

SAVITRIBAI PHULE PUNE UNIVERSITY

REVISED SYLLABUS FOR

BACHELOR OF DESIGN

(To be implemented w.e.f. A.Y. 2024-25)

CREDIT STRUCTURE & SUBJECT LIST

SECOND YEAR & THIRD YEAR

BOARD OF STUDIES IN DESIGN FACULTY OF SCIENCE AND TECHNOLOGY

Bachelor of Design Credit Structure Second Year- Interior Design

6. No.	Course Code	Course name	L	St	сн	Cr	Th	SS	sv	Total Marks
1	22024101	Design Project 1	2	8	10	6	-	-	200	200
2	22024102	Elements of Space Design 1	2	4	6	4	-	-	150	150
3	22024103	Interior Drawings & Graphics1	1	4	5	3	-	100	-	100
4	22024104	Material & Construction Techniques 1	2	4	6	4	-	-	100	100
5	22024105	History of Interior Design1(P)	2	-	2	2	100	-	-	100
6	22024106	History of Interior Design1	-	2	2	1	-	-	-	-
7	22024107	Electives1 - (Computer Aided Drawing)	1	2	3	2	-	50	-	50
		-	10	24	34	22	100	150	450	700
	6 Independent ctive subjects	learning Hours should be allotted according	-		_		100		Total Ma	

5. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	22024108	Design Project 2 (P)	2	-	2	2	100	-	-	100
2	22024109	Design Project 2	-	8	8	4	-	-	200	200
3	22024110	Elements of Space Design 2	1	4	5	3	-	-	150	150
4	22024111	Interior Drawings & Graphics 2	1	2	3	2	-	100	-	100
5	22024112	Material & Construction Techniques 2	1	4	5	3	-	-	100	100
6	22024113	Interior Services 1 (P)	2	-	2	2	100	-	-	100
7	22024114	Interior Services 1	-	2	2	1	-	100	-	100
8	22024115	History of Interior Design 2 (P)	2	-	2	2	100	-	-	100
9	22024116	History of Interior Design2	-	2	2	1	-	-	-	-
10	22024117	Electives 2	1	2	3	2	-	50	-	50
			10	24	34	22	300	250	450	1000
	• 6 Independent ctive subjects	learning Hours should be allotted according	to the acade	emic req	uiremen	t of		T	otal Mark	(s = 100

Credit Structure

Second Year- Product Design

S. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	22024201	Design Project 1	2	8	10	6	-	-	200	200
2	22024202	Elements of Form 1	1	4	5	3	-	-	150	150
3	22024203	Ergonomics 1 (P)	2	-	2	2	100	-	-	100
4	22024204	Ergonomics 1	-	2	2	1	-	100	-	100
5	22024205	Technical Drawing 1	1	4	5	3	-	100	-	100
6	22024206	Material & Processes 1	1	2	3	2	-	100	-	100
7	22024207	History of Product Design 1 (P)	2	-	2	2	100	-	-	100
8	22024208	History of Product Design 1	-	2	2	1	-	-	-	-
9	22024209	Electives1 - (Computer Aided Drawing)	1	2	3	2	-	50	-	50
			10	24	34	22	200	350	350	900
ILH =	6 Independent ctive subjects.	t learning Hours should be allotted according	to the acad	emic rec	uiremer	nt of			Total Ma	rks = 900

. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	22024210	Design Project 2 (P)	2	-	2	2	100	-	-	100
2	22024211	Design Project 2	-	8	8	4	-	-	200	200
3	22024212	Elements of Form 2	1	4	5	3	-	-	150	150
4	22024213	Ergonomics 2 (P)	2	-	2	2	100	-	-	100
5	22024214	Ergonomics 2	-	2	2	1	-	100	-	100
6	22024215	Technical Drawing 2	1	2	3	2	-	100	-	100
7	22024216	Material & Processes 2	1	4	5	3	-	100	-	100
8	22024217	History of Product Design 2 (P)	2	-	2	2	100	-	-	100
9	22024218	History of Product Design 2	-	2	2	1	-	-	-	-
10	22024219	Electives 2	1	2	3	2	-	50	-	50
			10	24	34	22	300	350	350	1000
L H = espe	6 Independen ctive subjects.	t learning Hours should be allotted accord	ing to the acad	emic rec	luiremer	nt of		Т	otal Mark	(s = 10(

Credit Structure

Second Year- Set Design

Seme	ster 3			1	1		1	1	1	Total
S. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Marks
1	22024301	Design Project 1	2	8	10	6	-	-	200	200
2	22024302	Elements of Form 1	1	4	5	3	-	-	150	150
3	22024303	Technical Drawing & Graphics1	1	4	5	3	-	100	-	100
4	22024304	Workshop & Miniature Making	1	4	5	3	-	100	-	100
5	22024305	Material & Construction Techniques 1	1	2	3	2	-	-	100	100
6	22024306	History 1(P)	2	-	2	2	100	-	-	100
7	22024307	History	-	2	2	1	-	-	-	-
8	22024308	Electives1- (Computer Aided Drawing)	1	2	3	2	-	50	-	50
			9	26	35	22	100	250	450	800
	5 Independent le ctive subjects	earning Hours should be allotted according to	the acaden	nic requi	rement o	of		Т	otal Mark	(s = 800

5. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	22024309	Design Project 2 (P)	2	-	2	2	100	-	-	100
2	22024310	Design Project 2	-	8	8	4	-	-	200	200
3	22024311	Elements of Form 2	1	4	5	3	-	-	150	150
4	22024312	Elements of Medium 1	1	2	3	2	-	-	100	100
5	22024313	Technical Drawing & Graphics 2	1	2	3	2	-	100	-	100
6	22024314	Material & Construction Techniques 2	2	4	6	4	-	-	100	100
7	22024315	History 2 (P)	2	-	2	2	100	-	-	100
8	22024316	History	-	2	2	1	-	-	-	-
9	22024317	Electives 2 -(Visual Arts)	1	2	3	2	-	50	-	50
			10	24	34	22	200	150	550	900
LH = espec	6 Independent I ctive subjects	earning Hours should be allotted according to	the acader	nic requ	irement	of		1	Fotal Mar	'ks = 90(

Credit Structure

Second Year- Furniture Design

Semes	ster 3		_	-		_	-	-	-	-
S. No.	Course Code	Course name	L	St	сн	Cr	Th	SS	sv	Total Marks
1	22024401	Design Project 1	2	8	10	6	-	-	200	200
2	22024402	Elements of Form 1	1	4	5	3	-	-	150	150
3	22024403	Ergonomics 1 (P)	2	-	2	2	100	-	-	100
4	22024404	Ergonomics 1	-	2	2	1	-	100	-	100
5	22024405	Technical Drawing 1	1	4	5	3	-	100	-	100
6	22024406	Material & Processes 1	1	2	3	2	-	100	-	100
7	22024407	History 1 (P)	2	-	2	2	100	-	-	100
8	22024408	History 1	-	2	2	1	-	-	-	-
9	22024409	Electives1 - (Computer Aided Drawing)	1	2	3	2	-	50	-	50
			10	24	34	22	200	350	350	900
LH=6	Independent lear	rning Hours should be alloted according to academ	ic requirem	ent of res	pective s	ubjects			Total Ma	rks = 900

. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	22024410	Design Project 2 (P)	2	-	2	2	100	-	-	100
2	22024411	Design Project 2	-	8	8	4	-	-	200	200
3	22024412	Elements of Form 2	1	4	5	3	-	-	150	150
4	22024413	Ergonomics 2 (P)	2	-	2	2	100	-	-	100
5	22024414	Ergonomics 2	-	2	2	1	-	100	-	100
6	22024415	Technical Drawing 2	1	2	3	2	-	100	-	100
7	22024416	Material & Processes 2	1	4	5	3	-	100	-	100
8	22024417	History 2 (P)	2	-	2	2	100	-	-	100
9	22024418	History 2	-	2	2	1	-	-	-	-
10	22024419	Electives 2	1	2	3	2	-	50	-	50
		•	10	24	34	22	300	350	350	1000
LH = 6	6 Independent lea	rning Hours should be allotted according to the	e academic requi	rement c	f respect	ive subje	cts.		Total Ma	rks = 100

Credit Structure

Third Year - Interior Design

S. No.	Course Code	Course name	L	St	сн	Cr	Th	SS	sv	Total Marks
1	32025118	Design Project 3	2	10	12	7	-	-	250	250
2	32025119	Material & Construction Techniques 3	2	4	6	4	-	-	100	100
3	32025120	Interior Services 2 (P)	2	-	2	2	100	-	-	100
4	32025121	Interior Services 2	-	2	2	1	-	100	-	100
5	32025122	Craft & Cultural Documentation	1	4	5	3	-	-	150	150
6	32025123	Responsive Environments	1	2	3	2	-	100	-	100
7	32025124	Electives 3	2	2	4	3	-	100	-	100
		-	10	24	34	22	100	300	500	900
	6 Independent ctive subjects	learning Hours should be allotted according	to the acade	emic req	uiremen	t of			Total Ma	rks = 90

6. No.	Course Code	Course name	L	St	сн	Cr	Th	SS	sv	Total Marks
1	32025125	Design Project 4 (P)	2	-	2	2	100	-	-	100
2	32025126	Design Project 4	-	10	10	5	-	-	250	250
3	32025127	Material & Construction Techniques 4	2	6	8	5	-	-	100	100
4	32025128	Estimation & Costing (P)	2	-	2	2	100	-	-	100
5	32025129	Estimation & Costing	-	2	2	1	-	50	-	50
6	32025130	Research Methods	1	2	3	2	-	100	-	100
7	32025131	Professional Practice	1	2	3	2	-	100	-	100
8	32025132	Electives 4 (Design)	2	2	4	3	-	100	-	100
			10	24	34	22	200	350	350	900
	6 Independent ctive subjects	learning Hours should be allotted according to	o the acade	emic req	uirement	t of			Total Ma	- rks = 90

Credit Structure

Third Year- Product Design

S. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	32025220	Design Project 3	2	10	12	7	-	-	250	250
2	32025221	Elements of Form 3	1	4	5	3	-	-	200	200
3	32025222	Material & Processes 3	2	4	6	4	-	100	-	100
4	32025223	Craft Documentation	1	4	5	3	-	-	150	150
5	32025224	Responsive Environments	1	2	3	2	-	100	-	100
6	32025225	Electives 3	2	2	4	3	-	100	-	100
			9	26	35	22	-	300	600	900
ILH = respe	5 Independen ctive subjects.	t learning Hours should be allotted according to t	he acad	emic req	luiremer	nt of		-	Total Ma	rks = 90(

S. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	32025226	Design Project 4 (P)	2	-	2	2	100	-	-	100
2	32025227	Design Project 4	-	10	10	5	-	-	250	250
3	32025228	Product Costing & Estimation (P)	2	-	2	2	100	-	-	100
4	32025229	Product Costing & Estimation	-	2	2	1	-	50		50
5	32025230	Research Methods	1	2	3	2	-	100	-	100
6	32025231	Professional Practice	1	2	3	2	-	100	-	100
7	32025232	Electives 4 (Design)	2	4	6	4	-	100	-	100
8	32025233	Electives 5	2	4	6	4	-	100	-	100
			10	24	34	22	200	450	250	900
ILH = respe	6 Independen ctive subjects.	t learning Hours should be allotted according to t	he acad	emic req	luiremen	it of			Total Mai	rks = 900

Credit Structure

Third Year- Set Design

5. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	32025318	Design Project 3	2	8	10	6	-	-	250	250
2	32025319	Elements of Form 3	1	4	5	3	-	-	150	150
3	32025320	Elements of Medium 2	1	2	3	2	-	-	150	150
4	32025321	Light & Camera	2	2	4	3	-	100	-	100
5	32025322	Craft & Cultural Documentation	1	4	5	3	-	-	150	150
6	32025323	Responsive Environments	1	2	3	2	-	100	-	100
7	32025324	Electives 3	2	2	4	3	-	100	-	100
		-	10	24	34	22	-	300	700	1000
ILH = subject	H = 6 Independent learning Hours should be allotted according to the academic requirement of respective bjects							T	otal Mark	s = 1000

Seme S. No.	ster 6 Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	32025325	Design Project 4 (P)	2	-	2	2	100	-	-	100
2	32025326	Design Project 4	-	10	10	5	-	-	250	250
3	32025327	Elements of Form 4	1	4	5	3	-	-	150	150
4	32025328	Elements of Medium 3	1	2	3	2	-	-	150	150
5	32025329	Estimation & Costing (P)	2	-	2	2	100	-	-	100
6	32025330	Estimation & Costing	-	2	2	1	-	50	-	50
7	32025331	Research Methods	1	2	3	2	-	100	-	100
8	32025332	Professional Practice	1	2	3	2	-	100	-	100
9	32025333	Electives 4	2	2	4	3	-	100	-	100
			10	24	34	22	200	350	550	1100
	-H = 6 Independent learning Hours should be allotted according to the academic requirement of espective subjects.					of		Т	otal Mark	s = 1100

Third Year- Furniture Design

Credit Structure

Semester 5										
S. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	32025420	Design Project 3	2	10	12	7	-	-	250	250
2	32025421	Elements of Form 3	1	4	5	3	-	-	200	200
3	32025422	Material & Processes 3	2	4	6	4	-	100	-	100
4	32025423	Craft Documentation	1	4	5	3	-	-	150	150
5	32025424	Responsive Environments	1	2	3	2	-	100	-	100
6	32025425	Electives 3	2	2	4	3	-	100	-	100
9 26 35 22 - 300 600								900		
LH = 5 Independent learning Hours should be allotted according to the academic requirement of respective subjects.						Total Ma	rks = 900			

6. No.	Course Code	Course name	L	St	СН	Cr	Th	SS	sv	Total Marks
1	32025426	Design Project 4 (P)	2	-	2	2	100	-	-	100
2	32025427	Design Project 4	-	10	10	5	-	-	250	250
3	32025428	Furniture Costing & Estimation (P)	2	1	2	2	100	-	-	100
4	32025429	Furniture Costing & Estimation	-	2	2	1	-	50		50
5	32025430	Research Methods	1	2	3	2	-	100	-	100
6	32025431	Professional Practice	1	2	3	2	-	100	-	100
7	32025432	Electives 4	2	4	6	4	-	100	-	100
8	32025433	Electives 5	2	4	6	4	-	100	-	100
	10 24 34 22 200 450 250 900									
LH = 6 Independent learning Hours should be allotted according to the academic requirement of respective subjects.								Total Ma	rks = 900	

ANNEXURE- A

List of Electives

S.	Art & Design	S.	Technology /Management	S .	Social/Humanities/History
1	Interior Styling	1	Exhibition design	1	History of Furniture
2	Interior landscape	2	Introduction to Bamboo construction & Techniques	2	Graphic narratives
3	Soft furnishings	3	Advanced Bamboo construction & Techniques	3	Culture & Design
4	Theatre design	4	Digital animation	4	Environmental Psychology
5	Introduction to Universal Design	5	Visual Communication-Infographics	5	Gender and Design
6	Automative styling	6	Visual Communication- Illustration	6	Anthropology
7	Fashion Image & Identity	7	Introduction to programming	7	Vernacular Design
8	Graphic Design	8	Internet of Everyhting	8	Sociology & Design
9	Basic Photography	9	Green building & rating systems	9	Basics of Archeology
10	Design Journalism	10	Appropriate design material &Technology	10	Basics of Ecology
11	Music & Space	11	Tensile structures	11	Climate change
12	Healthcare design	12	Facility management	12	Emergence of Global culture
13	Hospitality design	13	Geographic Information Systems (GIS)	13	Addressing for Senior Citizen Population
14	UI/UX design	14	Parametric design	14	Design as a tool for Social change
15	Ephemeral design	15	Building Onformation Modelling	15	Film appreciation
16	Architecture Photography	16	Creative coding	16	Script writing
	Costume design	17	Smart/Intelligent Technology systems	17	Ethnography
18	Visual Merchandising	18	Creative Surface Techniques		
19	Visual Arts	19	Fibre Reinforced Plastics		
20	Basic typography	20	Advanced construction in Fabrication		
21	Art appreciation	21	Documentary Film making		
22	Liberal Arts	22	Short Film Making		
23	Representation Techniques	23	Basics of Photoediting		
		24	Light design for theatre		
		25	Computer Aided Drawing (Basic)		
		26	Computer Aided Design (Advanced)		
		27	Toy & Game Design		
		28	Introduction to Artificial Intelligence		
		29	Interaction Design		
		30	Auditorium Interiors		
		31	Design for differently abled		
		32	Mobility & Vehicle Design		
		33	Identity Design		
		34	Packaging Design		

Note:

- * The students can opt for Electives from the categories defined above. (Annexure A).
- * It should be noted that the student has to choose different Electives in each Semester, as per '*RULE NO.13: OTHER RULES,* given in **Programme Structure & Rules**'.
- * Specific topics of Electives as mentioned in each discipline for different semesters should be conducted in coordination.
- * It is suggested to conduct any one Elective as per the choice of the Institute in **Interdisciplinary**, manner in collaboration with other Institutes.

Audit Courses

S.N	SEMESTER 1	S.N	SEMESTER 2
1	Crafts	1	Workshop & Model Making
2	Creative Writing	2	Foreign Language
3	Performing Arts	3	Cyber Security
4	Yoga	4	Sign language
5	Calligraphy		
6	English for Communication		

Note:

* The topic of "Workshop & Model Making" is suggested to be offered by the Institutions in Semester 2.

* The details of this topic can be worked out according to the specific disciplines of the Institute .



SAVITRIBAI PHULE PUNE UNIVERSITY

REVISED SYLLABUS FOR

BACHELOR OF DESIGN

(To be implemented w.e.f. A.Y. 2025-26)

PROGRAMME DETAIL

THIRD YEAR

BOARD OF STUDIES IN DESIGN FACULTY OF SCIENCE AND TECHNOLOGY

B. DES.

REVISED SYLLABUS (2025 - 26) THIRD YEAR - INTERIOR DESIGN SEMESTER 5

DESIGN PROJECT 3						
COURSE CODE 32025118						
TEACHING SCHEME	EXAMINATION SCHEME					
	Sessional (SV)	250				
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	125				
2 Lectures + 10 Studio	SV	125				
TOTAL = 12 hrs./week	Paper: Nil					
TOTAL MARKS	250					
TOTAL CREDITS	7					

This subject aims at introducing the design of commercial and retail spaces.

The course will encourage students, to handle multiple users and public at large. It will make them understand the process, methodology to be followed for the design of retail/commercial spaces.

Design parameters in terms of typology: Any commodity like garment, jewelry, company showrooms, departmental stores etc.

Area minimum 3000 - 4000sq.ft.

Multi levels/ mezzanine shall be incorporated.

COURSE CONTENT:

UNIT 1: Detailed study of selected Retail Typology and its requirements. Study of Anthropometry and Ergonomics in retails.

UNIT 2: Case study and analysis of designed retails, branded showrooms.

UNIT 3: Design development: Site Analysis, Design brief, zoning and circulation diagrams, mood board, conceptual sketches etc.

UNIT 4: Exploring volumes: To enable students to understand space in terms of volume and planes.

UNIT 5: Detailed drawings for Design solutions.

UNIT 6: Incorporation of Interior Services learnt like Plumbing, Electrification, Firefighting and schematic layout of Air conditioning in Design Project.

SUBMISSION REQUIREMENT Study of human anthropometry and ergonomics in Retail spaces. (Data Collection) Analytical study of typical Retail interiors with respect to activities, functions and requirements etc. (Case Studies) Site Analysis: Documenting Site and its context (through Drawings and photo Documentation) Design concepts, Formulation of Design Brief and Design development Drawings –Plans, Sections, Details, Colour & Material Pallet, Views, Service Details , etc

6. Presentation drawings of design project.

METHOD OF INSTRUCTION

Study of anthropometry can be done through Class exercise.Designed Retail Interiors to be taken for Case Studies.Theme oriented designs may also be considered.In addition to Live Case Studies 2 to 3 Case Studies can be done online/ Book as well.Case Study visit to be done in Unit 2.Site visit to be done in Unit 3.

Online Lectures for some topics from NPTEL, Coursera can be organized.

COURSE OUTCOME:

The students will develop a comprehensive understanding of Retail interiors combining aesthetics and functionality. They will learn about contemporary trends and material pallet used in retail environments.

Recommended Readings:

- Basics Interior Design 01: Retail Design by Lynne Mesher
- Shops and Boutiques 2000 by Susan Abramson, Marcie Stuchin
- Basic design and Anthropometry by Shirish Vasant Bapat.
- The measure of men and women human factors in design by Allvin R. Tilley and henry Dreyfuss and associates.
- Visual Dictionary of Architecture by D. K. Ching.
- Interior design by Ahmed Kasu.
- Interior design by D K Ching.
- Time savers standards of interior design
- Neuferts standards.

MATERIAL & CONSTRUCTION TECHNIQUES 3							
COURSE CODE	32025119						
TEACHING SCHEME	EXAMINATION SCHEME						
	Sessional (SV)	100					
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50					
2 Lectures + 4 Studio	SV	50					
TOTAL = 6 hrs/week	Paper (P): Nil						
TOTAL MARKS	100						
TOTAL CREDITS	4						

This course will help students understand structural systems of interior elements of buildings, materials used in their construction, construction techniques and details required.

COURSE CONTENT:

UNIT 1 : Materials used for construction of Partitions and Wall Paneling : Timber, aluminium extrusions, mild steel, stainless steel, plywood, fiber boards, particle boards, MDF/HDF, corean sheets, PVC sheets, acrylic sheets, ACP, high pressure laminate sheets, wood plastic composite sheets, Bakelite sheets, types of glass, alabaster sheets, finishing materials like charcoal sheets, rattan, 3D engraved sheets, wave boards etc. their properties and uses.

UNIT 2: Materials used for construction of False Ceilings : Aluminium false ceiling sections, timber, mild steel sections, plywood/ MDF, gypsum sheets, modular false ceiling tiles, glass, alabaster sheets etc. their properties and uses.

UNIT 3: Wall Cladding : Cladding materials like stone, tiles, engineered stones, composite cladding materials etc. Their properties and uses, process of applications

UNIT 4: Green Materials : Requirements of a sustainable material (lifecycle, extraction of raw materials, production and disposal). Cane, Bamboo, Cork, straw, jute, Cob, Adobe, recycled/ reclaimed timber, recycled glass, recycled metals, recycled plastic, semi-synthetic materials etc. their properties and uses.

UNIT 5: Paints and Polishes : Types of paints like distempers, cement paint, enamel paint, emulsion paint, latex paint, acrylic paint, metallic paint, anti-fungal paint, low VOC paint, bituminous paint etc. Types of polishes like varnish, wax polish, shellac polish, melamine polish, lacquer polish, polyurethane polish etc. Their properties and uses, process of applications.

COURSE OUTCOME

This course helps the students to understand materials, their properties, processes of application and the construction techniques required to execute the designs to fulfill specific requirements.

SUBMISSION REQUIREMENT

- Unit 1 to 5 : Journal writing, Market survey
- Sheet work on Panelling with materials learnt with different material combinations and working details.
- Sheet work on Partition with materials learnt with different material combinations and working details.
- Sheet work on False ceiling with materials learnt with different material combinations and working details.

Note : It is desirable/ suggested to take Design Project 2 as a base for detailing Panelling, Partitions and False Ceiling.

METHOD OF INSTRUCTION

Regular Site visits, with focus on construction methods and material application shall be organized.

Vendor interactions to give exposure to Brands, materials and development in technologies shall be arranged.

Online Lectures for some topics from NPTEL, Coursera can be organized.

Recommended readings:

- Engineering materials by K.P.Roy and Chaudhari.
- Materials of construction by D.N.Ghose.
- Architectural metals by I.William Zabner.
- Building construction by W.B.Mckay- Vol 1 to 4.
- Building construction by Chudley.
- Building materials by Sushilkumar.
- Woodworkers guide to furniture design.

INTERIOR SERVICES 2						
COURSE CODE 32025120 (P) 320						
TEACHING SCHEME	ING SCHEME EXAMINATION SCHEME					
	Sessional (SS)	100				
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50				
2 Lectures + 2 Studio	SS	50				
TOTAL = 4 hrs/week	Paper (P): 100					
TOTAL MARKS	200					
TOTAL CREDITS	3					

This course aims towards acquainting the students with necessary building services required for Interior projects.

To develop an understanding of balance between comfort, aesthetics and safety pertaining to interior services.

COURSE CONTENT :

a) Electrification & Lighting

b) Air conditioning

c) Acoustics

UNIT 1 : Electrification & Lighting

1. Calculating lumens requirement for each room depending on function and furniture placement.

2. Preparing a lighting layout indicating positions of light fixtures in detailed.

(current or previous design project for making complete understanding of lighting placement can be taken).

3. Preparing index explaining positioning of fixtures ,specifications.

UNIT 2 : Air-conditioning Systems:

1. Thermal comfort parameters for Human beings. Principles of Natural Ventilation.

2. Understanding concept of Air-conditioning. Requirement of Heating and Cooling of a space.

3. Types of systems which can be used in interior services- small scale to large scale depending

on requirements.

4. Selection process for air conditioning system.

5. Layout of systems, placement of equipment.

UNIT 3 : Acoustics in Interiors:

1. Understanding principles of Acoustics and its importance in Interiors.

2. Sound and noise

3. Introduction to room acoustics, sound reflection, diffraction, dispersion, reverberation time, reverberation time calculations, Sabine's equation, Sound isolation, reduction,

insulation

4. Different materials absorption quality and how to choose correct acoustic material, details of installation.

SUBMISSION REQUIREMENT

UNIT 1 : Journal writing with sketches on all the topics covered.

Sheetwork on Electrification layout.

Market survey report on Light fittings and components.

UNIT 2 : Journal writing with sketches on all the topics covered.

Sheetwork on Air conditioning solution.

UNIT3 : Journal writing with sketches on all the topics covered. Case study analysis of Auditorium/Home Theatre/ Recording studio.

METHOD OF INSTRUCTION

Site visits, with focus on Services to be undertaken.

Vendor interactions to give exposure to Brands, materials and development in technologies shall be arranged.

Earlier/ Current Design programmes can be taken for implementation of Electrification/ AC layouts.

COURSE OUTCOME :

The students will be able to develop understanding of different Interior Services. They will be able to read and create drawings for proper execution of Services on site.

Recommended readings:

- Environment and services , by: Peter Busberry.
- Lighting , by : Elizabeth wihide.
- Light fantastics , by:max keller
- Lighting design by Jeremy Myers
- ABC of air conditioning , by: Ernest Tricomi
- Heating and air conditioning of buildings.
- Environment science , by: smith, Philips, and sweenay.
- Mechanical and electrical equipments in building.
- Environmental sciences , by:peter busberry.
- Principles of air conditioning by: V.Paul Lang.
- Concepts in architectural acoustics by: M. Davidegan.
- Acoustics and sound insulation by: Eckard Mommerts, Dr.Ing Muller BBM.pl
- Architectural acoustics illustrated by Ermann, Michael

CRAFT & CULTURAL DOCUMENTATION							
COURSE CODE	32025122						
TEACHING SCHEME	EXAMINATION SCHEME						
	Sessional (SV)	150					
	Sessional CIA	75					
TOTAL CONTACT PERIOD PER WEEK	SV	75					
1 Lectures + 4 Studio							
TOTAL = 5 hrs/week	Paper: Nil						
TOTAL MARKS	150						
TOTAL CREDITS	3						

- 1. To establish an appreciation and understanding of our rich culture, heritage and vast craft techniques.
- 2. To expose the students to the gamut of contextually responsive space design of a community, craft activity and the role of design thereof.
- 3. To evaluate the possibility of extending the traditional material, construction and craft techniques to contemporary application.
- 4. To equip the students to undertake field research using suitable research tools wherein they directly interact with communities, artisans and skilled craftsman to collect, analyze and record data.

COURSE CONTENT:-

- 1. Traditional crafts and techniques -Detailed description and visual documentation of traditional craftsmanship, including materials used and techniques employed.
- 2. Architectural styles Examination of historical and contemporary architectural styles within a cultural context, highlighting key features and influences.
- 3. Cultural symbols and meanings Examination of symbols, motifs and their cultural significance in are and architecture.
- 4. Historical context In depth analysis of the historical social and political context shaping cultural expressions in art and architecture.
- 5. Interviews and oral histories Documentation of personal narratives, interviews with artisans, architects and community members to capture oral histories and first- hand experiences.
- 6. Photography and visual records High quality visual documentation, including photographs, sketches, and diagrams, to capture the aesthetics and details cultural artifacts and architectural marvels.
- 7. Documentation of rituals and traditions Record rituals, ceremonies, and eruditions associated with art and architecture, providing insights into their cultural significance.
- 8. Evolution and adaptation Examining how cultural elements have evolved and adapted over time, considering contemporary influences and changes.

- 9. Cultural contextualization Placing artistic and architectural works within their broader cultural, considering the impact of globalization and modernization.
- 10. Collaborative approaches Exploring collaborative efforts between artists, architects and local communities to preserve and promote cultural heritage.

METHODOLOGY:

• Field work, Analysis and synthesis, Discussions and feedback sessions, Documentation.

SUBMISSION REQUIREMENT :

Report writing & sketches about the craft community and craft identified.

COURSE OUTCOME:

- 1. Students will gain a deeper understanding and appreciation of various culture and traditions and histories through the study of craft, practices unique to different religions and communities.
- 2. Students should understand cross culture understand and socio- economic Impact
- 3. Students should be majorly focus on hands on experience of craft making.

Recommended readings :

- Jaitly, Jaya. "The Craft Traditions of India", Lustre Press Pvt.Ltd, New Delhi, 1990
- Jaitly Jaya. "Crafts Atlas of India", Niyogi Books, N.Delhi, 2012
- Khanna, P. "Material and Technology An inventory of selected materials and technologies for building construction", Project report to CDKN, Development Alternatives Group, New Delhi, 2011
- Mehrotra, Lakhan and Vajpayee, Raghvendra (ed.) "Communication Through The Ages An Indian Perspective", Aryan Books International, new Delhi in association with Media Centre for Research and Development, Gurgaon, 2009
- Pandya, Yatin. "Concepts of Space Making in Traditional Indian Architecture", Mapin Pub.Pvt.Ltd., Ahmedabad, 2005
- Saraf, D.N. "Indian Crafts Development and Potential", Vikas Publishing House Pvt. Ltd., New Delhi, 1982
- Ranjan, Aditi and Ranjan, M.P. (Ed.) "Crafts of India: Handmade in India", Council of Handicraft Development Corporations (COHANDS), New Delhi, Development Commissioner (Handicrafts), New Delhi
- Sparke P, Introduction to Design & Culture in the 20th centuary, Routledge, 1986
- Kosambi D.D; The culture & civilization of Ancient India in Historical outline, UBS publishers, 2007
- People History of India-Vol 1 to 7 by Irfan Habib, Tulika books.
- Indian Tales by Romila Thaper
- Indian culture as heritage contemporary pasts, by Romila Thaper

RESPONSIVE ENVIRONMENTS						
COURSE CODE						
TEACHING SCHEME	EXAMINATION SCHEME					
	Sessional SS	100				
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50				
1 Lectures + 2 Studio	SS	50				
TOTAL = 3 hrs./week	Paper (P): Nil					
TOTAL MARKS	100					
TOTAL CREDITS	2					

A Designer works in a comprehensive environment and not in isolation. A Designer works within a context, society & environment.

1. The objective of the course is to sensitise & develop awareness of responsibility towards today's environment & Society.

2. It aims to make understand role of a Designer for problem solving, for nurturing healthy societies, as a bonding element for society, and care taker of environment.

COURSE CONTENT:

- 1. Relation between Society, culture and in turn with the field of Design.
- 2. Identify the key approaches used in the study of design and society.
- 3. Ideas and thoughts relating to design of Indian society.
- 4. Urban and rural contexts-scopes, requirements, challenges, implications of lifestyle on the environment.
- 5. To understand issues of cross cultural exchange in design and society viz influences, transformation, inspiration, effects, etc.
- 6. To introduce the Concept of constant need of more resources and materials for living-'Consumerism', and its impacts.
- 7. Introduce the basic concept of Ecology & Environment. Various cycles in nature, Food chain, Food web, Energy flow in Eco system, Bio diversity etc,.
- 8. Environmental Degradation, their basic causes and sustainable solutions.
- 9. Environmental crisis, challenge and opportunity Greenhouse effect, Carbon credits, Carbon sequestration. Analysing position of India to contribute / lead.
- 10. Environmental Pollution Impact of pollution in the local environment and at the global level environment. To understand individual role in pollution & measures to mitigate.
- 11. To introduce environmental Impact Analysis, Notification of government of India Environmental Protection Act for Air, water, forest and wild life. Impact assessment methods. Environmental priorities in India, EIA guidelines. Examples in India.
- 12. The role of Design for a sustainable world.

SUBMISSION REQUIREMENT:

- Written Assignments / Reports
- Oral Presentation / Debates.

COURSE OUTCOME:

The students will equip themselves to identify the contribution for environment & society. They will be able to position themselves and their future work in the larger context.

RECOMMENDED READINGS:

- Global water pollution: perspectives & cases by Anand Sandip Lahari
- Environmental studies :basic concepts by Ahluwalia V.K.
- Environmental science earth as a living planet by Botkin, Daniel B & Keller
- Bamboo: Architecture & design by Broto, Eduard
- Climate Change Biology by Hannah, lee
- Ecological Restoration :principles values & structure of an emerging profession by Clewell andre & Aronson James
- Ecosystems & human well-being by Reid, walter & Mooney H Arold A. & (MEA)
- A text book of environmental Architecture by Dr. Kishore Pawar
- Urban Environments-design-2 by Lim.Sung Bin
- Sociology by Schaefer Richard T
- Voluntary environmental management by Morelli John
- Landscape of planning environmental applications by Marshall William
- Management of municipal solid waste by Ramchandra T V
- An introduction to water pollution by S V Rao
- Urban design Green dimensions by Moughtin ,Cliffl& Shirley Peter
- Biodiversity communities & climate change by Kala Chandra Prakash
- Vernacular traditions contemporary architecture by Tipnis Aishwarya
- Life cycle Assessment by Simonen Kathrina
- Rural Modern by Abraham Russell

ELECTIVES 3							
COURSE CODE 32025124							
TEACHING SCHEME	EXAMINATION SC	HEME					
	Sessional (SV)	100					
	Sessional CIA	50					
TOTAL CONTACT PERIOD PER WEEK 2 Lectures + 2 Studio	SV	50					
TOTAL = 4 hrs/week	Paper: Nil						
TOTAL MARKS	100						
TOTAL CREDITS	3						

Course Objectives:

To allow the students to study a subject of their interest and develop theoretical as well as practical understanding of the same.

Course Outline:

- Colleges have to develop course outline for the elective they wish to offer such that theoretical as well practical aspects are covered linking them to the Design field.
- Apart from lectures delivered by the subject resource persons, self study in form of hands on workshop / field work/ review of literature / seminar or any suitable format of learning may be adopted.
- A list of Electives is suggested in **Annexure A- in** *Programme Structure & Rules.* The Institutes can refer it or offer any other subject in Elective.

As mentioned in the *RULE NO.13:* OTHER RULES, **Programme Structure & Rules**, a student may adhere to a particular stream of elective of his/her choice and nurture his/her area of interest and develop his/her expertise.

However the student should not repeat a particular elective.

B. DES. REVISED SYLLABUS (2025 - 26) THIRD YEAR - INTERIOR DESIGN SEMESTER 6

DESIGN PROJECT 4		
COURSE CODE	32025125 (P)	32025126(SV)
TEACHING SCHEME	EXAMINATIÓN SCHEME	
	Sessional (SV)	250
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	125
2 Lectures + 10 Studio	SV	125
TOTAL = 12 hrs./week	Paper: 100	
TOTAL MARKS	350	
TOTAL CREDITS	7	

This subject aims at introducing to the design of hospitality spaces.

The course will encourage students, to handle multiple users in large nos.

It will give them the exposure of handling aesthetics, services and functionality simultaneously.

Design parameters in terms of typology: Star rated hotels, Boutique Hotels, Spa, Multi cuisine Restaurant, etc.

Area minimum: 4000 Sq. ft. to 6000 Sq ft.

Multi levels/ mezzanine shall be incorporated.

COURSE CONTENT:

UNIT 1: Detailed study of selected Typology and its requirements. Study and analysis of related data. Study of Anthropometry. Case study and analysis of designed spaces.

UNIT 2: Site Analysis: Documenting space (Drawings and photo documentation)

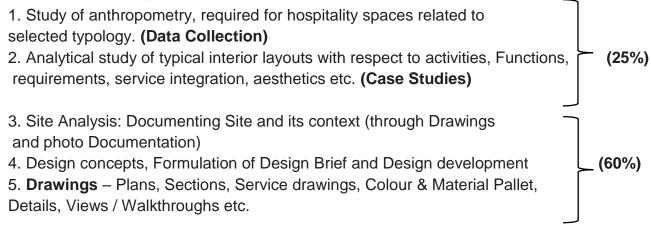
Design development: Design brief, zoning and circulation diagrams, mood board, conceptual sketches, spatial explorations etc.

UNIT 3 Detailed drawings for Design solutions.

UNIT 4: Integration of Interior Services learnt like Plumbing, Electrification, Fire fighting, Air Conditioning in the design proposals.

UNIT 5 : Color and material pallet, Views, Walkthroughs.

SUBMISSION REQUIREMENT



6. Presentation and working drawings of design project.

METHOD OF INSTRUCTION

Designed hospitality Interiors to be taken for Case Studies.

Theme oriented designs may also be considered.

2 to 3 Case Studies can be done online/ Book as well, in addition to Live Case Studies.

(15%)

Online Lectures for some topics from NPTEL, Coursera can be organized.

COURSE OUTCOME

The students will be able to design hospitality spaces for diverse users with focus on hospitality experience.

They will be able to apply advanced skills in planning and development of complex, multifunctional, multi user typologies of larger spatial volumes.

Recommended Readings:

- Interior design by D.K. Ching
- Time savers standards of interior design
- Neuferts standards.
- Façade restaurants and café by:Shirish Vasant Bapat.
- Hotels and Resorts in india by: published by White flag.
- Tropical Resort publisher : Cherry Chan
- Stylish Indian Restaurants by Indian Architecture Group
- Interior Design for Wellness Spaces by Allison Culliford

MATERIAL & CONSTRUCTION TECHNIQUES 4		
COURSE CODE	32025127	
TEACHING SCHEME	EXAMINATION SCHEME	
TOTAL CONTACT HOURS PER WEEK 2 Lectures + 6 Studio TOTAL = 8 hrs./week	Sessional (SV)	100
	Sessional CIA	50
	SV	50
	Paper (P): Nil	
TOTAL MARKS	100	
TOTAL CREDITS	5	

This course will help students understand the following.

- 1. Structural systems and materials used for composite construction and construction techniques employed.
- 2. Properties, uses and application of thermal insulation and acoustic materials in interiors.
- 3. Concepts of Modularity.

COURSE CONTENT:

UNIT 1: Materials for Acoustic & Thermal insulation :

Principles and methods of acoustic insulation, acoustic insulation materials like acoustic membranes, acoustic mineral wool, fiberglass, acoustic insulation systems like soundproof drywall, acoustic paneling, acoustic ceiling systems, soundproof floor underlay, soundproof plasters and paints etc, their properties and process of application.

Methods of thermal insulation, materials of thermal insulation like fiberglass, mineral wool, natural fibers, cellulose insulation materials, polystyrene insulation materials, etc. their properties, uses and methods of application.

UNIT 2: Mezzanine floors Structural framework of Mezzanine floors in mild steel and its construction details.

UNIT 3 : Modular Furniture: Principles of Modularity, Materials, Processes and Construction methods, hardware used in modular systems.

UNIT 4: Materials used for composite outdoor construction : Structural framework materials like mild steel/SS sections, aluminum extrusions, UPVC sections, covering materials like cement sheets, ACP sheets, WPC boards, HPL sheets, terracotta screens, types of shingles, acrylic sheets, polycarbonate sheets, tensile fabrics etc. their properties, uses and methods of application.

UNIT 5 : Facades : Façade with its structural framework in materials like mild steel, aluminium etc. Appropriate covering materials, glazing, cladding, Signage etc.

SUBMISSION REQUIREMENT

Unit 1 and 4 : Journal writing, Market survey

Unit 2 : Sheet work with details.

Unit 3 : Study of Modularity in: Dining, Wardrobe, Study unit, Corporate Office furniture, Retail furniture etc. (any 3)

Unit 5 : Sheet work with details for min. 2 types of Facades.

Note : Suggested to take earlier/ Current Design programmes for detailing in Unit 3.

METHOD OF INSTRUCTION

Regular Site visits, with focus on construction methods and material application shall be organized.

Vendor interactions to give exposure to Brands, materials and development in technologies shall be arranged.

Online Lectures for some topics from NPTEL, Coursera can be organized.

COURSE OUTCOME

This course helps the students to understand materials with thermal and acoustic applications and composite construction.

Students will learn the concepts of Modularity to design furniture with flexibility and adaptability to accommodate changing needs with diverse environment.

Recommended Readings:

- Engineering materials by K.P.Roy and Chaudhari.
- Materials of construction by D.N.Ghose.
- Architectural metals by I.William Zabner.
- Building construction by W.B.Mckay- Vol 1 to 4.
- Building construction by Chudley.
- Building materials by Sushil kumar.
- Woodworkers guide to furniture design.

ESTIMATION & COSTING		
COURSE CODE	32025128 (P)	32025129 (SS)
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SS)	50
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	25
2 Lectures + 2 Studio	SS	25
TOTAL = 4 hrs./week	Paper (P): 100	
TOTAL MARKS	150	
TOTAL CREDITS	3	

• To enable the students to understand the concept of estimation and costing for

- interior design
- To acquaint students with methodology of writing specifications with reference to
- service installations of different items of work
- To know importance of specifications in contract document for any construction project.

UNIT 1 : Introduction to costing, its application and benefits, cost influences construction costs, costing of furniture, fixtures and equipment, contractor's overheads and profit, Professional fees, taxes and contingencies other installation.

UNIT 2 : Introduction to estimation, importance, need, types of estimate, methods of estimate (parameter, items-wise estimation, take- offs), preparing abstract and bill of quantities including unit of measurements. Factors to be considered for special design with estimation.

UNIT 3: Introduction to specifications, types of specifications, its advantages and disadvantages.

UNIT 4 : Introduction to writing of specification, purpose and definition of specification, , coordination with the construction drawings, furniture specification, specification for walls, floors, wardrobes, ceiling, painting etc. Procedure for writing specification for the purpose of calling tenders.

UNIT 5 : Introduction to Rate analysis, Definition, method of preparation, quantity and labour estimation for woodwork, steelwork, aluminum work, glass and its rate for different, thickness & sections, finishing (enamel paint, deco paints, melamine, du coats, and hand polishing, veneering and laminating) for walls and ceilings.

Electrical and plumbing products, wiring, ducting, and laying of tiles and wall paneling in the estimate format of the project.

UNIT 6 : Introduction to costing of fixtures and fitting: Types of fixtures: carpentry, civil etc.

SUBMISSION REQUIREMENT

1. Journal writing on the topics described in Units.

2. Writing general and standard specifications for interior design items, like flooring, ceiling, furniture work, painting, electrification, plumbing etc.

3. Abstract and quantity estimating of the design program, for the interior design items like, flooring, ceiling, furniture work, painting, electrification, plumbing etc. and compiling it in a file format.

COURSE OUTCOME:

The students will know the methodology of estimating the Projects. They will understand the role of specification writing, method of systematic estimation.

Recommended readings:-

- Estimation costing and valuation by Rangwala.
- Estimating and costing in civil engineering by : B.N. Dutta.
- Professional practices by: Dr. Roshan. H. Namavati
- Estimating and Costing for Interior Designers: A Step-by-Step Workbook by Diana Allison (Author)
- Interior Design Materials and Specifications By Lisa Godsey

RESEARCH METHODS		
COURSE CODE	32025130	
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SS)	100
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50
1 Lectures + 2 Studio	SS	50
TOTAL = 3 hrs./week	Paper (P): Nil	
TOTAL MARKS	100	
TOTAL CREDITS	2	

The course aims towards developing foundation towards Research skills.

COURSE CONTENT:

UNIT 1: Introduction to Research: Meaning and importance of Research, its significance in Design, Research Process.

UNIT 2: Types of Research, Min.6 types of Research: (Descriptive, Analytical, Qualitative, Quantitative, Applied, Fundamental, Conceptual, Empirical, etc.)

UNIT 3: Methods of Data Collection: Types of Survey, Variables, Sampling techniques

UNIT 4: Analysis of data: presentation of data in different modes as per requirement of Research (Pie chart, Line graphs, etc.)

UNIT 5: Presentation of Data: Graphical, non graphical, photo, illustrations, Tables etc.

UNIT 6: Synopsis: Defining Aims, Objectives, Scope, Methodology. Understanding synopsis from reading Research Papers.

SUBMISSION REQUIREMENT

a) Journal writing for theories of Unit 1, 2 and 4.

b) Identifying and reading Research Papers (min.5) on topic of individual interest.

c) Analysis and systematic presentation of data collected from Research Papers: identification of types of survey, variables, sampling techniques, application in Research Paper.

d) Synopsis writing on topic of interest.

Note : Submissions according to specific disciplines should be stressed upon and detailed out.

METHOD OF INSTRUCTION

Regular presentation of students work and group discussions shall be undertaken.

Online E resources, E Libraries of different University / institutions – should be advised for reading

COURSE OUTCOME:

Students will be equipped to conduct independent research on relevant topics in a systematic manner.

Recommended readings:-

- Garg.B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. An introduction to Research Methodology, RBSA Publishers.
- Kothari, C.R.(2008). Research Methodology: Methods and Techniques. Second Edition. New Age International Publishers, New Delhi.
- Architectural Research Methods by Linda N. Groat ,David Wang, Wiley Publications.
- Sinha, S.C. and Dhiman, A.K., 2002. Research Methodology, Ess Ess Publications.
- Reasearch design by Creswell, John
- Writing Your Thesis by Oliver Poul
- Understanding the research process by Oliver Poul

PROFESSIONAL PRACTICE		
COURSE CODE	32025131	
TEACHING SCHEME	EXAMINATION SCHEME	
TOTAL CONTACT HOURS PER WEEK 1 Lectures + 2 Studio TOTAL = 3 hrs/week	Sessional (SS)	100
	Sessional CIA	50
	SS	50
	Paper (P): Nill	
TOTAL MARKS	100	
TOTAL CREDITS	2	

To help the students to understand the profession of Interior Design, its ethics conduct. To understand the importance, duties and responsibilities of the designer, and the other team members and society.

Understanding the working of an Interior firm.

COURSE CONTENT:

- 1. Introducing students to the profession of interior design, personal goal setting, and mission.
- 2. Ethics in business environment, responsibility to the public, client, responsibility of the interior designer, colleague, profession, employer.
- 3. Interior designer's office, equipping and maintaining the office, accounts etc.
- 4. Developing new interior design practice: coordination with Agencies, Consultants, Entrepreneurs, Proprietors, Partnerships, and Vendors.
- 5. Consulting fees, contract and agreements for consulting charges.
- 6. Project management, contracts and agreements for execution of Projects.
- 7. Tenders: Preparation of tender documents
- Professional bodies and associations in India and abroad. IIID (Institute of Indian Interior Designers), ASID (American society of interior design), IIDA (International interior design association),etc. importance and advantages of being a part of the professional bodies.

SUBMISSION REQUIREMENT

Journal writing on all of the above topics.

A Case Study of Practicing Int. Designer and report on the case study, Interview of the professional is desirable.

COURSE OUTCOME:

The course will expose students towards the nuances of interior Design practice. It will equip the students with knowledge and skills needed for professional environment.

Recommended readings:-

- Professional practice for interior design by: Christine.M. Piotrowski.
- Designing your business strategies for interior design professionals by: Gordon .T. Kendall.
- Shan Preddy, How to Run a Successful Design Business: The New Professional Practice, Gower Publishing Ltd. 2011
- Min Basadur, Michael Goldsby, Design centered Entrepreneurship, 2016

ELECTIVES 4 (DESIGN)			
COURSE CODE	32025132		
TEACHING SCHEME	EXAMINATION SCHEME		
TOTAL CONTACT PERIOD PER WEEK 2 Lectures + 2 Studio TOTAL = 4 hrs/week	Sessional (SS)	100	
	Sessional CIA	50	
	SS	50	
	Paper: Nil		
TOTAL MARKS	100		
TOTAL CREDITS	3		

Detail study of congregation spaces like Auditorium, Conference hall, Banquet halls of capacity 150 to 200 persons.

COURSE CONTENT:

- 1. To study in detail through case study and books about interior detailing of conference room or Auditorium.
- 2. To study and apply the aspect of Lighting & electrification, Acoustical Treatment, Sound systems, Projection facilities, Seating arrangements, Air Conditioning, Fire fighting services in an Auditorium/ Conference Hall/ Seminar hall/ Banquet.
- 3. To develop detail plans of above services and the details of other interior design feature.
- 4. To develop detail interior sections and elevations.
- 5. A detailed market survey of the latest technology of illumination, Firefighting and Air Conditioning technologies and materials should be done.

SUBMISSION REQUIREMENT

Minimum 5 to 7- A2 size sheets CAD drawings- Plans, Elevations, Sections, details, service Plan, details of services, market survey Report on latest materials and technology.

Recommended readings:-

- Theatre & Auditoriums by Herald Burris Meyer and Edward Cole.
- Handbook of Architects working details.
- Acoustical designing in Architecture by Kundsen, V.O. & Harris C.M

B. DES. REVISED SYLLABUS (2025 - 26) THIRD YEAR - PRODUCT DESIGN SEMESTER 5

DESIGN PROJECT 3		
COURSE CODE	32025220	
TEACHING SCHEME	EXAMINATION SCH	IEME
	Sessional (SV)	250
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 10 studio TOTAL = 12 hrs/week	Sessional CIA	125
	SV	125
	Paper: Nil	
TOTAL MARKS	250	
TOTAL CREDITS	7	

1. To introduce technically complex product design challenges, considerations and deliverables.

2. The focus is on being able to identify and analyze the need, articulate it and generate solution with an understanding of how things work.

COURSE CONTENT:

- 1. Identifying design opportunity in accessible environments.
- 2. Literature survey to collect relevant data on the product.
- 3. Activity recording and task analysis.
- 4. Questionnaire and interview techniques for enlisting and elaborating the different problem areas.
- 5. Study on the existing product: it's working principle, its advantages and disadvantages.
- 6. Study to understand technology and/or mechanisms in the context of identified need.
- 7. Conduct market research.
- 8. Study on materials and manufacturing processes.
- 9. Formulation of the design brief.
- 10. Ideation -- concept generation and explorations with quick explanatory models.

SUBMISSION REQUIREMENT:

1. Research documentation & presentation with observation, analysis & conclusi	on,
formulating design brief.	(20%)
Ideation & exploration sketches & study models, design solutions,	
product detailing etc.	(50%)
3. Final design solutions with technical drawings & rendering, Finished models,	
prototype & user validation.	(30%)

COURSE OUTCOME:

Skills of presenting solutions through active participation, exploratory learning, will be developed.

Students will learn about developing solutions for technically complex design challenges.

- Systems Analysis and Design Methods, Jeffrey Whitten and Lonnie Bentley, McGraw----Hill/Irwin, 2005.
- General Principles of Systems Design, Gerald M. Weinberg, Daniela Weinberg, Dorset House, 1988
- Routledge International Handbook of Participatory Design, Jesper Simonsen, Routledge, 2012
- The Strategic Designer: Tools & Techniques for Managing the Design Process, David Holston, How Books, 2011
- Creating Breakthrough Products: Innovation from Product Planning to Program Approval, Cagan, Jonathan; Vogel, Craig M.; Publisher: Financial Times Prentice Hall; 2002.
- The Design Process, Karl Aspelund; Fairchild Pubns, 2011
- Routledge International Handbook of Participatory Design, Jesper Simonsen, Routledge, 2012
- The Strategic Designer: Tools & Techniques for Managing the Design Process, David Holston, How Books, 2011

ELEMENTS OF FORM 3			
COURSE CODE	32025221		
TEACHING SCHEME	EXAMINATION SCHEME		
	Sessional (SV)	200	
TOTAL CONTACT HOURS PER WEEK 1 Lectures + 4 Studio TOTAL = 5 hrs./week	Sessional CIA	100	
	SV	100	
	Paper: Nil		
TOTAL MARKS	200		
TOTAL CREDITS	3		

COURSE OBJECTIVE: To study forms in nature to understand the what, why and how nature articulates.

To understand the rational logic of the form in response to the function.

COURSE CONTENT:

UNIT 1: Creation of a three-dimensional abstract form with models at each stage of the process. Transformation of derived form into a product with models.

UNIT 2: Form (metaphor, attributes and emotions) through stylized products from different domains.

UNIT 3: Stylizing a product based on the course learning. Attributes of stylized products shall be communicated through sketches and physical models. Making a scaled model of the final expression with desired material color and finishes supported with digital renders.

SUBMISSION REQUIREMENT

Minimum 1 exercise each based on Units in the form of sketches & models. Study of the natural form through drawings, sketches and physical models to understand form and structure.

TEACHING METHODOLOGY

Primary importance on hands on learning to be encouraged using materials like wood, paper, paper mache, clay, fabric, fiber boards, foam boards, acrylic, etc. to explore forms.

COURSE OUTCOME:

It helps students to understand the basics of "Form Manipulation", as one of the essential design skills. This course also aims at making the students understand the product styling.

- Biomimicry: Innovation Inspired by Natureby Janine M.Benyus
- The Secret Language of Animals: A Guide to Remarkable Behaviorby Janine M. Benyus and Juan CarlosBarberis
- Biomimicry: Nature as Designer byMr. Benjamin R.Krueger.
- Nature Form & Spirit: The Life and Legacy of George Nakashima by MiraNakashima
- Art Forms in Nature (Dover Pictorial Archive) by ErnstHaeckel

MATERIAL & PROCESSES 3			
COURSE CODE	32025222		
TEACHING SCHEME	EXAMINATION SC	CHEME	
	Sessional (SS)	100	
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50	
2 Lecture + 4 studio TOTAL = 6 hrs/week	External	50	
	Paper: Nil		
TOTAL MARKS	100		
TOTAL CREDITS	4		

1. To provide an in-depth understanding of materials with the major emphasis on advanced new materials and finishes.

2. An introduction to sustainable and ecofriendly materials and processes.

3. To equip the students with the methods of selecting materials and related processes based on cost, product safety, form, function etc .

COURSE CONTENT:

- 1. Analysis of plastics and rubber and related manufacturing processes utilized in production of mass-produced products.
- 2. Introduction to environment friendly materials and the processes. (Including traditionally used materials in our context and culture.
- 3. Advance studies in mass production processes and their influence on design and development of products.
- 4. Emphasis on material search and process selection in relation to cost, products safety, function, human factors, form, finishes and joining methods.

Note : To conduct industry /workshop visits to observe and understand processes.

SUBMISSION REQUIREMENT:

Documentation of manufacturing process of materials mentioned above & journal writing.

TEACHING METHODOLOGY

Minimum 2 industrial visits for material understanding. Online Lectures for some topics from NPTEL, Coursera can be organized.

COURSE OUTCOME:

It will introduce the students to the major processes and materials commonly used in Product Design

- Design and Technology, Garratt J Cambridge University Press, UK, 20004
- Manufacturing processes for design professionals, Thompson R.: Thames & Hudson, London 2007
- Materials and Design: The Art and Science of Material Selection in Product Design, Ashby, Michael; Johnson, Kara; Publisher: Butterworth-Heinemann; 2002
- Basic product design II Material thoughts by David Bramst

CRAFT DOCUMENTATION			
COURSE CODE	32025223		
TEACHING SCHEME	EXAMINATION SCHEME		
	Sessional (SV)	150	
TOTAL CONTACT HOURS PER WEEK 1 Lecture + 4 studio TOTAL = 5 hrs/week			
	Sessional CIA	75	
	SV	75	
	Paper: Nil		
TOTAL MARKS	150		
TOTAL CREDITS	3		

- 1. To establish an appreciation and understanding of our rich culture, heritage and vast craft techniques.
- 2. To expose the students to the gamut of contextually responsive space design of a community, craft activity and the role of design thereof.
- 3. To evaluate the possibility of extending the traditional material, construction and craft techniques to contemporary application.
- 4. To equip the students to undertake field research using suitable research tools wherein they directly interact with communities, artisans and skilled craftsman to collect, analyze and record data.

COURSE CONTENT:-

- 1. Traditional crafts and techniques -Detailed description and visual documentation of traditional craftsmanship, including materials used and techniques employed.
- 2. Architectural styles Examination of historical and contemporary architectural styles within a cultural context, highlighting key features and influences.
- 3. Cultural symbols and meanings Examination of symbols, motifs and their cultural significance in are and architecture.
- 4. Historical context In depth analysis of the historical social and political context shaping cultural expressions in art and architecture.
- 5. Interviews and oral histories Documentation of personal narratives, interviews with artisans, architects and community members to capture oral histories and first-hand experiences.
- 6. Photography and visual records High quality visual documentation, including photographs, sketches, and diagrams, to capture the aesthetics and details cultural artifacts and architectural marvels.
- 7. Documentation of rituals and traditions Record rituals, ceremonies, and eruditions associated with art and architecture, providing insights into their cultural significance.
- 8. Evolution and adaptation Examining how cultural elements have evolved and adapted over time, considering contemporary influences and changes.

- 9. Cultural contextualization Placing artistic and architectural works within their broader cultural, considering the impact of globalization and modernization.
- 10. Collaborative approaches Exploring collaborative efforts between artists, architects and local communities to preserve and promote cultural heritage.

TEACHING METHODOLOGY:

• Field work, Analysis and synthesis., Discussions and feedback sessions, Documentation.

SUBMISSION REQUIREMENT :

Individual Report writing & sketches about the craft community and craft identified.

COURSE OUTCOME:

- 1. Students will gain a deeper understanding and appreciation of various culture and traditions and histories through the study of craft, practices unique to different religions and communities.
- 2. Students will understand cross culture understand and socio- economic Impact

- Jaitly, Jaya. "The Craft Traditions of India", Lustre Press Pvt.Ltd, New Delhi, 1990
- Jaitly Jaya. "Crafts Atlas of India", Niyogi Books, N.Delhi, 2012
- Khanna, P. "Material and Technology An inventory of selected materials and technologies for building construction", Project report to CDKN, Development Alternatives Group, New Delhi, 2011
- Mehrotra, Lakhan and Vajpayee, Raghvendra (ed.) "Communication Through The Ages An Indian Perspective", Aryan Books International, new Delhi in association with Media Centre for Research and Development, Gurgaon, 2009
- Saraf, D.N. "Indian Crafts Development and Potential", Vikas Publishing House Pvt. Ltd., New Delhi, 1982
- Ranjan, Aditi and Ranjan, M.P. (Ed.) "Crafts of India: Handmade in India", Council of Handicraft Development Corporations (COHANDS), New Delhi, Development Commisioner (Handicrafts), New Delhi
- Sparke P, Introduction to Design & Culture in the 20th centuary, Routledge, 1986
- Kosambi D.D; The culture & civilization of Ancient India in Historical outline, UBS publishers, 2007
- People History of India-Vol 1 to 7 by Irfan Habib, Tulika books.
- Indian Tales by Romila Thaper
- Indian culture as heritage contemporary pasts, by Romila Thaper

RESPONSIVE ENVIRONMENTS			
COURSE CODE	32025224		
TEACHING SCHEME	EXAMINATION SCHEME		
TOTAL CONTACT HOURS PER	Sessional (SS)	100	
WEEK	Sessional CIA	50	
1 Lectures + 2 Studio TOTAL = 3 hrs/week	SS	50	
	Paper: Nil		
TOTAL MARKS	100		
TOTAL CREDITS	2		

A Designer works in a comprehensive environment and not in isolation. A Designer works within a context, society & environment.

1. The objective of the course is to sensitise & develop awareness of responsibility towards today's environment & Society.

2. It aims to make understand role of a Designer for problem solving, for nurturing healthy societies, as a bonding element for society, and care taker of environment.

COURSE CONTENT:

- 1. Relation between Society, culture and in turn with the field of Design.
- 2. Identify the key approaches used in the study of design and society.
- 3. Ideas and thoughts relating to design of Indian society.
- 4. Urban and rural contexts-scopes, requirements, challenges, implications of lifestyle on the environment.
- 5. To understand issues of cross cultural exchange in design and society viz influences, transformation, inspiration, effects, etc.
- 6. To introduce the Concept of constant need of more resources and materials for living-'Consumerism', and its impacts.
- 7. Introduce the basic concept of Ecology & Environment. Various cycles in nature, Food chain, Food web, Energy flow in Eco system, Bio diversity etc,.
- 8. Environmental Degradation, their basic causes and sustainable solutions.
- 9. Environmental crisis, challenge and opportunity Greenhouse effect, Carbon credits, Carbon sequestration. Analysing position of India to contribute / lead.
- 10. Environmental Pollution Impact of pollution in the local environment and at the global level environment. To understand individual role in pollution & measures to mitigate.
- 11. To introduce environmental Impact Analysis, Notification of government of India Environmental Protection Act for Air, water, forest and wild life. Impact assessment methods. Environmental priorities in India, EIA guidelines. Examples in India.
- 12. The role of Design for a sustainable world.

SUBMISSION REQUIREMENT:

- Written Assignments / Reports
- Oral Presentation / Debates.

COURSE OUTCOME:

The students will equip themselves to identify the contribution for environment & society. They will be able to position themselves and their future work in the larger context.

RECOMMENDED READINGS:

- Global water pollution: perspectives & cases by Anand Sandip Lahari
- Environmental studies :basic concepts by Ahluwalia V.K.
- Environmental science earth as a living planet by Botkin, Daniel B & Keller
- Bamboo: Architecture & design by Broto, Eduard
- Climate Change Biology by Hannah, lee
- Ecological Restoration :principles values & structure of an emerging profession by Clewell andre & Aronson James
- Ecosystems & human well-being by Reid, walter & Mooney H Arold A. & (MEA)
- A text book of environmental Architecture by Dr. Kishore Pawar
- Urban Environments-design-2 by Lim.Sung Bin
- Sociology by Schaefer Richard T
- Voluntary environmental management by Morelli John
- Landscape of planning environmental applications by Marshall William
- Management of municipal solid waste by Ramchandra T V
- An introduction to water pollution by S V Rao
- Urban design Green dimensions by Moughtin ,Cliffl& Shirley Peter
- Biodiversity communities & climate change by Kala Chandra Prakash
- Vernacular traditions contemporary architecture by Tipnis Aishwarya
- Life cycle Assessment by Simonen Kathrina
- Rural Modern by Abraham Russell

ELECTIVES 3		
COURSE CODE	32025225	
TEACHING SCHEME	EXAMINATION SCHEME	
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 2 studio TOTAL = 4 hrs/week	Sessional (SS)	100
	Sessional CIA	50
	External	50
	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	3	

Course Objectives:

To allow the students to study a subject of their interest and develop theoretical as well as practical understanding of the same.

Course Outline:

- Colleges have to develop course outline for the elective they wish to offer such that theoretical as well practical aspects are covered linking them to the Design field.
- Apart from lectures delivered by the subject resource persons, self study in form of hands on workshop / field work/ review of literature / seminar or any suitable format of learning may be adopted.
- A list of Electives is suggested in **Annexure A- in** *Programme Structure & Rules*. The Institutes can refer it or offer any other subject in Elective.

As mentioned in the *RULE NO.13: OTHER RULES, Programme Structure & Rules,* a student may adhere to a particular stream of elective of his/her choice and nurture his/her area of interest and develop his/her expertise.

However the student should not repeat a particular elective.

B. DES.

REVISED SYLLABUS (2025 - 26) THIRD YEAR - PRODUCT DESIGN SEMESTER 6

DESIGN PROJECT 4			
COURSE CODE	32025226(P)	32025227 (SV)	
TEACHING SCHEME	EXAMINATION SCHEME		
	Sessional (SV)	250	
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 10 studio TOTAL = 12 hrs/week	Sessional CIA	125	
	SV	125	
	Paper: 100		
TOTAL MARKS	350		
TOTAL CREDITS	7		

1. To introduce the students to the system thinking challenges, considerations and deliverables.

COURSE CONTENT:

1. Introduction to the design intervention in the human realm which add value and quality to the life.

- 2. Identifying system comprehensible, tangible and accessible environments.
- 3. Research of the system, components and stakeholders.
- 4. Understanding the interrelationship and interdependency of various components of identified system.
- 5. Analyzing and mapping the strengths and weakness of the system
- 6. Synthesizing and prioritizing the research observations leading to design brief.
- 7. Formulating the design brief.
- 8. Ideation -- concept generation and explorations with quick explanatory models.
- 9. Finalization of the concept with design development and detailing.
- 10. Prototyping of 3Dmodels.
- 11. Evaluation of new concepts
- 12. Hand and computer Renderings and finished model of the final design solution.

SUBMISSION REQUIREMENT

1. Research documentation & presentation with observation, analysis & conclusion, formulating design brief. (20%)

2. Ideation & exploration -- sketches & study models, design solutions, product detailing etc. (50%)

3. Final design solutions- Rendering and finished models/ prototype. (30%)

COURSE OUTCOME

The course will make them understand the relationship of the variant, processes, people, products and parts that contribute towards the functioning of a system

- Systems Analysis and Design Methods, Jeffrey Whitten and Lonnie Bentley, McGraw----Hill/Irwin, 2005.
- General Principles of Systems Design, Gerald M. Weinberg, Daniela Weinberg, Dorset House, 1988
- Routledge International Handbook of Participatory Design, Jesper Simonsen, Routledge, 2012
- The Strategic Designer: Tools & Techniques for Managing the Design Process, David Holston, How Books, 2011
- Creating Breakthrough Products: Innovation from Product Planning to Program Approval, Cagan, Jonathan; Vogel, Craig M.;Publisher: Financial Times Prentice Hall; 2002.
- The Design Process, Karl Aspelund; Fairchild Pubns, 2011
- Routledge International Handbook of Participatory Design, Jesper Simonsen, Routledge, 2012
- The Strategic Designer: Tools & Techniques for Managing the Design Process, David Holston, How Books, 2011

PRODUCT COSTING & ESTIMATION			
COURSE CODE	32025228(P)	32025229(SS)	
TEACHING SCHEME	EXAMINATIÓN SCHEME		
	Sessional (SS)	50	
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	25	
2 Lecture + 2 studio	External	25	
TOTAL = 4 hrs/week			
	Paper: 100		
TOTAL MARKS	150		
TOTAL CREDITS	3		

To enable the student to understand the breakdown of a simple product e.g. like pen into components, the implication of these components on the costing of the end product from various perspective, like design, material & manufacturing ; Vendor; Mass manufacturing ; assembly ; market etc.

COURSE CONTENT:

- 1. Identification of a simple product range of a brand within an economic segment.
- 2. Breaking down of the product into components to understand the design; manufacturing decisions that influence Cost.
- 3. Introduction to key factors responsible for the costing of a product.
- 4. Preparation of cost sheets for process and sub processes to compile the data collected to estimate the cost.
- 5. Introduction to the pricing of the product.(Market ,Brand, Brand strategy, Product positioning) The market value, competition product cost, bench mark pricing, basic material price, specific tooling cost, shift timings and costs, factor of cost with respect to quantity produced, material costs, expenses on packaging, distribution, marketing and even after sales service.
- 6. The students shall be made to understand through analysis of an existing product the implications of design decisions on the cost of the same. Implications of manufactured quantity on his design. Low volume low price, Low volume high price, high volume, high price, large product assemblies or simple products.
- 7. Introduction to be given to define a service, understanding the components of delivering a service and interdependencies for the purpose of calculating the cost to charge the services given.

SUBMISSION REQUIREMENT

1. The submission of the assignments shall be in the report format.

2. Estimation of the cost prepared by the student of a product either designed/identified by them.

COURSE OUTCOME :

They will be to calculate the quantity, cost, and price of the resources required within the project scope.

They will know the method of systematic estimation.

- Product Costing: Concepts and Applications Book by Arthur H. Adelberg, Frank J. Fabozzi, Jacqueline A. Burke, and Ralph S. Polimeni
- Cost and Price: Or, the Product and the Market (English, Paperback, Isaiah Skeels)
- Product Cost Estimating and Pricing: A Computerized Approach by <u>Michael R.</u> <u>Tyran</u>(Author)
- The Lean Design Guidebook: Everything Your Product Development Team Needs to Slash Manufacturing Cost by <u>Ronald Mascitelli</u>(Author)

RESEARCH METHODS			
COURSE CODE	32025230		
TEACHING SCHEME	EXAMINATION SCHEME		
	Sessional (SS)	100	
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50	
1 Lecture + 2 studio	External	50	
TOTAL = 3 hrs/week	Paper: Nil		
TOTAL MARKS	100		
TOTAL CREDITS	2		

The course aims towards developing foundations of Research skills.

COURSE CONTENT:

UNIT 1: Introduction to Research: Meaning and importance of Research, its significance in Design, Research Process

UNIT 2: Types of Research: Min.6 types of Research: (Descriptive, Analytical, Qualitative, Quantitative, Applied, Fundamental, Conceptual, Empirical, etc.)

UNIT 3: Methods of Data Collection: Types of Survey, Variables, Sampling techniques

UNIT 4: Analysis of data: presentation of data in different modes as per requirement of Research (Pie chart, Line graphs, etc.)

UNIT 5: Presentation of Data: Graphical, non graphical, photo, illustrations , Tables etc.

UNIT 6: Synopsis: Defining Aims, Objectives, Scope, Methodology. Understanding synopsis from reading Research Papers.

SUBMISSION REQUIREMENT

a) Journal writing for theories of Unit 1, 2 and 4.

b) Identifying and reading Research Papers (min.5) on topic of individual interest.

c) Analysis and systematic presentation of data collected from Research Papers: identification of types of survey, variables, sampling techniques, application in Research Paper.

d) Synopsis writing on topic of interest.

Note : Submissions according to specific disciplines should be stressed upon and detailed out.

METHOD OF INSTRUCTION

Regular presentation of students work and group discussions shall be undertaken. Online E resources, E Libraries should be advised for reading research papers.

COURSE OUTCOME:

Students will be equipped to conduct independent research on relevant topics in a systematic manner.

- Garg.B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. An introduction to Research Methodology, RBSA Publishers.
- Kothari, C.R.(2008). Research Methodology: Methods and Techniques. Second Edition. New Age International Publishers, New Delhi.
- Architectural Research Methods by Linda N. Groat ,David Wang, Wiley Publications.
- Sinha, S.C. and Dhiman, A.K., 2002. Research Methodology, Ess Ess Publications.
- Reasearch design by Creswell, John
- Writing Your Thesis by Oliver Poul
- Understanding the research process by Oliver Poul

PROFESSIONAL PRACTICE			
COURSE CODE	32025231		
TEACHING SCHEME	EXAMINATION SC	CHEME	
	Sessional (SS)	100	
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50	
1 Lecture + 2 studio TOTAL = 3 hrs/week	External	50	
	Paper: Nil		
TOTAL MARKS	100		
TOTAL CREDITS	2		

- Understanding the office of a designer, its working etc.
- To understand the importance, duties and responsibilities of the designer towards society.

COURSE CONTENT:

1. Setting up Studio:

Designer should be exposed to his role as a professional designer - Designer Setting up studio, managing studio, making proposals and duties as professionals etc., hiring process, Project scheduling and Work delegation, Billing, Salaries and Taxation, Consulting fees, Contracts and agreements, for consulting charges.

2. A designer working as a part of large company in their design team:

To make the students understand the role of a designer as a part of a small or large teams. To understand the structure of design teams, hierarchy, collaborated working with other divisions of the company like Marketing, Sales, Senior management, Shop floor or manufacturing units, alignment in the company's vision and values, collaborative working, managing confidentiality and working in their own role and capacity.

3. To understand various types of companies: Startups, small design studios, Large design studios, Services company, Product manufacturing companies, Various domains of work like Healthcare, Education, Automotive, Construction, Manufacturing, Hospitality, Infrastructure etc. Multinational companies, Indian companies, working overseas, working remotely, Stock options, Listed V/S unlisted companies etc.

4. Professional values- Definition, Accountability, identifying one's strength and interests, Respect for learning & learned, Time management, Team spirit, Code of conduct, personal goal setting and mission.

5. Ethics in business environment, responsibility to the public, client. Responsibility of the designer, colleague, employer.

METHOD OF INSTRUCTION

It is suggested to invite HR Professionals for guidance on Professional values & Ethics.

A one day workshop/ session can be arranged to give training by special trainers who take such sessions for Companies.

SUBMISSION REQUIREMENT

1. Journal writing on all of the above topics.

2. A Case study of Practicing Product Designer, report on the Case Study, and interview of the Professional is desirable.

COURSE OUTCOME:

It will equip the students with knowledge and skills needed for professional environment to set up an individual consultancy and work with other companies and groups.

- Douglas Davis, Creative Strategy and Business of Design, 2016
- Shan Preddy, How to run a successful Design Business: The New Professional Practice, Gower Publishing , ltd. 2011
- Min Basadur, Michael Goldsby, Design- Centered Entrepreneurship, 2016.

ELECTIVES 4 (DESIGN)			
COURSE CODE	32025232		
TEACHING SCHEME	EXAMINATION SCHEME		
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 4 studio TOTAL = 6 hrs/week	Sessional (SS) Sessional CIA External Paper: Nil	100 50 50	
TOTAL MARKS	100		
TOTAL CREDITS	4		

- To enable the students to understand the special needs of the differently abled.
- To enable the students for designing and developing solutions with empathy.

COURSE CONTENT

- 1. Introduction to the design intervention in the human realm which add value and quality to the life.
- 2. Identifying a user or a group of users in accessible environments.
- 3. Documentation of the user/users to understand the skills, aspirations and challenges in different environments.
- 4. Presentation with constructive analysis to identify area of potential intervention.
- 5. A focused detail research, documentation of the identified need.
- 6. An expert perspective like a doctor, trainer, care takers etc.
- 7. Research of the global solutions.
- 8. Synthesizing and prioritizing the research observations leading to design brief.
- 9. Ideation -- concept generation and explorations with quick explanatory models.

SUBMISSION REQUIREMENT

- 1. User research documentation & presentation
- 2. Analysis & formulation of design brief
- 3. Ideation & exploration -- sketches & study models

COURSE OUTCOME :

This course gives the students an opportunity to explore specific area of design application with users of different needs and serve the user to improve their quality of life.

- Designing for the Disabled: The New Paradigm By Selwyn Goldsmith
- Design Meets Disability by Graham Pullin

ELECTIVES 5		
COURSE CODE	32025233	
TEACHING SCHEME	EXAMINATION SCHEME	
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 4 studio TOTAL = 6 hrs/week	Sessional (SS) Sessional CIA External Paper: Nil	100 50 50
TOTAL MARKS	100	
TOTAL CREDITS	4	

Course Objectives:

To allow the students to study a subject of their interest and develop theoretical as well as practical understanding of the same.

Course Outline:

- Colleges have to develop course outline for the elective they wish to offer such that theoretical as well practical aspects are covered linking them to the Design field.
- Apart from lectures delivered by the subject resource persons, self study in form of hands on workshop / field work/ review of literature / seminar or any suitable format of learning may be adopted.
- A list of Electives is suggested in **Annexure A- in** *Programme Structure & Rules.* The Institutes can refer it or offer any other subject in Elective.

As mentioned in the *RULE NO.13: OTHER RULES, Programme Structure & Rules,* a student may adhere to a particular stream of elective of his/her choice and nurture his/her area of interest and develop his/her expertise.

However the student should not repeat a particular elective.

B. DES.

REVISED SYLLABUS (2025 - 26) THIRD YEAR - SET DESIGN SEMESTER 5

DESIGN PROJECT 3		
COURSE CODE	32025318	
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SV)	250
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	125
2 Lectures + 8 Studio	SV	125
TOTAL = 10 hrs/week	Paper: Nil	
TOTAL MARKS	250	
TOTAL CREDITS	6	

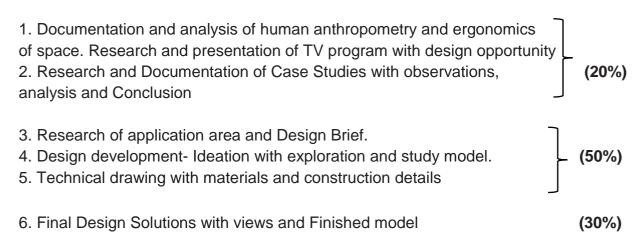
- 1. To understand and visualise script of the play
- 2. To design a drama set for proscenium arch theatre
- 3. To explore and experiment with theatrical possibilities at non-conventional theatrical spaces.

COURSE CONTENT:

- 1. Understanding of theatre as a place for performance (Theatre & Stage)
- 2. Types of theatre and sets. Types of stage and divisions of stage.
- 3. Use of curtains, wings, levels, etc
- 4. Selection of script. Research and working on the script for design interventions.
- 5. Concept generation and explorations with quick explanatory models.
- 6. Finalisation of the concept with design development and detailing.
- 7. Hand Renderings and final finished model of the final design solution.
- 8. Cost estimation of designed set.

SUBMISSION REQUIREMENT :

The assessment of Design Project to be done at the following assignment stages with due weightage to each stage



COURSE OUTCOME:

Students will understand and explore the process of set design for theatre production from script to performance.

- Khel Natkacha by Dr. Rajeev Naik
- Theatrical Design and Production: An Introduction to Scene Design and Construction, Lighting, Sound, Costume, and Makeup by J. Michael Gillette
- Fundamentals of Theatrical Design: A Guide to the Basics of Scenic, Costume, and Lighting Design by Karen Brewster & Melissa Shafer
- Scene Design: A Guide to the Stage by Hake Talbot
- Scene design and stage lighting by W. Oren Parker

ELMENTS OF FORM 3			
COURSE CODE	32025319		
TEACHING SCHEME	EXAMINATION SCHEME		
	Sessional (SV)	150	
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	75	
1 Lectures + 4 Studio	SV	75	
TOTAL = 5 hrs/week	Paper: Nil		
TOTAL MARKS	150		
TOTAL CREDITS	3		

- 1. This course aims towards enabling students understand the process of abstraction in set design
- 2. To sensitize students towards perception, appreciation of literature (especially poetry), painting, sculpture, installations and their articulation in theatre space.

COURSE CONTENT:

- 1 An introduction to abstraction in art through the works in paintings, sculpture, installations
- 2 Understand, interpret the meaning of a poem and appreciate it on a deeper level.
- 3 Analyse poem in order to study its structure, form, language, metrical pattern, and theme to create visuals and installations.
- 4 Going through the process of making multimedia theatrical presentation
- 5 Study of set designs by Josef Svoboda, Jordon Craige, Adolphe Appia, Mayerhold.

SUBMISSION REQUIREMENT FOR SESSIONAL WORK

Installation and/or multimedia theatrical presentation of 30 to 45 mins.

COURSE OUTCOME:

Understanding the abstraction from set design perspective in context of script, content, theme by creating abstract composition in a given space.

- Beginner's Guide to Abstract Art Laura Reiter
- Abstract Art: From the Cave to the Computer Screen by Anna Moszynska
- Abstract Painting: The Elements of Visual Language
- Paul Klee Notebooks, two volumes (The Thinking Eye and The Nature of Nature)
- Kora Canvas by Prabhakar Barve

ELEMENTS OF MEDIUM 2			
COURSE CODE TEACHING SCHEME	32025320 EXAMINATION SCHEME		
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	75	
1 Lectures + 2 Studio	SV	75	
TOTAL = 3 hrs/week	Paper: Nil		
TOTAL MARKS	150		
TOTAL CREDITS	2		

- 1. This course aims to make aware students about brief history theatre and its elements as a medium of live performance.
- 2. To understand evolution of theatre as a medium
- 3. To understand the different elements contributing towards the medium of theatre.
- 4. To understand the different genres of the theatre.

COURSE CONTENT:

- 1. Brief history of world and Indian theatre
- 2. To experience the live performances of the theatre by watching the theatrical shows.
- 3. To understand different elements of theatre such as play writing, direction, lighting design, costume design, makeup, acting, music.
- 4. To understand and explore the language of theatre like scene, blackout, scene change, entry, exit, etc.
- 5. To understand the theatre process script to performance.
- 6. Appreciation of the old classics and contemporary expressions

SUBMISSION REQUIREMENT FOR SESSIONAL WORK

• Journal/Report writing

COURSE OUTCOME:

- Students will understand the evolution of theatre in context with world & India.
- Students will explore elements of theatre as medium of live performance.

- Natyashastra by Bharat Muni Hindi translation by B. L. Shukla Shastri
- Natakatli Chinhe by Dr. Rajeev Naik.
- Khel Natkacha by Dr. Rajeev Naik.
- Empty Space by Peter Brook.
- The Oxford Illustrated History Of Theatre
- History of Indian Theatre by M. L. Varadpande

LIGHT AND CAMERA

COURSE CODE	32025321	
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SS)	100
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50
2 Lectures + 2 Studio	SS	50
TOTAL = 4 hrs/week	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	3	

COURSE OBJECTIVE:

- 1. To understand the dynamics created by light and camera from the set designer's perspective.
- 2. To study the language of moving images created by movie camera and lights from set designer's perspective.
- 3. To understand the significance of techniques and equipments used in making of cinematic expression.

COURSE CONTENT:

Light:

- 1. Function of lighting. Quality of lights
- 2. Basic principles of lighting.
- 3. Lighting equipments and accessories.
- 4. Lighting techniques.

Camera:

- 1. Basics of shot, scene and sequence
- 2. Shooting angles, shot composition, camera movement
- 3. Types of movie cameras entry level and professional
- 4. Visualization tools and techniques Storyboard
- 5. Visual design and concept of director of photography in cinema.
- 6. Equipments and accessories for camerawork.
- 7. Appreciation of cinematography in cinema, television shows, short films, Advertisement, web series and documentaries.

SUBMISSION REQUIREMENT :

- 1. Composing and making of a shot, scene and sequence in digital format.
- 2. Short film making Duration 5 to 20minutes.

COURSE OUTCOME:

Students will exposed to artistic vision & technical skills which are essential for cinematic work

- Grammar of the Shot by Christopher J. Bowen & Roy Thompson Publisher: Focal Press
- The Five C's of Cinematography: Motion Picture Filming Techniques by Joseph V. Mascelli
- Film Directing Shot by Shot: Visualizing from Concept to Screen by Steven D. Katz
- Cinematography: Theory and Practice: Image Making for Cinematographers and Directors by Blain Brown
- Set Lighting Technician's Handbook: Film Lighting Equipment, Practice, and Electrical Distribution by Harry Box
- Motion Picture and Video Lighting by Blain Brown Publisher: Focal Press
- The Visual Story: Creating the Visual Structure of Film, TV and Digital Media by Bruce Block
- Film Directing Shot by Shot: Visualizing from Concept to Screen, Katz, Steven D., Publisher: Michael Wiese Productions; 1991

CRAFT & CULTURAL DOCUMENTATION			
COURSE CODE	32025322		
TEACHING SCHEME	EXAMINATION SCHEME		
TOTAL CONTACT HOURS PER	Sessional (SV)	150	
WEEK	Sessional CIA	75	
1 Lectures + 4 Studio TOTAL = 5 hrs/week	SV	75	
	Paper: Nil		
TOTAL MARKS	150		
TOTAL CREDITS	3		

- 1. To establish an appreciation and understanding of our rich culture, heritage and vast craft techniques.
- 2. To expose the students to the gamut of contextually responsive space design of a community, craft activity and the role of design thereof.
- 3. To evaluate the possibility of extending the traditional material, construction and craft techniques to contemporary application.
- 4. To equip the students to undertake field research using suitable research tools wherein they directly interact with communities, artisans and skilled craftsman to collect, analyze and record data.

COURSE CONTENT:-

- 1. Traditional crafts and techniques -Detailed description and visual documentation of traditional craftsmanship, including materials used and techniques employed.
- 2. Architectural styles Examination of historical and contemporary architectural styles within a cultural context, highlighting key features and influences.
- 3. Cultural symbols and meanings Examination of symbols, motifs and their cultural significance in are and architecture.
- 4. Historical context In depth analysis of the historical social and political context shaping cultural expressions in art and architecture.
- 5. Interviews and oral histories Documentation of personal narratives, interviews with artisans, architects and community members to capture oral histories and first- hand experiences.
- 6. Photography and visual records High quality visual documentation, including photographs, sketches, and diagrams, to capture the aesthetics and details cultural artifacts and architectural marvels.
- 7. Documentation of rituals and traditions Record rituals, ceremonies, and eruditions associated with art and architecture, providing insights into their cultural significance.
- 8. Evolution and adaptation Examining how cultural elements have evolved and adapted over time, considering contemporary influences and changes.

- 9. Cultural contextualization Placing artistic and architectural works within their broader cultural, considering the impact of globalization and modernization.
- 10. Collaborative approaches Exploring collaborative efforts between artists, architects and local communities to preserve and promote cultural heritage.

METHOD OF INSTRUCTION:

• Field work, Analysis and synthesis., Discussions and feedback sessions, Documentation.

SUBMISSION REQUIREMENT :

Individual Report writing & sketches about the craft community and craft identified.

COURSE OUTCOME:

- 1. Students will gain a deeper understanding and appreciation of various culture and traditions and histories through the study of craft, practices unique to different religions and communities.
- 2. Students should understand cross culture understand and socio- economic Impact
- 3. Students should be majorly focus on hands on experience of craft making.

- Jaitly, Jaya. "The Craft Traditions of India", Lustre Press Pvt.Ltd, New Delhi, 1990
- Jaitly Jaya. "Crafts Atlas of India", Niyogi Books, N.Delhi, 2012
- Khanna, P. "Material and Technology An inventory of selected materials and technologies for building construction", Project report to CDKN, Development Alternatives Group, New Delhi, 2011
- Mehrotra, Lakhan and Vajpayee, Raghvendra (ed.) "Communication Through The Ages An Indian Perspective", Aryan Books International, new Delhi in association with Media Centre for Research and Development, Gurgaon, 2009
- Pandya, Yatin. "Concepts of Space Making in Traditional Indian Architecture", Mapin Pub.Pvt.Ltd., Ahmedabad, 2005
- Saraf, D.N. "Indian Crafts Development and Potential", Vikas Publishing House Pvt. Ltd., New Delhi, 1982
- Ranjan, Aditi and Ranjan, M.P. (Ed.) "Crafts of India: Handmade in India", Council of Handicraft Development Corporations (COHANDS), New Delhi, Development Commisioner (Handicrafts), New Delhi
- Sparke P, Introduction to Design & Culture in the 20th centuary, Routledge, 1986
- Kosambi D.D; The culture & civilization of Ancient India in Historical outline, UBS publishers, 2007
- People History of India-Vol 1 to 7 by Irfan Habib, Tulika books.
- Indian Tales by Romila Thaper
- Indian culture as heritage contemporary pasts, by Romila Thaper

RESPONSIVE ENVIRONMENTS			
COURSE CODE	32025323		
TEACHING SCHEME	EXAMINATION SCHEME		
TOTAL CONTACT HOURS PER	Sessional (SS)	100	
WEEK 1 Lectures + 2 Studio TOTAL = 3 hrs/week	Sessional CIA	50	
	SS	50	
	Paper: Nil		
TOTAL MARKS	100		
TOTAL CREDITS	2		

A Designer works in a comprehensive environment and not in isolation. A Designer works within a context, society & environment.

1. The objective of the course is to sensitise & develop awareness of responsibility towards today's environment & Society.

2. It aims to make understand role of a Designer for problem solving, for nurturing healthy societies, as a bonding element for society, and care taker of environment.

COURSE CONTENT:

- 1. Relation between Society, culture and in turn with the field of Design.
- 2. Identify the key approaches used in the study of design and society.
- 3. Ideas and thoughts relating to design of Indian society.
- 4. Urban and rural contexts-scopes, requirements, challenges, implications of lifestyle on the environment.
- 5. To understand issues of cross cultural exchange in design and society viz influences, transformation, inspiration, effects, etc.
- 6. To introduce the Concept of constant need of more resources and materials for living- 'Consumerism', and its impacts.
- 7. Introduce the basic concept of Ecology & Environment. Various cycles in nature, Food chain, Food web, Energy flow in Eco system, Bio diversity etc,.
- 8. Environmental Degradation, their basic causes and sustainable solutions.
- 9. Environmental crisis, challenge and opportunity Greenhouse effect, Carbon credits, Carbon sequestration. Analysing position of India to contribute / lead.
- 10. Environmental Pollution Impact of pollution in the local environment and at the global level environment. To understand individual role in pollution & measures to mitigate.
- 11. To introduce environmental Impact Analysis, Notification of government of India Environmental Protection Act for Air, water, forest and wild life. Impact assessment methods. Environmental priorities in India, EIA guidelines. Examples in India.
- 12. The role of Design for a sustainable world.

SUBMISSION REQUIREMENT :

- Written Assignments / Reports
- Oral Presentation / Debates.

COURSE OUTCOME:

The students will equip themselves to identify the contribution for environment & society. They will be able to position themselves and their future work in the larger context.

RECOMMENDED READINGS:

- Global water pollution: perspectives & cases by Anand Sandip Lahari
- Environmental studies :basic concepts by Ahluwalia V.K.
- Environmental science earth as a living planet by Botkin, Daniel B & Keller
- Bamboo: Architecture & design by Broto, Eduard
- Climate Change Biology by Hannah, lee
- Ecological Restoration :principles values & structure of an emerging profession by Clewell andre & Aronson James
- Ecosystems & human well-being by Reid, walter & Mooney H Arold A. & (MEA)
- A text book of environmental Architecture by Dr. Kishore Pawar
- Urban Environments-design-2 by Lim.Sung Bin
- Sociology by Schaefer Richard T
- Voluntary environmental management by Morelli John
- Landscape of planning environmental applications by Marshall William
- Management of municipal solid waste by Ramchandra T V
- An introduction to water pollution by S V Rao
- Urban design Green dimensions by Moughtin ,Cliffl& Shirley Peter
- Biodiversity communities & climate change by Kala Chandra Prakash
- Vernacular traditions contemporary architecture by Tipnis Aishwarya
- Life cycle Assessment by Simonen Kathrina
- Rural Modern by Abraham Russell

ELECTIVES 3		
COURSE CODE	32025324	
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SS)	100
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50
2 Lectures + 2 Studio	SS	50
TOTAL = 4 hrs/week	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	3	

Course Objectives:

To allow the students to study a subject of their interest and develop theoretical as well as practical understanding of the same.

Course Outline:

- Colleges have to develop course outline for the elective they wish to offer such that theoretical as well practical aspects are covered linking them to the Design field.
- Apart from lectures delivered by the subject resource persons, self study in form of hands on workshop / field work/ review of literature / seminar or any suitable format of learning may be adopted.
- A list of Electives is suggested in **Annexure A- in** *Programme Structure & Rules*. The Institutes can refer it or offer any other subject in Elective.

As mentioned in the *RULE NO.13: OTHER RULES, Programme Structure & Rules,* a student may adhere to a particular stream of elective of his/her choice and nurture his/her area of interest and develop his/her expertise.

However the student should not repeat a particular elective.

B. DES. REVISED SYLLABUS (2025 - 26) THIRD YEAR - SET DESIGN SEMESTER 6

DESIGN PROJECT 4

COURSE CODE	32025325 (P)	32025326(SV)
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SV)	250
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	125
2 Lectures + 10 Studio	SV	125
TOTAL = 12 hrs/week	Paper: 100	
TOTAL MARKS	350	
TOTAL CREDITS	7	

COURSE OBJECTIVE:

- 1. To understand cinematic space and time
- 2. To develop the skill of creative use of visual elements to create the expected look and feel.

COURSE CONTENT:

- 1 Introduction to the role and responsibilities in the art department...production designer, art director, set designer and others.
- 2 Analysis of a film from set designer's perspective focusing on the constructed set and locations.
- 3 Understanding the script to determine the visual requirements of scene and the overall mood and tone of the film of set. Translating the narrative into visual ideas with word, mood and inspiration boards.
- 4 Conducting research into relevant historical periods, architectural styles, cultural references, and visual motifs that will enrich the design
- 5 Properties listing and management.
- 6 Ideation -- concept generation and explorations with quick explanatory model
- 7 Finalization of the concept with design development and detailing.
- 8 Cost estimation of designed set with Scheduling and options for materials
- 9 Hand Renderings, technical drawings and finished model of the final design solution.
- 10 The photo documentation of the finished model of the set with effective lighting

SUBMISSION REQUIREMENT:

The assessment of Design Project to be done at the following assignment stages with due weightage to each stage

(25%)

- **1.** Analysis of a film from set designer's perspective.
- 2. Research of application area and Design program

 Design development- Ideation with exploration and study model Technical drawings, materials & construction details 	(50%)
5. Final Design Solutions, with views and Finished model.	(25%)

COURSE OUTCOME:

Students will understand and explore the process of set design and construction of around 1000 sq. ft area for cinema from script to final model

Recommended Readings:

- The filmmaker's guide to production design by Vincent LoBrutto
- Production Design for Screen: Visual Storytelling in Film and Television by Jane Barnwell
- Filmcraft: Production Design by Fionnuala Halligan
- Designs on Film: A Century of Hollywood Art Direction by Cathy Whitlock
- Adhunik Yugacha Vishwakarma Nitin Desai by Mandar Joshi
- Film Directing Shot by Shot: Visualizing from Concept to Screen, Katz, Steven D., Publisher: Michael Wiese Productions; 1991

ELEMENTS OF FORM 4			
COURSE CODE	32025327		
TEACHING SCHEME	EXAMINATION SCHEME		
	Sessional (SV)	150	
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	75	
1 Lectures + 4 Studio	SV	75	
TOTAL = 5 hrs/week	Paper: Nil		
TOTAL MARKS	150		
TOTAL CREDITS	3		

- 1. This course aims to equip the students with the understanding of their role as set designers in the special effects in the film making process. (VFX).
- 2. To make students understand the concept of virtual space, visual effects, and its creative use incinema.
- 3. To make students understand the development of technology and its future in the field of CGI.

COURSE CONTENT:

- 1. Introduction to VFX & Animation and overview of the VFX, Animation Principles and the users of art direction.
- 2. Understanding composition, Colour theory and visual storytelling
- 3. Introduction to 3D modelling software and basic techniques five creating objects, characters and environments.
- 4. Creating particle effects, simulations (such as smoke, Rive, Water water etc.)
- 5. Integrating 3D elements into line-action footage are still image using compositing softwares.

SUBMISSION REQUIREMENT :

Hands on projects and assignments to apply learned concepts of VFX & Animation.

COURSE OUTCOME:

- 1. Students will understand how film shots enhanced with use of CGI.
- 2. Students will have hands on experience of making basic environments in fantasty.

Recommended Readings:

• The filmmakers guide to production design by Vincent Lobrutto, Allworth press, New York.

ELEMENTS OF MEDIUM 3		
COURSE CODE	32025328	
TEACHING SCHEME	EXAMINATION SC	HEME
	Sessional (SV)	150
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	75
1 Lectures + 2 Studio	SV	75
TOTAL = 3 hrs/week	Paper: Nil	
TOTAL MARKS	150	
TOTAL CREDITS	2	

- 1. To understand evolution of Cinema as a medium
- 2. To understand the different elements contributing towards the medium of Cinema.
- 3. To understand the different genres of the Cinema.

COURSE CONTENT:

- 1. Brief history of world and Indian cinema
- 2. Brief history of set design in world and Indian cinema
- 3. Introduction to the process of filmmaking.
- 4. To understand the significance of the different elements of the films ... Direction, screen play and dialogue, costume, choreography, editing, sound design, etc.
- 5. Understanding the cinematic space and time.
- 6. Introduction to narrative, structure, theme, characterization in cinema.
- 7. Understanding the different genres of the Cinema.

COURSE OUTCOME:

- Students will understand the evolution of cinema in context with world and India.
- Students will understand and explore elements of cinema as a medium of mass communication.

SUBMISSION REQUIREMENT FOR SESSIONAL WORK

1. Making timelines of evolution of Cinema in World and Indian contexrs.

2. Journal writing on course content points : 2,3,5,6,7.

Recommended Readings:

- How to read a film by James Monaco.
- Film Art: an Introduction by David Bordwell.
- The language of film by Robert Edgar.
- History of Indian Cinema by Renu Saran
- The Oxford History of World Cinema by Geoffrey Nowell-Smith
- The Complete Book of Scriptwriting, Straczynski J. Michael; Writer's Digest Books; 2002

- The Art of Digital Video; Publisher: Watkinson John; Focal Press; 4th edition, 2008
- Cut by Cut: Editing Your Film or Video;Chandler Gael;Publisher: Michael Wiese Productions, 2004
- Adhunik Yugacha Vishwakarma Nitin Desai by Mandar Joshi

ESTIMATION & COSTING		
COURSE CODE	32025329 (P)	32025330 (SS)
TEACHING SCHEME	EXAMINATIÓN SCHEME	
	Sessional (SS)	50
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	25
2 Lectures + 2 Studio	SS	25
TOTAL = 4 hrs/week	Paper: 100	
TOTAL MARKS	150	
TOTAL CREDITS	3	

- 1. To make students understand how to break down a design solution into parts/elements to prepare a worksheet for cost analysis.
- 2. To make students understand the parameters to be considered in the decision making with respect to the materials and construction processes which determine the budget of the set .
- 3. To enable the student to understand the impact of the cost of the materials used in the process of the execution on the estimate of the set.
- 4. To prepare a detailed cost sheets and final estimate of a film set.

COURSE CONTENT:

- 1. Introduction to Film Sets Construction:
 - Overview of the role of construction in film production
 - Importance of Set construction for orating realistic environments and scenes.
- 2. Types of Film Sets:
 - Indoor Sets: Sound stages, studio builds
 - Outdoor Sets: Location builds, exterior sets.
 - Specialty Sets: Period Sets, fantasy sets, sci-fi sets.
- 3. Construction Techniques and Materials:
 - Framing and carpentry techniques
 - Use of materials such as lumber, drywall, scaffolding and props.
 - Specialized construction methods for different types of sets (e.g. modular sets, temporary sets)
- 4. Estimation techniques:
 - Determine the scope of work based on script analysis and set design plans
 - Quantifying materials and labor required for construction
 - Understanding factors influencing construction cost (e.g. set complexity, size, location)
- 5. Budgeting and Cost Management:

- Cost estimation methods for labor materials and equipment
- Creating and managing construction budgets
- Tracking and controlling cast throughout the construction process
- 6. Cast studies and Practical Exercise:
 - Analyzing construction challenges and solutions in real film sets with respect to set costing and estimation
 - Hand on construction Projects or simulations.
 - Site visits to film sets under construction or completed sets
- 7. Industry Trends and Innovations:
 - Emerging technologies and techniques in film set construction
 - Sustainable construction practices in film production
 - Opportunities for career advancement and specialization in set construction.

SUBMISSION REQUIREMENT :

- 1. Assignments: Estimation exercise, budgeting exercise, budgeting exercises, construction project proposals
- 2. Practical demonstration or projects show casing construction skills.

COURSE OUTCOME:

- Students to understand the concept and importance of costing and estimation from the perspective of Set of set design and its execution
- Student will learn to appreciate the limitations financially of a project and how to work within those constraints to achieve creative goals.
- Students should understand cost estimation and their anticipate protentional, financial risk as well as managements and plan accordingly, minimizing the chances of budget overruns and project delays.

Recommended Readings:

- The Art Direction Handbook for Film by Micheal Rizzo. Focal Press.
- The Filmmaker's Guide to Production Design by Vincent Lobrutto. Allworth press, New York.

Resources and References:

- Textbooks, outsides and online resources on construction techniques and cost estimation.
- Industry standards and guidelines for film set construction
- Software tools for project management and budgeting.

RESEARCH METHODS

RECERTOR METHODO		
COURSE CODE	32025331	
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SS)	100
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50
1 Lectures + 2 Studio	SS	50
TOTAL = 3 hrs/week	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	2	

COURSE OBJECTIVE:

The course aims towards developing foundation towards Research skills.

COURSE CONTENT:

UNIT 1: Introduction to Research: Meaning and importance of Research, its significance in Design, Research Process.

UNIT 2: Types of Research, Min.6 types of Research: (Descriptive, Analytical, Qualitative, Quantitative, Applied, Fundamental, Conceptual, Empirical, etc.)

UNIT 3: Methods of Data Collection: Types of Survey, Variables, Sampling techniques

UNIT 4: Analysis of data: presentation of data in different modes as per requirement of Research (Pie chart, Line graphs, etc.)

UNIT 5: Presentation of Data: Graphical, non graphical, photo, illustrations, Tables etc.

UNIT 6: Synopsis: Defining Aims, Objectives, Scope, Methodology. Understanding synopsis from reading Research Papers.

SUBMISSION REQUIREMENT

a) Journal writing for theories of Unit 1, 2 and 4.

b) Identifying and reading Research Papers (min.5) on topic of individual interest.

c) Analysis and systematic presentation of data collected from Research Papers: identification of types of survey, variables, sampling techniques, application in Research Paper.

d) Synopsis writing on topic of interest.

Note : Submissions according to specific disciplines should be stressed upon and detailed out.

METHOD OF INSTRUCTION

Regular presentation of students work and group discussions shall be undertaken.

Online E resources, E Libraries of different university / institutions – should be advised for reading

COURSE OUTCOME:

Students will be equipped to conduct independent research on relevant topics in a systematic manner.

Recommended readings:-

- Garg.B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. An introduction to Research Methodology, RBSA Publishers.
- Kothari, C.R. (2008). Research Methodology: Methods and Techniques. Second Edition. New Age International Publishers, New Delhi.
- Architectural Research Methods by Linda N. Groat ,David Wang, Wiley Publications.
- Sinha, S.C. and Dhiman, A.K., 2002. Research Methodology, Ess Ess Publications.
- Reasearch design by Creswell, John
- Writing Your Thesis by Oliver Poul
- Understanding the research process by Oliver Poul

PROFESSIONAL PRACTICE		
COURSE CODE	32025332	
TEACHING SCHEME	EXAMINATION SC	HEME
	Sessional (SS)	100
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50
1 Lectures + 2 Studio TOTAL = 3 hrs/week	SS	50
	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	2	

Understanding the work of an Art Director or production design house.

To understand the importance, duties and responsibilities of the designer in industry and towards society in larger context.

COURSE CONTENT:

- 1. Professional values- Definition, Accountability, identifying one's strength and interests, Respect for learning/ learned, open and balanced mind willingness to learn, willingness for discussion, Time management, Team spirit.
- 2. Code of conduct, Ethics in business environment, responsibility of the designer.
- 3. Personal goal setting and mission.
- 4. Understanding the role of associations in industry and rights of individual Art Direction practitioner

SUBMISSION REQUIREMENT

Journal writing on all of the above topics.

Case study of work in the form of Paper Presentation / PPT of experienced Art Director or production design house.

COURSE OUTCOME:

It will equip the students with knowledge and skills needed for professional environment.

Recommended readings:

- What an Art Director Does by Ward Preston
- The Art Direction Handbook for Film & Television by RIZZO
- The Filmmaker's Guide to Production Design by Vincent LoBrutto

ELECIVES 4		
COURSE CODE	32025333	
TEACHING SCHEME	EXAMINATION SC	HEME
	Sessional (SS)	100
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50
2 Lectures + 2 Studio	SS	50
TOTAL = 4 hrs/week	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	3	

Course Objectives:

To allow the students to study a subject of their interest and develop theoretical as well as practical understanding of the same.

Course Outline:

- Colleges have to develop course outline for the elective they wish to offer such that theoretical as well practical aspects are covered linking them to the Design field.
- Apart from lectures delivered by the subject resource persons, self study in form of hands on workshop / field work/ review of literature / seminar or any suitable format of learning may be adopted.
- A list of Electives is suggested in **Annexure A- in** *Programme Structure & Rules*. The Institutes can refer it or offer any other subject in Elective.

As mentioned in the *RULE NO.13: OTHER RULES*, **Programme Structure & Rules**, a student may adhere to a particular stream of elective of his/her choice and nurture his/her area of interest and develop his/her expertise.

However the student should not repeat a particular elective.

B. DES. REVISED SYLLABUS (2025 - 26) THIRD YEAR - FURNITURE DESIGN SEMESTER 5

DESIGN PROJECT - 3		
COURSE CODE	32025420	
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SV)	250
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	125
2 Lecture + 10 studio	External	125
TOTAL = 12 hrs/week	Paper: Nil	
TOTAL MARKS	250	
TOTAL CREDITS	7	

- 1. To introduce students to multifunctional design concerns, considerations and deliverables.
- 2. The course aims to prepare furniture design students for the challenges and possibilities of creating modular furniture.
- 3. Students will explore the principles of flexibility, adaptability and efficiency in multifunctional and modular furniture design.

COURSE CONTENT:

Unit 1: Introduction to Multifunctional and Modular Furniture Design its scale and volume.

Unit 2: Introduction to definition and characteristics of multifunctional furniture with context and evolution of multifunctional design solution.

Unit 3: Introduction to modularity in furniture design - benefits and challenges

Unit 4: Analyze case studies of successful modular furniture system

Unit 5: Analyze current market trends, consumer's preferences and emerging innovations in modular furniture design.

Unit 6: Conducting user research to understand diverse need of multifunctional and modular furniture and formulate design brief.

Unit 7: Ideation phase concept generation and explorations with quick explanatory models, hand rendering of the concepts

Unit 8: Explorations of materials, role of technology, testing for functionality, adaptability and user satisfaction.

Unit 9: Finalization of the concept with design development and detailing.

Unit 10: Finished model of final design solution.

SUBMISSION REQUIREMENT FOR SESSIONAL WORK

1. Market trends and identification of need, Concept developm	ient
and ideation sketches	(35%)
2. Material and manufacturing considerations, Technology inte	egration
in final solution	(25%)
3. Prototyping and testing documentation (validating concept),	
Final project presentation and critique	(40%)

COURSE OUTCOME:

- The students will be able to design furniture with flexibility and adaptability to accommodate changing needs with diverse environment.
- The students will be able to integrate technology into multifunctional and modular furniture.
- The students will be able to demonstrate ability to seek feedback, reflect on their design and engage in a process of improvement.

RECOMMENDED READINGS: -

- Rethink the Modular: Adaptable Systems in Architecture and Design
- Eileen Gray: Objects and Furniture Design
- Chairs
- Furniture Design: An Introduction to Development, Materials and Manufacturing
- Donald Judd Furniture: Retrospective
- Eero Saarinen: Furniture for Everyman

ELEMENTS OF FORM 3		
COURSE CODE	32025421	
TEACHING SCHEME	EXAMINATION SC	HEME
	Sessional (SV)	200
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	100
1Lecture + 4 studio	External	100
TOTAL = 5 hrs/week	Paper: Nil	
TOTAL MARKS	200	
TOTAL CREDITS	3	

- 1. The students will learn concept of biomimicry, focusing specifically on exploring elements of form inspired by nature.
- 2. Students will learn to derive design inspiration from biological forms and integrate biomimetic concepts into their furniture design.

COURSE CONTENT:

- 1. Introduction to Biomimicry and its principle.
- 2. Importance and relevance of biomimicry in furniture design.
- 3. Study of structural adaptations in plant / animal forms.
- 4. Analysis of natural form to understand the relationship between form and movement.
- 5. Development of derivations of a three dimensional abstract form.

SUBMISSION REQUIREMENT

- Biomimicry research and analysis
- Selection of species and decoding the specie
- Biomimetic elements models
- Biomimetic furniture design project
- Final project presentation

COURSE OUTCOME:

- Students will be able to identify and analyze opportunities for biomimetic design within the context of furniture, recognizing patterns, forms, and functions in the natural world that can inspire furniture design.
- Students will experiment with biomimetic textures and surface finishes, replicating natural patterns and tactile qualities in their furniture designs.

Recommended Readings:

- Biomimicry: Innovation Inspired by Nature by Janine M. Benyus
- The Secret Language of Animals: A Guide to Remarkable Behavior by Janine M. Benyus and Juan Carlos Barberis
- Biomimicry: Nature as Designer by Mr. Benjamin R. Krueger.
- Nature Form & Spirit: The Life and Legacy of George Nakashima by Mira Nakashima
- Art Forms in Nature (Dover Pictorial Archive) by Ernst Haeckel

MATERIALS AND PROCESSES 3		
COURSE CODE	32025422	
TEACHING SCHEME	EXAMINATION SC	CHEME
	Sessional (SS)	100
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50
2 Lecture + 4 studio	External	50
TOTAL = 6 hrs / week	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	4	

- 1. To study modern technologies in current times.
- 2. Understanding the post assembly and post building finishing processes.
- 3. Understanding the concepts of reuse and recycle with respect to materials in furniture design.

COURSE CONTENT:

Unit 1: Understanding textures and finishes of various components and materials in furniture making. Understanding the processes of finishing with respect to methods such as paints, polishes, coatings, etc.

Unit 2: Introduction to soft furnishing with special focus on cushioning and fabrics.

Unit 3: Modern Technologies such as digital fabrication methods such as 3D printing, cnc, etc. Introduction to smart furniture.

Unit 4: Understanding the lifecycle of materials by studying the concept of reuse and recycle through new materials in the industry.

SUBMISSION REQUIREMENT FOR SESSIONAL WORK

Journal writing and Market survey reports. Documentation of Processes.

TEACHING METHODOLOGY

Industrial and site visits for material understanding. Online Lectures for some topics from NPTEL, Coursera can be organized.

COURSE OUTCOME:

- The students will understand the importance and appreciate finesse and finality to the production process of the designed furniture.
- The students will study and research new materials and innovation in a global context, while understanding their scope properties and limitations and the technology available to use them.
- The students will be equipped with a knowledge-based ability to select and or design relevant materials and their processes for producing various designs.

Recommended Readings :-

- 1. Product and Furniture Design Rob Thompson, Young Yun Kim
- 2. Furniture Design and Construction for the Interior Designer Christopher Natale
- 3. The Form of Design Josiah Kahane
- 4. Design for CNC: Furniture Projects and Fabrication Technique Gary Rohrbacher, Anne Filson, Anna Kaziunas France, Bill Young
- 5. Upholstered Furniture Mario Dal Fabbro
- 6. Guerilla Furniture Design Will Holman

CRAFT DOCUMENTATION		
COURSE CODE	32025423	
TEACHING SCHEME	EXAMINATION SCHEME	
TOTAL CONTACT HOURS PER WEEK	Sessional (SV)	150
1 Lecture + 4 studio TOTAL = 5 hrs/week	Sessional CIA SV	75 75
	Paper: Nil	
TOTAL MARKS	150	
TOTAL CREDITS	3	

- 1. To establish an appreciation and understanding of our rich culture, heritage and vast craft techniques.
- 2. To expose the students to the gamut of contextually responsive space design of a community, craft activity and the role of design thereof.
- 3. To evaluate the possibility of extending the traditional material, construction and craft techniques to contemporary application.
- 4. To equip the students to undertake field research using suitable research tools wherein they directly interact with communities, artisans and skilled craftsman to collect, analyze and record data.

COURSE CONTENT:-

- 1. Traditional crafts and techniques -Detailed description and visual documentation of traditional craftsmanship, including materials used and techniques employed.
- 2. Architectural styles Examination of historical and contemporary architectural styles within a cultural context, highlighting key features and influences.
- 3. Cultural symbols and meanings Examination of symbols, motifs and their cultural significance in are and architecture.
- 4. Historical context In depth analysis of the historical social and political context shaping cultural expressions in art and architecture.
- 5. Interviews and oral histories Documentation of personal narratives, interviews with artisans, architects and community members to capture oral histories and first-hand experiences.
- 6. Photography and visual records High quality visual documentation, including photographs, sketches, and diagrams, to capture the aesthetics and details cultural artifacts and architectural marvels.
- 7. Documentation of rituals and traditions Record rituals, ceremonies, and eruditions associated with art and architecture, providing insights into their cultural significance.
- 8. Evolution and adaptation Examining how cultural elements have evolved and adapted over time, considering contemporary influences and change.
- 9. Cultural contextualization Placing artistic and architectural works within their broader cultural, considering the impact of globalization and modernization.
- 10. Collaborative approaches Exploring collaborative efforts between artists, architects and local communities to preserve and promote cultural heritage

TEACHING METHODOLOGY:

• Field work, Analysis and synthesis., Discussions and feedback sessions, Documentation.

SUBMISSION REQUIREMENT :

Individual Report writing & sketches about the craft community and craft identified.

COURSE OUTCOME:

- 1. Students will gain a deeper understanding and appreciation of various culture and traditions and histories through the study of craft, practices unique to different religions and communities.
- 2. Students will understand cross culture understand and socio- economic Impact

Recommended readings :

- Jaitly, Jaya. "The Craft Traditions of India", Lustre Press Pvt.Ltd, New Delhi, 1990
- Jaitly Jaya. "Crafts Atlas of India", Niyogi Books, N.Delhi, 2012
- Khanna, P. "Material and Technology An inventory of selected materials and technologies for building construction", Project report to CDKN, Development Alternatives Group, New Delhi, 2011
- Mehrotra, Lakhan and Vajpayee, Raghvendra (ed.) "Communication Through The Ages An Indian Perspective", Aryan Books International, new Delhi in association with Media Centre for Research and Development, Gurgaon, 2009
- Pandya, Yatin. "Concepts of Space Making in Traditional Indian Architecture", Mapin Pub.Pvt.Ltd., Ahmedabad, 2005
- Saraf, D.N. "Indian Crafts Development and Potential", Vikas Publishing House Pvt. Ltd., New Delhi, 1982
- Ranjan, Aditi and Ranjan, M.P. (Ed.) "Crafts of India: Handmade in India", Council of Handicraft Development Corporations (COHANDS), New Delhi, Development Commisioner (Handicrafts), New Delhi
- Sparke P, Introduction to Design & Culture in the 20th centuary, Routledge, 1986
- Kosambi D.D; The culture & civilization of Ancient India in Historical outline, UBS publishers, 2007
- People History of India-Vol 1 to 7 by Irfan Habib, Tulika books.
- Indian Tales by Romila Thaper
- Indian culture as heritage contemporary pasts, by Romila Thaper

RESPONSIVE ENVIRONMENTS		
COURSE CODE	32025424	
TEACHING SCHEME	EXAMINATION SCHEME	
TOTAL CONTACT HOURS PER WEEK 1 Lecture + 2 studio TOTAL = 3 hrs/week	Sessional (SS) Sessional CIA External Paper: Nil	100 50 50
TOTAL MARKS TOTAL CREDITS	100	

A Designer works in a comprehensive environment and not in isolation. A Designer works within a context, society & environment.

1. The objective of the course is to sensitise & develop awareness of responsibility towards today's environment & Society.

2. It aims to make understand role of a Designer for problem solving, for nurturing healthy societies, as a bonding element for society, and care taker of environment.

COURSE CONTENT:

- 1. Relation between Society, culture and in turn with the field of Design.
- 2. Identify the key approaches used in the study of design and society.
- 3. Ideas and thoughts relating to design of Indian society.
- 4. Urban and rural contexts-scopes, requirements, challenges, implications of lifestyle on the environment.
- 5. To understand issues of cross cultural exchange in design and society viz influences, transformation, inspiration, effects, etc.
- 6. To introduce the Concept of constant need of more resources and materials for living-'Consumerism', and its impacts.
- 7. Introduce the basic concept of Ecology & Environment. Various cycles in nature, Food chain, Food web, Energy flow in Eco system, Bio diversity etc,.
- 8. Environmental Degradation, their basic causes and sustainable solutions.
- 9. Environmental crisis, challenge and opportunity Greenhouse effect, Carbon credits, Carbon sequestration. Analysing position of India to contribute / lead.
- 10. Environmental Pollution Impact of pollution in the local environment and at the global level environment. To understand individual role in pollution & measures to mitigate.
- 11. To introduce environmental Impact Analysis, Notification of government of India Environmental Protection Act for Air, water, forest and wild life. Impact assessment methods. Environmental priorities in India, EIA guidelines. Examples in India.
- 12. The role of Design for a sustainable world.

SUBMISSION REQUIREMENT:

- Written Assignments / Reports
- Oral Presentation / Debates.

COURSE OUTCOME:

The students will equip themselves to identify the contribution for environment & society. They will be able to position themselves and their future work in the larger context.

RECOMMENDED READINGS:

- Global water pollution: perspectives & cases by Anand Sandip Lahari
- Environmental studies :basic concepts by Ahluwalia V.K.
- Environmental science earth as a living planet by Botkin, Daniel B & Keller
- Bamboo: Architecture & design by Broto, Eduard
- Climate Change Biology by Hannah, lee
- Ecological Restoration :principles values & structure of an emerging profession by Clewell andre & Aronson James
- Ecosystems & human well-being by Reid, walter & Mooney H Arold A. & (MEA)
- A text book of environmental Architecture by Dr. Kishore Pawar
- Urban Environments-design-2 by Lim.Sung Bin
- Sociology by Schaefer Richard T
- Voluntary environmental management by Morelli John
- Landscape of planning environmental applications by Marshall William
- Management of municipal solid waste by Ramchandra T V
- An introduction to water pollution by S V Rao
- Urban design Green dimensions by Moughtin ,Cliffl& Shirley Peter
- Biodiversity communities & climate change by Kala Chandra Prakash
- Vernacular traditions contemporary architecture by Tipnis Aishwarya
- Life cycle Assessment by Simonen Kathrina
- Rural Modern by Abraham Russell

ELECTIVES 3		
COURSE CODE	32025425	
TEACHING SCHEME	EXAMINATION SCHEME	
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 2 studio TOTAL = 4 hrs / week	Sessional (SS)	100
	Sessional CIA	50
	External	50
	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	3	

Course Objectives:

To allow the students to study a subject of their interest and develop theoretical as well as practical understanding of the same.

Course Outline:

- Colleges have to develop course outline for the elective they wish to offer such that theoretical as well practical aspects are covered linking them to the Design field.
- Apart from lectures delivered by the subject resource persons, self study in form of hands on workshop / field work/ review of literature / seminar or any suitable format of learning may be adopted.
- A list of Electives is suggested in **Annexure A- in** *Programme Structure & Rules.* The Institutes can refer it or offer any other subject in Elective.

As mentioned in the *RULE NO.13:* OTHER RULES, **Programme Structure & Rules**, a student may adhere to a particular stream of elective of his/her choice and nurture his/her area of interest and develop his/her expertise.

However the student should not repeat a particular elective.

B. DES. REVISED SYLLABUS (2025 - 26) THIRD YEAR - FURNITURE DESIGN SEMESTER 6

DESIGN PROJECT 4		
COURSE CODE	32025426(P)	
TEACHING SCHEME	EXAMINATIÓN SCHEME	
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 10 studio TOTAL = 12 hrs/week	Sessional (SV)	250
	Sessional CIA	125
	SV	125
	Paper: 100	
TOTAL MARKS	350	
TOTAL CREDITS	7	

To understanding the complex systems and behaviour patterns in a public setting.

COURSE CONTENT:

Unit 1: Introduction and identification of public spaces and scope for designing public furniture. Understanding the intricacies such as crowd psychology and behaviour in public spaces, with respect to public furniture. Understanding the composition of crowds with respect to children and accessibility needs.

Unit 2: Detailed research and synthesis of information by using established methods and methodologies to identify potential of the opportunity and formulation of design brief as per Design Process.

Unit 3: Ideation, concept generation and explorations.

Unit 4: Design development and detailing.

Unit 5: Communication and presentation of drawings.

SUBMISSION REQUIREMENT FOR SESSIONAL WORK

- The format of the submission shall be devised as suitable for the exercises designed by the institute. The assessment shall be based on the performance, skills and abilities exhibited by the student.
- Formulation of brief or design problem and identifying context, Understanding crowd psychology and its application in design. (30%)

(50%)

- Concept explorations, Material application
- Response to brief and presentation and communication of the same (20%)

COURSE OUTCOME:

- Students will be able to mould their thinking towards understanding crowd behaviour and psychology of the masses in relation to furniture designs.
- They will develop the skills of observation, critical thinking, analysis and synthesis and responding with solutions.
- They will understand the relationship of furniture with crowd and the ability of the design solutions to cater to the masses is the focus.

RECOMMENDED READINGS :-

- Street Furniture Chris van Uffelen
- Street Furniture Design Elanor Herring
- Site Furnishings Bill Main, Gail Greet Hannah
- Public Room Idea Book United States Bureau of Land management
- Cities for People by Jan Gehl

FURNITURE COSTING & ESTIMATION		
COURSE CODE	32025428(P)	32025429(SS)
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SS)	50
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	25
2 Lecture + 2 studio	External	25
TOTAL = 4 hrs/week	Paper: 100	
TOTAL MARKS	150	
TOTAL CREDITS	3	

To enable the student to understand the breakdown of a simple product e.g. like pen into components, the implication of these components on the costing of the end product from various perspective, like design, material & manufacturing ; Vendor; Mass manufacturing ; assembly ; market etc.

COURSE CONTENT:

- 1. Identification of a simple furniture range of a brand within an economic segment.
- 2. Breaking down of the furniture into components to understand the design; manufacturing decisions that influence Cost.
- 3. Introduction to key factors responsible for the costing of a furniture.
- 4. Preparation of cost sheets for process and sub processes to compile the data collected to estimate the cost.
- 5. Introduction to the pricing of the furniture Market, Brand, Brand strategy, Furniture positioning) The market value, competition furniture cost, bench mark pricing, basic material price, specific tooling cost, shift timings and costs, factor of cost with respect to quantity produced, material costs, expenses on packaging, distribution, marketing and even after sales service.
- 6. The students shall be made to understand through analysis of an existing furniture the implications of design decisions on the cost of the same. Implications of manufactured quantity on his design. Low volume low price, Low volume high price, high volume, high price, large product assemblies or simple products.
- 7. Introduction to be given to define a service, understanding the components of delivering a service and interdependencies for the purpose of calculating the cost to charge the services given.

SUBMISSION REQUIREMENT:

- 1. The submission of the assignments shall be in the report format.
- 2. Estimation of the cost prepared by the student of a product either designed by them or identified by them.

COURSE OUTCOME:

- They will be to calculate the quantity, cost, and price of the resources required within the project scope.
- They will know the method of systematic estimation.

RECOMMENDED READINGS:

- Product Costing: Concepts and Applications Book by Arthur H. Adelberg, Frank J. Fabozzi, Jacqueline A. Burke, and Ralph S. Polimeni
- Cost and Price: Or, the Product and the Market (English, Paperback, Isaiah Skeels)
- Product Cost Estimating and Pricing: A Computerized Approach by <u>Michael R.</u> <u>Tyran</u>(Author)
- The Lean Design Guidebook: Everything Your Product Development Team Needs to Slash Manufacturing Cost by <u>Ronald Mascitelli</u>(Author)

RESEARCH METHODS		
COURSE CODE	32025430	
TEACHING SCHEME	EXAMINATION SCHEME	
	Sessional (SS)	100
TOTAL CONTACT HOURS PER WEEK	Sessional CIA	50
1 Lecture + 2 studio	External	50
TOTAL = 3 hrs/week	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	2	

The course aims towards developing foundations of Research skills.

COURSE CONTENT:

UNIT 1: Introduction to Research: Meaning and importance of Research, its significance in Design, Research Process

UNIT 2: Types of Research,: Min.6 types of Research: (Descriptive, Analytical, Qualitative, Quantitative, Applied, Fundamental, Conceptual, Empirical, etc.)

UNIT 3: Methods of Data Collection: Types of Survey, Variables, Sampling techniques

UNIT 4: Analysis of data: presentation of data in different modes as per requirement of Research (Pie chart, Line graphs, etc.)

UNIT 5: Presentation of Data: Graphical, non graphical, photo, illustrations , Tables etc.

UNIT 6: Synopsis: Defining Aims, Objectives, Scope, Methodology. Understanding synopsis from reading Research Papers.

SUBMISSION REQUIREMENT

a) Journal writing for theories of Unit 1, 2 and 4.

b) Identifying and reading Research Papers (min.5) on topic of individual interest.

c) Analysis and systematic presentation of data collected from Research Papers: identification of types of survey, variables, sampling techniques, application in Research Paper.

d) Synopsis writing on topic of interest.

Note : Submissions according to specific disciplines should be stressed upon and detailed out.

METHOD OF INSTRUCTION

Regular presentation of students work and group discussions shall be undertaken. Online E resources, E Libraries should be advised for reading research papers.

COURSE OUTCOME:

Students will be equipped to conduct independent research on relevant topics in a systematic manner.

Recommended readings:-

- Garg.B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. An introduction to Research Methodology, RBSA Publishers.
- Kothari, C.R. (2008). Research Methodology: Methods and Techniques. Second Edition. New Age International Publishers, New Delhi.
- Architectural Research Methods by Linda N. Groat ,David Wang, Wiley Publications.
- Sinha, S.C. and Dhiman, A.K., 2002. Research Methodology, Ess Ess Publications.
- Reasearch design by Creswell, John
- Writing Your Thesis by Oliver Poul
- Understanding the research process by Oliver Poul

PROFESSIONAL PRACTICE			
COURSE CODE	32025431		
TEACHING SCHEME	EXAMINATION SCHEME		
	Sessional (SS)	100	
TOTAL CONTACT HOURS PER WEEK 1 Lecture + 2 studio			
	Sessional CIA	50	
TOTAL = 3 hrs/week	External	50	
	Paper: Nil		
TOTAL MARKS	100		
TOTAL CREDITS	2		

- Understanding the office of a designer, its working etc.
- To understand the importance, duties and responsibilities of the designer towards society.

COURSE CONTENT:

1. Setting up his own Studio:

Designer should be exposed to his role as a professional designer - Designer Setting up studio, managing his own studio, making proposals and duties as professionals etc., hiring process, Project scheduling and Work delegation, Billing, Salaries and Taxation, Consulting fees, Contracts and agreements, for consulting charges.

2. A designer working as a part of large company in their design team:

To make the students understand the role of a designer as a part of a small or large teams. To understand the structure of design teams, hierarchy, collaborated working with other divisions of the company like Marketing, Sales, Senior management, Shop floor or manufacturing units, alignment in the company's vision and values, collaborative working, managing confidentiality and working in their own role and capacity.

3. To understand various types of companies: Startups, small design studios, Large design studios, Services company, Furniture manufacturing companies, Various domains of work like Healthcare, Education, Automotive, Construction, Manufacturing, Hospitality, Infrastructure etc. Multinational companies, Indian companies, working overseas, working remotely, Stock options, Listed V/S unlisted companies etc.

4. Professional values- Definition, Accountability, identifying one's strength and interests, Respect for learning & learned, Time management, Team spirit, Code of conduct, personal goal setting and mission

5. Ethics in business environment, responsibility to the public, client. Responsibility of the designer, colleague, employer.

It is suggested to invite HR Professionals for guidance on Professional values & Ethics which can be a I day workshop/ training given by special trainers who do these kinds to trainings for companies.

SUBMISSION REQUIREMENT

1. Journal writing on all of the above topics.

2. A Case study of Practicing Furniture Designer, report on the Case Study, and interview of the Professional is desirable.

COURSE OUTCOME:

It will equip the students with knowledge and skills needed for professional environment to set up an individual consultancy and work with other companies and groups.t,

Recommended Readings:

- Douglas Davis, Creative Strategy and Business of Design, 2016
- Shan Preddy, How to run a successful Design Business: The New Professional Practice, Gower Publishing ,Itd. 2011
- Min Basadur, Michael Goldsby, Design- Centered Entrepreneurship, 2016.

ELECTIVES 4			
COURSE CODE	32025432		
TEACHING SCHEME	EXAMINATION SCHEME		
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 4 studio TOTAL = 6 hrs / week	Sessional (SS)	100	
	Sessional CIA External	50 50	
	Paper: Nil		
TOTAL MARKS	100		
TOTAL CREDITS	4		

Course Objectives:

To allow the students to study a subject of their interest and develop theoretical as well as practical understanding of the same.

Course Outline:

- Colleges have to develop course outline for the elective they wish to offer such that theoretical as well practical aspects are covered linking them to the Design field.
- Apart from lectures delivered by the subject resource persons, self study in form of hands on workshop / field work/ review of literature / seminar or any suitable format of learning may be adopted.
- A list of Electives is suggested in **Annexure A- in** *Programme Structure & Rules*. The Institutes can refer it or offer any other subject in Elective.

As mentioned in the *RULE NO.13: OTHER RULES*, *Programme Structure & Rules*, a student may adhere to a particular stream of elective of his/her choice and nurture his/her area of interest and develop his/her expertise.

However the student should not repeat a particular elective.

ELECTIVES 5		
COURSE CODE	32025433	
TEACHING SCHEME	EXAMINATION SCHEME	
TOTAL CONTACT HOURS PER WEEK 2 Lecture + 4 studio TOTAL = 6 hrs / week	Sessional (SS)	100
	Sessional CIA External	50 50
	Paper: Nil	
TOTAL MARKS	100	
TOTAL CREDITS	4	

Course Objectives:

To allow the students to study a subject of their interest and develop theoretical as well as practical understanding of the same.

Course Outline:

- Colleges have to develop course outline for the elective they wish to offer such that theoretical as well practical aspects are covered linking them to the Design field.
- Apart from lectures delivered by the subject resource persons, self study in form of hands on workshop / field work/ review of literature / seminar or any suitable format of learning may be adopted.
- A list of Electives is suggested in **Annexure A- in** *Programme Structure & Rules*. The Institutes can refer it or offer any other subject in Elective.

As mentioned in the *RULE NO.13: OTHER RULES*, **Programme Structure & Rules**, a student may adhere to a particular stream of elective of his/her choice and nurture his/her area of interest and develop his/her expertise.

However the student should not repeat a particular elective.