



(ISO 9001:2015 Certified)

B.DES_INTERIOR & RETAIL SPACE DESIGN

(w.e.f. 2023)

UPES Campus
“Energy Acres”
P.O Bidholi via Prem Nagar, Bidholi
Dehradun – 248007
(Uttarakhand)

Tel : + 91-135-2776053/54
Fax: + 91-135-2776090
URL: www.upes.ac.in

B.Des_Interior & Retail Space Design

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School of Design

Interior & Retail Space

Design

Course book, 2023

Bachelor of Design

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Interior & Retail Space Design

The ability to conceptualize, plan, design, and detail functional and aesthetical interior spaces ranging from small residential spaces to public & commercial spaces. Also, skill sets to visualize experiential spaces which have a communication content from retail spaces and visual merchandising to the design of sets.

Intent

Equipping the learner to visualize experiential spaces with a holistic multidisciplinary approach.
Keeping in mind the new emerging trends like online retail, Retail technology and Retail strategizing the learner needs to be up to date.

POs / Program Outcomes

PO 1: Develop Creative Mind-set

Prepare the mind for the unexpected and explore on unknown ground

PO 2: Empathy

Develop the art of empathy to diving deep into the problem statement.

PO 3: Creative Articulation

Developing the skills to articulate and communicate

PO 4: Discovery to Realization

Developing a strong process-oriented mind-set in order to Find Insights ranging from small incremental change to Undiscovered value addition for both the end consumer and the service provider.

PO 5: Design for Future

Developing an analytical thinking process which can look and dig into the uncertainties and the promises of the intelligent objects and technologies of the future and finding scope of design to enhance the lives of people.

PO 6: Inter-Disciplinary Approach

Inculcate inter-disciplinary mind set to bring a holistic approach towards the overall design process in order to deliver a cohesive outcome.

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PO 7: Entrepreneurial Spirit

Develop the ability to think innovatively, take risks, develop and successfully commercialize solutions in evolving market conditions

PO 8: Teamwork

Demonstrate knowledge and understanding of the design principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 9: Professional Ethics

Apply ethical principles and commit to professional ethics and responsibilities and norms of the design practice.

PO 10: Sustainable Solutions

Understand the impact of design in the societal and environmental contexts, and demonstrate the knowledge of, and ability to come up with sustainable solutions.

PO 11: Local & Global Context

To demonstrate the knowledge and sensitivity towards local needs and come up with solutions that contribute towards nation building while achieving international quality and benchmarks.

PO 12: Lifelong learning

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PSO / Program Specific Outcomes

PSO 1:

Develop Visual Vocabulary of interior spaces.

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Imbibe and be sensitized towards elements and idioms constituting an interior space by developing a thorough visual vocabulary of spatial design elements.

PSO 2:

Understand Spatial logic and Structural construction.

Understanding the logic of space evolution and development and the knowledge of construction and systems that realize it.

PSO 3:

Develop Multidisciplinary skills to resolve communicative spaces.

Learn the ropes to tackle space design situations that elicit communication and dialog with users.

PSO 4:

Develop abilities to orchestrate various nuances of Professional Practice.

Understand the tools of the trade and develop the abilities to become an Interior Design Practitioner.

Foundation program course grid over view

Foundation Year 1, Semester 1

Sl. No.	Course Code	Course Name	C	L	T	P	Hours
1	SDCS 1014	Sketching Drawing 1	5	4	0	2	
2	SDCS 1026	Elements of Design	3	1	1	2	
3	SDCS 1027	Colour	4	1	2	2	
4	SDCS 1028	Geometry	5	2	2	2	
5	SDCS 1018	SLA	2	1	1	0	
6	SDCS 1006	Material Exploration I	2	1	0	2	
7	SLLS 0102	Learning how to learn	2	2	0	0	
8	SLLS 0101	Living Conversations	2	2	0	0	
			25	14	6	10	30

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Foundation Year 1, Semester 2

Sl. No.	Course Code	Course Name	C	L	T	P	
1	SDCS 1019	Sketching Drawing 2	5	4	0	2	
2	SDCS 1020	Principles of Design	5	1	3	2	
3	SDCS 1021	Design Process	6	3	2	2	
4	SDCS 1010	Material Exploration II	2	1	0	2	
5	SDCS 1023	Computer Applications	2	1	0	2	
6	SLLS 0103	Leadership and Teamwork	2	2	0	0	
7	SLSG 0101	Critical Thinking and Writing	3	3	0	0	
			25	15	5	10	30

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Year 2, Semester 3

This year's semesters program's intensive curriculum is devoted to the fundamentals of Interior Design. The semester focusses on Orthographic understanding and basic Materials. An introduction to Unorganized Retail and also the various Retail formats. Understanding the design of Domestic spaces. The structural and visual logic in making simple furniture with emphasis on ergonomics.

Semester 3, Course grid with CLTP allocation

SEMESTER III				
SI No	Subject Code	Subject	Credit	Type
1	SDIR 2001	Orthography & Design Representation	2	C
2	SDIR 2002	Materials Technology I	3	C
4	SDIR 2003	Introduction to Retail Design	2	C
6	SDIR 2004	Design of Domestic Interiors	4	C
7	SDPJ 2130	Project 1: Simple Furniture & Ergonomics	5	C
5	SLLS 0201	Design Thinking	2	LS
6	SLSG 0201	Ethical Leadership in the 21st Century (Human Values and Ethics)	3	Sig
7		Exploratory Elective 1	3	Expl
		Total	24	0

Year 2, Semester 4

Semester 4, Course grid with CLTP allocation

SEMESTER IV				
SI No	Subject Code	Subject	Credit	Type
1	SDIR 2005	Visualisation & Rendering	2	C
2	SDIR 2006	Materials Technology II	3	C
3	SDPJ 2137	Project 2- Structures & Outdoor furniture	5	C
4	SDIR 2008	Estimation & Working Drawings	3	C
5		Professional Elective 1*	3	C
6		Professional Elective 2*	3	C
6	SLLS 0202	Working With Data	2	LS
7	SLSG 0202	Environment and Sustainability - Himalaya Fellowship	3	Sig
8		Exploratory Elective 2	3	Expl

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		Total	27	
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	Professional Elective 1
SDIR 2012P	Digital Modelling - 2D
SDIR 2013P	Professional Documentation

	Professional Elective 2
SDIR 2010P	Tensile Forms
SDIR 2014P	Interior Landscaping

Year 3, Semester 5

The Third year takes the work and understanding of the tools and concepts, to a higher level by incorporating elements such as acting and theater, dialogue, storytelling, treatments, communication studies and CG computer graphics, at the other hand diving in to the technical side of the discipline, In the third year, and acquired knowledge channelized and practiced thru the pipe line of animation film design thru major and minor projects

Semester 5, Course grid with CLTP allocation

SEMESTER V				
Sl No	Subject Code	Subject	Credit	Type
1	SDIR 3001	Building Technology I	2	C
2	SDIR 3010	Design of Retail spaces & Visual merchandizing	4	C
3		Professional Elective 3*	3	C
4	SDPJ 3139	Project 3: Design of Commercial Spaces	5	C
5	SLLS 0301	Persuasive Presence	2	LS
6		Exploratory Elective 3	3	Expl
7	SLSG 0301	Start your Start-up	3	Sig
		Total	22	

	Professional Elective 3
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SDIR 3011P	Digital Modelling - 3D
SDIR 3012P	Advance Digital rendering
SDIR 3013P	Bim for Interior Design

Year 3, Semester 6

Semester 6, Course grid with CLTP allocation

SEMESTER VI				
SI No	Subject Code	Subject	Credit	Type
1	SDIR 3006	Building Technology II	2	C
2	SDIR 3014	Stacking & Folding furniture	4	C
3		Professional Elective 4*	3	C
4	INDT 3101	Industrial visit	1	C
5	SDPJ 3140	Project 4:Design for Special Interiors	5	C
6		Exploratory Elective 4	3	Expl
7	SLSG 0302	Solving Complex Problems	3	Sig
	SLSG 0303	Technologies of the Future		
	SLSG 0304	Future Casting		
	SLSG 0305	Managing Relationships and Being Happy		
Total			21	

	Professional Elective 4
SDIR 3008P	Environmental Graphics
SDIR 3009P	Typography & Panel graphics

Year 4, Semester 7

The fourth year semester 7, acquired students typically move to the advanced level in their major project, and working in a group and team. And getting a chance to lead

Semester 3, Course grid with CLTP allocation

SEMESTER VII				
SI No	Subject Code	Subject	Credit	Type

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				2023-27	
1	SDCS 4001	Design Management	2	C	
2		Profesisonal Elective 5*	3	C	
3		Profesisonal Elective 6*	3	C	
4	SIIB 4101	Summer Internship	2	C	
5	SDPJ 4135	Project 5: Design for Hospitality Spaces	5	C	
6		Exploratory Elective 5	3	Expl	
7	SLSG 0401	India and Its Place in the Contemporary World	3	Sig	
	SLSG 0402	Theory of Everything			
	SLSG 0403	Digital Transformation			
	SLSG 0404	Finding your purpose in Life			
Total			21		

Professional Elective 5	
SDIR 4001P	Set Design
SDIR 4002P	Introduction to Theater
SDIR 4003P	Lighting & Illumination Design

Professional Elective 6	
SDIR 4004P	Traditional interiors
SDIR 4005P	Space Transformation

Year 4, Semester 8

The semester 8 is one of the most important semester in terms of final project outcomes, which would reflect multidisciplinary skills and abilities learnt over the course of the previous three and half years amalgamating in the final Inter Design Graduation project. The project tests the student's ability to take on real life design problems and make them future ready.

Semester 8, Course grid with CLTP allocation

SEMESTER VIII				
SI No	Subject Code	Subject	Credit	Type
1	SDPJ 4119	Graduation Project: Interior and Retail Space Design	15	Inds

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		Total	15	
		Total Credits for B. Des - Interiors & Retail space design	180	

Evaluation Methodology

***** All of the teaching pedagogy and its corresponding evaluation methods shall be kept as per the requirement of the course and the course faculty is solely responsible for selection of teaching pedagogy and shall adapt the suggested evaluation methods as listed above.**

End-Semester Examination:

Jury and Written Exam:

- A panel of jury members will be formed with at least three members (one subject matter expert specific to the design programme, one internal design faculty member and one industry expert/ another internal design faculty member).
- Jury panel will evaluate all the course outcomes based on evaluation criteria (Cognitive skill, Studio Skill, and Innovative Skill). The jury panel will assign the both quantitative markings and qualitative feedbacks in a prescribed format. Feedbacks for each course will be recorded in a prescribed format.
- Written examination will be conducted for certain courses where understanding of theory is specifically involved. The papers will be assessed with quantitative markings by an internal Interior and Retail Design Faculty member and to be moderated by another faculty member.

Criteria of Assessment and its Definition:

- **Conceptual Clarity (CS)**- The CC are related to understanding of fundamentals and concepts of a particular subject in the Interior and Retail Design course.
- **Studio Skill (SK)** – The SS are related to quality of modeling/ illustration / digital representation skill of a student during studio practice for respective design problem

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- **Innovative Skill (IS)** - Innovative skills are related to the quality of a student to bring unique creative solutions to an assigned design problem to a particular context.
- **Attitude Towards Learning (ATL)** – This is depending on the frequency of faculty-student interaction, which could be measured as number of classroom attendance and one to one meeting of student with a faculty, for assignment guidance required by a student.

***Weightage (from 10 % to 100%) could be assigned for these above mention criteria (CC, SS, IS and ATL) as per the requirement of evaluation of a particular course. However, a maximum weightage for ATL should be kept as 10 %.

Foundation

Year 1

Semester 1

SKETCHING AND DRAWING-I *Foundation @ SOD*

L	T	P	C
4	0	2	5

COURSE BRIEF

Drawing is a language /tool which help design student represent their concept and ideas. Since primitive age drawing was a best way of communicating thought or Idea. Ability to use lines and draw is a basic requirement of design practice. This module introduces students to the essentials of freehand drawing and enables them to draw what the eye observes, and the mind perceives. They are guided on how to use drawing as a powerful communication tool and about coordination of hand, eye and mind.

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LEARNING OBJECTIVES

The module introduces the students to

- The fundamentals of Visual Perception and Spatial Positioning of Figures/ Objects in two dimensions and three dimensions
- Observe and represent observation with different lines.
- Develop line quality with rigorous sketching.

COURSE CONTENTS

- **Drawing basics:**

Types of pencils and their characteristics, how to hold a pencil, importance of wrist and elbow movements, how to draw lines and circles, importance of drawing in single strokes, disadvantages of broken wrist movement, gain control over eye and hand coordination.

- **Nature Drawing :**

Importance of pressure while drawing a line. Impact of variation in pressure on the quality of drawing. Understand basic units, (e.g. a leaf) their proportions and relationship with the whole. Draw simple units, without details.

- **Human Drawing:**

Understand the proportions of body. Different parts of human body, their proportional relationship within and without, learn to draw parts without details.

- **Object Drawing:**

Basic dimensions, how three dimensions build up volumes, representation of three axes in 2 D, principles of isometric and perspective drawing, simple isometric and perspective drawing in one, and two point perspectives.

COURSE OUTCOMES

Knowledge & Understanding:

After completing this course, you will be able to:

- Develop observation skills and understanding of tools to draw (CO1)
- Understand proportions of human body and objects and their relationship to the environment (CO2)

Skills and Attributes:

- Apply observational skills to draw nature, human and object drawings (CO3)

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- Sketch forms and figures with an understanding of proportions, light and shade, angles and perspective (CO4)

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	2	1	3	2	3	3	0	0	0	0	3	3
CO 2	2	2	3	2	3	2	0	0	0	1	1	3
CO 3	3	2	3	3	3	2	0	0	0	2	2	3
CO4	3	1	3	3	3	2	0	0	2	2	2	3

PREREQUISITES AND MATERIAL

1. Basic drawing skill
2. Pencil (2B , 4 B, 6B) Paper (cartridge paper, color , and other types of paper)
3. Require few object and human models for Live sketching

REFERENCE BOOKS

1. Sketching: Drawing Techniques for Product Designers by Koos Eissen(Author), Roselien Steur(Author), BIS Publishers
2. Drawing for Product Designers (Portfolio Skills: Product Design) by Kevin Henry, Laurence King Publishing
3. Perspective and Sketching for Designers by Jessica Newman, Jessica Newman and Jack Beduhn, Prentice Hall
4. Freehand Drawing For Architects and Interior Designers by Magali Delgado Yanes, Magali Delgado Yanes (Author), Ernest Redondo Dominguez and Maria Fleming Alvarez, W. W. Norton & Company
5. Design Drawing by Francis D. K. Ching and Steven P. Juroszek, Wiley

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6. How to Draw: drawing and sketching objects and environments from your imagination by Scott Robertson and Thomas Bertling, Design Studio Press
7. Sketching: The Basics by Roselien Steur an Koos Eissen, BIS Publishers
8. Anatomy and Drawing by Victor Perard, Dover Publications
9. Illustration With Markers/Time-Saving Techniques for Design Professionals by John A. Gleason, Whitney Library of Design
10. Rendering with Pen and Ink by Robert W. Gill, W Norton & Co Inc

URL

- <https://www.creativebloq.com/features/how-to-draw-animals-people-landscapes>
- <https://design.tutsplus.com/tutorials/how-to-draw-a-rose--cms-26864>
- <https://www.thegreatcourses.com/courses/how-to-draw.html>
- http://www.floobynooby.com/pdfs/Perspective_Drawing_Handbook-JosephDAmelio.pdf
- <https://www.pdfdrive.com/human-figure-drawing-books.html>

ELEMENTS OF DESIGN

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L	T	P	C
1	1	2	3

COURSE BRIEF

The elements of design are the basic components used as part of any composition. They are the objects to be arranged, the constituent parts used to create the composition itself. In most situations the elements of design build upon one another, the former element helping to create the latter. The module focuses on ways of thinking and seeing with focus on the elements like a dot, a line, color, shape, form, texture, pattern etc.

LEARNING OBJECTIVE

The module introduces the students to

- Understand fundamentals related to elements of design and develop sensitivity towards Visual Perception.
- The various characteristics of each element and their applicability.
- Explore according to aptitude and thought process. Such explorations imbibe sensitivity towards the various characters of each element and the variations that can be created by appropriate utilization of these characteristics.

COURSE CONTENT

- **Dot**

What is a dot? Arrangement of dots, image creation with dots, density of dots, impact of varying densities of dots, relationship of density with clarity of pictures/images,

- **Line**

Line as extension of dots, straight and curved lines, various attributes of line, (width, thickness, weight, length, direction) combination of various types of lines, effect of line orientations

- **Texture and pattern**

What is texture? Texture and pattern in nature and man-made environment, analysis of texture and patterns, exploration with different media

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○ **Shape**

Definition/ identification of shape, (through lines, value, color, texture etc.) Geometric and organic shapes. Linear and complex shapes. Interaction of shapes

○ **Size/scale**

Basic understanding of scale and size. How sizes play a role in gaining/losing dominance over other elements in a given format.

○ **Form and space**

Definition of negative and positive spaces. Relationship between positive and negative spaces. Transition from space to form and vice versa.

COURSE OUTCOME

Knowledge & Understanding:

After completing this course, you will be able to:

- Develop creative conceptual ability and sensitivity to visual perception (CO1)
- Understand fundamentals of visual interactions that exist between two or more elements (CO2)

Skills and Attributes:

- Apply understanding of elements to create effective compositions (CO3)
- Demonstrate an ability to present creative ideas using design language (CO4)

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	3	1	3	2	2	2	0	0	2	2	2	3
CO 2	2	1	3	2	2	2	0	0	0	1	2	3
CO 3	3	1	3	2	2	2	0	0	3	2	2	3

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CO4	3	2	3	3	2	2	0	0	2	2	2	3
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PREREQUISITES AND MATERIAL

1. Poster color, Black Ink, Scale, Markers and Geometry Box.
2. Brush(0,2, 4 ,8,) Paper (cartridge paper, color , and other types of paper)
3. Acrylic or water and oil-based color require to explore student in bigger surface.

REFERENCE BOOKS

1. Design Basics by David A. Lauer Learning.
2. Design Elements: Understanding the rules and knowing when to break them by Timothy Samara, Rockport Publishers.
3. Design Elements, Form & Space: A Graphic Style Manual for Understanding Structure and Design by Dennis Puhalla, Rockport Publishers.

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COLOUR

Foundation @ SOD

L	T	P	C
1	2	2	4

COURSE BRIEF

Colour, or color, is the characteristic of human visual perception described through with names such as red, orange, yellow, green, blue, or purple. The module explores an understanding of three basic elements that are required for an appreciation of color: a light source, an object, and a viewer. It also helps to explore the psychological and cultural factors involved in perception. The importance of color design stems from the significance of color to the human mind and this module shall help in creating ideas, expresses messages, spark interest, and generate certain emotions through compositions.

LEARNING OBJECTIVES

One of the most important elements of design, color, is being treated as a separate subject, to learn and explore more in the same. This subject exposes the student to the basic characteristics of color, and the additive and subtractive color theories and its application.

COURSE CONTENTS

- Color terminologies – hue, value, tint, shade, intensity, Chroma, etc.
- Primary colors
- Secondary colors
- Color wheel
- Intermediate colors
- Complimentary colors
- Split complimentary colors
- Grey scale
- Color schemes: monochromatic, warm, cool, complimentary, split complimentary, triadic, analogous,
- Color interaction

COURSE OUTCOMES

Knowledge & Understanding:

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After completing this course, you will be able to:

- Demonstrate an understanding of color theories and color interaction in your work (CO1)
- Explain and translate the understanding of color terminology in compositions (CO2)

Skills and Attributes:

- Generate practical application and understanding of colors (CO3)
- Demonstrate an ability to present creative contextual compositions (CO4)

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	3	2	3	0	2	1	0	0	2	0	3	3
CO 2	2	1	3	0	2	1	0	0	3	1	2	3
CO 3	3	1	3	1	1	1	0	0	3	2	2	3
CO4	3	1	3	0	3	1	0	0	3	2	2	3

PREREQUISITES AND MATERIAL

1. Poster color, mostly camel
2. Brush(0,2, 4 ,8,) Paper (cartridge paper, color , and other types of paper)
3. Pastel, and acrylic or water and oil-based color require to explore student in bigger surface.

REFERENCE BOOKS

1. Color influencing form : a color coursebook by Roy Osborne. Publication - Boca Raton, FL: Universal Publishers, 2007
2. Color, form and space by Birren, Faber, Publication- New York. : Reinhold., 1960
3. Colour Interaction with a Three Dimensional Form by Vyas, H. K. 1968

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4. Elements of Design: (Advanced) Form & Colour Vyas, H. K.
Design I: The Elements Videotape; Color, Line, Shape & Form, Pattern by Texture Atexinc.
5. The Forms of Color by Gerstner, Karl, Publication - Cambridge : The MIT Press, 1990
6. Colour for Survival by Ward, Peter, Publication - London : Orbis pub, 1980
7. Playing with color: 50 graphic experiments for exploring color design principles by Richard Mehl, Publication - Beverly: Rockport Publishers, 2013
8. Color management : a comprehensive guide for graphic designers (2005 ed.)by John T Drew and Sarah A Meyer, Publication - Switzerland : Roto Vision, 2005
9. Colour: Art & Science edited by Trevor Lamb, Janine Bourriau. Publication - Cambridge University Press.
10. Goethe's Theory of Colours By Johann Wolfgang von Goethe .
11. Colour: A Workshop for Artists and Designers by David Hornung.

REFERENCE URL's

<https://www.pantone.com/what-is-color>

<https://www.quora.com/What-are-designer-colours>

<https://www.crayola.com/for-educators/resources-landing/articles/color-what-is-color.aspx>

GEOMETRY*Foundation @ SODS*

L	T	P	C
2	2	2	5

COURSE BRIEF

The course introduces the students to the basic fundamentals of Construction, Visual Perception and Spatial Positioning of Figures/ Objects in 2 Dimensions and 3 Dimensions. The students are empowered with the knowledge and skills to interpret and represent development of 2D and 3D geometry in the form of drafted sheets and study models. The module covers the practical nuances of drafted drawing as an effective communication tool in a cross functional production scheme.

LEARNING OBJECTIVE

Learn axes, planes of projection and types of graphical representations.

Learn standard guidelines of drafting in 2d and 3D representations.

Learn basic geometric shapes and properties, construction of 3d form.

COURSE CONTENTS**UNIT 1 (Fundamentals of Drafting)**

Guidelines and Nomenclatures, Lettering, Scales (Engineer's scale, Graphical Scale, Representative Fraction), Two Dimensional Geometrical Constructions (Line and Angle Bisection, Division of lines and circle, Centre point of arc, Calculation of Arc length, Reverse Curves, Evolution and construction of Polygons), Conics and Curvilinear Objects, Representation of 3 Dimensional objects, Principles of Projections, Projections of Points.

UNIT 2 (Principles of Geometry)

Geometry in natural and Man-made environments, Relationship of Pentagon and natural objects, Vitruvian man, Fibonacci series and Golden Ratio, Fractals.

UNIT 3 (Projections of Lines and Solids)

Guidelines and Nomenclatures, Lettering, Scales (Engineer's scale, Graphical Scale, Representative Fraction),

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Two Dimensional Geometrical Constructions (Line and Angle Bisection, Division of lines and circle, Centre point of arc, Calculation of Arc length, Reverse Curves, Evolution and construction of Polygons), Conics and Curvilinear Objects, Representation of 3 Dimensional objects, Principles of Projections, Orthographic Projections- Isometric and Axonometric projection of of regular solids and combination of solids.

UNIT 4 (3D geometry and Development of solids)

Solids (Generation of Volumes, Basic Solids, Additive and Subtractive nature of solids, Development of Surfaces of regular and sectional solids), **Platonic and Archimedean solids** (Identities and differences, Importance and application, Duals of Platonic solids, Truncation of solids)

COURSE OUTCOMES

Knowledge & Understanding:

After completing this course, you will be able to:

- CO1: Demonstrate an understanding of geometric principles in nature
- CO2: Develop an understanding of terminology used to explain projections and fundamentals of drafting

Skills and Attributes:

- CO3: Create platonic solids reflecting an understanding construction of the same
- CO4: Demonstrate and explain the construction of 2D and 3D objects

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
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PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	2	2	2	2	2	1	0	0	0	3	2	3
CO 2	2	2	2	2	2	1	0	0	3	1	2	3
CO 3	2	1	2	2	1	1	0	0	3	1	2	3
CO4	3	1	3	1	2	1	0	0	2	1	1	3

PREREQUISITES AND MATERIAL

1. Drawing Board, T square, Set Square, Geometry Box, Brush and Glue
2. Paper (cartridge paper, color , and other types of paper)
3. Acrylic or water and oil-based color require to explore student in bigger surface.

REFERENCE BOOKS

- Engineering Drawing, P.S. Gill, S. K. Kataria & Sons
- Elementary Engineering Drawing (Plane and Solid Geometry), by N.D. Bhatt, Charotar Publishing House
- Geometry of Design: Studies in Proportion and Composition, Kimberly Elam, 2001
- Alt.fractals: A Visual Guide to Fractal Geometry and Design by Eric Baird, 2011
- The Aesthetics of Geometry in Design, Suzanne Greischel, 1983
- Shell foundations: geometry, analysis, design and construction, N. P. Kurian 2006
- Geometry of construction, T.B. Nichols and Norman Keep. Nichols, Trafalgar Bertram. Publication - London : Cleaver-Hume Press, 1947
- Ruler and Compass, Andrew Sutton, 2009
- Geometric constructions with 112 figures, George Edward Martin,1998

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SCIENCE & LIBERAL ARTS

Foundation @ SODS

L	T	P	C
1	1	0	2

COURSE BRIEF

The subject aims to introduce design students to Indian Visual culture, history and Society through a Liberal Arts perspective. It aims to sensitize students to the visual aesthetics, cultural practices, viewed against the backdrop of various regional, social, and historical contexts.

LEARNING OBJECTIVE

- To sensitize design students to social, cultural, and historical contexts surrounding design.
- To enable students to discover values, belief systems, and philosophies that underly various cultural, and aesthetic expressions.
- To introduce and expose students to Indian and global art, design, and craft movements.
- To introduce design students to basic methods of inquiry, research, and documentation.
- To enable students to contextualize basic design principles to plural Indian aesthetic identities.
- To enable students to develop visual, written, and oral communication skills.

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COURSE CONTENTS

Here's an indicative list of trigger topics based on broad themes. Each theme shall look at how design, function, aesthetics, materials, processes, and techniques have influenced or been influenced by the diversity of place, climate, culture, history, values, and philosophies:

1. **Food:** Philosophy, production, processing, cooking, serving, consumption, waste disposal.
2. **Clothing and accessories:** Everyday, ceremonial, royal, gender, age, body, comfort, identity.
3. **Shelter:** Settlement patterns, form, comfort, services, tribal, vernacular, classical architecture.
4. **Communication:** Language, signs and symbols, text, script, music, dance, theater.
5. **Transport:** Means and methods, every day, royal, ceremonial, accessories, individual, group, mass.

COURSE OUTCOMES

Knowledge & Understanding:

After completing this course, you will be able to:

CO 1: Research and document cultural/ethnic backgrounds, and to discover underlying beliefs, philosophies, and value systems.

CO 2: Contextualize cultural heritage with the historical backdrop of Indian and global art, design, and craft.

Skills and Attributes:

CO 3: Correlate basic design principles such as elements, colour, geometry, materials and techniques with historical and contemporary design, and craft.

CO 4: Organize, articulate, and present information, and ideas through visual, textual, and oral presentations.

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	2	3	1	3	1	1	0	1	2	1	2	3
CO 2	3	2	2	2	2	1	0	1	3	1	2	3
CO 3	3	1	3	2	2	3	0	1	2	1	2	3
CO4	3	2	3	3	2	2	0	1	3	2	2	3

PREREQUISITES AND MATERIAL

1. Basic drawing skill ,
2. Pencil (2B , 4 B, 6B) Paper (cartridge paper, color , and other types of paper)
3. Color- poster, acrylic, and other
4. Laptop and Camera

REFERENCE BOOKS

Liberal Arts and Sciences: Thinking Critically, Creatively, and Ethically by Christopher A. Ulloa Chaves ED.D.

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MATERIAL EXPLORATION-I

Foundation @ SOD

L	T	P	C
0	1	2	2

COURSE BRIEF

The module introduces students to material and technical exploration. This semester the students will explore planar and granular material and understand the possibilities of form exploration with the same while understanding the properties and characteristics of the same. The module is designed to allow each student to pursue a personal direction in their work that may be traditional or non-traditional. With focus on ideation and exploration, the module

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aims at exposing the basic properties, simple techniques and methods to add/remove material, and how to evolve new forms using the properties. Through a series of lectures, discussions, exercises, and assignments, students will acquire the fundamental knowledge and skills required for entry into the professional world.

LEARNING OBJECTIVE

Student will learn about the property and characteristics of materials and gain knowledge and skills to work on it by using basic tools and techniques.

COURSE CONTENT

This is entirely a manual process-based module, and only hand tools will be used for carrying out all the exercises. The students will be exposed to:

Planar Material (paper, fabric, etc.)

Granular Material (clay, pop, etc.)

TOOLS

Use of basic hand tools -

- Cutter
- Scissors
- Saw
- Chisel
- File
- Tri angle
- Hammer
- Holders Etc.

TECHNIQUES

- Demo of properties of Materials
- Sample manipulations
- Explanation of each property
- Various methods of addition and removal
- Assignments based on explorations of properties

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COURSE OUTCOMES

After completing this course, you will be able to:

Knowledge & Understanding:

- Explain properties of material through manipulation technique. (CO1)

Skills and Attributes:

- Apply knowledge and understanding of material behavior and techniques to create design expression (CO2)
- Demonstrate skillset of working with material and related tools via exploration and manipulation (CO3)

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	3	0	3	2	2	1	0	0	1	3	2	3
CO 2	3	2	3	3	3	2	0	0	3	2	2	3
CO 3	3	2	3	3	3	2	0	0	2	2	2	3

PREREQUISITES AND MATERIAL

1. Basic drawing skill
2. Material as specified by the faculty

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3. Pencil (2B, 4 B, 6B) Paper (cartridge paper, color , and other types of paper)
4. Mask and Apron

REFERENCE BOOKS

1. The Backyard Blacksmith Hardcover - by **Lorelei Sims** , publisher : Crestline book
2. Learners World Clay Moulding Book Clay Tools, AC 073 ASIN B00HJ2VNNA
3. Clay Modeling Books, by **Gurinder**, young learner publications
4. BETWEEN CLAY AND DUST-by : **MUSHARRAF ALI FAROOQI**, publisher : Aleph book company pvt. Ltd.
5. The Potter's Complete Book of Clay and Glazes: A Comprehensive Guide to Formulating, Mixing, Applying, and Firing Clay Bodies and Glazes. by **James Chappell**.
6. The Incredible Clay Book. Publishr : Klutz Press by Sherri Haab (Editor), Laura Torres
7. On the Effects of Gypsum, or Plaster of Paris, as a Manure; Chiefly Extracted from Papers and Letters on Agriculture, by the Agricultural Society in Canada, by **Multiple Contributors**
8. Plaster of Paris and How to Use It, by **Martin Wiener Ware**
9. Plaster of Paris: Techniques from Scratch, by **Reid Harvey**
10. Create Anything With Clay, by Sherri Haab , Laura Torres publisher : Kultz press
11. Plaster of Paris: Techniques from Scratch Paperback – by **Reid Harvey** publisher: Gentle breeze publication

Year 1

Semester 2

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SKETCHING AND DRAWING-II

Foundation @ SOD

L	T	P	C
4	0	2	5

COURSE BRIEF

Increasing the level of complexity from previous semester the sketching and drawing- 2, this semester will focus more on learning to gain control over hand movement to achieve the desired result with different mediums on different surfaces. The students shall also work with creativity and imagination to explore and create detailed drawings with play of light and shadow for a context.

LEARNING OBJECTIVES

- Enhances on student's previous learnings of Visual Perception and Spatial Positioning of Figures/ Objects in two dimensions and three dimensions.
- Empower students with the knowledge and skills to observe, explore, experiment and represent their observation while playing with different mediums.
- Display rigor and experimentation while looking at details of light and shadows along with expressions and techniques.

COURSE CONTENTS

This subject is an extension of learning gained in semester I. Having gained the basic skills, the student is now prompted to move ahead, with complex cases, and make complete drawing with details.

- **Nature Drawing:**
Importance of light and shade and drawing. Impact of changing the surface and medium. Looking at details and bringing aesthetically pleasing compositions
- **Human Drawing:**
Understand the proportions of body. Looking at human form with details and precision. Looking at human form in relation to another subject/ object.
- **Object Drawing:**
Form in perspective and in context. Creating images that communicate and ways and means to say it.

COURSE OUTCOMES

Knowledge & Understanding:

After completing this course, you will be able to:

- Reflect an understanding of form and proportions (CO1)

Skills and Attributes:

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- Experiment and explore drawing techniques to create aesthetically pleasing compositions. (CO2)
- Illustrate ideas with details and sensitivity. (CO3)
- Communicate ideas effectively through visual representations (CO4)

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	2	0	3	3	3	3	0	0	1	0	1	3
CO 2	3	2	3	3	3	2	0	0	3	0	1	3
CO 3	3	0	3	3	3	2	0	0	2	2	2	3
CO4	3	1	3	3	3	1	0	0	3	2	1	3

PREREQUISITES AND MATERIAL

- Basic drawing skill
- Pencil (2B, 4B, 6B) Paper (cartridge paper, color , and other types of paper)
- Require few objects and human models for Live sketching

REFERENCE BOOKS

1. Sketching: Drawing Techniques for Product Designers by Koos Eissen(Author), Roselien Steur(Author), BIS Publishers
2. Drawing for Product Designers (Portfolio Skills: Product Design) by Kevin Henry, Laurence King Publishing
3. Perspective and Sketching for Designers by Jessica Newman
4. Jessica Newman and Jack Beduhn, Prentice Hall
5. Freehand Drawing For Architects and Interior Designers by Magali Delgado Yanes
6. Magali Delgado Yanes (Author), Ernest Redondo Dominguez and Maria Fleming Alvarez,

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7. Design Drawing by Francis D. K. Ching and Steven P. Juroszek, Wiley
8. How to Draw: drawing and sketching objects and environments from your imagination by Scott Robertson and Thomas Bertling, Design Studio Press
9. Sketching: The Basics by Roselien Steur and Koos Eissen, BIS Publishers
10. Anatomy and Drawing by Victor Perard, Dover Publications
11. Illustration With Markers/Time-Saving Techniques for Design Professionals by John A. Gleason, Whitney Library of Design
12. Rendering with Pen and Ink by Robert W. Gill, W Norton & Co Inc

URL

- <https://www.creativebloq.com/features/how-to-draw-animals-people-landscapes>
- <https://design.tutsplus.com/tutorials/how-to-draw-a-rose--cms-26864>
- <https://www.thegreatcourses.com/courses/how-to-draw.html>
- http://www.floobynooby.com/pdfs/Perspective_Drawing_HandbookJosephDAmelio.pdf
- <https://www.pdfdrive.com/human-figure-drawing-books.html>

PRINCIPLES OF DESIGN

Foundation @ SOD

L	T	P	C
1	1	2	3

COURSE BRIEF

In this course, which is an extension of design basics learnt in the earlier semester, thrust is given on understanding and learning of principles for visualization. Human eyes follow certain unwritten yet universally true principles. Once understood, these principles are to be thoroughly explored, to create visuals and aesthetically pleasing compositions demonstrating the application of principles.

LEARNING OBJECTIVE

The module introduces the students to

- Create communicative compositions, applying knowledge and understanding of elements and principles of design.
- Gestalt laws and its application.
- Creative thought process, self-exploration, and deriving a final on comparative basis.

COURSE CONTENT

Gestalt Law

Introduction to Gestalt psychology. Gestalt's principles of visualization, these principles in nature, application in creative work of prominent artists/designers

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Harmony and Rhythm

Few of the basic principles, underlying the pleasantness of a visual. What is visual harmony and what is visual disharmony? what is the impact of rhythm on a visual? These questions will be answered by a detailed and elaborate demonstration to the students, followed by exploratory assignments to be done by the students.

Emphasis

"Center of Interest." It is about dominance and influence. Most artists put it a bit off center and balance it with some minor themes to maintain our interest. Some artists avoid emphasis on purpose. They want all parts of the work to be equally interesting.

Contrast

Uses contrasting visual concepts. That same Western Kansas "big sky" landscape becomes very dramatic and expressive when a storm builds in the southwest. Principles can grow out of any artistic device that is used to produce an effect on the viewer.

Balance

This is perhaps the most subjective principles of design. A visual looks good if it is well balanced, and if it is not, the eyes tend to reject it as unpleasant. However, it is not the physical balance but the visual balance – the interaction between the positive and negative spaces in a given format. Learning this principle involves going through and analyzing substantial examples.

What is symmetry? What are the different types of symmetry? The discussion would involve examples of symmetry in nature and man-made environment. The exercises will also involve relation between symmetry, asymmetry and balance.

COURSE OUTCOME**Knowledge & Understanding:**

After completing this course, you will be able to:

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- CO1: Understand fundamentals of principles of design.

Skills and Attributes:

- CO2: Employ visual, material, hand-skills and digital techniques to generate original forms.
- CO3: Implement fundamentals by developing conceptual ability and the necessary skills of creating communicative compositions
- CO4: Observe and explore visual language as a tool of communication

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
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CO 2	3	0	3	2	3	2	0	0	0	2	2	3
CO 3	3	0	3	2	2	2	0	0	1	1	2	3
CO4	3	2	3	3	3	2	0	0	3	2	2	3

PREREQUISITES AND MATERIAL

- Poster color, Black Ink, Black pen, Scale, Markers and Geometry Box.
- Brush(0,2, 4 ,8,) Paper (cartridge paper, color , and other types of paper)
- Laptop or personal computer

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REFERENCE BOOKS

1. Design Basics by David A. Lauer Learning.
2. Logic and Design: In Art, Science and Mathematics by Krome Barratt, Green Editorial.
3. Illustrated Elements of Art and Principles of Design by consultant: Gerald F. Brommer, Crystal Productions.
4. Design Elements: Understanding the rules and knowing when to break them by Timothy Samara, Rockport Publishers.
5. Design Elements, Form & Space: A Graphic Style Manual for Understanding Structure and Design by Dennis Puhalla, Rockport Publishers.
6. Universal Principles of Design by William Lidwell, Kritina Holden and Jill Butler, Rockport Publishers.

DESIGN PROCESS

Foundation @ SOD

L	T	P	C
3	2	2	6

COURSE BRIEF

Design is a process. Anyone who wants to get into the field of design, irrespective of the discipline of specialization, needs to get conversant with the basic steps, their relevance, methods and approaches involved in the process of designing. Besides looking at creating visual and design vocabulary, this course will also introduce the methods and give students an overview of the process of design which is essential to understand and appreciate the design development through observation, study, exploration, ideation and perception.

LEARNING OBJECTIVE

- To introduce students to the different stages in the design process – from perception of a problem to

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generating a solution to the problem through investigation, analysis and synthesis.

- To understand the methodology of the problem solving process.

COURSE CONTENTS

- Analysis and mapping of the design process.
- The morphology of the problem solving process
- Case studies
- Role of creativity in design

COURSE OUTCOMES

Knowledge & Understanding:

After completing this course, you will be able to:

- CO1: Understand the steps involved in design process.
- CO2: Interpret and analyze visual and textual information to develop perception and ideas for expression.

Skills and Attributes:

- CO3: Design a thoughtful tangible outcome using skill, knowledge and understanding explored in other modules.
- CO4: Document the entire learning process, exploration, progression of design understanding and sequence of design development.
- CO5: Demonstrate engagement with content via reading, researching and participating in classroom discussions and activities.

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Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium)

3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
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CO 1	3	3	3	3	3	1	1	1	1	1	3	3
CO 2	3	3	3	3	3	2	1	2	2	2	2	3
CO 3	3	2	3	2	2	2	1	2	1	2	2	3
CO4	3	3	3	3	3	2	1	2	3	2	2	3
CO5	1	3	2	2	1	2	1	3	2	1	2	3

PREREQUISITES AND MATERIAL

1. Basic drawing skill ,
2. Pencil (2B , 4 B, 6B) Paper (cartridge paper, color , and other types of paper)
3. Color poster acrylic, and other
4. Laptop and Camera

REFERENCE BOOKS

1. Thinking Design by S Balaram
2. The Design Process by Karl Aspelund
3. Thoughts on Design by Paul Rand
4. The Design of Everyday Things by Don Norman
5. Change by Design by Tim Brown

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6. Designing for Growth by Jeanne Liedtke

MATERIAL EXPLORATION-II

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1

0

2

2

COURSE BRIEF

Material Exploration for this semester will focus on the creating design expression through manipulating and modifying porous and fibrous material like wood to strong, hard and shiny material like metal. With emphasis placed on ideation, and exploration this subject will promote curiosity and an atmosphere conducive to material and technical exploration. Material Exploration aims at exposing the basic properties, simple techniques and methods to add/remove material, and how to evolve new forms using the properties. Through a series of lectures, discussions, exercises, and assignments, students will acquire the fundamental knowledge and skills required for understanding and playing with material.

LEARNING OBJECTIVE

Student will learn about the property and characteristics of materials and also gain knowledge and skills to work on it by using basic tools and techniques.

COURSE CONTENT

This is entirely a manual process-based module, and only hand tools will be used for carrying out all the exercises. The students will be exposed to:

- WOOD (deodar, golden teak, sesame, Sal, rosewood) etc.
- METAL (aluminum, steel,) etc.

TOOLS

Use of basic hand tools -

- saw
- chisel
- file
- drill

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- tri angle
- hammer
- planer
- holders
- jointer
- Sander machine etc.

TECHNIQUES

- Demo of properties of Materials
- Sample manipulations
- Explanation of each property
- Various methods of addition and removal
- Assignments based on explorations of properties

COURSE OUTCOMES

After completing this course, you will be able to:

Knowledge & Understanding:

- CO1: Demonstrate an understanding of material properties through manipulation technique.

Skills and Attributes:

- CO2: Demonstrate skillset of working with material and related tools via exploration and manipulation
- CO3: Apply knowledge and understanding of material behavior and techniques to create design expression.

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	3	0	3	2	2	1	0	0	0	3	2	3
CO 2	3	0	3	3	3	1	0	0	0	2	2	3
CO 3	3	2	3	3	3	2	0	0	2	2	2	3

PREREQUISITES AND MATERIAL

- Basic drawing skill
- Material as specified by the faculty
- Pencil (2B, 4 B, 6B) Paper (cartridge paper, color , and other types of paper)
- Mask and Apron

REFERENCE BOOKS

1. What Wood Is That? A Manual of Wood Identification by Herbert L. Edlin (Author) publisher : Viking adult
2. Understanding Wood: A Craftsman's Guide to Wood Technology by R. Bruce Hoadley publisher: Taunton press
3. Wood: Materials for Inspirational Design, by Chris Lefteri
4. Solid Wood: Case Studies in Mass Timber Architecture, Technology and Design 1st Edition , by Joseph Mayo
5. Wood: Identification and Use, by Terry Potter, Publisher : guild of master craftsmen Nature & Art of Workmanship, by David Pye
6. Creative Metal Forming – by Betty Helen Longhi (Author), Cynthia Eid (Author), publisher :Brynmorgen press
7. The Backyard Blacksmith Hardcover – by Lorelei Sims , publisher : Crestline book

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COMPUTER APPLICATIONS

Foundation @ SOD

L	T	P	C
1	0	2	2

COURSE BRIEF

This subject gives an exposure to basic design softwares used in design disciplines. The tools are used extensively in varied industries as well. It is very important to understand how to design graphics as well as how to handle the tools effectively. Through a series of lectures, discussions, exercises, and assignments, students will acquire the fundamental knowledge and skills required for entry into the professional world.

LEARNING OBJECTIVE

Develop necessary digital tools and techniques.

Enhance the techniques of execution of form and content relevant to the field in both digital and print mediums.

Create and manipulate images to use in various contexts.

The learnings will also help in understanding of form - product, spaces, and layouts for print and web.

COURSE CONTENT

Adobe Photoshop

Basic exposures and learning to experiment with various possibilities. Application oriented exercises with actual photographs/images.

- Images in Photoshop and Image Ready (Default images)

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- Intro to Tools Selections & Color Models
- Working with Layers
- Transforming & Retouching
- Color & Tonal Adjustments
- Working with Typography

Adobe Illustrator

Basic exposures and learning to experiment with various possibilities. Application oriented exercises to create graphics and sketches for a purpose.

- Graphics creation
- Intro to Tools Selections & Color Models
- Working with Layers
- Transforming & Manipulating
- Grids and layouts
- Working with Typography

COURSE OUTCOME

After completing this course, you will be able to:

Knowledge & Understanding:

- Demonstrate an understanding of tools and techniques used to create effective compositions. (CO1)

Skills and Attributes:

- Create graphics and images using tools and techniques of divergent thinking (CO2)
- Apply basic design concepts – light, color, texture etc to create aesthetically pleasing graphics/images (CO3)

Co-relation Course Outcomes (COs) and Program Outcomes (POs)

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

	Develop a creative mind-set	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Inter-Disciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solution	Local and Global Context	Lifelong Learning
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	3	0	3	2	2	0	0	0	1	1	2	3
CO 2	3	0	3	3	3	1	0	0	1	1	2	3
CO 3	3	0	3	3	3	1	0	0	1	1	2	3

PREREQUISITES AND MATERIAL

- Basic drawing skill
- Laptop, or personal computer

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REFERENCE BOOKS

1. The Adobe Photoshop CS6 Book for Digital Photographers (English) by Scott Kelby
2. Adobe Photoshop CS6 for Photographers: A professional image editor's guide to the relative use of Photoshop for the Macintosh and PC by Martin Evening.
3. Adobe Illustrator for beginners 2021, Hector Grant

Course: Orthography and Design Representation

C: L: T: P :: 2 1:0:

Year 2

Semester 3

Course Description

The Course is a step forward from the Engineering Drawing/ Geometry courses from the Foundation year. The course here is streamlined towards the various representation techniques and projection methods which are widely used in Interior Design.

Learning Objective

The Course aims to train the Students in the field of Interior Design Representation Skills, geometrical drawing of special curves.

Course Outcomes

CO1: To understand the fundamentals of 2D projections and usage in Interior space and elements.

CO2: To develop understanding of Perspective Drawing and Sciography and various hand representation skills.

CO3: Understand Construction of Special Curves and development of Complex Surfaces.

CO & PO Mapping

	PO & PSO Vs CO																
	PO1	Develop a creative mindset															
	PO2	Empathy															
	PO3	Creative Articulation															
	PO4	Discovery to Realization															
	PO5	Design for Future															
	PO6	Interdisciplinary Approach															
	PO7	Entrepreneurial Spirit															
	PO8	Teamwork															
	PO9	Professional Ethics															
	PO10	Sustainable Solutions															
	PO11	Local and Global Context															
	PO12	Lifelong Learning															
	PSO1	Develop visual vocabulary of Interior Spaces															
	PSO2	Understand Spatial Logic and Structural Construction															
	PSO3	Develop Multidisciplinary skills to resolve communicative spaces															
	PSO4	Develop abilities to orchestrate various nuances of Professional Practice															
CO1	0	0	3	1	0	2	0	0	0	0	1	1	2	3	1	2	

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2023-27

CO2	0	0	3	1	0	2	0	0	0	0	1	1	1	1	1	1
CO3	0	0	3	1	0	2	0	0	0	0	1	1	1	1	1	1

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial

(High)

Course Contents

UNIT-1 PLANS & SECTIONS OF INTERIOR SPACES

Floor plans, elements above & below plan cut, reflected ceiling plan, Interior 4 side elevations and sections, multiple sections, cut away plans & sections of spaces.

UNIT-2 PERSPECTIVE AND SCIOGRAPHY

Principles of perspective and visual effects of three dimensional objects, study of picture plane, Station point, vanishing Point, Eyelevel, Ground level, etc. - its variations and Effects. Principles of Drawing One point, Two point perspectives & 3 point perspectives -Perspective Drawing of Three Dimensional Objects, Sectional Perspectives of Building interiors

Principles of Shade and Shadows - shadows of rectilinear and circular solids - Shadows of building and interior elements.

UNIT-3 GEOMETRY OF CONIC SECTIONS AND DEVELOPMENT OF COMPLEX SURFACES

Curves formed by the intersection of a plane with a right circular cone – Ellipse, Parabola, Hyperbola and Catenary, Geometrical mean, Golden Section, Archimedean Spiral, Logarithmic Spiral.

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Geometrical construction of Hyperbolic paraboloid, Ellipsoid, Elliptic Paraboloid, Hyperboloid, Geodesic Domes etc.

Reference Books

1. **Perspective & Sciography**, by Shankar Mulik Allied Publishers.
2. **Design Drawing**, Francis DK ching, John wiley & sons, usa, 1998.
3. **Interior Design Illustrated**, Francis DK ching, John wiley & sons, usa, 1998.

Course Description

Understanding of materials and various manufacturing/ construction processes is an essential requirement for an Interior and Retail space Designer. This module is spread over two semesters and helps students develop a knowledge base of materials and the processes to translate them into viable interior construction elements and products.

Learning Objective

To develop a knowledge base of a variety of materials (Ceramics, Glass and Metals including Precious & Industrials metals, Plastic, Stone and Wood.) in raw, processed & finished forms and their uses.

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Understanding the basics of construction and material technology that comprises a building.

Course Outcomes

CO1: A hands on understanding of the properties and processes involved in giving shape to materials such as wood, metals and plastics.

CO2: An understanding of tools, equipment & machinery and their limitations, besides, the basic principles of manufacturing processes and their applications.

CO & PO Mapping

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PO/CO	PO & PSO Vs CO
PO1	Develop a creative mindset
PO2	Empathy
PO3	Creative Articulation
PO4	Discovery to Realization
PO5	Design for Future
PO6	Interdisciplinary Approach
PO7	Entrepreneurial Spirit
PO8	Teamwork
PO9	Professional Ethics
PO10	Sustainable Solutions
PO11	Local and Global Context
PO12	Lifelong Learning
PSO1	Develop visual vocabulary of Interior Spaces
PSO2	Understand Spatial Logic and Structural Construction
PSO3	Develop Multidisciplinary skills to resolve communicative spaces
PSO4	Develop abilities to orchestrate various nuances of Professional Practice
CO1	0 0 2 2 1 1 0 0 0 1 2 1 2 3 1 0
CO2	1 0 1 2 2 2 0 0 0 1 2 1 0 2 0 0

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial

(High)

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Course Contents

Ceramics, Glass, Metals

Timber and its applications in interior design

Construction materials- Bricks, lime, cement

Reference Books

1. **Materials for Interior Environments** by Corky Binggelli, ASID
2. **Materials for Design** by Victoria Bellard Bell

Course: Introduction to Retail Design**C: L: T: P :: 2:1:0:2****Course Description**

Retail is one of the largest sectors of most economies as well as a channel to reach out their products to the consumer. To the learners of Retail Design the course is expected to provide a brief introduction to retail business.

Learning Objective

1. Develop an understanding of the important role of retail business.
2. Understanding the realm of retail business, categorizing retail, retail structures and retail formats.
3. Develop an understanding of the concerns of retailers in the context of future.

Course Outcomes

CO1: Understanding the unorganized sector by doing a case study in a particular location.

CO2: Taking a street and doing a complete study of the mix of Retail formats.

CO & PO Mapping

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PO/CO	PO & PSO Vs CO															
CO1	1	3	2	2	1	1	0	1	0	1	2	1	1	2	2	0
CO2	2	3	2	2	0	1	0	2	0	1	2	1	1	0	0	0
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial

(High)

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Course Contents

The realm of retail business

Categorising retail.

Retail formats.

Contemporary and future trends.

Understanding of different Retail formats for various product offerings in the organized sector. Understanding Retail in terms of the 5 P's of marketing namely (People, Product, Pricing, Promotion and Position).

Reference Books

1. **Basics Interior Design-1: Retail Design** by Lynne Mesher
2. **Department Stores and Modern Retail** by Anca I/Lasc and Patricia Lara-Betancourt.
3. **Design for Shopping: New Retail Interiors** by Sarah Manuelli

Course: Design of Domestic Interiors**C: L: T: P :: 4 2:0:4****Course Description**

Abiding by the famous quote by Le Corbusier, "A house is a machine for living in"; The course helps students to understand the constituents of a residential space and provide them with the skillset to design visually coherent interior spaces responsive to function, culture, context etc. The course helps students to understand the factors that guide in designing of residential in the form of research case studies, user understanding and translate in the form of a project.

Learning Objective

The course helps students to understand elements of a domestic space and develop as well as translate the skills in the form of a project.

Course Outcomes

CO1: To develop understanding of the scale, function and options existing when designing small scale spaces in residences such as toilets, kitchens, living, bedroom etc.

CO2: Development of ideas w.r.t. to treatments such as false ceiling, wall panelling, flooring, floor coverings, dressings in fenestrations and other elements with regards to residential interiors.

CO3: Demonstrate concepts in the form of hand drafted/ rendered sheets and scaled concept models.

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CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
PO & PSO Vs CO	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice
CO1	0	2	2	2	1	1	0	0	1	1	3	2	2	3	2	0
CO2	1	0	1	3	2	2	0	0	1	1	2	2	1	2	1	0
CO3	3	2	3	3	3	2	0	0	1	1	0	1	2	3	2	0

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial

(High)

Course Contents

UNIT-1 KITCHENS

Area of work, Anthropometric planning for activity, Storage- Traditional vs Modular Kitchen. Materials used in counters, shelves, worktops, washing areas and their comparative study justifying context of use. Lighting and color scheme- color, texture and patterns.

UNIT-2 TOILETS

Anthropometry, Various types of sanitary ware and their use, types of layouts, concepts in modern day toilet interiors, materials and finishes.

UNIT-3 BEDROOMS AND LIVING ROOMS

Anthropometry, Concepts in bedroom and living room interiors, layouts and configuration affecting usage, use of furniture and accessories, materials and finishes- lighting, color and texture.

UNIT-4 PROJECT

Integrate various individual spaces into one theme, treatment of patios, courtyards, verandas and other semi covered spaces, integration of built form and open spaces.

Small residence interior project / Detailing of a domestic space.

Reference Books

1. **Design Drawing**, Francis DK ching, John wiley & sons, usa, 1998.
2. **Interior Design Illustrated**, Francis DK ching, John wiley & sons, usa, 1998.
3. **Interior Colour by Design**, Jonathan Moore, Rockport Publishers, 1994.
4. **Designs for 20th century interiors**, Fiona Leslie, VH Publications, London, 2000

Course: Project 1: Simple Furniture and Ergonomics**C: L: T: P :: 6 1:1:****Course Description**

The course is the first design project which provides the opportunity for integrative application of the basic design fundamentals, design thinking and methodology to address design opportunities in the area of basic furniture design. The course provides experience to recognize & comprehend contextual issues of basic furniture design with respect to aesthetics, style and consumer segments associated with it. The design project is required to project the type of furniture being designed and with actual design of the product close in form as well as function to be a real product to be realized through detailed concepts & prototypes. Thus this course aims at providing scientific understanding of interaction among human beings and other elements of a system and its application to design process in order to optimize human well-being and overall system performance.

Learning Objective

The course helps students to apply learnings from the diverse modules covered previously and apply learnings of Research, Conceptualization, Validation and Realization. The course also helps students to understand the importance and application of Physical Ergonomics in Furniture Design.

Course Outcomes

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CO1: To appreciate the design opportunity for integrative application of the basic design fundamentals, design thinking and methodology to address design opportunities in the area of simple furniture design.

CO2: Importance of the relationship between ergonomics and furniture. To develop understanding of the physical and cognitive aspects of comfort, efficiency, utility and safety in human machine interface, processes and services.

CO3: To appreciate appropriateness of materials and joinery. To learn validation of concepts.

CO4: To gain hands on experience in the design and prototyping simple furniture.

CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	2	3	3	2	1	0	0	0	1	2	3	3	2	0	0
CO2	0	1	1	2	2	1	0	1	0	1	2	3	0	2	2	0
CO3	1	1	2	2	1	1	0	0	0	1	2	2	0	3	1	1
CO4	3	1	3	3	3	2	0	0	0	1	2	2	2	3	2	3

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial

(High)

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Course Contents

1. To understand creative problem solving.
2. Understanding the context related to the usage of a furniture with respect to comfort, convenience and ergonomics.
3. Defining the problem and coming up with a statement of Intent.
4. Developing alternative concepts and coming up with a final valid concept; supported by models and technical drawing.
5. Prototype making of final concept.

Reference Books

1. **Furniture Design: An Introduction to Development, Materials and Manufacture** by Stuart Lawson.
2. **Handmade: Creative Focus in the Age of Distraction** by Gary Rogowski.
3. **Illustrated Cabinetmaking. How to design and construct furniture** by Bill Hylton.

Year 2

Semester 4

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Course: Visualisation and Rendering**C: L: T: P :: 2 2:0:****Course Description**

Communicating concepts and design ideas is very vital for an interior designer. The module equips the students with the skillset and abilities to communicate effectively as a designer in the form of Concept presentations, renderings etc.

Learning Objective

To equip learners to communicate ideas and conceptualize products to as close to reality in order to make design decisions for production. Rendering as communication medium forms basis to represent and communicate product ideas.

Course Outcomes

CO1: To develop the ability to represent various products and its surface qualities through rendering with difference media

CO2: To develop the ability to evaluate light source and its effect on various types of surfaces and materials.

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CO & PO Mapping

PO/CO	PO & PSO Vs CO
PO1	Develop a creative mindset
PO2	Empathy
PO3	Creative Articulation
PO4	Discovery to Realization
PO5	Design for Future
PO6	Interdisciplinary Approach
PO7	Entrepreneurial Spirit
PO8	Teamwork
PO9	Professional Ethics
PO10	Sustainable Solutions
PO11	Local and Global Context
PO12	Lifelong Learning
PSO1	Develop visual vocabulary of Interior Spaces
PSO2	Understand Spatial Logic and Structural Construction
PSO3	Develop Multidisciplinary skills to resolve communicative spaces
PSO4	Develop abilities to orchestrate various nuances of Professional Practice
CO1	3 0 1 3 0 1 0 0 0 0 1 2 3 1 2 2
CO2	3 0 3 3 0 0 0 0 0 0 0 2 2 1 2 2

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial

(High)

B.Des_Interior & Retail Space Design

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Course Contents

1. Sketching a product or Interior space from a different point of view.
2. Using cuboidal forms from which products can be visualized. In such a case the cuboidal form becomes a reference in order to remove or add material to visualize any given form.

Assignment

1. Sketching to size and proportion Objects and interior spaces.
2. Visualizing & Sketching different operations on a cube such as slots, chamfers, radii manipulation and designing a whole range of cubes; which are makeable in the workshop.
3. Drawing from recall: Studying a reasonably complex object for 15 minutes and sketching the object details from memory; Workshop Vice to be observed and drawn from memory.
4. Rendering Objects to highlight material textures and surface qualities of wood, metal, glass and plastics.

Reference Books

1. **Sketching and Drawing** by Johnson, Cathy
2. **Figure drawing and anatomy for the artist** by Raynes, John
3. **Introduction to Drawing** by Jackson, John
4. **Basic perspective drawing : a visual approach** by Montague, John

Course Description

Understanding of materials and various manufacturing/ construction processes is an essential requirement for an Interior and Retail space Designer. This module is spread over two semesters and helps students develop a knowledge base of materials and the processes to translate them into viable interior construction elements and products.

Learning Objective

To equip learners to communicate ideas and conceptualize products to as close to reality in order to make design decisions for production. Rendering as communication medium forms basis to represent and communicate product ideas.

Course Outcomes

CO1: Develop an understanding and knowledge base of materials used in interiors.

CO2: Understand certain construction practices with respect to interiors.

CO & PO Mapping

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PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	0	0	2	2	1	1	0	1	0	1	2	2	2	3	1	0
CO2	1	0	1	2	2	2	0	1	0	1	2	2	0	2	0	0
PO & PSO Vs CO	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

UNIT-1 MATERIALS

Flooring- Wood, Stone, Tiles etc. and Ceiling Materials- Suspended ceilings, False ceilings, Upholstery and Fabrics, Materials for Partition Walls- Gypsum, Plywood, Glass etc.

UNIT-2 CONSTRUCTION METHODS

Wooden Flooring, Partition Walls-Gypsum, Glass curtain walls, Ceilings-Suspended ceiling, Grid ceiling.

Reference Books

1. **Building Construction** by B.C Punmia, Laxmi Publishers
2. **Building Construction** by W.B Mckay, Wiley Publishing
3. **Materials in Construction** by Rangwala, Charotar publishing House

Course Description

Structure and joining are critical elements in Furniture and Exhibition Design. Therefore it is important for learners to understand different generic structure characteristics and behavior under different circumstances.

Learning Objective

To equip students with the understanding of structural characteristics and applications using different materials and in different use cases. At the end of the course students will be able to decide and apply knowledge of joinery systems, structural dynamics for interior and retail projects.

Course Outcomes

CO1: To gain understanding of various aspects of structure in relation to loads and materials.

CO2: To develop skills in design of joinery system and detailing of any given structure.

CO3: Understanding of different materials and its behavior in different types of loading (compression tensile and dynamic).

CO & PO Mapping

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PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	0	0	2	1	0	0	0	0	1	2	1	0	3	1	0
CO2	2	0	1	2	2	1	0	0	0	1	2	1	0	2	0	0
CO2	1	0	0	1	0	1	0	0	0	1	2	1	0	2	0	0
PO & PSO Vs CO	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

Visualizing and developing joints in wood, wood and metal and their interface with plastics.

The joinery in itself becomes an aesthetic statement which not only connects materials but

also has a visual expression reflecting the material property.

ASSIGNMENT

Design a POS display for any small size products using a material mix of corrugated plastic sheet of 3 mm thickness, acrylic sheet of 3 mm thk, and extruded aluminium section. Appropriate material language with proper joinery for an aesthetic solution.

A hands-on exercise with prototype to be made.

Reference Books

1. **'Structures' Or 'Why things don't fall down'** by E.J Gordon
2. **Strength of Materials and Structures by John Case**, Lord Chilver of Cranfield
3. **The complete illustrated guide to Joinery** by Gary Rogowsky

Course Description

Working drawings are final drawings upon which interior/construction work is executed. These drawings serve as the bridge between the designer and the implementing team. This module is divided into two sections; The first section will help students to learn and apply the knowledge of working drawings in their future projects. The second section introduces the various methods and practices of estimation and specifications applicable for an interior design project.

Learning Objective

At the end of the course students will be able to prepare Working Drawings for interior work execution as well as be able to prepare detailed Estimates and Bill of Quantities.

Course Outcomes

CO1: Understand the scope of Working drawing for an interior design project and its co-relation and cross-referencing in various technical projections like plans, elevations, sections, detailing etc.

CO2: Imbibe and apply the knowledge of estimate preparation for an interior design project.

CO3: Acquire the knowledge of specifications etc. necessary for professional practice.

CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	0	2	1	0	2	1	0	1	0	1	3	0	2	2	3
CO2	0	0	1	0	0	1	1	0	1	0	2	3	0	1	2	3
CO3	0	0	1	0	0	1	1	0	1	0	2	3	0	1	2	3

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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Course Contents

UNIT-1 BUILDING SURFACES AND COMPONENTS

Working Drawing of Building Surfaces- Wall details, Flooring patterns, Reflected Ceiling Plan, Working Drawing of Components- Doors, Windows

UNIT-2 FURNITURE DETAILING

Working drawing of a particular domestic space, associated built in furnitures, storage units, Detailing of Bathroom/ Kitchen

UNIT-3 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 etc. 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. Costing of Fittings and Fixtures.

Rate Analysis – definition, method of preparation, quantity & labour estimate for woodwork, steelwork, Aluminum work, glass & its rate for different, thickness & sections, finishing (enamel paint, duco paints, melamine, DU coats, Hand polishing, veneering and laminating) for walls & ceilings. Electrical & plumbing products, wiring, ducting etc., and laying of tiles & wall paneling in the estimate format of the project.

UNIT-4 INTRODUCTION TO SPECIFICATION

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 etc. Detailed Estimate – data required, factors to be considered, methodology of preparation, abstract of Estimate,

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contingencies, labour charges, bill of quantities, different methods of estimate for interior design works, methods of measurement of works. Costing of Fittings and Fixtures.

Rate Analysis – definition, method of preparation, quantity & labour estimate for woodwork, steelwork, Aluminum work, glass & its rate for different, thickness & sections, finishing (enamel paint, duco paints, melamine, PU coats, Hand polishing, veneering and laminating) for walls & ceilings. Electrical & plumbing products, wiring, ducting etc., and laying of tiles & wall paneling in the estimate format of the project.

Reference Books

1. **Estimation and Costing** by B.N Dutta, S. Dutta and Co, Lucknow
2. **Estimation, Costing, Specification and Valuation in Civil engineering** by M. Chakrabarti

Course: Professional Elective 1: Digital Modelling 2D

C: L: T: P :: 2: 1: 0: 2

Course Description

The course introduces the basic knowledge of Computer Aided Drafting and it's usage to prepare drawings as an Interior Designer.

Learning Objective

At the end of the course students will be able to prepare drafted drawings of a small scale interior design project using a 2D CAD software as well as learn to make concept presentation sheets using tools such as Photoshop etc.

Course Outcomes

CO1: Demonstrate understanding and usage of CAD software such as Autocad.

CO2: Equip students to prepare drafted presentation and working drawings in the future.

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CO & PO Mapping

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PO/CO	PO & PSO Vs CO
CO1	0
CO2	0
PO1	Develop a creative mindset
PO2	Empathy
PO3	Creative Articulation
PO4	Discovery to Realization
PO5	Design for Future
PO6	Interdisciplinary Approach
PO7	Entrepreneurial Spirit
PO8	Teamwork
PO9	Professional Ethics
PO10	Sustainable Solutions
PO11	Local and Global Context
PO12	Lifelong Learning
PSO1	Develop visual vocabulary of Interior Spaces
PSO2	Understand Spatial Logic and Structural Construction
PSO3	Develop Multidisciplinary skills to resolve communicative spaces
PSO4	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

UNIT-1 COMMANDS TO CREATE AND MANIPULATE GEOMETRY

Introduction to commands to create line, polygons, curvilinear shapes, Commands as manipulators of geometry- Trim, Fillet, Offset etc.

UNIT-2 LAYOUTS AND PAGE SETUP

Scaling and setting up of drawings for print in layout, Pen and colour calibration for different printing requirements.

UNIT-3 PROJECT

Small Project to demonstrate fluency and skillset in Autocad.

Reference Books

1. **Mastering AutoCAD 2019 and AutoCAD LT 2019**, George Omura, Wiley, 2018

Course: Professional Elective 1: Professional Documentation**C: L: T: P :: 2 1:0:****Course Description**

One of the most important parts of research project is being able to communicate the findings effectively. Without effective communication, even a very interesting, competent and relevant piece of research is hollow.

This course deals with the methods and steps for effective documentation of design projects.

Learning Objective

1. Identify the relevant information of a design project
2. Collect and organise the information in a simple yet effective approach

Course Outcomes

CO1: Students will be able to identify key and relevant information in a design process.

CO2: Students will be able to write simple, concise and effective design document for their projects.

CO & PO Mapping

PO/CO	PO & PSO Vs CO															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	0	1	3	0	0	0	0	0	2	0	0	1	1	0	2	2
CO2	1	0	1	1	0	0	0	0	1	0	0	1	0	0	2	2
	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

A. Theoretical

- Components of a design document
- Understanding of fonts and layout
- Examples of design documents

B. Practical/Tutorial

Students have to document their finished design projects

Reference Books

1. Hillary Collins, Research Methods: How to conduct design research for the creative industries, AVA Publishing SA 2010
2. Coffey, A. (1996) Making Sense of Qualitative Data: Complimentary Research Strategies. Sage
3. Yin, R.K. (1994) Case Study Research. Sage

Web Links

1. <https://designmodo.com/product-design-process-1/>
2. <https://www.intelligaia.com/6-benefits-to-design-documentation.php>
3. <http://www.csun.edu/~shan/comp696-698/Resources/Thesis-Outline-Guide-rev1.pdf>

Online Videos

1. <https://www.youtube.com/watch?v=w-vvrcQdpZQ>
2. <https://www.youtube.com/watch?v=r6ZVGBQYNXE>

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Course: Professional Elective 2: Tensile Forms**C: L: T: P :: 3 2:0:2****Course Description**

A hands on exercise wherein students explore the organic and curvilinear forms generated by stretched fabric.

Learning Objective

The course helps students understand and explore curvilinear, hyperboloid and paraboloid lightweight fabric structures.

Course Outcomes

CO1: Understand geometry and explore form generation in hyperboloid and paraboloid shell structures.

CO2: Understand and apply concepts of creating lightweight fabric structures.

CO & PO Mapping

PO/CO	PO & PSO Vs CO
CO1	0
CO2	1
PO1	Develop a creative mindset
PO2	Empathy
PO3	Creative Articulation
PO4	Discovery to Realization
PO5	Design for Future
PO6	Interdisciplinary Approach
PO7	Entrepreneurial Spirit
PO8	Teamwork
PO9	Professional Ethics
PO10	Sustainable Solutions
PO11	Local and Global Context
PO12	Lifelong Learning
PSO1	Develop visual vocabulary of Interior Spaces
PSO2	Understand Spatial Logic and Structural Construction
PSO3	Develop Multidisciplinary skills to resolve communicative spaces
PSO4	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

Students shall develop an interesting grid on mountboard for generating desired forms.

Then through the process of cutting and lifting various forms in a certain hierarchy. These uplifted forms are covered and stretched with fabric. This gives an immediate understanding of possible form generation.

Reference Books

1. **Membrane Structures, First Steps towards Form Finding** by Romualdo Rivera.
1. **Tensile Structures** by Frei Otto.

Course Description

The course exposes the students to the evolution of interior design as a dedicated discipline by looking at the work of master designers and their influence on interior design through the ages.

Learning Objective

The course will help students know about the design movements, trends and present a discourse on the work of great masters and what makes their work timeless.

Course Outcomes

CO1: To know about the modern movements in interior design from the beginning of 20th century and their importance in contemporary interior designs.

CO2: To know about the work and style of the great masters.

CO & PO Mapping

	PO & PSO Vs CO															
	Develop a creative mindset															
	Empathy															
	Creative Articulation															
	Discovery to Realization															
	Design for Future															
	Interdisciplinary Approach															
	Entrepreneurial Spirit															
	Teamwork															
	Professional Ethics															
	Sustainable Solutions															
	Local and Global Context															
	Lifelong Learning															
	Develop visual vocabulary of Interior Spaces															
	Understand Spatial Logic and Structural Construction															
	Develop Multidisciplinary skills to resolve communicative spaces															
	Develop abilities to orchestrate various nuances of Professional Practice															
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	0	0	0	1	1	0	0	0	0	2	1	1	0	0	0
CO2	2	0	1	0	0	0	0	0	0	0	2	1	1	0	1	0

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

UNIT - I DESIGN MOVEMENTS AND PIONEERS

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Art nouveau, the post Industrial era works of Charles Renée Mackintosh, Antonio Gaudi, Gerrit Rietveld and their expressionist interior design, Walter Gropius/ Bauhaus, De Stijl, Mies Van Der Rohe, Art Deco

UNIT – II MODERNISM

Interiors of Le Corbusier, Frank Llyod Wright, Louis Khan, Kenzo Tange and Oscar Niemeyer

UNIT – III POST MODERNISM AND MINIMALISM

The works of Alvar Alto, Phillip Johnson, Charles and Ray Eames , Eero Saarinen, Eero Arnio, Arne Jacobsen, Zaha Hadid, Santiago Calatrava, Frank Gehry and Peter Eisenmann.

Reference Books

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

Course Description

The study of outdoor furniture enables students to develop and design furniture for outdoor public usage. The furniture designed needs to be weather resistant and be robust to withstand wear & tear and heavy usage.

Learning Objective

1. Understand contextual, climatic, material and usage aspects of a outdoor furniture.
2. Learn to develop and prototype a furniture for outdoor public usage.

Course Outcomes

CO1: An understanding of outdoor social spaces and transit spaces in order to come up with appropriate outdoor furniture that are functional and aesthetic.

CO2: A study of materials and production processes suitable to withstand outdoor climatic conditions and are robust, vandal proof, easy to maintain & clean. Materials used for way finding and outdoor signage included.

CO & PO Mapping

PO/CO	PO & PSO Vs CO															
CO1	2	2	1	2	2	1	0	0	0	2	2	1	0	2	1	0
CO2	1	1	2	2	2	1	0	0	0	2	1	1	0	2	1	0
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

Essentially all outdoor elements such as garden furniture, waste bins, lamp posts, seating for outdoor and semi outdoor social spaces constitute outdoor furniture. Bus stops with seating, outdoor waiting areas in a zoo with shelter to provide shade from the sun.

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Reference Books

1. How to make Outdoor & Garden furniture by Randy Johnson

Year 3

Semester 5

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Course: Building Technology I**C: L: T: P :: 2 2:0:****Course Description**

The course introduces basic knowhow of the Services that form the backbone of a living space. This course covers points on Water Supply and Drainage with more emphasis on material and fixture usage as per context and aesthetics. The second unit deals with the Electrical and wiring system for Building interiors.

Learning Objective

At the end of this course students will understand the importance, considerations and implications of services such as Water supply, drainage and electricals while planning out interior spaces in real life projects.

Course Outcomes

CO1: To develop understanding of water requirements and the methods of water supply and drainage in a living space.

CO2: Develop knowhow and Market knowledge of sanitary materials and fixtures, Electrical fittings and fixtures used contextually and aesthetically in interior spaces.

CO3: Demonstrate conceptual layouts and fixture identification for various interior spaces.

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CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
PO & PSO Vs CO	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice
CO1	0	2	0	0	1	1	0	0	0	1	2	1	0	2	0	2
CO2	0	0	0	2	2	1	0	0	0	1	2	1	1	1	1	1
CO3	2	1	2	1	1	0	0	0	0	1	1	1	0	2	1	1

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

UNIT-1 WATER SUPPLY AND DRAINAGE

1. Water Supply: Water requirements for different types of buildings, simple method of removal of impurities, water saving practices and their potential Service

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connection from mains, sump and storage tank, types and sizes of pipes, special installation in multistoried buildings.

2. Material, types of fixtures and fitting for a contemporary bathroom: taps – quarter turn, half turn, ceramic, foam flow etc, hot water mixer, hand shower

Rainwater harvesting to include roof top harvesting, type of spouts, sizes of rainwater pipes and typical detail of a water harvesting pit.

1. Drainage: Basic principles of drainage, surface drainage, shape and sizes of drains and sewers, storm water overflow chambers, methods of laying and construction of sewers.

2. Types of fixtures and materials: sinks, shower tray, shower temple, bath tub, Jacuzzi, water closets, flushing cisterns, urinals, sinks , wash basins, bidet, Traps – shapes, sizes, types, materials and function etc.

UNIT-2 ELECTRICAL SYSTEMS

Single/Three phase supply, Protective devices in electrical installation- Fuses, MCB, ISI Specifications - Types of wires, Wiring systems and their choice – Planning electrical wiring for building interiors, Main and distribution boards, Typical Electrical layout for interiors.

Reference Books

1. **Water supply and sanitary engineering**, S.C Rangwala, Charotar publishing house.
2. **The Lighting of Buildings**, R.G.Hopkinson and J.D.Kay, Faber and Faber, London,1969

Course: Design of Retail Spaces and Visual Merchandising**C: L: T: P :: 3 1:0:****Course Description**

The evolution of human societies and global economies to a consumerist lifestyle and the subsequent retail growth worldwide has led to the requirement of design of retail and consumer spaces, which facilitate consumers to make purchase decision. The course aims at familiarizing the learners with different types of retailing modes and its environments.

Learning Objective

1. At the end of this course students will be able to understand User and Business criterias while designing a Retail space.
2. Students will learn and be able to apply concepts of Visual Merchandising to elicit more user interest, interaction and brand communication in a retail environment.

Course Outcomes

CO1: To develop understanding of the concept of Retail and brands.

CO2: Develop Understanding of merchandising principles and be able to apply them.

CO3: Understand the bigger picture of the Retail context by gaining a knowhow of User and Business criterias, Supply chain processes and Service Interfacing

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CO4: To develop abilities at strategizing retail concepts and the translation of the concept to spaces with appropriateness of material, process, consumer habits, brand parameters, etc.

Course Contents

Selecting a particular product category such as garments, electronics & appliances, books or bakery products etc, studying and understanding various brands of a given product category. Studying retail spaces with respect to product category and understand the product hierarchy of display, zoning and layout planning and coming up with a strategy for enhancing sales and visual merchandising.

Coming up with a design proposal for an enhanced look and feel, atmospherics, lighting, branding in sync with the selected brand/ product.

Reference Books

1. **The Inspired Retail Space: Attract Customers, Build Branding, Increase Volume** by Corinna Dean
2. **Masters' Interior Design 2 - Retail Space** by Wang Zhi.
3. **Visual Merchandising: The Art of Making the Most of Your Selling Space** by Camille D. Roberge.

CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
PO & PSO Vs CO	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice
CO1	2	2	3	3	3	2	2	1	1	1	3	1	3	2	2	1
CO2	2	2	2	2	3	1	0	0	0	2	3	1	3	2	2	2
CO3	2	1	2	1	1	2	2	2	1	1	2	1	2	0	2	1
CO4	3	2	2	3	2	2	1	1	1	2	3	2	2	1	2	2

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Description

The course introduces the students to the 3D modelling techniques and its usage to conceptual presentations as an Interior Designer.

Learning Objective

Understand and demonstrate use of 3D modelling software like Sketch up, Rhinoceros to design interior spaces and artefacts.

Course Outcomes

CO1: Demonstrate understanding and usage of 3D modelling software such as Sketchup/ Rhinoceros.

CO2: Be able to create and manipulate curves, solids and surfaces.

CO3: Be able to create renderings and digital presentations of created products & spaces.

Course Contents

UNIT-1 3D MODELLING WITH SKETCHUP/ RHINOCEROS

Sketching and 2D Drafting, Basic Solids/ Surfaces, Surface generation commands (Extrude, Push Pull, Sweep etc.), Surface manipulation commands (Fillet, Boolean etc.)

UNIT-2 RENDERING

Using Lumion/ Keyshot for Digital renderings of Products/ Spaces, Material and Texture Creation, Setting of environment, lights and cameras.

UNIT-3 PROJECT

Modelling and Rendering final concept from module of Design of Domestic interiors/ Simple Furniture and Ergonomics.

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Reference Books

1. Timesaver standards for landscape architecture
2. Planting design by Theodore D.Walker by VNR Publications New York.
3. Landscaping Principles and Practices by Jack E.Ingels,Delmar Publishers.

CO & PO Mapping

	PO & PSO Vs CO																
	Develop a creative mindset																
	Empathy																
	Creative Articulation																
	Discovery to Realization																
	Design for Future																
	Interdisciplinary Approach																
	Entrepreneurial Spirit																
	Teamwork																
	Professional Ethics																
	Sustainable Solutions																
	Local and Global Context																
	Lifelong Learning																
	Develop visual vocabulary of Interior Spaces																
	Understand Spatial Logic and Structural Construction																
	Develop Multidisciplinary skills to resolve communicative spaces																
	Develop abilities to orchestrate various nuances of Professional Practice																
CO1	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	
2	0	2	1	1	0	0	0	0	1	0	3	2	0	0	0	1	

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UPES

2023-27

CO2	2	0	2	1	1	0	0	0	1	0	2	2	0	0	0	1
CO3	2	0	2	1	1	0	0	0	1	0	2	2	0	0	0	1

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial
(High)

Course: PE 3: Advanced Digital Rendering

C: L: T: P :: 4 2:0:

Course Description

3D renderings not only aid in creating lifelike concept presentations but they also help simulate material properties, colour palette and lighting design long before the interior design project commences. The advent of Virtual Reality has further broadened up horizons to experience a space in the form of 360 degree visualizations and interactive walkthroughs.

Learning Objective

The course will enable the students to master further nuances of digital 3d rendering for interior spaces and be future ready to present design concepts.

Course Outcomes

CO1: Develop understanding of Texturing, Lighting and Environment for visual simulation of interior space.

CO2: To be able to create lifelike interior renderings and walkthroughs for communicating concepts

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CO3: Explore possibility of VR as a tool to create experiential design concepts.

Course Contents

UNIT-1 Texturing

Understand different kinds of maps used for material creation, Mapping- UV, Box mapping etc.

UNIT-2 Lighting and Environment

Lighting and shadows, Colour temperature and exposure, Use of IGES lights, Lighting using HDRI mapping

UNIT-3 Walkthroughs and VR

Learn to set up cameras for rendering and creating walkthroughs, Explore VR possibilities in creating 360 degree renders of interior spaces.

Reference Books

1. Materials will be discussed in class by course faculty.

CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
PO & PSO Vs CO	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice
CO1	2	0	2	1	1	0	0	0	0	0	2	3	0	0	0	1
CO2	2	0	2	1	1	0	0	0	0	0	2	2	0	0	0	1
CO3	2	0	2	1	1	0	0	0	0	0	2	2	0	0	0	1

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial

Course: Professional Elective 3: Interior Landscaping

C: L: T: P :: 4: 2: 0:

Course Description

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Landscaping brings in life to otherwise sterile spaces. Not only incorporating green spaces within the living environment enhance its aesthetic value, it also affects the overall well being and helps reduce pollutants in the air as well as stress and anxiety levels of the occupants. Landscaping in interior spaces has thus always been a crucial element throughout cultures and is an important branch of study for designing interior spaces.

Learning Objective

1. To study concepts of interior landscaping and apply in the design of interior spaces

Course Outcomes

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.

CO2: Definition, classification of plants, indoor plants and their functions, layout & components, Floriculture – commercial, ornamental, Selection of plants & pest control.

CO & PO Mapping

PO/CO	PO & PSO Vs CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	Develop a creative mindset	1	0	1	2	2	0	0	0	0	2	2	1	2	2	0	1
CO2	Empathy	0	0	1	1	0	0	0	0	0	1	2	1	0	0	2	0
	Creative Articulation																
	Discovery to Realization																
	Design for Future																
	Interdisciplinary Approach																
	Entrepreneurial Spirit																
	Teamwork																
	Professional Ethics																
	Sustainable Solutions																
	Local and Global Context																
	Lifelong Learning																
	Develop visual vocabulary of Interior Spaces																
	Understand Spatial Logic and Structural Construction																
	Develop Multidisciplinary skills to resolve communicative spaces																
	Develop abilities to orchestrate various nuances of Professional Practice																

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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Course Contents

UNIT – I INTERIOR LANDSCAPING

Definition, classification of plants, indoor plants and their functions, layout & components, Floriculture – commercial, ornamental, Selection of plants & pest control.

Physical requirements of plants – light, temperature, water, planting medium, soil separator, weight of plants, acclimatization & maintenance. Techniques to meet physical requirements.

UNIT – II INTERIOR LANDSCAPING ELEMENTS & PRINCIPLES

Various interior landscaping elements – water bodies - pools, fountains, cascades
Plants, rocks, artifacts, paving & lighting, Design guidelines- plant texture & colour, plant height, plant spacing.

UNIT – III LANDSCAPING FOR COURTYARDS AND DECKS

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.

UNIT – IV EXERCISE ON INTERIOR LANDSCAPE

Courtyard design/ An outdoor room design/ Terrace garden

Reference Books

1. **Timesaver standards for landscape architecture**
2. **Planting design by Theodore D.Walker** by VNR Publications New York.
3. **Landscaping Principles and Practices** by Jack E.Ingels,Delmar Publishers.

Course Description

Understanding of spaces which have a commercial transaction. Commercial spaces are becoming more flexible and more multifunctional in nature due to space constraints.

The design of a commercial building is based on usability. Space needs to be usable for both employees and customers in order to maximize profits.

Learning Objective

1. Understand Usage and transactional criterias of a commercial space and how design plays a crucial role in it.
2. Enable students to tackle a relatively complex interior project with multiple stakeholders and high occupancy.

Course Outcomes

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CO1: To develop understanding of the nuances of commercial spaces & related activities. Understand the inter-relationship of various elements of commercial space.

CO2: To develop understanding of the nuances of interface of consumer and product / service.

CO3: To develop understanding the nuances of special needs of consumer groups and their demography and psychographic.

CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	1	1	2	0	1	0	1	2	2	0	2	1	3
CO2	3	2	2	2	2	2	0	1	0	1	3	2	0	0	0	3
CO3	2	3	3	3	3	2	2	1	0	1	3	2	0	0	0	0

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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Course Contents

Design of Office spaces to improve interaction and productivity. Exploring the new trend of co-working and collaborative spaces.

Furniture systems both built in and modular.

Understanding of Interior fit outs.

Reference Books

1. **Designing Sustainable Residential and commercial Interiors.**

Year 3

Semester 6

B.Des_Interior & Retail Space Design

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Course: Building Technology II**C: L: T: P :: 2 2:0:****Course Description**

The course acts as a continuation from the previous semester and introduces the basic concepts of Ventilation and Acoustics as essential service elements of interior design. The module firstly emphasizes in explaining the fundamentals of the role of artificial ventilation to achieve a sense of thermal comfort and in the second part it helps students understand the role acoustics play in a built up environment.

Learning Objective

At the end of this course students will understand the importance, considerations and implications of services such as Ventilation and Acoustics in interior spaces in real life projects.

Course Outcomes

CO1: Understand need and role of HVAC and Acoustics in an interior environment.

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CO2: Understand the role building services play in attaining liveable comfort.

CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	0	0	0	1	2	1	0	0	0	1	2	1	0	2	2	2
CO2	0	1	0	0	1	1	0	0	0	1	2	1	0	1	1	2

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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Course Contents

UNIT-1 BASIC CONCEPTS OF AIRCONDITIONING, COMPONENTS AND APPLICATION

Compressors, Evaporators, Air handling units – Cooling towers, Window type and packaged air conditioners, Chilled water plants, Fan coiled systems, Water piping, Cooling load, Air-conditioning systems for different types of buildings, Duct lay out etc.

UNIT-2 ACOUSTICS AND SOUND INSULATION FOR INTERIOR SPACES

Room acoustics- resonance, reverberation, echo, reverberation time. Acoustical requirements of different types of building. Sound absorption, Absorbing materials used and their choices, Sound insulation materials.

Reference Books

1. **Air Conditioning** by M.H Lulla
2. **Detailing for architectural acoustics** by Peter Templeton & Saunders, Architectural press, 1994

Course: Stacking and Folding Furniture**C: L: T: P :: 3 1:0:****Course Description**

Spaces in urban dwelling tend to be dense and compact. Therefore, there is a need to design furniture that can be folded or stacked in order to maximize usable space. The concept of modularity or stack-ability is considered as an important factor to resolve the space issues.

The process of folding is enhanced by the usage of elements such as links, pivots, hinges or sliding features. Whereas the concept of modularity is seen in relation to knock down flat pack furniture easy to transport.

Learning Objective

The course will enable students to understand concepts of stackability, foldability and modularity of furniture and also empower them with the ability to detail ot concepts.

Course Outcomes

CO1: To develop understanding of concept of foldability, collapsibility, and stackability.

CO2: Understanding of principles of movement and kinematics.

CO3: Appropriate selection of type of system (linkage, stackability) towards rationalization of spaces and increased affordances.

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CO & PO Mapping

PO/CO	PO & PSO Vs CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	Develop a creative mindset	2	1	2	2	1	1	0	1	0	2	3	1	0	2	1	0
CO2	Empathy	2	0	0	1	1	0	0	1	0	2	2	1	0	2	0	0
CO3	Creative Articulation	2	0	2	0	2	1	0	1	0	2	3	1	0	1	1	0
	Discovery to Realization																
	Design for Future																
	Interdisciplinary Approach																
	Entrepreneurial Spirit																
	Teamwork																
	Professional Ethics																
	Sustainable Solutions																
	Local and Global Context																
	Lifelong Learning																
	Develop visual vocabulary of Interior Spaces																
	Understand Spatial Logic and Structural Construction																
	Develop Multidisciplinary skills to resolve communicative spaces																
	Develop abilities to orchestrate various nuances of Professional Practice																

0: No Relation 1 : Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

The course will be conducted in a workshop mode with lectures and demonstrations to clarify the context, usage and fundamentals to construct a prototype of a stackable furniture.

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Reference Books

Course: Professional Elective 4: Environmental Graphics

C: L: T: P :: 3 2:0:

Course Description

Environmental Graphics embraces many design disciplines including graphic, architectural, interior, landscape, and industrial design, all concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of creating experiences that connect people to place.

Learning Objective

To sensitize students towards the communication effectiveness of wayfinding signages and equip them with the skillset to create and utilize them contextually in retail oriented projects where wayfinding plays a pivotal role.

Course Outcomes

CO1: To develop an understanding about the importance of Visual communication in wayfinding.

CO2: To be able to use Environmental Graphics in Retail oriented projects.

CO & PO Mapping

PO & PSO Vs CO
Develop a creative mindset
Empathy
Creative Articulation
Discovery to Realization
Design for Future
Interdisciplinary Approach
Entrepreneurial Spirit
Teamwork
Professional Ethics
Sustainable Solutions
Local and Global Context
Lifelong Learning
Develop visual vocabulary of Interior Spaces
Understand Spatial Logic and Structural Construction
Develop Multidisciplinary skills to resolve communicative spaces
Develop abilities to orchestrate various nuances of Professional Practice

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UPES

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PO/CO	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010	P011	P012	PS01	PS02	PS03	PS04
CO1	2	1	2	1	1	1	0	1	0	1	2	2	0	0	3	0
CO2	3	1	3	2	1	1	0	1	0	1	2	2	0	0	3	0

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

UNIT – I INTRODUCTION TO ENVIRONMENTAL GRAPHICS

Semiotic study- Symbols and modes of communication, Wayfinding- examples of transit spaces, retail spaces, other public spaces with high footfall, Placemaking and identity- architectural signages, Exhibitions and interpretive graphics, civic installations.

UNIT – II METHODS OF COMMUNICATION

Mediums of communication, Possibilities with newer mediums such as VR, Projection mapping etc.

UNIT – III PROJECT

Hands on project to demonstrate ability to integrate Environmental Graphics in Retail oriented projects.

Reference Books

1. **Designing & Planning Environmental Graphics** by Gerry Rosentswieg, Wayne A. Hunt
2. **Environmental Graphics & the 20th Century** by Poulin

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Course Description

A systematic methodology of arranging content towards exhibitions, museums, and other formats wherein content plays a vital role, in terms of hierarchy of information, emphasis of relevant information. This also enables the objective of the various mediums of expression to have clarity.

Learning Objective

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To sensitize students towards appropriate usage of typefaces that elicit intended semiotics and effective communication in Interior and Retail spaces.

Course Outcomes

CO1: Sensitize towards emotive and semiotic aspects of typefaces and imbibe fundamentals of typography .

CO2: To inculcate clarity of thought and content towards various formats of exhibition, museums, and other retail spaces.

CO & PO Mapping

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PO/CO	PO & PSO Vs CO
CO1	2
CO2	2
PO1	Develop a creative mindset
PO2	Empathy
PO3	Creative Articulation
PO4	Discovery to Realization
PO5	Design for Future
PO6	Interdisciplinary Approach
PO7	Entrepreneurial Spirit
PO8	Teamwork
PO9	Professional Ethics
PO10	Sustainable Solutions
PO11	Local and Global Context
PO12	Lifelong Learning
PSO1	Develop visual vocabulary of Interior Spaces
PSO2	Understand Spatial Logic and Structural Construction
PSO3	Develop Multidisciplinary skills to resolve communicative spaces
PSO4	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

UNIT – I FUNDAMENTALS OF TYPOGRAPHY

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Brief history of Typography, Understanding and usage of Typefaces, Attributes of typefaces- Weights, Proportions, Spacing, Semiotic qualities

UNIT – II MEDIUM OF COMMUNICATION

Panel graphics, Context of use in Retail, Exhibition spaces.

Reference Books

1. **Basic Typography** by Michael Harkins
2. **Why Fonts matter** by Sarah Hyndman
2. **New Perspectives in Typography** by Scott Williams

Course Description

Hospitals, schools, home for the elderly, visually impaired are examples of spaces having specific and special functions and requirement. Designers would need the ability to create spaces and elements specific to special user groups. To understand key aspects of empathy with context to user.

Learning Objective

1. Understand to tackle interior design problems with user group of specific needs and imbibe factors of universal design.
2. Enable students to tackle a relatively complex interior project with multiple stakeholders and high occupancy.

Course Outcomes

CO1: To develop ability to meaningfully create spaces and elements which have a specific requirement of functionality.

CO2: Investigation and evaluation of special and specific needs/ requirements.

CO3: Application of principles of ergonomics.

CO4: To learn validation of concepts.

CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3	2	2	1	2	0	1	0	2	2	1	0	2	1	3
CO2	2	3	2	2	1	1	0	1	2	2	2	1	0	0	0	3
CO3	0	2	0	2	1	1	0	0	0	0	2	1	0	0	0	0
CO4	1	2	3	2	2	1	0	0	0	0	0	1	0	0	0	3

0: No Relation 1 : Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

1. Anthropometric study.
2. Bio-Mechanical study.

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3. Enhancing work efficiency
4. Time motion study
5. Illumination conditions and effects of ambience temperature.
6. Data gathering/generation
7. Recreation of workstation for testing and validation.
8. Documentation.

Reference Books

1. **Neuferts standards for Architecture and Interiors** by Ernst and Peter Neuferts
2. **Time-Saver Standards for Interior Design and Space Planning** by Joseph DeChiara, Tata McGraw Hill.

Year 4

Semester 7

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Course Description

Design Management is the topic that plays an important role in the design industry. It manages almost all the peripheral issues related to design. It will help to learn about the connection design has with business success and innovation. It will give the right knowledge around organizational structure, organizational culture and functional leadership of design. Along with that, it ensures that the laws are followed, the rights are protected and the design is kept as close to its idea as possible. Design management de-mystifies much of what entrepreneurs do and, as such, it forms a solid foundation for any enterprise curriculum. The objective of this course is to orient the student on how to become a design entrepreneur.

Learning Objective

1. Students will learn about basics of Design Management which will give them the understanding and requirement for a design entrepreneur.
2. It provides an overview of topics and issues central to the Strategic Design and Management program, with an emphasis on the relationships between design, experience, social and economic change.

Course Outcomes

CO1: To introduce students to the concepts of Design Management which will give them the understanding and requirement for a design entrepreneur.

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CO2: overview of topics and issues central to the Strategic Design and Management program, with an emphasis on the relationships between design, experience, social and economic change.

CO & PO Mapping

PO/CO	PO & PSO Vs CO
CO1	0
CO2	0
PO1	Develop a creative mindset
PO2	Empathy
PO3	Creative Articulation
PO4	Discovery to Realization
PO5	Design for Future
PO6	Interdisciplinary Approach
PO7	Entrepreneurial Spirit
PO8	Teamwork
PO9	Professional Ethics
PO10	Sustainable Solutions
PO11	Local and Global Context
PO12	Lifelong Learning
PSO1	Develop visual vocabulary of Interior Spaces
PSO2	Understand Spatial Logic and Structural Construction
PSO3	Develop Multidisciplinary skills to resolve communicative spaces
PSO4	Develop abilities to orchestrate various nuances of Professional Practice

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

- Marketing Mix
- 4Ps and Porter's Five Forces

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- Branding and PESTEL
- Financial and Legal aspects
- Intellectual Property Rites
- Case Study

Reference Books

1. **The Tipping Point.** 2000, Gladwell, M. Little Brown and Company, London.
2. **The 80/20 Principle: the secrets to success by achieving more with less.**1998, Koch, R., Doubleday – A Currency Book, New York.
3. **Design in Business: Strategic Innovation through Design.** 2002, Bruce, M. & Bessant., Prentice Hall, Harlow UK.
4. **The Design Agenda: A Guide to Successful Design Management.** 1995, Cooper, R. & Press, M, John Wiley & Sons, Chichester UK.
5. **Design Management: A Handbook of Issues and Methods.** 1990, Oakley, M. - Blackwell, Oxford UK

Course: Professional Elective V: Set Design**C: L: T: P :: 3 2:0:****Course Description**

Set Design deals with design of physical spaces where actions take place in reference to an audience or a camera. This is towards suggesting the style and tone of a scripted production. This also creates ambiances and gives clues as to the specific time and space of the actions and offering creative possibility for the movements and grouping of actors

Learning Objective

1. Understand the multi activities that constitute a set.
2. Familiarise and Develop fluency in set interiors and props

Course Outcomes

CO1: To develop understanding of spaces in which action is giving to take place.

CO2: To develop understanding the nuances of three styles at sets such as precaution, amphi theater.

CO3: To develop understanding of the nuances of traditional performing art.

CO4: To develop understanding of the nuances of appropriate materials, content development, sensorial experiences and props.

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CO5: To develop understanding of the nuances of lightings.

Course Contents

This course is intended to be taken in a workshop mode where the instructor/ facilitator will help students imbibe concepts with lectures, demonstrations and hands on activities.

Reference Books

Materials will be discussed by instructor/ facilitator

CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	2	2	2	0	1	0	2	0	2	3	2	0	2	1	1
CO2	1	2	2	2	0	1	0	1	0	2	3	2	0	2	1	1
CO3	1	2	2	2	0	1	0	1	0	2	3	2	0	2	1	1
CO4	1	2	2	2	0	1	0	0	0	2	2	2	0	2	1	1
CO5	1	2	2	2	0	1	0	0	0	2	2	2	0	2	1	1

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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Course Description

The workshop is meant to provide students an overview of the field of performing arts, primarily theater.

These contexts are introduced by inviting experts to conduct expository workshops such as this one.

Learning Objective

We aspire to introduce our students to various contexts that influence design and are essentially drawn from other disciplines

Course Outcomes

CO1: Understand and appreciate theatre and performing arts as an auxiliary extension to design

Course Contents

The workshop is meant to be an activity oriented workshop, which will combine theory with exercises and short assignments. The course could cover the following:

- a) Performing arts: a synchronic and diachronic overview
- b) Place of Theater in the gamut of performing arts
- c) Theater and its various forms (historic, traditional and contemporary)
- d) What distinguishes one form from the other (use of space, style, music, costumes, sets etc).
- e) The dynamics of performance (students could learn this easily by actually performing)

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Reference Books

No specific reference books are required for this course

CO & PO Mapping

	PO & PSO Vs CO																
	Develop a creative mindset																
	Empathy																
	Creative Articulation																
	Discovery to Realization																
	Design for Future																
	Interdisciplinary Approach																
	Entrepreneurial Spirit																
	Teamwork																
	Professional Ethics																
	Sustainable Solutions																
	Local and Global Context																
	Lifelong Learning																
	Develop visual vocabulary of Interior Spaces																
	Understand Spatial Logic and Structural Construction																
	Develop Multidisciplinary skills to resolve communicative spaces																
	Develop abilities to orchestrate various nuances of Professional Practice																
PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	
CO1	2	2	2	0	0	1	0	1	0	0	2	2	0	0	1	0	

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Professional Elective V: Lighting and Illumination Design

C: L: T: P :: 3 2:0:

Course Description

The workshop is meant to provide students an overview of the field of performing arts, primarily theater.

These contexts are introduced by inviting experts to conduct expository workshops such as this one.

Learning Objective

The course enables the students to understand the importance of lighting in a Built up space. The students are sensitized to the wholesome Spatial expression and occupancy comfort attributed to the colour and illumination of a space.

Course Outcomes

CO1: Understand Daylighting and idioms in Artificial lighting.

CO2: Perceive spatial expression and user comfort as a result of illumination and colour rendering.

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CO & PO Mapping

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PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	0	0	1	2	1	0	0	0	2	2	1	1	0	0	0
CO2	2	1	2	0	2	1	0	0	0	2	1	1	0	0	2	0
	<p>PO & PSO Vs CO</p> <p>Develop a creative mindset</p> <p>Empathy</p> <p>Creative Articulation</p> <p>Discovery to Realization</p> <p>Design for Future</p> <p>Interdisciplinary Approach</p> <p>Entrepreneurial Spirit</p> <p>Teamwork</p> <p>Professional Ethics</p> <p>Sustainable Solutions</p> <p>Local and Global Context</p> <p>Lifelong Learning</p> <p>Develop visual vocabulary of Interior Spaces</p> <p>Understand Spatial Logic and Structural Construction</p> <p>Develop Multidisciplinary skills to resolve communicative spaces</p> <p>Develop abilities to orchestrate various nuances of Professional Practice</p>															

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

UNIT-1 DAYLIGHTING

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Nature of light – Wavelength, Photometric quantities – intensity, Flux, illumination and luminance, visual efficiency, sources of light, day light factor concept, day lighting requirements.

UNIT-2 ARTIFICIAL LIGHTING

Ambient, Accent and Task Lighting. Electric lamps – incandescent, fluorescent, sodium vapour, mercury, halogen and neon. Calculation of artificial lighting, guidelines for lighting design, Glare in artificial lighting.

UNIT-3 COLOUR AND LIGHTING

Colors, color schemes - Monochromatic, analogous, complementary colour schemes, triadic schemes, effects of color in different areas, color temperature, psychological effects of colour in interiors, factors affecting colour, Munsell system and Oswald system.

UNIT-4 LUMINAIRES AND FIXTURES

Definition, different luminaires 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 etc.

To be commenced with a small luminaire design project.

Reference Books

1. **The Art of living** by Randall whitehead
2. **Lighting design: source** book by Randall whitehead
3. **Concepts of lighting, Lighting design in Architecture** by Torquil Barker

Professional Elective VI: Traditional Interiors**C: L: T: P :: 3:1:2****Course Description**

A built up interior space is an amalgamation of several Cultural, Climatic idioms and notions. The semiotics of which are a result of continuous evolution and inheritance of societal tastes and values, beliefs and the methods of construction. At a point when we stand looking for sustainable building practices, it is time to take a step back and sensitize the students about the Climate and Context inclusive interiors from over the globe.

Learning Objective

The course aims to sensitize the students towards traditional building and making practices resulting in contextually coherent interior spaces. The course will also aim to imbibe the essence of interiors of dwellings in hilly areas.

Course Outcomes

CO1: Understand and be sensitized towards traditional building practices and methods.

CO2: Understand Design and Aesthetics across cultures.

CO3: Imbibe and value importance of heritage and concept of adaptive reuse.

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CO & PO Mapping

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
PO & PSO Vs CO																
	Develop a creative mindset															
	Empathy															
	Creative Articulation															
	Discovery to Realization															
	Design for Future															
	Interdisciplinary Approach															
	Entrepreneurial Spirit															
	Teamwork															
	Professional Ethics															
	Sustainable Solutions															
	Local and Global Context															
	Lifelong Learning															
	Develop visual vocabulary of Interior Spaces															
	Understand Spatial Logic and Structural Construction															
	Develop Multidisciplinary skills to resolve communicative spaces															
	Develop abilities to orchestrate various nuances of Professional Practice															
CO1	1	3	2	1	2	1	0	1	1	2	3	2	1	2	0	0
CO2	1	2	2	0	1	1	0	1	1	2	3	2	3	0	0	0
CO3	2	2	1	2	2	1	0	1	2	2	3	2	0	0	1	0

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

1. Cultural idioms
2. Case Studies and examples of Interior spaces
3. Methods of making built up areas and Furniture

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4. Adaptive reuse and sustainable practices

Reference Books

1. **Indian Interiors** by Deidi Von Schaewen, Taschen
2. **Himalayan Style** by Claire Burkert, Roli Books
3. **Himalayan Traditional Architecture** by OC Handa, Rupa
4. **Temples of Lhasa** by Tibet Heritage Fund

Course Description

Space form and colour are key elements of space experiences which are often used to manipulate space for creating desired visual effects. The course provides opportunity to study and compose visual elements such as color, graphics and lighting, for visual impact.

Learning Objective

Understanding composition of visual elements to create impactful spaces that elicit participation and interaction.

Course Outcomes

CO1: Understand and appreciate spaces to invite participation and interaction.

CO2: Understand multi sensorial and experiential nature of spaces

CO & PO Mapping

PO & PSO Vs CO
Develop a creative mindset
Empathy
Creative Articulation
Discovery to Realization
Design for Future
Interdisciplinary Approach
Entrepreneurial Spirit
Teamwork
Professional Ethics
Sustainable Solutions
Local and Global Context
Lifelong Learning
Develop visual vocabulary of Interior Spaces
Understand Spatial Logic and Structural Construction
Develop Multidisciplinary skills to resolve communicative spaces
Develop abilities to orchestrate various nuances of Professional Practice

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UPES

2023-27

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	3	2	1	2	1	0	0	1	0	1	1	1	2	0	0
CO2	1	2	2	0	1	1	0	0	1	0	2	1	3	0	0	0
CO3	2	2	1	2	2	1	0	0	1	0	1	1	0	0	1	0

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

1. To study interaction of visual elements such as lines, textures, patterns, colour and role of lighting in order to create desired effects.
2. Application of fundamentals of design, lighting and concepts of illumination.
3. Understanding and appreciation of space to invite participation and interaction.
4. Sensorial exploration of spaces.

Reference Books

1. **The Art of living** by Randall whitehead
3. **Interior Colour by Design**, Jonathan Moore, Rockport Publishers, 1994.
4. **Designs for 20th century interiors**, Fiona Leslie, VH Publications, London, 2000

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Course : Project VI: Design for Hospitality spaces**C: L: T: P :: 6:1:0:1****Course Description**

Recreational & Service spaces such as Hotels, Restaurants, clubs etc. are used by people for more of luxurious treatment. Apart from function, aesthetics takes an upper hand & people enjoy the special treatments being given to such spaces which are normally not used in the domestic spaces. The spaces being vast also gives an opportunity to be extended to & connected with the exteriors through the landscapes or bringing in the exterior through some other elements.

Learning Objective

The main aim is to develop visually literate students who are proficient at analytical thinking, conceptualization and the problem-inquiry, solution cycle for a complex project with high aesthetic value interiors. The course also examines the connection between abstract design principles and the physical and visual environments.

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Course Outcomes

CO1: Understand spatial coherence in a large scale project.

CO2: Apply concepts of spatial planning and reorganization.

CO3: Apply theme based aesthetics to satisfy semantic connotation of intended project

CO & PO Mapping

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PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
PO & PSO Vs CO																
	Develop a creative mindset															
	Empathy															
	Creative Articulation															
	Discovery to Realization															
	Design for Future															
	Interdisciplinary Approach															
	Entrepreneurial Spirit															
	Teamwork															
	Professional Ethics															
	Sustainable Solutions															
	Local and Global Context															
	Lifelong Learning															
	Develop visual vocabulary of Interior Spaces															
	Understand Spatial Logic and Structural Construction															
	Develop Multidisciplinary skills to resolve communicative spaces															
	Develop abilities to orchestrate various nuances of Professional Practice															
CO1	1	3	2	2	3	2	0	1	0	2	3	2	2	2	1	1
CO2	3	2	3	2	2	1	0	1	0	2	3	2	2	2	0	0
CO3	2	2	3	3	3	1	0	1	0	1	2	2	0	0	0	3

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

Hotels and Resorts with restaurant: Spatial and service standards for five star hotels – integration of interior design schemes for rooms, restaurants, bars, health clubs, shopping arcade and other guest areas with the general theme of the hotel.Special

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ideas for suites and banquet halls – contemporary interior schemes to integrate new concepts in lighting and materials.

or

Auditorium: Detail schematics of wall paneling, false ceiling and carpeting to satisfy acoustic requirements. Lighting study to develop ideas for foyer, auditorium and stage requirements.

Reference Books

1. **Designs for 20th century Interiors** – Fiona Leolie, VH Publications, London.
2. **Interior Design; The New Freedom**, Barbaralec Diamonstein, Rizzoli International Publications, New York, 1982.

Year 4

Semester 8

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Course Description

The semester 8 is one of the most important semester in terms of final project outcomes, which would reflect multidisciplinary skills and abilities learnt over the course of the previous three and half years amalgamating in the final Inter Design Graduation project. The project tests the student's ability to take on real life design problems and make them future ready.

Learning Objective

The main aim is to follow the design process to come out with intended design solutions.

The secondary objective is to handle a relatively complex Interior or Retail Design project in a given frame of time.

Course Outcomes

CO1: Follow Design process in a relatively complex interior design project.

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CO2: Coming out with design solutions independantly within a given time frame.

CO3: Real life simulation and be future ready for Professional Practice

CO & PO Mapping

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PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
PO & PSO Vs CO	Develop a creative mindset	Empathy	Creative Articulation	Discovery to Realization	Design for Future	Interdisciplinary Approach	Entrepreneurial Spirit	Teamwork	Professional Ethics	Sustainable Solutions	Local and Global Context	Lifelong Learning	Develop visual vocabulary of Interior Spaces	Understand Spatial Logic and Structural Construction	Develop Multidisciplinary skills to resolve communicative spaces	Develop abilities to orchestrate various nuances of Professional Practice
CO1	1	3	3	2	3	2	2	1	1	2	3	1	2	2	2	2
CO2	3	2	3	2	2	2	2	1	1	2	3	1	2	2	0	0
CO3	2	2	3	3	3	1	0	1	1	1	1	1	3	3	3	3

0: No Relation 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Course Contents

Anthropometric and contextual studies, Spatial and service standards for interiors – integration of interior design schemes for rooms, restaurants, bars, health clubs, shopping arcade and other guest areas with the general theme of the hotel.Special

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ideas for suites and banquet halls – contemporary interior schemes to integrate new concepts in lighting and materials.

Reference Books

1. **Designs for 20th century Interiors** – Fiona Leolie, VH Publications, London.
2. **Interior Design; The New Freedom**, Barbaralec Diamonstein, Rizzoli International Publications, New York, 1982.

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