

University of Mumbai

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Academic Authorities,
Meetings & Services (AAMS)
Room No. 128, M. G. Road, Fort,
Mumbai – 400 032.
Tel. 022-68320033

Re- accredited with A ++ Grade (CGPA 3.65) by NAAC
Category- I University Status awarded by UGC

No. AAMS_UGS/ICD/2024-25/429

Date : 24th March, 2025.

To,
The Director,
Garware Institute of Career Education
and Development,
Vidyanagari
Santacruz (East)
Mumbai – 400 098.

Sub : Bachelor of Interior Design (Three year) (Sem I & II)

Sir,

With reference to the subject noted above, this is to inform you that the recommendations made by the **Advisory Committee & Board of Management** of Garware Institute of Career Education & Development at its Meeting held on **4th September, 2023** & resolution passed by the **Board of Deans** at its meeting held on **9th August, 2023 vide** Item No. **9.2** have been accepted by the **Academic Council** at its meeting held on **1st November, 2023 vide** Item no. **9.3 (C) 5 (N)** and subsequently approved by the **Management Council** at its meeting held on **14th August, 2024 vide** Item No. **6** that in accordance therewith, in exercise of the powers conferred upon the Management Council under Section 74(4) of the Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017) the following program with Ordinance for Title of the Program, Eligibility and Regulation numbers for Duration of Program, Intake Capacity, Scheme of Examinations, Standard of Passing and Credit Structure along with syllabus of **Bachelor of Interior Design (Sem I & II)** (Appendix – 'A') have been introduced and the same have been brought into force with effect from the academic year **2023-24**.

The New Ordinances & Regulations as per NEP 2020 is as follows :-

Sr. No.	Name of the Program	Ordinance no. for Title	Ordinance no. for Eligibility	Duration
A	U.G. Certificate in Interior Design	O.GUA – 523 A	O.GUA – 524 A	One year
B	U.G. Diploma in Interior Design	O.GUA – 523 B	O.GUA – 524 B	Two year
C	Bachelor of Interior Design	O.GUA – 523 C	O.GUA – 524 C	Three year
D	Bachelor of (Interior Design)	O.GUA – 523 D	O.GUA – 524 D	Four year

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: 2 :

Regulation No	
Duration	R.GUA – 556
Intake Capacity	R.GUA – 557
Scheme of examination	R.GUA – 558
Standard of Passing	R.GUA – 559
Credit Structure	R.GUA – 560 A
	R.GUA – 560 B
	R.GUA – 560 C
	R.GUA – 560 D
	R.GUA – 560 E
	R.GUA – 560 F
	R.GUA – 560 G
	R.GUA – 560 H


(Dr. Prasad Karande)
REGISTRAR

A.C/9.3(C)5(N)/01/11/2023
M.C/6/14/8/2024

Copy forwarded with Compliments for information to:-

- 1) The Chairman, Board of Deans
- 2) The Dean, Faculty of Interdisciplinary Studies.
- 3) The Director, Board of Examinations and Evaluation,
- 4) The Director, Board of Students Development,
- 5) The Director, Department of Information & Communication Technology,
- 6) The Co-ordinator, MKCL.

Copy forwarded for information and necessary action to :-	
1	The Deputy Registrar, (Admissions, Enrolment, Eligibility and Migration Dept)(AEM), dr@eligi.mu.ac.in
2	The Deputy Registrar, Result unit, Vidyanagari drresults@exam.mu.ac.in
3	The Deputy Registrar, Marks and Certificate Unit,. Vidyanagari dr.verification@mu.ac.in
4	The Deputy Registrar, Appointment Unit, Vidyanagari dr.appointment@exam.mu.ac.in
5	The Deputy Registrar, CAP Unit, Vidyanagari cap.exam@mu.ac.in
6	The Deputy Registrar, College Affiliations & Development Department (CAD), deputyregistrar.uni@gmail.com
7	The Deputy Registrar, PRO, Fort, (Publication Section), Pro@mu.ac.in
8	The Deputy Registrar, Executive Authorities Section (EA) eau120@fort.mu.ac.in He is requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to the above circular.
9	The Deputy Registrar, Research Administration & Promotion Cell (RAPC), rapc@mu.ac.in
10	The Deputy Registrar, Academic Appointments & Quality Assurance (AAQA) dy.registrar.tau.fort.mu.ac.in ar.tau@fort.mu.ac.in
11	The Deputy Registrar, College Teachers Approval Unit (CTA), concolsection@gmail.com
12	The Deputy Registrars, Finance & Accounts Section, fort draccounts@fort.mu.ac.in
13	The Deputy Registrar, Election Section, Fort drelection@election.mu.ac.in
14	The Assistant Registrar, Administrative Sub-Campus Thane, thanesubcampus@mu.ac.in
15	The Assistant Registrar, School of Engg. & Applied Sciences, Kalyan, ar.seask@mu.ac.in
16	The Assistant Registrar, Ratnagiri Sub-centre, Ratnagiri, ratnagirisubcentar@gmail.com
17	The Director, Centre for Distance and Online Education (CDOE), Vidyanagari, director@idol.mu.ac.in
18	Director, Innovation, Incubation and Linkages, Dr. Sachin Laddha pinkumanno@gmail.com
19	Director, Department of Lifelong Learning and Extension (DLLE), dlleuniversityofmumbai@gmail.com

Copy for information :-	
1	P.A to Hon'ble Vice-Chancellor, vice-chancellor@mu.ac.in
2	P.A to Pro-Vice-Chancellor pvc@fort.mu.ac.in
3	P.A to Registrar, registrar@fort.mu.ac.in
4	P.A to all Deans of all Faculties
5	P.A to Finance & Account Officers, (F & A.O), camu@accounts.mu.ac.in

To,

1	The Chairman, Board of Deans pvc@fort.mu.ac.in
2	Faculty of Humanities, Dean 1. Prof.Anil Singh Dranilsingh129@gmail.com Associate Dean 2. Dr.Suchitra Naik Naiksuchitra27@gmail.com 3.Prof.Manisha Karne mkarne@economics.mu.ac.in
	Faculty of Commerce & Management, Dean 1. Dr.Kavita Laghate kavitalaghate@jbims.mu.ac.in Associate Dean 2. Dr.Ravikant Balkrishna Sangurde Ravikant.s.@somaiya.edu 3. Prin.Kishori Bhagat kishoribhagat@rediffmail.com

	Faculty of Science & Technology Dean 1. Prof. Shivram Garje ssgarje@chem.mu.ac.in Associate Dean 2. Dr. Madhav R. Rajwade Madhavr64@gmail.com 3. Prin. Deven Shah sir.deven@gmail.com
	Faculty of Inter-Disciplinary Studies, Dean 1. Dr. Anil K. Singh aksingh@trcl.org.in Associate Dean 2. Prin. Chadrashekhhar Ashok Chakradeo cachakradeo@gmail.com
3	Chairman, Board of Studies,
4	The Director, Board of Examinations and Evaluation, dboee@exam.mu.ac.in
5	The Director, Board of Students Development, dsd@mu.ac.in DSW directr@dsw.mu.ac.in
6	The Director, Department of Information & Communication Technology, director.dict@mu.ac.in

As Per NEP 2020

University of Mumbai



Title of the program

- A- U.G. Certificate in Interior Design
- B- U.G. Diploma in Interior Design
- C- Bachelor of Interior Design
- D- Bachelor of Interior Design

(Garware Institute of Career Education and Development)

Syllabus for Semester- Semester I and II

Ref: GR dated 20th April,2023 for Credit Structure of UG

(with effect from the academic year 2023-24 Progressively)

UNIVERSITY OF MUMBAI



(AS PER NEP 2020)

Sr. No.	Heading	Particulars	
1	Title of program O: <u>GUA – 523 A</u>	A	U.G. Certificate in Interior Design
	O: <u>GUA – 523 B</u>	B	U.G. Diploma in Interior Design
	O: <u>GUA – 523 C</u>	C	Bachelor of Interior Design
	O: <u>GUA – 523 D</u>	D	Bachelor of Interior Design
2	Eligibility O: <u>GUA – 524 A</u>	A	The candidate shall be HSC from any stream and Candidate must have appeared Elementary &/or Intermediate Drawing grade examination. In case, candidate has appeared but not cleared elementary &/or intermediate drawing grade examination candidate will undergo 30 hours of Bridge classes with the institute at an extra fee. OR In case candidate has not appeared for elementary/Intermediate drawing exam. He must have Technical Drawing as a subject either in 9th & 10th Std. or 11th & 12th Std. Admissions on the basis of Written Test & Interview. OR Passed Equivalent Academic Level 4.0
	O: <u>GUA – 524 B</u>	B	1.The candidate who has successfully completed U.G. Certificate in Interior Design. OR Passed Equivalent Academic Level 4.5 2. The candidate who's Under Graduate Certificate credits are 60% equivalent to U.G. Diploma in Interior Design & he/she

		earns minimum 8 Credits from U.G. Certificate in Interior Design. 3. As per NEP criteria on the basis of RPL-Recognition of Prior Learning, Candidate to be admitted to 2nd Year subject to He/she securing minimum 50% in the 1st Year assessment of U.G. Certificate in Interior Design.
	O: <u>GUA – 524 C</u>	C 1. The candidate who has successfully completed U.G. Diploma in Interior Design. OR Passed Equivalent Academic Level 5.0 2. The candidate who's Under Graduate Diploma credits are 60% equivalent to B.A. Interior Design & he/she earns minimum 8 Credits from U.G. Diploma in Interior Design. 3. As per NEP criteria on the basis of RPL-Recognition of Prior Learning, Candidate to be admitted to 3rd Year subject to He/she securing minimum 50% in the 2nd Year assessment of U.G. Diploma in Interior Design.
	O: <u>GUA – 524 D</u>	D 1. The candidate who has successfully completed Bachelor in Interior Design OR Passed Equivalent Academic Level 5.5 2. The candidate who's Under Graduate Degree credits are 60% equivalent to Bachelor (Hons.) in Interior Design & he/she earns minimum 8 Credits from Bachelor in Interior Design. 3. As per NEP criteria on the basis of RPL-Recognition of Prior Learning, Candidate to be admitted to 4th Year subject to He/she securing minimum 50% in the 3rd Year assessment of Bachelor in Interior Design.

3	Duration of Program R: <u>GUA – 556</u>	A	1 Year
		B	2 Years
		C	3 Years
		D	4 Years
4	R: <u>GUA – 557</u> Intake Capacity	60	
5	R: <u>GUA – 558</u> Scheme of Examination	NEP 50% Internal – Continuous Evaluation 50% External- Semester End Examination Individual Passing in Internal and External Examination	
6	Standards of Passing R: <u>GUA – 559</u>	50% in each component	
7	Credit Structure R: <u>GUA – 560 A</u> R: <u>GUA – 560 B</u> R: <u>GUA – 560 C</u> R: <u>GUA – 560 D</u> R: <u>GUA – 560 E</u> R: <u>GUA – 560 F</u> R: <u>GUA – 560 G</u> R: <u>GUA – 560 H</u>	Attached herewith	
8	Semesters	A	Sem I & II
		B	Sem I, II, III, & IV
		C	Sem I, II, III, IV, V, & VI
		D	Sem I, II, III, IV, V, VI, VII & VIII
9	Program Academic Level	A	4.5
		B	5.0
		C	5.5
		D	6.0
10	Pattern	Semester	
11	Status	New	

12	To be implemented from Academic Year Progressively	From Academic Year 2023-24
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Keyurkumar

Dr. Keyurkumar M. Nayak,
Director,
UM-GICED



Prof.(Dr.) Anil Kumar Singh
Dean,
Faculty of Interdisciplinary Studies

Preamble

1) Introduction

Bachelor in Interior Design is a career-oriented course that gives chance and opportunity to the deserving candidates, who have had no exposure to the creative field like 'INTERIOR DESIGN'. After graduation, this course enables the candidate to make meaningful participation in the building industry, gain appropriate employment, become entrepreneurs and be self-supporting.

2) Aims and Objectives

The Course covers Interior Designing of residential and commercial premises by creating meaningful, functional and habitable spaces. Thus, making the students aware of how the space influences our identity, productivity and wellness.

It aims at studying the design and drawing aspects by using Computer aided design methods. As a part of the curriculum the candidate has to undergo project training in the industry to match theory with practical on the job experience.

The student has to learn representative skills through theory lectures, studios, workshops, case studies, live projects, field trips, interior exhibitions, industry professional lectures etc. To enhance these skills further, a dedicated team of faculties focus on the holistic approach of overall development and growth of the students.

The program helps the student to become an independent and effective learner and opens up a range of prospects on completion of the course.

3) Learning Outcomes

- a) To be academically sound within the field of interior and to make connections to related disciplines through oral and graphical communication.
- b) To provide the foundation for the further development of the candidate in the professional area so that he/she can contribute towards the society in the respective field as a responsible professional.
- c) To develop strong set of values that will provide the basis of a comprehensive critical learning ability which will help the candidate to be technically sound and understand related industry needs.

4) Any other point (if any)

The program focuses on the use and practice of environment friendly sustainable green building materials and technology while designing and planning.

The student learns to observe and practice professional ethics while working in the industry with clients, contractors and consultants.

5) Credit Structure of the program – Parishisth- 2

R: _____A

Level	Semester	Major		Minor	OE	VSC, SEC (VSEC)	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Cum. Cr./ Sem.	Degree / Cum. Cr.
		Mandatory	Electives							
4.5	I	4- 6 (4+2) DESIGN-I (4) CONSTRUCTION-I (2)		-	2+2 DRAWING -I (2) SERVICES -(THEORY AND APPLICATIONS) (2) ICT (4) GRAPHIC S-I (2) FREEHAND SKETCHING AND DRAWING (2)	VSC:2, SERVICES I- (2) SEC:2 APPLIED TECHNOLOGY-I (2)	AEC:2, PRESENTATION AND COMMUNICATION SKILLS-THEORY OF MATERIALS-I (2) IKS:2 HISTORY OF DESIGN (INDIAN FURNITURE /MATERIALS)-I (2) VEC:2, ENVIRONMENT STUDY (2)	CC:2 EVENT MANAGEMENT) (2)	22	UG Certificate 44
	II	4- 6 (4+2) DESIGN-II (4) CONSTRUCTION-II (2)		2 THEORY OF MATERIALS-II (2)	2+2 DRAWING -II (2) SERVICES -(THEORY AND APPLICATIONS) (2) ICT (4) GRAPHIC S-II (2) FREEHAND SKETCHING AND DRAWING (2)	VSC:2, SERVICES II- (2) SEC:2 APPLIED TECHNOLOGY-II (2)	AEC:2, PRESENTATION AND COMMUNICATION SKILLS-THEORY OF MATERIALS-II (2) VEC:2 ENVIRONMENT STUDY (2)	CC:2 FREEHAND SKETCHING AND RENDERING (2)	22	
	Cum Cr.	12	0	2	8	8	10	4	44	
Exit option: Award of UG Certificate in Major with 40-44 credits and an additional 4 credits core NSQF course/ Internship OR Continue with Major and Minor										

R: _____ B										
Level	Semester	Major		Minor	OE	VSC, SEC (VSEC)	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Cum. Cr./ Sem.	Degree/ Cum. Cr.
		Mandatory	Electives							
5.0	III	8(2*4) DESIGN-III (4) CONSTRUCTION-III (4)		4 THEORY OF MATERIALS-III (4)	2 FURNITURE DETAILS (2) FURNITURE DETAILS (ACCESSORY DESIGN) (2) AUTOCAD-I (2) DRAWING SKETCHING AND RENDERING (2) SERVICES--(THEORY AND APPLICATIONS) (2)	VSC:2, SERVICES III- (2)	AEC:2 AutoCAD -II (2)	FP:2 FIELD PROJECT WORK (2) CC:2 EVENT MANAGEMENT- (2)	22	UG Diploma 88
	IV	8(2*4) DESIGN-IV (4) CONSTRUCTION-IV (4)		4 THEORY OF MATERIALS-IV (4)	2 LANDSCAPE DESIGN (2) LANDSCAPE DESIGN (PROJECT) (2) DRAWING AND GRAPHICS (2) SERVICES-(THEORY AND APPLICATIONS) (2)	SEC:2 SERVICES IV (2)	AEC:2 SKETCH UP (2)	CEP: 2 DESIGN- DEVELOP EXTERIOR SPACES (2) CC:2 DRAWING SKETCHING RENDERING (2)	22	
	Cum Cr.	28	0	10	12	12	14	12	88	
Exit option; Award of UG Diploma in Major and Minor with 80-88 credits and an additional 4 credits core NSQF course/ Internship OR Continue with Major and Minor										

R: _____ C

5.5	V	(2*4 +2) DESIGN-V (4) CONSTRUCTION-V (4) WORKING DRAWING (2)	4 SUSTAINABLE INTERIORS/ FURNITURE DESIGN/ MODERN SPACE PLANNING SOLUTIONS/ INTERIOR LIGHTING (4) SKETCHUP/ VRAY (4) SERVICES- (THEORY AND APPLICATION S) (2)	4-6 THEORY OF MATERIALS-V (4)		VSC: 2- 4 SERVICES- V (2)		FP/CEP: 2 FP WORKING DRAWING- PROJECT (2)	22	UG Degree 132
	VI	(2*4 +2) DESIGN- VI (4) CONSTRUCTION- VI (4) WORKING DRAWING (2)	4 SUSTAINABLE INTERIORS/ FURNITURE DESIGN/ MODERN SPACE PLANNING SOLUTIONS/ INTERIOR LIGHTING (4) PHOTOSHOP/ LUMION (4) WORKING DRAWING- APPLICATION S (2)	4 SPECIALIZATION CASE STUDY (4)				OJT :4 INTERNSHIP (4)	22	
	Cum Cr.	48	8	18	12	14	14	18	132	
Exit option: Award of UG Degree in Major with 120-132 credits OR Continue with Major and Minor										

R:_____D										
6.0	VII	3*4+2) DESIGN-VII DISSERTATION (4) SPECIALIZATION IN ONE MATERIAL (4) WORKING DRAWING (4) GREEN BUILDING TECHNOLOGY- (THEORY AND APPLICATIONS) (2)	4 REVIT OR 3DS MAX (4)	RM:4 GREEN BUILDING TECHNOLOGY (4)					22	UG Honours Degree 176
	VIII	3*4+2) DESIGN-VII DISSERTATION (4) SPECIALIZATION IN ONE MATERIAL (4) ENTREPRENEUR SHIP (4) GROOMING SESSION (2)	4 REVIT OR 3DS MAX (4)					OJT:4 INTERNSHIP (4)	22	
	Cum Cr.	76	16	22	12	14	14	22	17 6	
Four Year UG Honours Degree in Major and Minor with 160-176 credits										

Keyurkumar M. Nayak

Dr. Keyurkumar M. Nayak,
Director,
UM-GICED



Prof.(Dr.) Anil Kumar Singh
Dean,
Faculty of Interdisciplinary Studies

Credit Structure of the program

	Subject Code	Core Subject	Assessment Pattern			Teaching Hours			
		Topics	Internal Marks	External Marks	Total Marks (CA)	Theory Hours	Practical hours	Total Hours	Total Credits
S e m e s t e r - 1	Major Mandatory								
	BIDS1MJP1	Design -I	50	50	100	45	30	75	4
	BIDS1MJP2	Construction-I	25	25	50	15	30	45	2
	Open Electives (Any Two)								
	BIDS1P3A	Drawing-I	25	25	50	15	30	45	2
	BIDSIP3B	Services- (Theory and Applications)	25	25	50	30	-	30	2
	BIDS1P3C	Graphics-I	25	25	50	15	30	45	2
	OR								
	BIDSIP3D	ICT	100	-	100	60	-	60	4
	OR								
	BIDS1P3E	Freehand Sketching and Drawing – I	25	25	50	15	30	45	2
	BIDS1P3F	Freehand Sketching and Drawing – II	25	25	50	15	30	45	2
	Vocational Skill Course (VSC)								
	BIDS1P4	Services-I	25	25	50	30	-	30	2
	Skill Enhancement Course (SEC)								
	BIDS1P5	Applied Technology-I	25	25	50	15	30	45	2
	Ability Enhancement Course (AEC)								
	BIDS1P6	Presentation and Communication Skills-Theory of Materials-I	25	25	50	15	30	45	2
	Indian Knowledge System (IKS)								
	BIDS1P7	History of Design (Indian Furniture/ Materials)	25	25	50	15	30	45	2
	Value Education Course (VEC)								
	BIDS1P8	Environment study	25	25	50	30	-	30	2
	Co-Curricular Course (CC)								
	BIDS1P9	Event Management	50	-	50	-	60	60	2
		Total	300	250	550	195	270	465	22

S e m e s t e r - I I	Semester II								
	Major Mandatory								
	BIDS2MJP 10	Design -II	50	50	100	45	30	75	4
	BIDS2MJP 11	Construction-II	25	25	50	15	30	45	2
	Minor								
	BIDS2MRP12	Theory of Materials - II	25	25	50	15	30	45	2
	Open Electives(Any Two)								
	BIDS2P13A	Drawing-II	25	25	50	15	30	45	2
	BIDS2P13B	Services- - (Theory and Applications)	25	25	50	30	-	30	2
	BIDS2P13D	Graphics-II	25	25	50	15	30	45	2
	OR								
	BIDS2P13C	ICT	100	-	100	60	-	60	4
	OR								
	BIDS2P13D	Freehand Sketching and Drawing - I	25	25	50	15	30	45	2
	BIDS2P13E	Freehand Sketching and Drawing- II	25	25	50	15	30	45	2
	Vocational Skill Course (VSC)								
	BIDS2P14	Services-II	25	25	50	30	-	30	2
	Skill Enhancement Course (SEC)								
	BIDS2P15	Applied Technology-II	25	25	50	15	30	45	2
	Ability Enhancement Course (AEC)								
	BIDS2P16	Presentation and Communication Skills-Theory of Materials-II	25	25	50	15	30	45	2
	Value Education Course (VEC)								
	BIDS2P17	Environment study	25	25	50	30	-	30	2
	Co-Curricular Course (CC)								
	BIDS2P18	Event Management	50	-	50	-	60	60	2
	Total	300	250	550	210	240	450	22	

SEM III								
Major Mandatory								
BIDS3MJP19	Design-III	50	50	100	45	30	75	4
BIDS3MJP20	Construction-III	50	50	100	45	30	75	4
Minor								
BIDS3MRP21	Theory of Materials-III	50	50	100	45	30	75	4
Open Electives (Any One)								
BIDS3P22A	Furniture Details	25	25	50	15	30	45	2
BIDS3P22B	Furniture Details – Accessory Design	25	25	50	15	30	45	2
BIDS3P22C	AutoCAD- I	50	-	50	30	-	30	2
BIDS3P22D	Drawing Sketching and Rendering- I	25	25	50	15	30	45	2
BIDS3P22E	Drawing Sketching and Rendering- II	25	25	50	15	30	45	2
BIDS3P22F	Services- - (Theory and Applications)	25	25	50	30	-	30	2
Vocational Skill Course (VSC)								
BIDS3P23	Services-III	25	25	50	30	-	30	2
Ability Enhancement Course (AEC)								
BIDS3P24	AutoCAD- II	50	-	50	30	-	30	2
Field Project								
BIDS3P25	Field project work	50	-	50	-	60	60	2
Co-Curricular Course (CC)								
BIDS3P26	Event Management- Fine arts, poster making, stall design	50	-	50	-	60	60	2
	Total	325	225	550	225	210	435	22
SEM IV								
Major Mandatory								
BIDS4MJP27	Design-IV	50	50	100	45	30	75	4
BIDS4MJP28	Construction-IV	50	50	100	45	30	75	4
Minor								
BIDS4MRP29	Theory of Materials-IV	50	50	100	45	30	75	4
Open Electives (Any One)								
BIDS4P30A	Landscape Design	25	25	50	15	30	45	2
BIDS4P30B	Landscape Design – Project	25	25	50	15	30	45	2
BIDS4P30C	Drawing and Graphics	25	25	50	15	30	45	2
BIDS4P30D	Drawing Sketching and Rendering	25	25	50	15	30	45	2
BIDS4P30E	Services- (Theory and Applications)	25	25	50	30	-	30	2
Skill Enhancement Course (SEC)								
BIDS4P31	Services-IV	25	25	50	30	-	30	2
Ability Enhancement Course (AEC)								
BIDS4P32	Sketchup	50	-	50	30	-	30	2
Community Engagement Program								
BIDS4P33	Design - Develop exterior spaces	50	-	50		60	60	2
Co-Curricular Course (CC)								
BIDS4P34	Event Management	50	-	50	-	60	60	2
	Total	325	225	550	225	210	435	22

SEM V								
Major Mandatory								
BIDS5MJP35	Design-V	50	50	100	45	30	75	4
BIDS5MJP36	Construction-V	50	50	100	45	30	75	4
BIDS5MJP37	Working Drawing	25	25	50	15	30	45	2
Electives (Any One)								
BIDS5P38A	Sustainable interiors	50	50	100	45	30	75	4
BIDS5P38B	Furniture design	50	50	100	45	30	75	4
BIDS5P38C	Modern space planning solutions	50	50	100	45	30	75	4
BIDS5P38D	Interior lighting	50	50	100	45	30	75	4
OR								
BIDS5P38E	Sketchup/VRay	50	-	50	30	-	30	2
BIDS5P38F	Services- (Theory and Applications)	25	25	50	30	-	30	2
Minor								
BIDS5MRP39	Theory of Materials-V	50	50	100	45	30	75	4
Vocational Skill Course (VSC)								
BIDS5P40	Services-V	25	25	50	30	-	30	2
Field Project								
BIDS5P41	Working Drawing- Project	50	-	50	-	60	60	2
	Total	275	275	550	240	180	420	22
SEM VI								
Major Mandatory								
BIDS6P42	Design-VI	50	50	100	45	30	75	4
BIDS6P43	Construction-VI	50	50	100	45	30	75	4
BIDS6P44	Working Drawing	25	25	50	15	30	45	2
Electives (Any One)								
BIDS6P45A	Sustainable interiors	50	50	100	45	30	75	4
BIDS6P45B	Furniture design	50	50	100	45	30	75	4
BIDS6P45C	Modern space planning solutions	50	50	100	45	30	75	4
BIDS6P45D	Interior lighting	50	50	100	45	30	75	4
OR								
BIDS6P45E	Photoshop/Lumion	50	-	50	30	-	30	2
BIDS6P45F	Working Drawing	25	25	50	15	30	45	2
Minor								
BIDS6P46	Specialization Case Study	50	50	100	45	30	75	4
On job training								
BIDS6P47	Internship	100	-	100	30	60	90 & 4 weeks	4
	Total	325	225	550	225	210	435	22

SEM VII								
Major Mandatory								
BIDS7MJP48	Design-VII Dissertation	100	-	100	45	30	75	4
BIDS7MJP49	Specialization in One Material	50	50	100	45	30	75	4
BIDS7MJP50	Working Drawing	50	50	100	45	30	75	4
BIDS7P51	Green building technology- (Theory and Applications)	25	25	50	15	30	45	2
Electives (Any One)								
BIDS7P52A	Revit	100	-	100	60	-	60	4
BIDS7P52B	3DS MAX	100	-	100	60	-	60	4
Minor								
BIDS7P53	Research Methodology- Green building technology	100	-	100	45	30	75	4
	Total	425	125	550	255	150	405	22
Major Mandatory Sem VIII								
BIDS8MJP54	Design-VII Dissertation	100	-	100	45	30	75	4
BIDS8MJP55	Specialization in One Material	100	-	100	45	30	75	4
BIDS8MJP56	Entrepreneurship	50	50	100	60	-	60	4
BIDS8MJP57	Grooming session	25	25	50	15	30	45	2
Electives (Any One)								
BIDS8P58A	Revit	100	-	100	60	-	60	4
BIDS8P58B	3DS MAX	100	-	100	60	-	60	4
On job training								
BIDS8P59	Internship	100	-	100	45	30	75	4
	Total	550	-	550	270	120	390	22

Sem.-I

BID REVISED SYLLABUS (4 YEARS) SEM I TO SEM IV

SEMESTER I

The First Semester covers a range of fundamental studies of interior space and build form at human scale, developing skills, which include drawing techniques, surveying and building constructions. Designing of objects, spaces which start in the first week of the course, provides the student with a means of achieving a high degree of proficiency in both theory and practice of interior design. The First Semester offers a comprehensive view and experience of the field of interior with the knowledge and skills, which can be assumed at this stage. Along with design study, the student will study a number of theoretical subjects including history, technology and humanities. In process and skills, they will learn about design process and management. Students will be able to develop their visualization skills through basic 3D models and explore different ways of viewing them to build up a creative approach. The subject Services will help the students to get an overview of the utilities and their functions in Interior Design. They will also become familiar with using computers and AutoCAD right from the First Semester along with some basic computer applications.

Paper No.	SUBJECT – MAJOR MANDATORY	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 2 hours each
BIDS1MJP1	DESIGN- I Objective: To introduce basic concepts and terminology used in design, give the overview of design aspects in terms of design elements and principles including anthropometry/ergonomics. To develop observational and creative skills that would enhance the visual perception of students and evolve aesthetic sensitivity. Learning Outcome: Apply the basic design knowledge gained and anthropometric observations in the designing of Residential interior spaces.	45	15	30	15

	<u>Unit - 1</u> ➤ Basic Terminology – Plan, Elevation, Section Etc. ➤ Developing observational skills (This will be monitored till Sem II in all lectures) ➤ Basic Design - Model Making – Cube, Pyramid Etc. ➤ Understanding of volume and space ➤ Using different 3d objects, studying their arrangements and its effect on space and volume. ➤ Understanding flow of space around objects, aesthetical reasonings. ➤ Geographical and astronomical orientation and introduction to surroundings. Relation of Geography, natural phenomenon like and light and ventilation with architectural and Interior design. ➤ Understanding different Design styles, themes etc. International, Modern, Contemporary. <u>Unit - 2</u> ➤ Revisions and application of British and metric scales taught in technical drawing classes. ➤ Understanding Furniture Units, Their Functions. ➤ Anthropometric Data – Human behaviour and movements for residential applications. ➤ Ergonomics and It's Application in Interior Design. ➤ Sketching basic furniture <u>Unit – 3</u> ➤ Understanding the fundamental of design – Form Follows Function ➤ Living Room items and circulation (Plan /Section /Elevation)				
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	➤ Bedroom circulation items and circulation (plan/ section/ elevation) ➤ Students will be taught how to make and use cutouts of furniture units to try different layout arrangements and select the correct one from the options worked out. ➤ Kitchen + Toilet Introduction Fundamental Design ➤ Understanding Kitchen Triangle. Studying various types of kitchen layouts and shapes. Selecting the right type for required application ➤ Studying own house plan <u>Unit - 4</u> ➤ Introduction to 1 Bedroom apartment design ➤ Designing of 1-bedroom apartment. ➤ Layout plan - Studying various arrangements and understanding pros and cons by using scaled furniture cutout ➤ Sections/ Elevations ➤ Sections and elevations in detail. ➤ Converting technical plan/ elevation into realistic design by adopting right style and detailing. ➤ Spot views and details <u>Reference Books:</u> ➤ Time Saver Standards Design Data -Chiava. J. & Callender. J. ➤ Interior Design - Kasu Ahmed ➤ Sanskruti - Sudhir Diwan ➤ Architectural Picture Dictionary - Francis D. K. Ching				
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Paper No.	SUBJECT – MAJOR MANDATORY	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1MJP2	CONSTRUCTION I Objective: To introduce basic materials used in construction, basic components of a building and method of construction and representation of the same. Learning Outcome: Understand basic materials used in construction, basic components of a building and method of construction and representation of the same.	15	5	30	15
	<u>Theory & Sketches</u> <u>Unit – 1</u> ➤ Terminology – Introduction to various building components, common terms used in interior design. ➤ Natural Materials– Study of soil, sand, gravels, pebbles, boulders, rocks, and their use in construction and application in interiors. <u>Unit – 2</u> ➤ Stone –Terms, Types, Stone Masonry, (Random Rubble & Ashlar Types), Masonry Tools, Stone dressing, Pointing, and use in interiors. <u>Unit - 3</u> ➤ Brick – Manufacturing Process, Types (Common bricks, Wire cut bricks, Fire clay bricks, Concrete blocks etc), Std Sizes, Closers & Bats, Various Bonds (Stretcher, Header, English & Flemish) & Partition walls, Steps & Guidelines for Brick Masonry Construction, Piers & Paving. ➤ Brick work features such as Corbelling, Toothing,				

	Stepping, Coping, Terracing, etc. <u>Unit - 4</u> ➤ Bamboo & Cane Construction – ➤ Understanding its character and use in interior. ➤ Terms, Characteristics, Types of Bamboo, Construction Basic Joineries, ➤ Individual Case Study. ➤ Details of Roof, seating in bamboo & fixing of bamboo frame work to floor. <u>Reference Books:</u> ➤ Building Construction Vol. 1 & 2 - W. B. Mackey ➤ Construction and material handbook - P. N. Khanna ➤ Building Construction Handbook - R. Chudley and R. Greeno ➤ Technology of Interior Construction by Vasudeo Channapattam - Part 1 ➤ Design Fundamental in Architecture by V.S Parmar ➤ Interior Design Illustrated by Francis DK Ching				
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Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P3A	DRAWING – I Objective: Introduction to graphics, drawings and representation techniques in form of technical drawings to enable student to visualize the design in effective manner. Learning Outcome: Application of representation techniques to draw two & three-dimensional objects, improve visualization skills.	15	5	30	15

	<u>Unit - 1</u> ➤ Introduction to Technical Drawing ➤ Define, Identify and Explain concepts/ provisions/ principles relating to Technical Drawing. ➤ Eye, Hand, Brain Coordination. ➤ Introduction of subject, nameplate & its construction/ format with Introduction to Arithmetic & Geometry. <u>Unit - 2</u> ➤ Measurement & scale – British/Metric (Units/system of measurements) with its application & Introduction to instruments with application. ➤ Technical Lettering, Free hand exercise for hand assessment & hand writing improvement. ➤ Lettering application: Different sizes scales, Upper case, lower case, bold etc. ➤ <u>Unit - 3</u> ➤ Understanding two-dimensional objects such as Square, hexagons, and Circle etc. ➤ Define, Identify and Explain concepts/provisions/ principles relating to Technical Drawing. ➤ Introduction of orthographic Projection - Primary / Simplified Objects (cubes, cuboids etc.) <u>Unit - 4</u> ➤ Developed Objects - Introduction to Surfaces /edges / corners. ➤ Developed Objects - Prism / Pyramids with Square & Polygonal Base. ➤ Advance Structure - Ref. Interior Layout - composing of multiple objects with different size/ dimensions <u>Reference Books</u> ➤ Time Saver Standards- Design Data - Chiava. J. Callender J.				

	➤ Perspective & Sciography – Shankar M ➤ Rendering With Pen & Ink - Robert W. Gill				
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Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 2 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P3B	SERVICES- THEORY AND APPLICATIONS Objective: To introduce the principles of MEP, sanitation and drainage system, HVAC, Firefighting to enable learner understand the concept and function of all services Learning Outcome: Understand and study principles of MEP, sanitation and drainage system, HVAC, Firefighting to enable learner understand the concept and function of all services.	30	15		
	<u>Unit – 1</u> ➤ Introduction, Terminologies. ➤ Units Under Services, Concepts of Services, Introduction to term MEP (Ventilation, Plumbing – Water supply + drainage, Electrical & Lighting, HVAC, Firefighting etc.) ➤ Understanding concepts with case studies ➤ Importance of services in lifestyle and in architecture and interior design. Identifying services around us which may have gone unnoticed. <u>Unit – 2</u> ➤ Ventilation – Importance in interiors ➤ Natural, Mechanical, Hybrid (Types- Single sided, Cross, stack ventilation and its effects) ➤ Lack of cross ventilation and its effects				

	➤ Elements influencing indoor air pattern ➤ Techniques to achieve Natural ventilation (Stack effect, wind tower, courtyard effect, Evaporative cooling) ➤ Case study, Research ➤ Ventilation in different zones ➤ Ways and means to improve comfort <u>Unit – 3</u> ➤ Mechanical ventilation- Introduction ➤ Types, ducts, fans etc. ➤ Types, uses, location, materials used etc. ➤ Case Study-Residential, Commercial, Industrial, Basement Parking etc. <u>Unit – 4</u> ➤ Plumbing – Introduction, Norms and Terms. ➤ Terminology only - Pipes, appliances, stack, drain, sewage, manhole, chambers etc. ➤ Study of residential/ commercial places <u>Reference Books:</u> ➤ National Building Code- Building bylaws ➤ Times Saver standards of Architectural Design Data by Callender, Tata McGraw Hill. ➤ Electrical & mechanical services in high rise buildings (Design & estimation manual- including Green buildings) – AK Mittal ➤ Building services (Electrical services) – Krunal Thanki ➤ Building services (Part 1) – Krunal Thanki				
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Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 4 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P3C	ICT Objective: Introduction to fundamentals of computer systems, hardware, peripheral devices, operating systems, application software etc in interior practice, understanding and application of MS-Word, Power point, AutoCAD. Learning Outcome: Use computer aided design language.	60	15		
	<u>Unit - 1</u> ➤ Understanding difference between hardware & software ➤ Understanding various input and output devices & methods ➤ Understanding basics of Windows ➤ Understanding Basics in Microsoft Words ➤ Using Word for documentation ➤ Editing in word files ➤ Understanding and creating Basic Presentation for projects in PPT <u>Unit – 2</u> ➤ Editing in presentation files ➤ Understanding interface, input methods, ➤ navigation in excel, adding formatting data ➤ Formatting managing worksheet ➤ Using tables & styles, inserting shapes/pictures creating & using formulas <u>Unit – 3</u> ➤ Introduction to AutoCAD, Understanding interface, Understanding input methods. ➤ Setting units & drawing area & drawing basic 2D shapes ➤ Modifying 2D shapes with basic modification tools ➤ Drawing 2D shapes & editing the shapes				

	<u>Unit – 4</u> ➤ Using various object selection methods, Dimensioning drawing with using basic dimensioning tools ➤ Understanding advanced dimension styles with applying various properties to dimensioning objects - Editing existing dimensions ➤ Workshop/activity session <u>Reference Books:</u> ➤ Mastering AutoCAD (George Omura Brian Benton) ➤ AutoCAD for engineers and designers basics & intermediate (Sham Tickoo)				
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Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P4A	GRAPHICS – I Objective: Introduction to graphics, drawings and representation techniques in form of technical drawings to enable student to visualize the design in effective manner. Learning Outcome: Application of representation techniques to draw two & three-dimensional objects, improve visualization skills.	15	5	30	15
	<u>Unit - 1</u> ➤Improving visualization skills, simple exercises, focus on noticing objects, details etc. ➤Revision of Developed Objects - Introduction to Surfaces /edges / corners. ➤Developed Objects - Prism / Pyramids with Square & Polygonal Base. ➤Advance Structure - Ref. Interior Layout - composing of multiple objects with different size/ dimensions <u>Unit – 2</u> ➤Graphic exercise - Optical impression & awareness ➤Introduction to Section with various planes <u>Unit – 3</u> ➤Developed Objects - Composite multiple objects with different size/ Dimensions. ➤Advance / Complicated objects - Circular – Cylinder & cone etc. <u>Unit - 4</u> ➤Tracing work for Training Hand & Drafting. ➤Advance / Complicated objects – Practical application with live				

	furniture in classroom. <u>Reference Books</u> ➤ Time Saver Standards- Design Data - Chiava. J. Callender J. ➤ Perspective & Sciography - Shankar M ➤ Rendering With Pen & Ink - Robert W. Gill				
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Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P4B	FREEHAND SKETCHING AND DRAWING Objective: Introduction to Freehand drawing and representation techniques in form of sketches, rendering, views to enable the student to visualize the design in effective manner. To learn colour theory through various mediums. Learning Outcome: Application of representation techniques to design and improve visualization skills. Understand colour theory and its applications.	15	5	30	15
	<u>Unit - 1</u> ➤ Free hand skills – Understanding and improving. (For lines, curves etc). ➤ Line work improvement Understanding different line weights, values, meaning, uses, functions in interiors. ➤ Drafting tools – Understanding drafting tools, aligning paper, pencil pressure techniques (2B, 4B etc). ➤ Lettering improvement. Understanding and studying different fonts, styles and their uses, applications. ➤ Lettering for templates, heading, sub-heading with sizes. ➤ Understanding tracing techniques. ➤ Expressing words with the help of alphabet. <u>Unit – 2</u> ➤ Understanding basic shapes, 2D, 3D (square, hexagon, circle etc) with				

	pencil rendering, awareness of light, shade and shadows. ➤ Square, hexagon, cuboid, hexagon, pentagon their different angles. ➤ Freehand drawing techniques: Perspective drawing – Introduction to one point, object drawing, 3D shapes, pencil rendering in light and dark shades. ➤ One point perspective with different furniture items, home appliances. ➤ Different views, angles with simple objects. Table, Chair etc. ➤ Perspective - Interiors and exterior (rendered in pencil). <u>Unit – 3</u> ➤ Colour Theory: Colour Wheel – Primary, Secondary, Tertiary schemes etc. ➤ Different mediums of colouring – Poster colours, Water colours, Oil pastels etc. ➤ With the help of colour wheel make 2D Design, Make colour scale and grey scale ➤ Understanding colour theory with relation to interiors. ➤ Application of colour theory in interiors ➤ Make interior layout colour with the help of poster, water and colour pencil. <u>Unit – 4</u> ➤ Basics of human figures, ➤ Drawing human figures with proportions, hands, feet etc. (Its relation with objects, furniture etc. ➤ Rendering with pencil human figures. ➤ Still life Drawing, Sketching still life ➤ Still life rendering in Poster/Watercolour ➤ Outdoor sketching – Urban Sketching ➤ Visit outdoor drawing and sketching ➤ Same outdoor do it on a various angles.				
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	<u>Reference Books:</u> ➤ Rendering with Pen and Ink - W. Robert Gill ➤ Water Colour Sketching - Milind Mulik ➤ Art – Nouveau - Constantino Maria Magazines, and periodicals				
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Paper No.	SUBJECT - VOCATIONAL SKILL COURSE	Total Theory Hours	Total Session of 2 hours	Studio Hours	Total Session of 2 hours each
BIDS1P5	SERVICES- I Objective: To introduce the principles of MEP, sanitation and drainage system, HVAC, Firefighting to enable learner understand the concept and function of all services Learning Outcome: Understand and study principles of MEP, sanitation and drainage system, HVAC, Firefighting to enable learner understand the concept and function of all services.	30	15		
	<u>Unit – 1</u> ➤ Introduction, Terminologies. ➤ Units Under Services, Concepts of Services, Introduction to term MEP (Ventilation, Plumbing – Water supply + drainage, Electrical & Lighting, HVAC, Firefighting etc.) ➤ Understanding concepts with case studies ➤ Importance of services in lifestyle and in architecture and interior design. Identifying services around us which may have gone unnoticed. <u>Unit – 2</u> ➤ Ventilation – Importance in interiors ➤ Natural, Mechanical, Hybrid (Types- Single sided, Cross, stack ventilation and its effects) ➤ Lack of cross ventilation and its effects ➤ Elements influencing indoor air pattern ➤ Techniques to achieve Natural ventilation (Stack effect, wind tower, courtyard effect, Evaporative cooling) ➤ Case study, Research			-	-
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	➤ Ventilation in different zones ➤ Ways and means to improve comfort <u>Unit – 3</u> ➤ Mechanical ventilation- Introduction ➤ Types, ducts, fans etc. ➤ Types, uses, location, materials used etc. ➤ Case Study-Residential, Commercial, Industrial, Basement Parking etc. <u>Unit – 4</u> ➤ Plumbing – Introduction, Norms and Terms. ➤ Terminology only - Pipes, appliances, stack, drain, sewage, manhole, chambers etc. ➤ Study of residential/ commercial places <u>Reference Books:</u> ➤ National Building Code- Building bylaws ➤ Times Saver standards of Architectural Design Data by Callender, Tata McGraw Hill. ➤ Electrical & mechanical services in high rise buildings (Design & estimation manual- including Green buildings) – AK Mittal ➤ Building services (Electrical services) – Krunal Thanki ➤ Building services (Part 1) – Krunal Thanki			-	-
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Paper No.	SUBJECT - SKILL ENHANCEMENT COURSE	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P6	APPLIED TECHNOLOGY- I Objective: To introduce basic materials used in construction, basic components of a building and method of construction and representation of the same. Learning Outcome: Understand basic materials used in construction, basic components of a building and method of construction and representation of the same.	15	5	30	15
	<u>Unit - 1</u> ➤Terminology – Introduction to various building components, common terms used in interior design. ➤Natural Materials– Study of soil, sand, gravels, pebbles, boulders, rocks, and their use in construction and application in interiors. <u>Unit – 2</u> ➤Stone –Terms, Types, Stone Masonry, (Random Rubble & Ashlar Types), Masonry Tools, Stone dressing, Pointing, and use in interiors. <u>Unit - 3</u> ➤Brick – Manufacturing Process, Types (Common bricks, Wire cut bricks, Fire clay bricks, Concrete blocks etc), Std Sizes, Closers & Bats, Various Bonds (Stretcher, Header, English & Flemish) & Partition walls, Steps & Guidelines for Brick Masonry Construction, Piers & Paving. ➤ Brick work features such as Corbelling, Tothing, Stepping, Coping, Terracing, etc. <u>Unit - 4</u> ➤ Bamboo & Cane Construction – ➤ Understanding its character and use in interior.				

	➤Terms, Characteristics, Types of Bamboo, Construction Basic Joineries, ➤Individual Case Study. ➤Details of Roof, seating in bamboo & fixing of bamboo frame work to floor. <u>Reference Books:</u> ➤ Building Construction Vol. 1 & 2 - W. B. Mackey ➤ Construction and material handbook - P. N. Khanna ➤ Building Construction Handbook - R. Chudley and R. Greeno ➤ Technology of Interior Construction by Vasudeo Channapattam - Part 1 ➤ Design Fundamental in Architecture by V.S Parmar ➤ Interior Design Illustrated by Francis DK Ching				
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Paper No.	SUBJECT - ABLITY ENHANCEMENT COURSE	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P7	PRESENTATION AND COMMUNICATION SKILLS-THEORY OF MATERIALS- I Objective: To give an overview of the basic materials used in Interiors with reference to the material properties, feasibility, availability, durability and sustenance to climatic conditions along with presentation of the same. Learning Outcome: Understand and apply basic materials used in Interiors with reference to the material properties, feasibility, availability, durability and sustenance to climatic conditions along with presentation of the same.	15	5	30	15

	<u>Unit -1</u> ➤ Introduction to Design elements and principles, basic art elements, optical illusions ➤ Introduction of design as a visual language. ➤ Introduction to building elements and spaces, structuring spaces ➤ Introduction to 5 senses and sensory based design + colour psychology + interaction of humans and surrounding spaces. <u>Unit – 2</u> ➤ Units and conversion Measurements of past, SI system, British, Metric absolute system ➤ Introduction to all Fundamental quantities in SI system ➤ Learning British scale inches ➤ Unit Conversions for length, area and volume. ➤ Tools for measurement, Paper sizes ➤ Understandings drawing scales on paper <u>Unit – 3</u> ➤ Nature, Geography, Seasons ➤ Manmade and natural environment, Climatic factors to be considered ➤ Understanding earth, sun, seasons, nature, Maps, Sun path. ➤ Orientation- Climate responsive designs. Directions based building orientation. ➤ Window openings- Sun- Natural light, solar heat gain, shading devices <u>Unit – 4</u> ➤ Introduction of stones- Quarrying methods, Natural Bed, Stone Dressing, seasoning, finishes on stone ➤ Uses of stones- flooring, construction, methods of cladding, Properties of good stone as a building material, deterioration of stones,				

	➤ Preservation of stones, sizes of stone slabs available, brands, Finishes of stones. ➤ Comparative analysis of types of stones under parent rock, its uses, properties, availability in India ➤ Artificial stones <u>Reference Books:</u> ➤ Building Construction Vol. 1 & 2 - W. B. Mackey, Barry, Roy Chudley ➤ Architecture form, space and order, Picture Dictionary- Francis D.K. Ching ➤ Construction and material handbook : P. N. Khanna ➤ Neuferts Architects data				
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Paper No.	SUBJECT - INDIAN KNOWLEDGE SYSTEM	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P8	HISTORY OF DESIGN- INDIAN FURNITURE/MATERIALS Objective: To give an overview and study History of materials and traditional furniture in India to assist design process. Learning Outcome: Understand importance of materials, furniture history and develop design processes based on historical components.	15	5	30	15
	<u>Unit-1</u> ➤ History of materials- Traditional materials and evolution of materials. ➤ Introduction to building components and materials applicable which we interact with on daily basis (List of basic materials and information) Eg: Type of Flooring-Joint less/seamless- Cement screed, granolithic, resin based-epoxy, PU, mastic asphalt, Flexible thin sheet and tiles- Linoleum, vinyl, rubber sheet. Rigid tiles and stone slabs- ceramic, vitrified, porcelain, glass tile etc. <u>Unit – 2</u> ➤ Regional revolution- India ➤ India and Traditional Indian folk and tribal arts and handicrafts, such as madhubani, Kalamkari, warli, etc. ➤ Study of inlay and meenakari in relation to interior. ➤ Traditional designs and motifs used on surface and objects including pottery, stone, metal ware, wood crafts etc.				

	<u>Unit – 3</u> ➤ Understanding different Design styles, themes etc. Indian – (east, west, north, south) ➤ Regional houses around the globe ➤ Climatic zones of India. ➤ Variation in traditional housing based on different regions ➤ Climate based vernacular architecture of India, Traditional materials <u>Unit – 4</u> ➤ Theory of materials- Natural and man made ➤ Introduction, classification of rocks; Stones, history. <u>Reference Books:</u> ➤ Building Construction Vol. 1 & 2 - W. B. Mackey, Barry, Roy Chudley ➤ Architecture form, space and order, Picture Dictionary- Francis D.K. Ching ➤ Construction and material handbook : P. N. Khanna ➤ Neuferts Architects data				
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Paper No.	SUBJECT - VALUE EDUCATION COURSE	Total Theory Hours	Total Session of 2 hours	Studio Hours	Total Session of 2 hours each
BIDS1P9	ENVIRONMENT STUDY Objective: To create awareness about physical environment, ecosystems and their components. To gain knowledge of natural resources and develop the concept of ecology and its components. Learning Outcome: Recognize natural resources and their types, understand physical environment and its components, the impact of human activities on ecology and need to conserve the resources.	30	15		

	<u>Unit -1</u> ➤ Introduction to the subject, importance ➤ Renewable and non-renewable resources ➤ Natural resources, types ➤ Forest, water, food, land resources-problems, exploitataion, preservation <u>Unit – 2</u> ➤ Conservation of natural resources ➤ Organizations involved <u>Unit – 3</u> ➤ Ecosystems, types of ecosystems ➤ Function, structure ➤ Producers, consumers, decomposers ➤ Food chains, ecological pyramid <u>Unit – 4</u> ➤ Biodiversity, terminology, importance ➤ India as a mega-diversity nation ➤ Threats to bio-diversity ➤ Endangered species ➤ Conservation of bio-diversity <u>Reference Books:</u> ➤ The Biodiversity of India by Bharucha Erach ➤ Environmental Biology by Agarwal				
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Paper No.	SUBJECT - CO-CURRICULAR COURSE	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS1P10	EVENT MANAGEMENT- POSTER MAKING, STALL DESIGN, FREE HAND SKETCHING AND RENDERING Objective: Introduction to Freehand drawing and representation techniques in form of sketches, rendering, views to enable the student to visualize the design in effective manner. To learn colour theory through various mediums. Learning Outcome: Application of representation techniques to design and improve visualization skills. Understand colour theory and its applications.	15	5	30	15
	<u>Unit - 1</u> ➤ Free hand skills – Understanding and improving. (For lines, curves etc). ➤ Line work improvement Understanding different line weights, values, meaning, uses, functions in interiors. ➤ Drafting tools – Understanding drafting tools, aligning paper, pencil pressure techniques (2B, 4B etc). ➤ Lettering improvement. Understanding and studying different fonts, styles and their uses, applications. ➤ Lettering for templates, heading, sub-heading with sizes. ➤ Understanding tracing techniques. ➤ Expressing words with the help of alphabet. <u>Unit – 2</u> ➤ Understanding basic shapes, 2D, 3D (square, hexagon, circle etc) with pencil rendering, awareness of light, shade and shadows. ➤ Square, hexagon, cuboid, hexagon, pentagon their different angles. ➤ Freehand drawing techniques: Perspective drawing – Introduction to one point, object drawing, 3D				

	shapes, pencil rendering in light and dark shades. ➤ One point perspective with different furniture items, home appliances. ➤ Different views, angles with simple objects. Table, Chair etc. ➤ Perspective - Interiors and exterior (rendered in pencil). <u>Unit – 3</u> ➤ Colour Theory: Colour Wheel – Primary, Secondary, Tertiary schemes etc. ➤ Different mediums of colouring – Poster colours, Water colours, Oil pastels etc. ➤ With the help of colour wheel make 2D Design, Make colour scale and grey scale ➤ Understanding colour theory with relation to interiors. ➤ Application of colour theory in interiors ➤ Make interior layout colour with the help of poster, water and colour pencil. <u>Unit – 4</u> ➤ Basics of human figures, ➤ Drawing human figures with proportions, hands, feet etc. (Its relation with objects, furniture etc. ➤ Rendering with pencil human figures. ➤ Still life Drawing, Sketching still life ➤ Still life rendering in Poster/Watercolour ➤ Outdoor sketching – Urban Sketching ➤ Visit outdoor drawing and sketching ➤ Same outdoor do it on a various angles. <u>Reference Books:</u> ➤ Rendering with Pen and Ink - W. Robert Gill ➤ Water Colour Sketching - Milind Mulik ➤ Art – Nouveau - Constantino Maria Magazines, and periodicals				
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Sem.-II

SEMESTER II

In the **Second Semester** more emphasis is placed on functional and contextual considerations through projects concerned with residential premises, building put to new use with additional project options concerned with public services design. The visual research studies continue through the Second Semester, exploring the sensory understanding of interior space as a component of the built environment, which may be both sensitive and experimental in application. The studios are the base for the student's academic activities and in addition, teach design related to formal and cultural values.

Paper No.	SUBJECT – MAJOR MANDATORY	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 2 hours each
BIDS2MJP 11	DESIGN - II	45	15	30	15
	<u>Unit – 1</u> ➤ Converting 1 BHK apartment to 2BHK apartment ➤ Choosing right position for the additional room or the re-positioned room from circulation point of view. ➤ Understating services and structural issues for such conversions. ➤ How services play important role in such conversions/modifications ➤ Re-routing services to suit the revised layout. <u>Unit – 2</u> ➤ Introduction to bigger residential units ➤ Design of 2/3 bedroom flats, bungalows, duplex, triplex, condominium houses ➤ Layout plan - Studying various arrangements and understanding pros and cons by using scaled furniture cutout ➤ Sections/ Elevations ➤ Sections and elevations in detail.				

	➤ Converting technical plan/ elevation into realistic design by adopting right style and detailing. <u>Unit – 3</u> ➤ Preparing and developing various layouts ➤ Flooring, Electrical layout – Understanding the function, symbols, legends etc. <u>Unit - 4</u> ➤ Mood board: developing ambiance for the selected design style and selecting right colour palette. ➤ Selection of material/ textures and colours for various applications ➤ Total project presentation with drawings, sketches, mood boards and sample boards, views. ➤ Final marking. ➤ Conversion of existing flats for maximum efficiency of available space. <u>Reference Books:</u> ➤ Time Saver Standards Design Data -Chiava. J. & Callender. J. ➤ Interior Design - Kasu Ahmed ➤ Sanskruti - Sudhir Diwan ➤ Architectural Picture Dictionary - Francis D. K. Ching				
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Paper No.	SUBJECT – MAJOR MANDATORY	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2MJP 12	CONSTRUCTION- II	15	5	30	15
	<u>Theory & Sketches</u> <u>Unit - 1</u> ➤ Structural Systems overview, Load bearing structure in depth, terms, characteristics. ➤ Load distribution, parts of a typical load bearing building including, pitched roofs, brackets, awning, arched openings. Wall thicknesses in a load bearing structure. ➤ RCC framed structure introduction & basics only (Terms, load distribution characteristics). ➤ Typical plan section elevation of a load bearing structure explaining lintel, sill and all other important components. ➤ Brief introduction to RCC for comparison. ➤ Introduction to terminologies and concepts: canopy, porch, portico, chajja, verandah, balcony, deck, gallery, corridor, vestibule etc. <u>Unit - 2</u> ➤ Stone Arches- (Introduction, elements of arches, norms & terms, types, concept of load distribution, construction method), Corbelling, Stepping, Tothing, Copings, etc. ➤ Most common and popular type of Arches in Stone masonry in different type of dressing techniques. ➤ Brick Arches- Introduction, elements of arches, norms and terms, types, construction method. Researching through Books & observe the interior & architectural use of arches. ➤ Site visit to South Mumbai ➤ Other facial elements as Niche,				

	String Band, Cornice, Plinth Profiles, and overall application of all above in interiors. <u>Unit - 3</u> ➤ Mud House Construction – ➤ Introduction, understanding its character and use in Interior. ➤ Cob wall construction ➤ Plan Section Elevation of a Mud House - Individual Case Study. <u>Unit – 4</u> ➤ Introduction of Timber, timber types and their application (briefly). ➤ Timber frame structure ➤ Typical characteristics of a timber structure (Roof, brackets, railings etc), flooring basics, timber posts. <u>Reference Books:</u> ➤ Building Construction Vol. 1, 2, &3 - W. B. Mackey ➤ Construction and material handbook P. N. Khanna ➤ Building Construction Handbook - R. Chudley and R. Greeno ➤ Technology of Interior Construction by Vasudeo Channapattam - Part 1 ➤ Design Fundamental in Architecture by V.S Parmar ➤ Interior Design Illustrated by Francis DK Ching				
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Paper No.	SUBJECT - MINOR	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1to 2 hours each
BIDS2MRP 13	THEORY OF MATERIALS -- II	15	5	30	15
	<u>Theory & Sketches</u> <u>Unit – 1</u> ➤ Theory of material- natural and man - made contd. ➤ Timber- Introduction of Timber as a natural product, Timber yielding Indian tress, Uses of timber in building construction. ➤ Types of timbers (softwood, hardwood) and its characteristics- (knots, Slope of grain, density etc.) ➤ Conversion of timber, sawing techniques, Seasoning methods; ➤ Defects of timber natural and seasoning, strengthening of timber, preservatives application, properties, advantages, uses. ➤ Engineered wood products- Glulam, Plywood, engineered wood, chip boards, fibre board, Laminated veneer lumber, block board, laminates, veneers etc. Artificial Timber ➤ Plywood- Types, grading, uses- finishes. ➤ Introduction to Wood and Wood based- Hardwood, softwood- Strip flooring, plank flooring, block flooring <u>Unit – 2</u> ➤ Study of various natural & man - made materials –Wall material & Finishes ➤ Introduction of Brick as a material ➤ Cement- contents, types, categories, uses, advantages, cement products. ➤ Introduction to Sand as an aggregate material ➤ Mortar- understanding mortar and its necessity, uses, properties				

	of good mortar, Process of application, preparation, properties, types - Cement mortar, lime mortar, surkhi mortar, gauged mortar, mud mortar. ➤ Concrete- concrete contents, uses and types, Grade of concrete, preparation of concrete mix, compaction, curing of concrete. ➤ Understanding formwork, Shuttering, scaffolding. ➤ Introduction to concrete Blocks-sizes and uses, Dry wall Partitions, screens, dividers etc. ➤ Plaster- contents, Use, method and process of application, surface preparation, lathing, understanding coats of plaster based on use and finish ➤ Types of plaster- Gypsum plaster, Portland cement plaster/ stucco plaster, waterproof plaster, lime plaster, composite plaster, acoustic plaster, keene's cement plaster ➤ Wall finishes- Understanding paints & types of paints with application, charcoal sheet, tile cladding, wood panelling, plaster finishes, laminates, skirting, dado <u>Unit – 3</u> ➤ Glass- manufacturing process, defects, uses, Application. ➤ Types of glass- patterned glass, wire glass, heat absorbing/ tinted glass, reflective coated glass, tempered glass, toughened glass etc. ➤ Different uses of glass, tools for cutting, hardware used for fixing, methods of fixing, thicknesses etc. ➤ Introduction to glazing system (SGU, DGU) -energy performance of window system. ➤ Advantages and disadvantages ➤ Clay and Clay products - Classification of clay based on products- Brick clay, China clay, Fire clay, Bentonite				
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	➤ Clay -advantages, disadvantages, sizes, application- Terracotta, stoneware, Vitreous China, Porcelain ➤ Plastic-Properties, resistance, durability of plastic as a material, Application in buildings. ➤ Types of plastic- polymers, pvc, polyurethanes, polystyrene etc. ➤ Products based on plastic types- Wall tiles, Coatings, Adhering films, flooring, vinyl carpet, products for ceiling, Use in sanitary fixtures, pipes ➤ Introduction to ceiling – ➤ Type of Ceiling-Advantages of false ceiling, material used for ceiling- gypsum ceiling, pop, levelling and re plastering of ceiling. ➤ Conventional, suspended, coffered, tray, coved, beam, exposed ceiling, ➤ Mouldings, method of installation of ceiling. ➤ Brands and tentative rates <u>Unit – 4</u> ➤ History of architecture period furniture (Indian/Foreign) ➤ Transition of design, materials, design revolution from ancient time till modern times, reference images, styles, design elements motifs etc., ➤ Egypt, (Greek empire, roman empire, dark ages,) ➤ Byzantine empire, Renaissance period, gothic, Baroque, Traditional, Industrial Revolution, Neoclassical, Contemporary etc. ➤ Period furniture- specific reference of designs and designers based on design eras and transition ➤ Use of historical themes in modern furniture, materials <u>Reference Books:</u> ➤ Construction of Buildings Volume 1 Seventh Edition- R. Barry				
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	➤ Building Construction Illustrated second edition Francis D. K. Ching ➤ A Global History of Architecture. 2nd edition - Ching, Francis, Mark ➤ Time-Saver Standards for Interior Design and Space Planning, Second by DeChiara ➤ Interior Design by Ahmed Kasu ➤ History of Architecture by Serem Andrew ➤ A history of Interior Design second edition by John Wiley and Sons 2005				
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Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2P 14A	DRAWING - II	15	5	30	15
	<u>Unit - 1</u> ➤ Study of complex solid objects through Orthographic Projection System ➤ Introduction to isometric View, Explain from Notes & References. <u>Unit - 2</u> ➤ Perspective Drawing: One Point Perspective as technical way. ➤ Introduction to 1 Pt Perspective View: Primary / Simple Objects. <u>Unit - 3</u> ➤ One Pt Perspective View: Interior Layout Residential plan etc. ➤ One Pt Perspective View: Complicated Layout Plans with Raised Levels etc. ➤ One Pt Perspective View: Interior Layout Residential plan (advance) <u>Unit -4.</u> ➤ Rendering technics – furniture, finishes				

	➤ Application of rendering techniques ➤ Rendering techniques in various mediums <u>Reference Books:</u> ➤ Perspective and Sciography - Shankar Mulik ➤ Rendering with Pen and Ink - W. Robert Gill				
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Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 2 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2P 14B	SERVICES- -(THEORY AND APPLICATIONS)	30	15		
	<u>Unit - 1</u> ➤ Basics of water supply. Source, collection, purification, distribution. storage. Various types water supply systems within residential and commercial premises of different sizes, high-rise buildings, towns and cities. ➤ Basics of drainage. Types of drainage systems. Traps, Branches of drainage system. Drainage in building blocks, high-rise buildings, complexes, towns and cities. Types of drainage discharge. Septic tanks and sewer lines. <u>Unit - 2</u> ➤ Water supply in dwellings - individual toilets, kitchen and other locations. ➤ Drainage in dwellings - toilets, kitchen and other locations. ➤ Water supply piping layout in toilets and kitchen ➤ Drainage piping layout in toilets and kitchen. ➤ Effect of water supply and drainage on toilet and kitchen design and layout and tiling layout in particular. <u>Unit - 3</u>				

	➤ Water supply Hardware: types of pipes, ➤ Different materials: advantages and disadvantages ➤ Different sizes of pipes and their applications ➤ Understanding pipes routing and it's accessories: couplings, elbows (L), T junctions, Y junction's terminators and it's testing etc. ➤ Drainage hardware: types of pipes, ➤ Different materials: advantages and disadvantages ➤ Different sizes of pipes and their applications ➤ Understanding drainage pipe routing and its accessories: couplings, elbows (L), T junctions, Y junctions terminators and it's testing etc. <u>Unit - 4</u> ➤ Application of unit 3 and 4 in design project. Effect on tiling layout and overall design. ➤ Additional civil work requirements to suit site conditions and design requirements. ➤ Final presentation and marking <u>Reference Books:</u> ➤ National Building Code- Building bylaws ➤ Times Saver standards of Architectural Design Data by Callender, Tata McGraw ➤ Electrical & mechanical services in high rise buildings (Design & estimation manual- including Green buildings) – AK Mittal ➤ Building services (Electrical services) – Krunal Thanki ➤ Building services (Part 1) – Krunal Thanki				
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Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 4 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2P 14C	ICT - II	60	15		
	<u>Unit – 1</u> ➤ Organising projects drawings with using Layers; advance editing tools. ➤ Drawing advance 2D shapes for designs elevation ➤ Changing and matching the properties of existing objects, ➤ Modifying shapes with advance ➤ Modification tools ➤ Creating blocks & wblocks & inserting blocks/wblock <u>Unit – 2</u> ➤ Editing blocks, wblocks, using enquiry for finding out information about objects. ➤ Creating & using design centre ➤ Creating, using and editing multiple lines with advance tools ➤ Printing 2D drawing <u>Unit – 3</u> ➤ Using editing tools. ➤ Using express tools to create shapes ➤ Editing objects with express tools <u>Unit – 4</u> ➤ Creating and using readymade title blocks for organised time saving permanent setting. ➤ Using utility tools ➤ Revision of tools/ problem solving session ➤ <u>Reference Books</u> ➤ Mastering AutoCAD (George Omura) ➤ AutoCAD for engineers and designers basics & intermediate (Sham Tickoo)				

Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 3hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2P15A	GRAPHICS - II	15	5	30	15
	<u>Unit - 1</u> ➤ Isometric Projection. ➤ Ex. On primary Objects: Solid Objects - square, rectangles etc. ➤ Ex. On Advance Object: circular type (Cylinder & Cone) <u>Unit - 2</u> ➤ 1 Pt Perspective View: Advance / complicated Objects & Solid Objects- square, rectangles etc. ➤ 1 Pt Perspective View: Application into a Furniture / fixture designed. <u>Unit -3</u> ➤ A Test: Developed Objects with Interior Layout . ➤ Developed Objects - Ref. Interior Layout. <u>Unit -4</u> ➤ One Pt Perspective View: Interior Layout commercial office plan etc. ➤ One Pt Perspective View: Interior Layout Commercial plan advance etc. <u>Reference Books:</u> ➤ Perspective and Sciography - Shankar Mulik ➤ Rendering with Pen and Ink - W. Robert Gill				

Paper No.	SUBJECT - OPEN ELECTIVES	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2P15B	FREEHAND SKETCHING AND DRAWING	15	5	30	15
	<u>Unit – 1</u> ➤ Freehand techniques – making cubes, pyramid with paper, card board, arranging them as 3D structure ➤ Draw that 3D structure in one point perspective. ➤ With the help perspective of 3D structure draw 5 different angles. ➤ Render with Colour same perspective. ➤ 3D structure rendering with Poster, water colour etc. ➤ Advanced pencil rendering <u>Unit – 2</u> ➤ Study of human anatomy ➤ Perspective view of the human figures. ➤ Colour wheel and colour scheme – analogous and complementary ➤ Colour schemes contd. Triads, understanding hue, tint, tone, shade. ➤ Make some commercial Design out of these colours. (Activity) <u>Unit - 3</u> ➤ Freehand drawing techniques: Two and Three Perspective drawing. ➤ Perspective drawing – Introduction to two point, object drawing, 3D shapes, pencil rendering in light and dark shades. ➤ Bird's eye view and ant views. ➤ Two point perspective with different furniture items, home appliances. ➤ Perspective - Interiors and exterior (rendered in pencil). ➤ Natural and technical way of drawing human figures with proportion, front view, 2 point perspective with pencil rendering.				

	➤ Freehand perspective – one point, two point perspective interior/exterior with reference to layouts with rendering, colouring (water colours, poster colours) <u>Unit – 4</u> ➤ Outdoor sketching – Nature, Cityscapes ➤ Creative application of design principles – Making 2D, 3D Mural, sculpture design, with texture ➤ Final Mural or sculpture output. <u>Reference Books:</u> ➤ Rendering with Pen and Ink - W. Robert Gill ➤ Water Colour Sketching - Milind Mulik				
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Paper No.	SUBJECT - VOCATIONAL SKILL COURSE	Total Theory Hours	Total Session of 2 hours	Studio Hours	Total Session of 2 hours each
BIDS2P16	SERVICES - II	30	15		
	<u>Unit - 1</u> ➤ Basics of water supply. Source, collection, purification, distribution. storage. Various types water supply systems within residential and commercial premises of different sizes, high-rise buildings, towns and cities. ➤ Basics of drainage. Types of drainage systems. Traps, Branches of drainage system. Drainage in building blocks, high-rise buildings, complexes, towns and cities. Types of				

	drainage discharge. Septic tanks and sewer lines. <u>Unit - 2</u> ➤ Water supply in dwellings - individual toilets, kitchen and other locations. ➤ Drainage in dwellings - toilets, kitchen and other locations. ➤ Water supply piping layout in toilets and kitchen ➤ Drainage piping layout in toilets and kitchen. ➤ Effect of water supply and drainage on toilet and kitchen design and layout and tiling layout in particular. <u>Unit - 3</u> ➤ Water supply Hardware: types of pipes, ➤ Different materials: advantages and disadvantages ➤ Different sizes of pipes and their applications ➤ Understanding pipes routing and it's accessories: couplings, elbows (L), T junctions, Y junction's terminators and it's testing etc. ➤ Drainage hardware: types of pipes, ➤ Different materials: advantages and disadvantages ➤ Different sizes of pipes and their applications ➤ Understanding drainage pipe routing and its accessories: couplings, elbows (L), T junctions, Y junctions terminators and it's testing etc. <u>Unit - 4</u> ➤ Application of unit 3 and 4 in design project. Effect on tiling layout and overall design. ➤ Additional civil work requirements to suit site conditions and design requirements. ➤ Final presentation and marking				
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	<u>Reference Books:</u> ➤ National Building Code- Building bylaws ➤ Times Saver standards of Architectural Design Data by Callender, Tata McGraw ➤ Electrical & mechanical services in high rise buildings (Design & estimation manual- including Green buildings) – AK Mittal ➤ Building services (Electrical services) – Krunal Thanki ➤ Building services (Part 1) – Krunal Thanki				
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Paper No.	SUBJECT - SKILL ENHANCEMENT COURSE	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2P17	APPLIED TECHNOLOGY - II	15	5	30	15
	<u>Unit - 1</u> ➤ Structural Systems overview, Load bearing structure in depth, terms, characteristics. ➤ Load distribution, parts of a typical load bearing building including, pitched roofs, brackets, awning, arched openings. Wall thicknesses in a load bearing structure. ➤ RCC framed structure introduction & basics only (Terms, load distribution characteristics). ➤ Typical plan section elevation of a load bearing structure explaining lintel, sill and all other important components. ➤ Brief introduction to RCC for comparison. ➤ Introduction to terminologies and concepts: canopy, porch, portico, chajja, verandah, balcony, deck, gallery, corridor, vestibule etc. <u>Unit - 2</u> ➤ Stone Arches- (Introduction, elements of arches, norms & terms, types, concept of load distribution, construction method), Corbelling, Stepping, Toothing, Copings, etc. ➤ Most common and popular type of Arches in Stone masonry in different type of dressing techniques. ➤ Brick Arches- Introduction, elements of arches, norms and terms, types, construction method. Researching through Books & observe the interior & architectural use of arches. ➤ Site visit to South Mumbai ➤ Other facial elements as Niche, String Band, Cornice, Plinth				

	Profiles, and overall application of all above in interiors. <u>Unit - 3</u> ➤ Mud House Construction – ➤ Introduction, understanding its character and use in Interior. ➤ Cob wall construction ➤ Plan Section Elevation of a Mud House ➤ Individual Case Study. <u>Unit – 4</u> ➤ Introduction of Timber, timber types and their application (briefly). ➤ Timber frame structure ➤ Typical characteristics of a timber structure (Roof, brackets, railings etc), flooring basics, timber posts. <u>Reference Books:</u> ➤ Building Construction Vol. 1, 2, &3 - W. B. Mackey ➤ Construction and material handbook P. N. Khanna ➤ Building Construction Handbook - R. Chudley and R. Greeno ➤ Technology of Interior Construction by Vasudeo Channapattam - Part 1 ➤ Design Fundamental in Architecture by V.S Parmar ➤ Interior Design Illustrated by Francis DK Ching				
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Paper No.	SUBJECT – ABILITY ENHANCEMENT COURSE	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2P18	PRESENTATION AND COMMUNICATION SKILLS-THEORY OF MATERIALS- II	15	5	30	15
	<u>Unit – 1</u> ➤ Theory of material- natural and man - made contd. ➤ Timber- Introduction of Timber as a natural product, Timber yielding Indian tress, Uses of timber in building construction. ➤ Types of timbers (softwood, hardwood) and its characteristics- (knots, Slope of grain, density etc.) ➤ Conversion of timber, sawing techniques, Seasoning methods; ➤ Defects of timber natural and seasoning, strengthening of timber, preservatives application, properties, advantages, uses. ➤ Engineered wood products- Glulam, Plywood, engineered wood, chip boards, fibre board, Laminated veneer lumber, block board, laminates, veneers etc. Artificial Timber ➤ Plywood- Types, grading, uses- finishes. ➤ Introduction to Wood and Wood based- Hardwood, softwood- Strip flooring, plank flooring, block flooring <u>Unit – 2</u> ➤ Study of various natural & man - made materials –Wall material & Finishes ➤ Introduction of Brick as a material ➤ Cement- contents, types, categories, uses, advantages, cement products. ➤ Introduction to Sand as an aggregate material ➤ Mortar- understanding mortar and its necessity, uses, properties of good mortar, Process of application, preparation, properties, types -				

	Cement mortar, lime mortar, surkhi mortar, gauged mortar, mud mortar. ➤ Concrete- concrete contents, uses and types, Grade of concrete, preparation of concrete mix, compaction, curing of concrete. ➤ Understanding formwork, Shuttering, scaffolding. ➤ Introduction to concrete Blocks- sizes and uses, Dry wall Partitions, screens, dividers etc. ➤ Plaster- contents, Use, method and process of application, surface preparation, lathing, understanding coats of plaster based on use and finish ➤ Types of plaster- Gypsum plaster, Portland cement plaster/ stucco plaster, waterproof plaster, lime plaster, composite plaster, acoustic plaster, keene's cement plaster ➤ Wall finishes- Understanding paints & types of paints with application, charcoal sheet, tile cladding, wood panelling, plaster finishes, laminates, skirting, dado <u>Unit – 3</u> ➤ Glass- manufacturing process, defects, uses, Application. ➤ Types of glass- patterned glass, wire glass, heat absorbing/ tinted glass, reflective coated glass, tempered glass, toughened glass etc. ➤ Different uses of glass, tools for cutting, hardware used for fixing, methods of fixing, thicknesses etc. ➤ Introduction to glazing system (SGU, DGU) -energy performance of window system. ➤ Advantages and disadvantages ➤ Clay and Clay products - Classification of clay based on products- Brick clay, China clay, Fire clay, Bentonite ➤ Clay -advantages, disadvantages, sizes, application- Terracotta, stoneware, Vitreous China, Porcelain ➤ Plastic-Properties, resistance, durability of plastic as a material, Application in buildings. ➤ Types of plastic- polymers, pvc, polyurethanes, polystyrene etc.				
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	➤ Products based on plastic types- Wall tiles, Coatings, Adhering films, flooring, vinyl carpet, products for ceiling, Use in sanitary fixtures, pipes ➤ Introduction to ceiling – ➤ Type of Ceiling-Advantages of false ceiling, material used for ceiling-gypsum ceiling, pop, levelling and re plastering of ceiling. ➤ conventional, suspended, coffered, tray, coved, beam, exposed ceiling, ➤ Mouldings, method of installation of ceiling. ➤ Brands and tentative rates <u>Unit – 4</u> ➤ History of architecture period furniture (Indian/Foreign) ➤ Transition of design, materials, design revolution from ancient time till modern times, reference images, styles, design elements motifs etc., ➤ Egypt, (Greek empire, roman empire, dark ages,) ➤ Byzantine empire, Renaissance period, gothic, Baroque, Traditional, Industrial Revolution, Neoclassical, Contemporary etc. ➤ Period furniture- specific reference of designs and designers based on design eras and transition ➤ Use of historical themes in modern furniture, materials <u>Reference Books:</u> ➤ Construction of Buildings Volume 1 Seventh Edition- R. Barry ➤ Building Construction Illustrated second edition Francis D. K. Ching ➤ A Global History of Architecture. 2nd edition - Ching, Francis, Mark ➤ Time-Saver Standards for Interior Design and Space Planning, Second by DeChiara ➤ Interior Design by Ahmed Kasu ➤ History of Architecture by Serem Andrew ➤ A history of Interior Design second edition by John Wiley and Sons 2005				
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Paper No.	SUBJECT - VALUE EDUCATION COURSE	Total Theory Hours	Total Session of 2hours	Studio Hours	Total Session of 2 hours each
BIDS2P19	ENVIRONMENT STUDY	30	15		
	<u>Unit -1</u> ➤ Environment, factors governing it ➤ Healthy, polluted environment ➤ Pollution- Causes, effects, prevention ➤ Soil, air, water pollution ➤ Noise pollution ➤ Nuclear hazards <u>Unit – 2</u> ➤ Waste Management, types ➤ Solid waste management ➤ Disaster management ➤ Case studies <u>Unit – 3</u> ➤ Environment ethics and related issues, solutions ➤ Sustainable development ➤ Water conservation, rain water harvesting ➤ Case study <u>Unit – 4</u> ➤ Weather and climate ➤ Climate changes, global warming, ozone layer depletion ➤ Solutions- scope and limitations ➤ Environment protection act <u>Reference Books:</u> ➤ Hazardous Waste Incineration by Brunner R.C, McGraw Hill ➤ Environmental Encyclopedia by Cunningham, W.P.Cooper				

Paper No.	SUBJECT – CO-CURRICULAR COURSE	Total Theory Hours	Total Session of 3 hours	Studio Hours	Total Session of 1 to 2 hours each
BIDS2P20	EVENT MANAGEMENT- FINE ARTS, POSTER MAKING, STALL DESIGN, FREEHAND SKETCHING RENDERING	15	5	30	15

Unit – 1

- Freehand techniques – making cubes, pyramid with paper, card board, arranging them as 3D structure
- Draw that 3D structure in one point perspective.
- With the help perspective of 3D structure draw 5 different angles.
- Render with Colour same perspective.
- 3D structure rendering with Poster, water colour etc.
- Advanced pencil rendering

Unit – 2

- Study of human anatomy
- Perspective view of the human figures.
- Colour wheel and colour scheme – analogous and complementary
- Colour schemes contd. Triads, understanding hue, tint, tone, shade.
- Make some commercial Design out of these colours. (Activity)

Unit - 3

- Freehand drawing techniques:
Two and Three Perspective drawing.
- Perspective drawing – Introduction to two point, object drawing, 3D shapes, pencil rendering in light and dark shades.
- Bird's eye view and ant views.
- Two point perspective with different furniture items, home appliances.
- Perspective - Interiors and exterior (rendered in pencil).
- Natural and technical way of drawing human figures with proportion, front view, 2 point perspective with pencil rendering.

- Freehand perspective – one point, two point perspective interior/exterior with reference to layouts with rendering, colouring (water colours, poster colours)

Unit – 4

- Outdoor sketching – Nature, Cityscapes
- Creative application of design principles – Making 2D, 3D Mural, sculpture design, with texture
- Final Mural or sculpture output.

Reference Books:

- Rendering with Pen and Ink - W. Robert Gill
- Water Colour Sketching - Milind Mulik

PASSING PERFORMANCE GRADING :

The Performance Grading of the learner shall be on ten point scale be adopted uniformly.

Letter Grades and Grade Point

Semester GPA/ Program CGPA Semester / Program	% of Marks	Alpha-Sign/Letter Grade Result	Grading Point
9.00 – 10.00	90.0 - 100	O (Outstanding)	10
8.00 - < 9.00	80.0 < 90.0	A+ (Excellent)	9
7.00 - < 8.00	70.0 < 80.0	A (Very Good)	8
6.00 - < 7.00	60.0 < 70.0	B+ (Good)	7
5.50 - < 6.00	55.0 < 60.0	B (Average)	6
5.00 - < 5.50	50.0 < 55.0	C (Pass)	5
Below 5.00	Below 50	F (Fail)	0
AB (Absent)		Absent	

NOTE : VC : Vocational Courses, SEC : Skill Enhancement Courses, AEC : Ability Enhancement Courses, VEC : Value Education Courses, VSC : Vocational Skill Course, IKS : Indian Knowledge System, OJT: On The Job Training, FP: Field Projects.

The performance grading shall be based on the aggregate performance of Internal Assessment and Semester End Examination.

The Semester Grade Point Average (SGPA) will be calculated in the following manner: $SGPA = \frac{\sum CG}{\sum C}$ for a semester, where C is Credit Point and G is Grade Point for the Course/ Subject.

The Cumulative Grade Point Average (CGPA) will be calculated in the following manner: $CGPA = \frac{\sum CG}{\sum C}$ for all semesters taken together.

PASSING STANDARD:

Passing 50% in each subject /Course separate Progressive Evaluation (PE)/Internal Evaluation and Semester-End/Final Evaluation (FE) examination.

- A. Carry forward of marks in case of learner who fails in the Internal Assessments and/ or Semester-end examination in one or more subjects (whichever component the learner has failed although passing is on total marks).
- B. A learner who PASSES in the Internal Examination but FAILS in the Semester-end Examination of the Course shall reappear for the Semester-End Examination of that Course. However, his/her marks of internal examinations shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

C. A learner who PASSES in the Semester-end Examination but FAILS in the Internal Assessment of the course shall reappear for the Internal Examination of that Course. However, his/her marks of Semester-End Examination shall be carried over and he/she shall be entitled for grade obtained by him/her on passing

R ALLOWED TO KEEP TERMS (ATKT)

- A. A learner shall be allowed to keep term for Semester II irrespective of number of heads/courses of failure in the Semester I.
- B. A learner shall be allowed to keep term for Semester III wherever applicable if he/she passes each of Semester I and Semester II.

OR

- C. A learner shall be allowed to keep term for Semester III wherever applicable irrespective of number of heads/courses of failure in the Semester I & Semester II.
- D. A learner shall be allowed to keep term for Semester IV wherever applicable if he/she passes each of Semester I, Semester II and Semester III.

OR

- E. A learner shall be allowed to keep term for Semester IV wherever applicable irrespective of number of heads/courses of failure in the Semester I, Semester II, and Semester III
- F. A learner shall be allowed to keep term for Semester V wherever applicable if he/she passes each of Semester I, Semester II, Semester III and Semester IV.

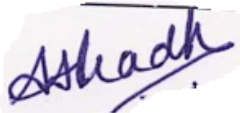
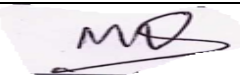
OR

- G. A learner shall be allowed to keep term for Semester V wherever applicable irrespective of number of heads/courses of failure in the Semester I, Semester II, Semester III, and Semester IV.
- H. The result of Semester VI wherever applicable OR final semester shall be kept in abeyance until the learner passes each of Semester I, Semester II, Semester III, Semester IV, Semester V wherever applicable.

OR

- I. A learner shall be allowed to keep term for Semester VI wherever applicable irrespective of number of heads/courses of failure in the Semester I, Semester II, Semester III, Semester IV and Semester V.

University of Mumbai's
Garware Institute of Career Education and Development
Board of Studies – Committee members
Bachelor of Interior Design
Held on 10th July, 2023 at 11.00 a.m.

Sr. No.	Name	Signature
1	Dr. Keyurkumar M. Nayak Director, UM-GICED	
2	Arc. Rajeev Mishra, Principal, Sir J J College of Architecture, University of Mumbai, Mumbai.	
3	Ms. Shilpa Borkar, Placement officer & Course Coordinator, UM-GICED	
4	Arc. Ms. Aishana Pradhan, Head of Department, School of Interior Design, Rachna Sansad, 278, Shankar Ghanekar Marg, Prabhadevi, Mumbai 400 025.	
5	Arc. Rupali Mande R design architects, office no.1312, Suswagatam, building no.41, Opposite to PMC Bank, Tagore Nagar, Vikhroli (East), Mumbai.	
6	Arc. Vikram Apte, Faculty, UM-GICED	
7	Arc. Shama Kulkarni, Faculty, UM-GICED	
8	Arc. Mehvish Qureshi Faculty, UM-GICED	
9	Arc. Sushmita Shivdas Faculty, UM-GICED	
10.	Ms. Nirmala Vishwakarma	



Dr. Keyurkumar M. Nayak,
Director,
UM-GICED



Prof.(Dr.) Anil Kumar Singh
Dean,
Faculty of Interdisciplinary Studies

Justification for (Bachelor of Interior Design)

1.	Necessity for starting the course	The University of Mumbai's Garware Institute of Career Education & Development plans to introduce a four-year full time Bachelor of Interior Design. The society today has become quite aware of aesthetics and beautiful way of living the life. Accordingly, the people are conscious of getting their bungalows, apartments, offices designed and decorated with the latest ideas. Hence there is good demand for interior designers from the best interior designing colleges in Mumbai in cities and small towns, giving opportunity to Interior designers to build their career.
2.	Whether the UGC has recommended the course:	Yes, UGC has recommended the course as per gazette no. DL(N)-04/0007/2003-05 dated 11th July 2014. UGC encourages the incorporation of skill oriented and value-added courses to develop skilled manpower.
3.	Whether all the courses have commenced from the academic year 2023-2024	Yes, it would be commencing from the Academic year 2023-24 as per NEP 2020. However, the course was launched in the year 2017.
4.	The courses started by the University are self-financed, whether adequate number of eligible permanent faculties are available?	Yes, this course is self-financed. The expert visiting faculty from industries come to teach this course.
5.	To give details regarding the duration of the Course and is it possible to compress the course?	The duration of the course is four year (Eight Semesters). It cannot be further compressed.
6.	The intake capacity of each course and no. of admissions given in the current academic year:	The intake capacity of this course is 120 students. The admission procedure is still ongoing.
7.	Opportunities of Employability/ Employment available after undertaking these courses:	Job opportunities are as Interior Designers, Landscape Designers, Set Designers, Event Management, Doing Office Work as Designer and Site Supervisor, Freelancing.



Dr. Keyurkumar M. Nayak,
Director,
UM-GICED



Prof.(Dr.) Anil Kumar Singh
Dean,
Faculty of Interdisciplinary Studies