HOK Guide book for sustainable design – John Wiley and Sons, Canada,2002.
- Conservation guidelines for pondichery – DTCP, Pondichery – INTACH 2000.

Web Resources

Course Outcomes		KnowledgeLevel
CO1	To recall the need for adaptive reuse of existing resources	**K1**
CO2	To analyse and understand the importance of recycling Materials	**K2**
CO3	To remember the concept of sustainability and its rating system	**K1**
CO4	To discuss the need for recycling liquid waste.	**K4**
CO5	To understand and outline the need for conservation	**K2**

DSE	81263A	(A) Retail Interior Design	P	Credits -3	Hours -3
Objectives	To keep the students to 1. Learn the importance of Merchandizing. 2. Distinguish display techniques. 3. Study psychology of window display. 4. Acquire knowledge on retail space. 5. Understanding the requirements of a retail space.				
Unit I	Commercial Art and its importance in Merchandising. Meaning and definition of commercial art, Development of commercial art. New trends, Steps in Merchandising and art display. Role of commercial art in Merchandising.				
Unit II	Commercial display and Techniques - Interior Display - general Arrangement, principles and factors, types and merchandise display, types of lighting arrangements in commercial buildings.				
Unit III	Commercial display and Techniques - Interior Display - general Arrangement, principles and factors, types and merchandise display, types of lighting arrangements in commercial buildings.				
Unit IV	Introduction to commercial space. Definition of commercial space, types of commercial space -Office Space, Retail space, Hospitality space, Health care, Education ,Entertainment and Relaxation, Religious ,Banks and Financial Institutions, functions and need, Design Process -Programming, Conceptual planning, Design Development, Construction documents, Construction administration, Evaluation, Factors to be considered in Commercial space design, Recent trends in commercial space design.				
Unit V	Retail Space - Introduction to Retail space, Types of Retail outlets, Types of Retail Layout -Straight plans, Angular plans, Geometrical plans and Diagonal plans. Principles of Retail store design - Eye catching Visual Merchandising, Slowing the customer journey in the store, Customer pathway, Steering the customer to the right of the store, Creativity and Innovation, Aerating the store design, Optimize space. Elements of Store Design - Exterior, Interior, Atmosphere, Fixture, Merchandise, People.				

Reference and Text books

1. Gupta, C.B., Dr. Nair, Rajan 2003, Marketing Management, Sultan Chand &Som, New Delhi.
2. Joseph, D.C., Julies, P. and Martiv, Z. 1992, Time Saver Standards for Interior Design and Space Planning, New York.
3. Nair, R. 2002, Marketing, Sultan Chand and Sons Publisher, New Delhi.
4. Pattanchetti, C.C. Reddy, P.N. 1995, Marketing, Rainbow publishers, Coimbatore.

Web Resources

1.https://www.smartsheet.com/retail-merchandising
2. https://sinalite.com/printersuccess/visual-merchandising-7-steps-to-revitalize-your-print-shop/
3. https://www.digitalvidya.com/blog/display-advertising/
4. https://www.warehouse-lighting.com/blogs/lighting-application-suggestions/different-types-of-office-lighting
5. https://www.unibox.co.uk/news-inspiration/types-importance-of-window-displays
6. https://smallbusiness.chron.com/psychology-visual-merchandising-66054.html
7. https://timesofstartups.com/more/factors-consider-planning-office-design-layout/
8. https://accountlearning.com/selection-of-office-building-important-factors-to-be-

Course Outcomes		KnowledgeLevel
CO1	Relate the role of art in merchandising.	**K2**
CO2	Identify techniques of display.	**K3**
CO3	Develop various types of window display.	**K3**
CO4	Develop commercial space for various uses.	**K3**
CO5	Create retail space for different requirements of customers.	**K3**

DSE	81263B	(B) Pioneer Interior Designers	P	Credits -3	Hours -3
Objectives	• To analyse the works of early Pioneers in Interior Design • To Understand the significance of Bauhaus Movement and Post War Modernists • To remember Trends in Modernism • To Recall the works of significant architects in International style • To compare and determine the unique characteristics of Post modernism and minimalism				
Unit I	EARLY PIONEERS Art nouveau, the post Industrial era works of Charles Renée Mackintosh, Antonio Gaudi, Gerrit Rietveld and their expressionist interior design.				
Unit II	BAUHAUS AND POST WAR MODERNISTS Walter Gropius/ Bauhaus, De Stijl, Mies Van Der Rohe, Art Deco, Postwar Modernism.				
Unit III	MODERNISM Interiors of Le Corbusier, Frank Llyod Wright, Louis Khan, Kenzo Tange and Oscar Niemeyer				
Unit IV	INTERNATIONAL STYLE The works of Alvar Alto, Phillip Johnson, Charles and Ray Eames , Eero Saarinen, Eero Arnio, Arne Jacobsen.				
Unit V	POST MODERNISM AND MINIMALISM Interiors of Zaha Hadid, Santiago Calatrava, Frank Gehry and Peter Eisenmann.				

Reference and Text books

- Interior Design Course, Mary Gilliat Coyran, Octopus Ltd., London
- Interior Design & Decoration, Sherril Whiton, Prentice Hall
- Interior Design, Francis D.K. Ching, John Wiley & Sons, New York
- History of Architecture, Sir Banister Fletcher, CBS Publishers & distributors, New Delhi
- Time Saver Standards for Interior Design, Joseph De Chiara, McGraw Hill, New York.

Web Resources

Course Outcomes		KnowledgeLevel
CO1	To analyse the works of early Pioneers in Interior Design	**K4**
CO2	To Understand the significance of Bauhaus Movement and Post War Modernists	**K2**
CO3	To remember Trends in Modernism	**K1**
CO4	To Recall the works of significant architects in international style	**K1**
CO5	To compare and determine the unique characteristics of Post modernism and minimalism	**K5**

CC	81264	Graphic Communication & Signage Design	P	Credits -3	Hours -3
Objectives	● Understanding the history of communication and the importance of graphic design for efficient visual communication ● Understanding and application of visual communication. ● Understanding and application of signages and audio visuals in interior and its influence in a space. ● Application of graphics in a space ● Case study to understand and analyze the application of graphic and communication design in interior design				
Unit I	GRAPHIC COMMUNICATION History of communication- graphics, communication, visual communication & communication design. Graphic design- typography, visual arts, page layout. Graphic representation, graphicacy.				
Unit II	VISUAL COMMUNICATION SYSTEMS Gestalt Theory, Aldous Huxley. Image analysis & its perspectives. Visual Aids & its types. Visual aids media - simple to advanced.				
Unit III	SIGNAGES & AUDIO VISUALS History of signages. Functions of signs. Sign technologies- banner, bill boards, digital signs, street signs, neon signs, LED signs. Digital signs & its different applications. Graphics & Image making – audio visuals and graphic systems.				
Unit IV	GRAPHIC AS A SPACE Graphic as a space – making element. Graphic as space transforming element.				
Unit V	CASESTUDY OF INTERIOR SPACES				
Reference and Text books 1. Graphic Communications Today, 4E (Design Concepts),William E Ryan, Theodore E. Conover 2. Signage Systems and Information Graphics ,Andreas Uebele 3. Technical Graphics Communication, Gary Robert Bertoline, Eric N. Wiebe 4. Signage Design Manual, EdoSmitshuijzen 5. Bob Gordon and Maggie Gordon – Digital Graphic Design – Thames & Hudson 6. Louise Bowen Ballinger – Perspective Space & Design – Van Nostrand Reinhold Company 7. Fred A Stitt – System Graphics – Mcgraw Hill Company					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	Understanding the history of communication and the importance of graphic design for efficient visual communication	**K2**
CO2	Understanding and application of visual communication.	**K3**
CO3	Understanding and application of signages and audio visuals in interior and its influence in a space	**K3**
CO4	Application of graphics in a space to create an impactful space	**K6**
CO5	Case study to understand and analyze the application of graphic and communication design in interior design	**K4**

CC	81265	Interior Skeleton and Surface Finishes	P	Credits -4	Hours -6
Objectives	● Understanding and exploring the properties of wood in interior design, and their fabrication process. ● Understanding and application of Metal in interior design, and their fabrication process. ● Understanding and application of Fabric in interior design, and their fabrication process. ● Understand techniques for surface finish on different materials using paint. ● Understanding and application of glass in interior design, and their fabrication process.				
Unit I	WOOD WORKSHOP The safe and efficient use of the tools of the trade, Hand tools, portable power tools, Stationary power tools, Materials, Hardware. Safe working practices in a workshop. Joineries in wood – lap, butt, dowell, tenon & mortise, dovetail, etc. Exercises in plywood joinery.				
Unit II	METAL WORKSHOP Cutting, planning, drilling and lathing of steel sections used in furniture. Aluminium sections and their use in doors, windows and partitions, Welding practice.				
Unit III	FABRIC WORKSHOP Familiarity with different types of fabrics and their properties – methods of cutting and sewing of upholstery fabrics - various types of foam and cushions and their applicability in furniture making.				
Unit IV	PAINT WORKSHOP Techniques of spray painting of enamel paint on metal and wood surfaces – varnishing and lacquering etc.				
Unit V	GLASS WORKSHOP Techniques to achieve different surface finishes				
Reference and Text books ● Harimohan Pillai – Heritage conservation and cultural continuity – Saraswatham publishers, 2002. ● Sustainable building design manual – TERI publication, 2004. ● Waste management and recycling – Compiled by C.T. Lakshmanan, SRM University. ● Sandra F Mendler - The HOK Guide book for sustainable design – John Wiley and Sons, Canada,2002. ● Conservation guidelines for pondichery – DTCP, Pondichery – INTACH 2000.					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	Understanding and exploring the properties of wood in interior design, and their fabrication process	**K2**
CO2	Understanding and application of Metal in interior design, and their fabrication process.	**K3**
CO3	Understanding and application of Fabric in interior design, and their fabrication process.	**K3**
CO4	Understand techniques for surface finish on different materials using paint.	**K2**
CO5	Understanding and application of glass in interior design, and their fabrication process.	**K3**

CC	81266	Interior Design Studio - IV	P	Credits -6	Hours -12
Objectives	● Focus on three stages of commercial spaces, with a special emphasis on planning showrooms and hospitality spaces. ● Develop analytical thinking, conceptualization, and navigating the problem-inquiry and solution cycle. ● explore the correlation between abstract design principles and the tangible aspects of physical and visual environments				

Reference and Text books

- Designs for 20th century Interiors – Fiona Leolie, VH Publications, London, 2000.
- Interior Design; The New Freedom, BarbaralecDiamonstein, Rizzoli International Publications, New York, 1982.
- Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.
- Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.

Web Resources

Course Outcomes		KnowledgeLevel
CO1	Demonstrate proficiency in creating detailed floor plans and layouts for showrooms, emphasizing strategic spatial organization to optimize product display and customer experience.	**K6**
CO2	Showcase advanced skills in designing hospitality spaces, considering factors such as ambiance, functionality, and the overall guest experience.	**K3**
CO3	Apply innovative conceptualization techniques for showrooms and hospitality spaces, integrating design elements to align with industry trends and client preferences.	**K3**
CO4	Integrate materials and lighting effectively into showroom and hospitality designs, emphasizing their impact on the aesthetic and functional aspects of the spaces.	**K6**
CO5	Develop effective communication skills to interpret and incorporate client requirements, ensuring the final designs for showrooms and hospitality spaces meet and exceed expectations.	**K3**

SEMESTER – VII

CC	81271	Project Management	P	Credits -2	Hours -2
Objectives	• To expose the students to the currently prevalent techniques in the planning, programming and management of a project. • To expose the students to understand and analyze BOQ, Estimates, Help them prepare the same • To expose students to different quality management guidelines, documentation and standards to be applied during the execution of a project. • To equip students to analyze various materials and its market rates to arrive at a suitable project budget. • To equip students to present themselves in the current market.				
Unit I	Project Management Systems & Techniques Project planning, project scheduling and project controlling, role of decision in project management, method of planning and programming, human aspects of project management, work breakdown structure, life cycle of a project				
Unit II	Interior Quantity Surveying Types of estimates, approximate estimates, items of work, unit of measurement, unit rate of payment, Numbering and coding of items in the Bill of Quantities, Bill of Quantities for various works				
Unit III	Quality Management Quality Management Systems – concepts and Meaning –Importance of Quality Management in Interior Project – Role of QMS in Project Management. Quality Control Operations – Concepts – Norms, Techniques and Procedures; TQM – Introduction – ISO Standards Requirements of Standards – Advantages of documentation – General Principles in documentation – Types of Documents				
Unit IV	Estimation and costing types of estimates, and procedure for estimating the cost of work in order to implement a project or to make products related to Interiors, Rate Analysis – definition, method of preparation, quantity &labour estimate for various interior activities, different methods of estimate for interior works, methods of measurement of works. Specification – Definition, purpose, procedure for writing specification for the purpose of calling tenders, types of specification. Specification for different item related to interior project				
Unit V	PROFESSIONAL PRACTICE, MARKET TRENDS & SURVEY Interior design profession: Survey of various interior designers, Working procedures, Fee structures, Professional interior design societies, licensing & registration.				

Reference and Text books

TEXT BOOK

- Dr. B.C.Punmia et al. Project planning and control with PERT and CPM, Laxmi Publications

References:

- Jerome D.Wiest and Ferdinand K.Levy, A Management Guide to PERT, CPM, prentice Hall of India Pub, Ltd., New Delhi, 1982
- R.A. Burgess and G.White, Building production and project Management, The construction press, London, 1975

Web Resources

Course Outcomes		KnowledgeLevel
CO1	To remember the currently prevalent techniques in the planning, programming and management of a project.	**K1**
CO2	To understand and analyze BOQ, Estimates, help them prepare the same	**K2**

CO3	To understand and remember different quality management guidelines, documentation and standards to be applied during the execution of a project.	**K2**
CO4	To analyze various materials and its market rates to arrive at a suitable project budget.	**K4**
CO5	To practice as a professional in the current market.	**K3**

CC	81272	Sustainability in Interior Design	P	Credits -3	Hours -3
Objectives	• To enable students to understand the concept of sustainability and different validation criterias • To enable students to understand and analyze the importance of recycling the construction materials • To enable the student to understand the need for adaptive reuse of old heritage buildings and applications of using recycled materials. • To enable students to understand the evaluation criteria of old heritage buildings for the levels of intervention • To enable students to understand and apply the techniques through case studies				
Unit I	CONCEPT OF SUSTAINABILITY Definition of sustainability – Identifying various sustainable materials - economic, social and environmental issues – green rating of buildings – criteria for LEED rating – criteria for GRIHA - Earth summit declaration				
Unit II	NEED FOR RECYCLING OF MATERIALS The logic behind recycling – recycling of steel, wood, glass etc - estimation of the quality of recycled timber – criteria for recycling of steel, glass.				
Unit III	NEED FOR ADAPTIVE REUSE Cultural inheritance – heritage buildings and old structures – ascertaining the structural stability – estimation of the prolonged life of the building – strategies of adaptive reuse – investigation into material finishes.				
Unit IV	NEED FOR CONSERVATION Architectural conservation – conservation of heritage and important buildings – levels of intervention – structural, construction related, finishes etc. Revival of old building techniques and finishes.				
Unit V	CASE STUDY OR PRACTICAL PROJECT				
Reference and Text books • Harimohan Pillai – Heritage conservation and cultural continuity – Saraswatham publishers, 2002. • Sustainable building design manual – TERI publication, 2004. • Waste management and recycling – Compiled by C.T. Lakshmanan, SRM University. • Sandra F Mendler - The HOK Guide book for sustainable design – John Wiley and Sons, Canada,2002. • Conservation guidelines for pondichery – DTCP, Pondichery – INTACH 2000.					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	To understand the concept of sustainability and different validation criteria	**K2**
CO2	To understand and analyze the importance of recycling the construction materials	**K4**
CO3	To understand the need for adaptive reuse of old heritage buildings and applications of using recycled materials.	**K2**
CO4	To understand the evaluation criteria of old heritage buildings for the levels of intervention	**K5**
CO5	To enable students to understand and apply the techniques through case studies	**K2**

CC	81273	Set Design	P	Credits -3	Hours -3
Objectives	• To help the student understand and analyze the impact of motion pictures of the 20th century. • To help the student understand the history and its influence in set design for motion pictures in 20th & 21st century. • To help the student understand the significance of typography and exhibition design in motion pictures • To help the student understand to analyze scripts for proper scenery and to conceptualize designs. • To enable the student to understand temporary performance stage design concepts				
Unit I	UNIT-I FILM AND SOCIETY Examination of the twentieth-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 texts to better understand history and culture manifestations.				
Unit II	HISTORY AND THEATER FILM SET DESIGN Investigation of 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.				
Unit III	GRAPHIC DESIGN AND TYPOGRAPHY FOR EXHIBIT DESIGN Principles of layout for creating effective visual signage and exploring 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.				
Unit IV	SET DESIGN AND CONCEPT WRAP 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.				
Unit V	STAGE DESIGN 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.				
Reference and Text books • Time saver standards for building types, DeChiara and Callender, Mc Graw hill company • NeufertArchitect‟s data, Bousmaha Baiche& Nicholas Walliman, Blackwell science l					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	To understand and analyze the impact of motion pictures of the 20th century.	**K2**
CO2	To understand the history and its influence in set design for motion pictures in 20th & 21st century	**K2**
CO3	To understand and apply the significance of typography and exhibition design in motion pictures	**K2**
CO4	To understand and to analyze scripts for proper scenery and to conceptualize designs	**K4**
CO5	To understand temporary performance stage design concepts and to create a concept	**K6**

Allied	81274	Interior Photography	P	Credits -4	Hours -6
Objectives	• To help the students to understand the principles of photography and the anatomy of a SLR camera and its lenses • To enable the students to understand the principles of lighting, various types of lighting and its influence to capture photographs • To enable the students to understand the principles of color and its effect on photography • To enable students to integrate all the above learnt skills to capture photographs • To enable students to understand the aesthetics and principles in curating a portfolio				
Unit I	PRINCIPLES OF PHOTOGRAPHY Technical definitions, understanding a camera, anatomy of a SLR camera, technical setting in a SLR camera, different types of lenses				
Unit II	PRINCIPLES OF INTERIOR LIGHTING Technical definitions, lighting sources, types of lighting fixtures, types of lamps, calculating lighting levels, flash photography, types of flashes, controlling lighting levels with flash photography. Exercise in interior lighting photography with artificial light and black and white photos				
Unit III	PRINCIPLES OF COLOR Color rendering in photographic medium, color rendering in photographs under different lighting condition, lighting colors and its effect on a photograph, color filters in a camera Exercise on color photography of interiors				
Unit IV	INTEGRATION exercise in integrating all prior units				
Unit V	PORTFOLIO Curate and create an interesting portfolio compiling all the works and create a portfolio with interior design / architecture photography				
Reference and Text books • Fundamentals of Creative Photography, David Prakel, AVA Publishing • Digital photography Expert Colour, Michael Freeman, Ilex Press Ltd • The complete guide to light and lighting in digital photography, Michael Freeman, Ilex Press Ltd					
Web Resources					

Course Outcomes		KnowledgeLevel
CO1	To remember and recall the anatomy of a SLR camera and itsvarious parts and settings	**K 1**
CO2	To understand the principles of lighting, various types of lighting and its influence to capture photographs	**K 2**
CO3	To understand and to apply the principles of color and its effect onphotography	**K3**
CO4	To integrate and to practice all the above learnt skills to capture photographs	**K 3**
CO5	To create a portfolio with all the skills learnt	**K 6**

CC	81275	Portfolio skills	P	Credits -2	Hours -2
Objectives	• This course is a skill builder course whose primary objective is to impart project portfolio skills and focuses on presentation of work in a professional manner. • To enable students to compile and curate their works in a professional way • To enable students to do research and to collect references to justify and evaluate the learnt information • To enable students to understand the importance of creating layouts and visually appealing compositions • To enable students to effectively summarise and articulate their works				
Unit I	Introduction to portfolio maki				
Unit II	Presentation of projects				
Unit III	Collection and preparation of the resources				
Unit IV	Layout & compositions				
Unit V	Concise articulation & compilation				
Reference and Text books • Portfolio Presentation For Fashion Designers, Linda Tain, Fairchild Publications, 2nd edition , 2003 • Graphic Designer's guide to Portfolio Design, Debbie Rose Myers, John Wiley & Sons, Inc., 2009					
Web Resources					

Course Outcomes		Knowledge Level
CO1	To understand the project portfolio skills and focuses on presentation of work in a professional manner.	**K1**
CO2	To generate a well compiled and curate their works in a professional way	**K4**
CO3	To do research and to collect references to justify and evaluate the learnt information	**K5**
CO4	To understand the importance of creating layouts and visually appealing compositions	**K1**
CO5	To develop and effectively summarize the work	**K6**

CC	81276	Advanced Design Studio	P	Credits -8	Hours -14
Objectives	● Explore and develop innovative design schemes for hotel and auditorium interiors, emphasizing creativity and uniqueness in conceptualization. ● Acquire knowledge and skills in creating detailed working drawings essential for the execution of hotel and auditorium interior designs. ● Understanding the intricacies involved in designing hotel and auditorium interiors, encompassing both creative innovation and technical aspects such as working drawings.				

Reference and Text books

- Designs for 20th century Interiors – Fiona Leolie, VH Publications, London, 2000.
- Interior Design; The New Freedom, Barbaralec Diamonstein, Rizzoli International Publications, New York, 1982.
- Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.
- Worldwide Interiors – International Federation of Interior Architects & Designers, Rikuyo-Sha, Japan, 1987.

Web Resources

Course Outcomes		KnowledgeLevel
CO1	Demonstrate the ability to conceive and present innovative design schemes for hotel and auditorium interiors, showcasing creativity and originality.	**K6**
CO2	Develop proficiency in creating detailed and accurate working drawings, essential for translating conceptual designs into tangible interior spaces for hotels and auditoriums.	**K3**
CO3	Apply conceptual design knowledge to real-world scenarios, addressing the specific challenges and requirements posed by hotel and auditorium interiors.	**K3**
CO4	Showcase the capability to integrate materials effectively, considering their impact on the aesthetic and functional aspects of hotel and auditorium interiors.	**K6**
CO5	Develop effective communication skills to understand and incorporate client preferences, ensuring that the final interior designs for hotels and auditoriums align with and exceed client expectations.	**K3**

SEMESTER – VIII

CC	812**81**	**GRADUATION PROJECT WORK**	**PR**	**Credits -18**	**Hours - 30**

UG Programme

Passing minimum

- A candidate shall be declared to have passed in each course if he/she secures not less than 40% marks in the End Semester Examinations and 40% marks in the Internal Assessment and not less than 40% in the aggregate, taking Continuous assessment and End Semester Examinations marks together.
- The passing minimum for CIA shall be 40% out of 25 marks (i.e.10 marks) in Theory/ Practical Examinations.
- The passing minimum for University Examinations shall be 40% out of 75 marks (i.e. 30 marks) for Theory /Practical papers.
- The candidates not obtain 40% in the Internal Assessment are permitted to improve their Internal Assessment marks in the subsequent semesters (2 chances will be given) by writing the CIA tests or by submitting assignments.
- Candidates, who have secured the pass marks in the End-Semester Examination and in the CIA but failed to secure the aggregate minimum pass mark (E.S.E + C I.A), are permitted to improve their Internal Assessment mark in the following semester and/or in University examinations.
- A candidate shall be declared to have passed in the Dissertation/Project report/Internship report if he/she gets not less than 40% marks in the Internal Assessment and End Semester Examinations and not less than 40% in the aggregate, taking Continuous assessment and End Semester Examinations marks together.
- A candidate who gets less than 40% in the Dissertation / Internship/ Project Report must resubmit the thesis. Such candidates need to take again the Viva-Voce on the resubmitted report/thesis.

18.2 Grading of the Courses

The following table gives the marks, Grade points, Letter Grades, and classifications meant to indicate the overall academic performance of the candidate.

Conversion of Marks to Grade Points and Letter Grade (Performance in Course / Paper)

RANGE OF MARKS	GRADE POINTS	LETTER GRADE	SCRIPTION
- 100	**9.0 – 10.0**	**O**	**tstanding**
- 89	**8.0 – 8.9**	**D+**	**cellent**
- 79	**7.5 – 7.9**	**D**	**tinction**
- 74	**7.0 – 7.4**	**A+**	**y Good**
- 69	**6.0 – 6.9**	**A**	**od**
- 59	**5.0 – 5.9**	**B**	**erage**

- 49	**4.0 – 4.9**	**C**	**isfactory**
- 39	**0.0**	**U**	**-appear**
SENT	**0.0**	**AAA**	**SENT**

a) Successful candidates passing the examinations and earning a GPA between 9.0 and 10.0 and marks from 90 – 100 shall be declared to have Outstanding (O).

b) Successful candidates passing the examinations and earning GPA between 8.0 and 8.9 and marks from 80 - 89 shall be declared to have Excellent (D+).

c) Successful candidates passing the examinations and earning GPA between 7.5 – 7.9 and marks from 75 - 79 shall be declared to have Distinction (D).

d) Successful candidates passing the examinations and earning GPA between 7.0 – 7.4 and marks from 70 - 74 shall be declared to have Very Good (A+).

e) Successful candidates passing the examinations and earning GPA between 6.0 – 6.9 and marks from 60 - 69 shall be declared to have Good (A).

f) Successful candidates passing the examinations and earning GPA between 5.0 – 5.9 and marks from 50 - 59 shall be declared to have Average (B).

g) Successful candidates passing the examinations and earning GPA between 4.0 – 4.9 and marks from 40 - 49 shall be declared to have Satisfactory (C).

h) Candidates earning GPA between 0.0 and marks from 00 - 39 shall be declared to have Re-appear (U).

i) Absence from an examination shall not be taken as an attempt.

From the second semester onwards the total performance within a semester and continuous performance starting from the first semester are indicated respectively **by** Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA).

These two are calculated by the following formulate

GRADE POINT AVERAGE (GPA) = $\Sigma_i C_i \ G_i / \Sigma_i C_i$

GPA = Sum of the multiplication of grade points by the credits of the courses

Sum of the credits of the courses in a Semester

18.3 Classification of the final result

The final result of the candidate shall be based only on the CGPA earned by the candidate.

a) Successful candidates passing the examinations and earning CGPA between 9.5 and 10.0 shall be given Letter Grade (O+) and those who earned CGPA between 9.0 and 9.4 shall be given Letter Grade (O) and declared to have First Class –Exemplary*.

b) Successful candidates passing the examinations and earning CGPA between 7.5 and 7.9 shall be given Letter Grade (D), those who earned CGPA between 8.0 and 8.4 shall be given Letter Grade (D+) and

those who earned CGPA between 8.5 and 8.9 shall be given Letter Grade (D++) and declared to have First Class with Distinction*.

c) Successful candidates passing the examinations and earning CGPA between 6.0 and 6.4 shall be given Letter Grade (A), those who earned CGPA between 6.5 and 6.9 shall be given Letter Grade (A+), and those who earned CGPA between 7.0 and 7.4 shall be given Letter Grade (A++) and declared to have First Class.

d) Successful candidates passing the examinations and earning CGPA between 5.0 and 5.4 shall be given Letter Grade (B) and those who earned CGPA between 5.5 and 5.9 shall be given Letter Grade (B+) and declared to have passed in the Second Class.

e) Successful candidates passing the examinations and earning CGPA between 4.0 and 4.4 shall be given Letter Grade (C) and those who earned CGPA between 4.5 and 4.9 shall be given Letter Grade (C+) and declared to have passed in the Third Class.

f) Absence from an examination shall not be taken as an attempt.

Final Result

CGPA	Grade	Classification of Final Result
9.5 – 10.0 9.0 and above but below 9.5	**O+** **O**	First Class – Exemplary*
8.5 and above but below 9.0 8.0 and above but below 8.5 7.5 and above but below 8.0	**D++** **D+** **D**	First Class with Distinction*
7.0 and above but below 7.5 6.5 and above but below 7.0 6.0 and above but below 6.5	**A++** **A+** **A**	First Class
5.5 and above but below 6.0 5.0 and above but below 5.5	**B+** **B**	Second Class
4.5 and above but below 5.0 4.0 and above but below 4.5	**C+** **C**	Third Class
0.0 and above but below 4.0	**U**	Re-appear

CUMULATIVE GRADE POINT AVERAGE (CGPA) = $\Sigma_n \Sigma_i C_{ni} G_{ni} / \Sigma_n \Sigma_i C_{ni}$

CGPA = Sum of the multiplication of grade points by the credits of the entire programme

Sum of the credits of the course for the entire Programme

Where '**Ci**' is the Credit earned for Course i in any semester; '**Gi**' is the Grade Point obtained by the student for Course i and 'n' refers to the semester in which such courses were credited.

CGPA (Cumulative Grade Point Average) = Average Grade Point of all the Courses passed starting from the first semester to the current semester.

Note: * The candidates who have passed in the first appearance and within the prescribed Semesters of the UG Programme (Major, Allied, and Elective courses alone) are eligible for this classification.