Annexure 5

Your Dreams Our Goal

POORNIMA UNIVERSITY

Member of Association of Indian Universities & Approved by UGC (Govt. of India) under 2(f) & 12(B)

FACULTY OF DESIGN & ARTS

PROGRAM: BACHELOR OF INTERIOR DESIGN

SCHEME & SYLLABUS BOOKLET

BATCH 2025-2029

SCHEME & SYLLABUS (2025-2029)

FACULTY OF DESIGN & ARTS

PROGRAM: BACHELOR OF INTERIOR DESIGN

INDEX

Disclaimer: The scheme, syllabus and other materials published in this booklet may be changed or modified as per the requirement after approval of competent authority. The decision taken by the management of Poornima University will be final and abiding to all.

Your Dreams Our Goal

POORNIMA UNIVERSITY

Member of Association of Indian Universities & Approved by UGC (Govt. of India) under 2(f) & 12(B)

Vision

Our vision is to create knowledge based society with scientific temper, team spirit and dignity of labour to face global competitive challenges.

Mission

Our mission is to evolve and develop skill based systems for effective delivery of knowledge so as to equip young professionals with dedication and commitment to excellence in all spheres of life.

Quality Policy

To provide quality education through faculty development, updating of facilities and continual improvement for meeting norms laid down by the government, keeping thestakeholders satisfied. Poornima University has forged industrial alliances with Top MNC's worldwide which assures high educational standards, up to- date and forward-thinking curricula, and professional relevance. At Poornima University you will have a distinct advantage through exposure to the corporate standard environment through industry sponsored infrastructure and expert faculty. The University involves global industry leaders in many ways.

Knowledge Wheel

At Poornima, the academic atmosphere is a rare blend of modern technical as well assoft skills and traditional systems of learning processes.

About Program and Program Outcomes (PO):

Title of the Program: Bachelor of Interior Design

Nature of the Program: It is a four-year degree programme consisting of 8 semesters whichcovers both practical and theoretical subjects.

Program Outcomes (POs):

Interior Design Graduates will be able to do:

1. **Design Knowledge:** Apply the knowledge of design fundamentals, and a specialization to the solution of complex design problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyze complex design problems reaching substantiated conclusions using elements and principles of design.
3. **Design/Development of solutions:** Design solutions for complex problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern designing and IT tools including prediction and modeling to complex designing activities with an understanding of the limitations.
6. **The Designer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional design practice.
7. **Environment and Sustainability:** Understand the impact of the professional designing solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the designing practice.
9. **Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex design activities with the design community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project Management and Finance:** Demonstrate knowledge and understanding of the design and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and life- long learning in the broadest context of technological change

Program Specific Outcomes (PSOs):

PSO1: The student will be able to analyze the markets structure, operational procedures of the industry for design solution, client's specifications in terms of domestic and international market following trend forecasting, quality standards sustainability prevailing in the Interior Design Industry.

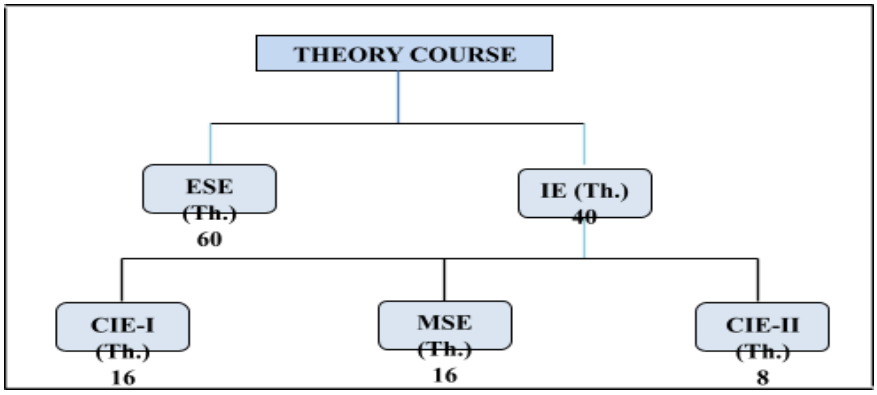
PSO2: Achieve professionalism, expertise presentations, demonstrate proficiency and working with creative hand skills, presentation technology, uses of indigenous material adorn global role play.

PSO3: Ability to analyze Interior design with intelligence and contextual association in terms of issues related to the subject and its international and national relevance.

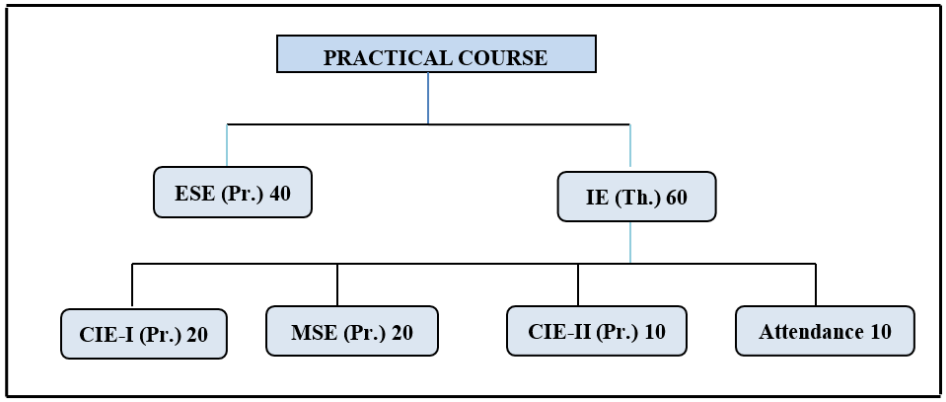
PSO4: To formulate and hypothesize the design brief practically take initiative, plan, organize consider fulfill the set objectives, merge research activities and deliver project outcomes

Examination System :

A. Marks Distribution of Theory Course:



B. Marks Distribution of Practical Course :



Th.: Theory, Pr.: Practical, **ESE:** End Semester Examination, **MSE:** Mid Semester Examination, **CIE:** Continuous Internal Evaluation.

CO Wise Marks Distribution:

Exam Entity	Theory Subject		Practical/ Studio Subject	
	Maximum Marks	CO to be Covered	CO to be Covered	Maximum Marks
CIE-I	16 (8 + 8)	1 & 2	1 & 2	24 (12 + 12)
MSE	16 (8 + 8)	3 & 4	3 & 4	24 (12 + 12)
CIE-II (Activity / Assignment)	8 (8)	5	5	12 (12)
ESE	60	-	-	40
TOTAL	100	-	-	100

Minimum Passing Percentage in All Exams:

S.No.	Program Name	Minimum Passing Percentage in		
		IE Component	ESE Component	Total Component
1	Course Work for PhDRegistration	-	-	50%
2	B.Arch., FIRE Dept. (BBA, B.Com., MBA)	-	45%	50%
3	MBA, MCA, M.Des., M.Tech.,M.Plan, MHA, MPH	-	40%	40%
4	B. Tech., B. Des., BVA, BCA,B.Sc., BBA, B.Com., B.A. &any other program	-	35%	35%

SGPA Calculation

$$SGPA = \frac{C_1G_1 + C_2G_2 + ... + C_nG_n}{C_1 + C_2 + ... + C_n}$$

$$SGPA = \frac{\sum_i C_i \times G_i}{\sum_i C_i}$$

where (as per teaching scheme & syllabus):

C_i is the number of credits of subject i,

G_i is the Grade Point for the subject I and i = 1 to n,

n = number of subjects in a course in the semester

CGPA Calculation

$$CGPA = \frac{C_1G_1 + C_2G_2 + ... + C_nG_n}{C_1 + C_2 + ... + C_n}$$

$$CGPA = \frac{\sum_i C_i \times G_i}{\sum_i C_i}$$

where (as per teaching scheme & syllabus):

C_i is the number of credits of subject i,

G_i is the Grade Point for the subject I and i = 1 to n,

n = number of subjects in a course of all the semesters up to which CGPA is computed

Grading Table:

Table-A
Applicable for B.Arch., FIRE Courses
(BBA, B.Com, MBA), & PhD. Course Work

Academic Performance	Grade	Grade Point	Marks Range (in %)
Outstanding	O	10	90≤ x ≤100
Excellent	A+	9	80≤ x <90
Very Good	A	8	70≤ x <80
Good	B+	7	60≤ x <70
Above Average	B	6	50≤ x <60
Fail	F	0	x <50
Absent	Ab	0	Absent

Table-B
Applicable for All Courses except Table-A

Academic Performance	Grade	Grade Point	Marks Range (in %)
Outstanding	O	10	90≤ x ≤100
Excellent	A+	9	80≤ x <90
Very Good	A	8	70≤ x <80
Good	B+	7	60≤ x <70
Above Average	B	6	50≤ x <60
Average	C	5	40≤ x <50
Pass*	P	4	35≤ x <40
Fail	F	0	x <35
Absent	Ab	0	Absent

CGPA to percentage conversion rule:

Equivalent % of Marks in the Program = *CGPA* *10

Award of Class

CGPA	Percentage	Equivalent Division
7.50 ≤ CGPA	75% or more	First Division with Distinction
6.00 ≤ CGPA < 7.50	60% ≤ x <75%	First Division
5.00 ≤ CGPA < 6.00	50% ≤ x <60%	Second Division
4.00 ≤ CGPA < 5.00	40% ≤ x < 50%	Pass Class

Guidelines for Massive Open Online Courses (MOOCs)

(Session 2023-24)

Poornima University, in its never ending endeavor to equip students with best-of-class learning and knowledge, has undertaken to include MOOC courses as part of its credit scheme from session 2023-24 onwards. The objective behind this is to enable students to study courses designed by the best teachers in the country and to scale their knowledge base with the rest of learners from the nation. The MOOCs which are included under this scheme is can be chosen from SWAYAM-NPTEL.

1. Introduction of MOOCs: SWAYAM-NPTEL

About SWAYAM-NPTEL

NPTEL (National Programme on Technology Enhanced Learning), is a joint venture of the IITs and IISc, funded by the Ministry of Education (MoE) Government of India, and was launched in 2003. Initially started as a project to take quality education to all corners of the country, NPTEL now offers close to 600+courses for certification every semester in about 22 disciplines.

Some highlights:

- Largest online repository in the world of courses in engineering, basic sciences and selected humanities and management subjects
- YouTube channel for NPTEL – most subscribed educational channel, 1.3 billion views and 40+lakhs subscribers
- More than 56000 hours of video content, transcribed and subtitled
- Most accessed library of peer-reviewed educational content in the world
- Translation of more than 12000 hrs. of English transcripts in regional Indian languages

NPTEL Online Certification:

The objective of enabling students obtain certificates for courses is to make students employable in the industry or pursue a suitable higher education programme. Through an online portal, 4, 8, or 12-week online courses, typically on topics relevant to students in all years of higher education along with basic core courses in sciences and humanities with exposure to relevant tools and technologies, are being offered. Enrolment to and learning from these courses is free. Following these online courses, anin-person, proctored certification exam is conducted and a certificate is provided through the participating institutions and industry, as applicable. Some statistics regarding the open online courses since March 2014 till Dec 2021Completed courses: 3496; Enrollments across courses: 1.58 CRORE + Number of exam registrations: 15.1 LAKH + All the statistics pertaining to completed courses are available at https://beta.nptel.ac.in/courses.

All courses are completely free to enroll and learn from. The certification exam is optional and comes at a fee of Rs 1000/course exam.

2. MOOCs at Poornima University:

MOOCs envelops best in class teaching - learning processes along with meeting the requirements of various courses in terms of quality of teaching and evaluation system. To promote the MOOCs among students of Poornima University, it is decided to consider the credits earned through MOOCs.

(a) MOOCs as Credit Courses

(For this document, only those MOOCs will be considered which are available only on NPTEL platforms)

- Credit and Non-credit SWAYAM-NPTEL MOOCs can be opted by anyone, anytime, anywhere and in any language.

However, prior-permission of the University Authorities is mandatory ifthe credits are to be transferred to regular degree.

- As Open Elective (for batches entered till 2022) / Multidisciplinary Courses (for batches admitted from 2023-24 onwards): Open Elective (for batches entered till 2022) courses were available at University level in offline mode till 2022-23 for which relevant booklets were published. From session 2023-24, Multidisciplinary Courses are introduces in lieu of open elective courses as per NEP 2020. These courses carries 02 credits. These category/type of courses (similar/different) are available as MOOC courses on SWAYAM-NPTEL platform which are being introduced from session 2023-24 onwards for all the students. The respective Deans / HODs shall provide all the information to all the students pertaining to MOOCs as per details given below:
    1. Deans / HODs shall prepare a list of up to 10 appropriate MOOC courses (From NPTEL Only) of Minimum 02/03 credits each, well in advance (at-least 15 days prior to commencement of semester) and take approval from the Office of Dean, Academics / Pro-President, PU.
    2. After approval, the respective Deans / HODs shall circulate a notice to all their respective students so that they can select any one course from the list, the credits (only 02) of which will be counted against Open Elective/ Multidisciplinary courses pertaining to that particular semester.
    3. The tutor of the class shall monitor the progress (assignments, feedback, anyproblem etc.) on weekly basis and report to Head/Dean and provide the academic support to students as per requirement.

(b) Important points related to MOOCs at Poornima University

- Only one MOOC shall be allowed in a particular semester for the purpose of credit transfer in the beginning.
- No attendance will be taken for MOOC courses.
- The method of assessments of MOOC such as assignments and examination are completely associated with that particular MOOC and no internal exam (IE component) will be conducted by the department as well as by the Examination Cell.
- The respective Dean / HOD must submit the detail of course i.e., code, name and credit of MOOC opted against that particular course in particular semester attached with highlighting in the related examination scheme of syllabus of that semester signed by BOS Convener / HoD and Dean of Faculty to the office of Pro-President before commencement of the classes.
- The center of examination for MOOCs will be finalized by SWAYAM-NPTEL. All the responsibility related to registration for MOOCs, timely submission of assignments, examinations etc. will be borne by the students only.
- NPTEL will award a certificate to all the students passing the examination.
- The list of registered students in MOOC along with name of course will be submitted to the Examination Cell by the Deans / HoDs before commencement of the classes.
- An ESE Exam of each said MOOC course will also be conducted by the University as per University norms.
- The award of marks/grading will be computed as given below:

Award of marks/grading	Remarks
1. 20% weightage taken from MOOC Certificate +80% weightage taken from ESE Exam of Poornima University **OR** 2. 100% of weightage taken from MOOC Certificate Note: The Higher Marks/Grades of the above two will be considered	The Certificate of MOOC to be Submitted as per date notified by COE, Poornima University

- Any student who would not be able to clear/pass the said course, will be required to appear as a back exam candidate of the University as per PU norms. Students who have not passed the MOOC exam are required to register and participate

in the next semester for either the same subject or a similar subject (Ensuring at least 60% of the syllabus matches with the back subject and also approved by respective Dean) offered through NPTEL.

- The scorecard and related certificate of MOOC along with a consolidated list of students with marks of assignment and final exam will be submitted to the examination cell by the concerned Dean / HOD for further process. It is also recommended that alteration/changes/scaling in marks obtained by the students in any MOOC will not be considered.
- The exam registration fee of MOOC up to Max. INR 1000/- will be reimbursed to the student only after successful completion of the course in first attempt and submission of the fee receipt, score-card and certificate of the MOOC to the concerned department within stipulated time after declaration of the results.
- There will be no provision of re-evaluation of MOOC.

NOTE: This is to be noted that the procedure for getting approval from BOS, FacultyBoard, Academic Council and BoM is to be followed as per regular process.

Attached Items:

Ability Enhancement Courses	Annexure-1
Value Added Course Booklet	Annexure-2

B.DES [ID]
SCHEME
BATCH: 2025 - 29

POORNIMA UNIVERSITY, JAIPUR

Faculty of Design & Arts

Name of Program : B.DES (ID) **Total Duration: 4 years** **Credits: 25**

Teaching Scheme for Batch 2025-29

Semester-I

Course Code	Name of Course	Teaching Scheme			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
A	**Major (Core Courses)**							
A.1	**Theory**							
25BIDCID1101	History of Interior Design – I	2	-	-	40	60	100	2
25BIDCID1102	Art & Design Fundamentals – I	2	-	-	40	60	100	2
A.2	Practical							
25BIDCID1201	Basic Design & Concepts	2	-	4	60	40	100	8
25BIDCID1202	Material Exploration Design & Model making – I	2	-	4	60	40	100	4
25BIDCID1203	Interior Geometry and Drawing	2	-	2	60	40	100	3
25BIDCID1204	Digital Design – I	1	-	2	60	40	100	2
B	**Minor Stream Courses / Department Electives**							
B.1	**Theory**							
B.2	**Practical**							
	Nil	-	-	-	-	-	-	
C	**Multidisciplinary Courses**							
	Nil	-	-	-	-	-	-	-
D	**Ability Enhancement Courses (AEC)**							
BUACHM1101	Language & Conversation	-	-	2	60	40	100	1
E	**Skill Enhancement Courses (SEC)**							
25BIDESE1201	Introduction to AI	1	-	2	60	40	100	2
F	**Value Added Courses (VAC)**							
25BUVCVA1201	Performing Arts	-	-	2	60	40	100	1
25BUVCVH1201	Universal Human Values and Professional Ethics Lab							
G	**Summer Internship / Research Project / Dissertation**							
Total		**12**	**0**	**18**				
		30						**25**

POORNIMA UNIVERSITY, JAIPUR

Faculty of Design & Arts

Name of Program : B.DES ID **Total Duration: 4 years** **Credits: 27**

Teaching Scheme for Batch 2025-29

Semester-II

Course Code	Name of Course	Teaching Scheme			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
A	**Major (Core Courses)**							
sA.1	**Theory**							
25BIDCID2101	History of Interior Design – II	2	-	-	40	60	100	2
25BIDCID2102	Material Study – I	2	-	-	40	60	100	2
A.2	Practical							
25BIDCID2201	Interior Design Studio – I	2	-	4	60	40	100	8
25BIDCID2202	Material Exploration Design and Model Making – II	2	-	4	60	40	100	4
25BIDCID2203	Carpentry & Metal Soldering	2	-	2	60	40	100	3
25BIDCID2204	Digital Design II	2	-	2	60	40	100	3
B	**Minor Stream Courses / Department Electives**							
B.1	**Theory**							
B.2	**Practical**							
	Nil	-	-	-	-	-	-	
C	**Multidisciplinary Courses**							
	Nil	-	-	-	-	-	-	-
D	**Ability Enhancement Courses (AEC)**							
25BUACHM2208	LANGUAGE AND COMMUNICATION		-	1	60	40	100	1
E	**Skill Enhancement Courses (SEC)**							
25BIDESE2201	Drawing, Color Study & Graphics – I	1	-	2	60	40	100	2
F	**Value Added Courses (VAC)**							
25BUVCVA2201	Performing Arts	-	-	2	60	40	100	2
25BUVCVD2201	Entrepreneurship							
G	**Summer Internship / Research Project / Dissertation**							
Total		**13**		**17**				
Total Teaching Hours		**30**						**27**

POORNIMA UNIVERSITY, JAIPUR

Faculty of Design & Arts

Name of Program : B.DES ID **Total Duration: 4 years** **Credits:207**

Teaching Scheme for Batch 2025-29

Semester-III

Course Code	Name of Course	Teaching Scheme			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
A	**Major (Core Courses)**							
A.1	**Theory**							
25BIDCID3101	Theory of Interior Furnishings	2	-	-	**40**	**60**	**100**	**2**
25BIDCID3102	Material Study – II	2	-	-	**40**	**60**	**100**	**2**
A.2	**Practical**							
25BIDCID3201	Interior Design Studio – II & Measure Drawing	2		4	**60**	**40**	**100**	**8**
25BIDCID3202	Furniture design – I	1	-	2	**60**	**40**	**100**	**2**
25BIDCID3203	Building Services – I	1	-	2	**60**	**40**	**100**	**2**
25BIDCID3204	Digital and Virtual Design I	2	-	2	**60**	**40**	**100**	**3**
25BIDCID3205	Building Construction – I	1	-	2	**60**	**40**	**100**	**2**
B	**Minor Stream Courses / Department Electives**							
B.1	**Theory**							
B.2	**Practical**							
	Nil	-	-	-	-	-	-	
C	**Multidisciplinary Courses**							
25BIDEMO3601	MOOC Course-I	2	-	-	**40**	**60**	**100**	**2**
D	**Ability Enhancement Courses (AEC)**							
	Nil	-	-	-	-	-	-	
E	**Skill Enhancement Courses (SEC)**							
25BIDESE3201	Drawing, Color study and graphics-II	1	-	2	**60**	**40**	**100**	**2**
F	**Value Added Courses (VAC)**							
25BUAEID3101	Introduction to IKS (IKS)	2	-	-	**40**	**60**	**100**	**2**
G	**Summer Internship / Research Project / Dissertation**							
Total		**16**		**14**				
Total Teaching Hours		**30**						**27**

POORNIMA UNIVERSITY, JAIPUR

Faculty of Design & Arts

Name of Program : B.DES ID **Total Duration: 4 years** **Credits: 207**

Teaching Scheme for Batch 2025-29

Semester-IV

Course Code	Name of Course	Teaching Scheme			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
A	**Major (Core Courses)**							
A.1	**Theory**							
25BIDCID4101	Basics of Vaastu	2	-	-	**40**	**60**	**100**	**2**
25BIDCID4102	Material Study – III	2	-	-	**40**	**60**	**100**	**2**
A.2	**Practical**							
25BIDCID4201	Interior Design Studio – III	2	-	4	**60**	**40**	**100**	**8**
25BIDCID4202	Furniture design – II	1	-	2	**60**	**40**	**100**	**2**
25BIDCID4203	Building Services – II	1		2	**60**	**40**	**100**	**2**
25BIDCID4204	Digital and Virtual Design III	1	-	2	**60**	**40**	**100**	**2**
25BIDCID4205	Building Construction – II	2	-	2	**60**	**40**	**100**	**3**
B	**Minor Stream Courses / Department Electives**							
B.1	**Theory**							
25BIDEID4101	Lighting and color in Interiors	2	-	-	**40**	**60**	**100**	**2**
25BIDEID4102	Environmental control in Interiors							
B.2	**Practical**							
	Nil	-	-	-	-	-	-	
C	**Multidisciplinary Courses**							
25BIDEMO4601	MOOC Course-II	1	-	0	**40**	**60**	**100**	**2**
D	**Ability Enhancement Courses (AEC)**							
	Nil	-	-	-	-	-	-	
E	**Skill Enhancement Courses (SEC)**							
25BIDESE4201	Drawing, Color Study & Graphics – III	-	-	2	**60**	**40**	**100**	**1**
F	**Value Added Courses (VAC)**							
25BUAEID4101	Indian Intellectual Heritage (IKS)	2	-	0	**40**	**60**	**100**	**2**
G	**Summer Internship / Research Project / Dissertation**							
Total		**16**		**14**				
Total Teaching Hours		**30**						**28**

POORNIMA UNIVERSITY, JAIPUR

Faculty of Design & Arts

Name of Program : B.DES ID **Total Duration: 4 years** **Credits: 207**

Teaching Scheme for Batch 2025-29

Semester-V

Course Code	Name of Course	Teaching Scheme			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
A	**Major (Core Courses)**							
sA.1	**Theory**							
25BIDCID5101	Interior Estimation & Costing	2	-	-	**40**	**60**	**100**	**2**
A.2	**Practical**							
25BIDCID5201	Interior Design Studio – IV	2	-	4	**60**	**40**	**100**	**8**
25BIDCID5202	Working Drawing – I	2	-	2	**60**	**40**	**100**	**3**
25BIDCID5203	Building Services – III	1	-	2	**60**	**40**	**100**	**2**
25BIDCID5204	Digital and Virtual Design IV	2	-	2	**60**	**40**	**100**	**3**
B	**Minor Stream Courses / Department Electives**							
B.1	**Theory**							
B.2	**Practical**							
25BIDEID5201 25BIDEID5202	Heritage Interior Product Design	1	-	2	**60**	**40**	**100**	**2**
C	**Multidisciplinary Courses**							
25BIDEMO5601	MOOC Course-III	1	-	-	**40**	**60**	**100**	**2**
D	**Ability Enhancement Courses (AEC)**							
BUACHM5230	CORPORATE COMMUNICA TION SKILLS	**-**	-	1	-	-	-	**1**
E	**Skill Enhancement Courses (SEC)**							
25BIDESE5201	Interior Design Photography	1	-	2	**60**	**40**	**100**	**2**
F	**Value Added Courses (VAC)**							
25BUAEID5101	Yogasutra (IKS)	2	-	0	**40**	**60**	**100**	**2**
25BUAEID5102	Indian Ethics (IKS)							
G	**Summer Internship / Research Project / Dissertation**							
Total		**13**		**17**				
Total Teaching Hours		**30**						**27**

POORNIMA UNIVERSITY, JAIPUR

Faculty of Design & Arts

Name of Program : B.DES ID **Total Duration: 4 years** **Credits:207**

Teaching Scheme for Batch 2025-29

Semester-VI

Course Code	Name of Course	Teaching Scheme			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
A	**Major (Core Courses)**							
A.1	**Theory**							
25BIDCID6101	Advance Materials	2	-	-	**40**	**60**	**100**	**2**
A.2	**Practical**							
25BIDCID6201	Interior Design Studio – V	2	-	4	**60**	**40**	**100**	**8**
25BIDCID6202	Working Drawing – II	2	-	2	**60**	**40**	**100**	**3**
25BIDCID6203	Interior Landscape design	2	-	2	**60**	**40**	**100**	**3**
B	**Minor Stream Courses / Department Electives**							
B.1	**Theory**							
25BIDEID6101	History of Rajasthan Art& Culture	2	-	-	**40**	**60**	**100**	**2**
25BIDEID6102	Sustainable development in interiordesign							
B.2	**Practical**							
	Nil	-	-	-	-	-	-	
C	**Multidisciplinary Courses**							
25BIDEMO6601	MOOC Course-IV	2	-	-	**40**	**60**	**100**	**2**
D	**Ability Enhancement Courses (AEC)**							
	Nil	-	-	-	-	-	-	-
E	**Skill Enhancement Courses (SEC)**							
	Nil	-	-	-	-	-	-	-
F	**Value Added Courses (VAC)**							
G	**Summer Internship / Research Project / Dissertation**							
25BIDCID6303	Pre Thesis	2	-	4	**60**	**40**	**100**	**4**
Total		**15**		**14**				
Total Teaching Hours		**29**						**25**

POORNIMA UNIVERSITY, JAIPUR

Faculty of Design & Arts

Name of Program : B.DES ID **Total Duration: 4 years** **Credits: 207**

Teaching Scheme for Batch 2025-29

Semester-VII

Course Code	Name of Course	Teaching Scheme			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
A	**Major (Core Courses)**							
sA.1	**Theory**							
A.2	**Practical**							
25BIDCID7201	Portfolio Development & Presentation	1	-	2	**60**	**40**	**100**	**2**
B	**Minor Stream Courses / Department Electives**							
B.1	**Theory**							
B.2	**Practical**							
	Nil	-	-	-	-	-	-	
C	**Multidisciplinary Courses**							
	Nil	-	-	-	-	-	-	-
D	**Ability Enhancement Courses (AEC)**							
	Nil	-	-	-	-	-	-	-
E	**Skill Enhancement Courses (SEC)**							
	Nil	-	-	-	-	-	-	-
F	**Value Added Courses (VAC)**							
	Nil	-	-	-	-	-	-	-
G	**Summer Internship / Research Project / Dissertation**							
25BIDCID7301	Thesis Design Project	2	-	14	**60**	**40**	**100**	**23**
Total		**3**		**16**				25

POORNIMA UNIVERSITY, JAIPUR

Faculty of Design & Arts

Name of Program : B.DES ID **Total Duration: 4 years** **Credits: 207**

Teaching Scheme for Batch 2025-29

Semester-VIII

Course Code	Name of Course	Teaching Scheme			Marks Distribution			Credits
		Lecture (L)	Tutorial (T)	Practical (P)	IE	ESE	Total	
A	**Major (Core Courses)**							
sA.1	**Theory**							
A.2	**Practical**							
B	**Minor Stream Courses / Department Electives**							
B.1	**Theory**							
B.2	**Practical**							
	Nil	-	-	-	-	-	-	
C	**Multidisciplinary Courses**							
	Nil	-	-	-	-	-	-	-
D	**Ability Enhancement Courses (AEC)**							
	Nil	-	-	-	-	-	-	-
E	**Skill Enhancement Courses (SEC)**							
	Nil	-	-	-	-	-	-	-
F	**Value Added Courses (VAC)**							
	Nil	-	-	-	-	-	-	-
G	**Summer Internship / Research Project / Dissertation**							
25BIDCID8501	Practical Training (Internship) for 110 Working Days & its Seminar.	-	-	-	**60**	**40**	**100**	**26**
Total								
Total Teaching Hours		**0**						**26**

I SEMESTER

Code: 25BIDCID1101	HISTORY OF INTERIOR DESIGN-I	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Remembering** the techniques to sketch plans, sections, elevations and other architectural details ofheritage buildings in India.	Remember	PO1, PO10	PSO1
CO2	**Apply** the design variables, construction techniques materials and craftsmanship used in the historicalbuildings in the respective period.	Apply	PO1, PO2, PO5	PSO2
CO3	**Analyze** different styles of historic architecture	Analyze	PO2, PO4, PO10	PSO2, PSO3
CO4	**Evaluate** various styles on the basis of the contributing factors responsible for their development.	Evaluate	PO2, PO6, PO7, PO10	PSO3
CO5	**Design** buildings in the historic architectural styles.	Create	PO3, PO5, PO9, PO10, PO12	PSO3

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	–	–	–	–	–	–	–	–	2	–	–	3	–	–
CO2	3	2	–	–	2	–	–	–	–	–	–	–	–	3	–
CO3	–	3	–	2	–	–	–	–	–	2	–	–	–	2	3
CO4	–	3	–	–	–	2	2	–	–	2	–	–	–	–	2
CO5	–	–	3	–	2	–	–	–	2	2	–	2	–	–	2
WT.	2.4	2.2	0.6	0.4	0.8	0.4	0.4	–	0.4	2	–	0.4	1	1.4	1.8

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Ancient World History	04
2.	Middle ages in Europe	06
3.	Asian and African Cultures	04
4.	The Later Middle ages	06
5.	Post Industrial Revolution Era	04

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Ancient World History**
	● Prehistory to Early civilizations, Prehistoric Interiors, Archeological evidence ● Evidence from Tribal Cultures, pattern and Design ● The first permanent settlement, Mesopotamia, Pre-Columbian America, Ancient Egypt ● Classical Civilizations: Greece and Rome
2.	**Middle ages in Europe**

	● Early Christian, Byzantine and Romanesque ● Early Christian Design ● Early medieval: The "Dark ages" ● The Romanesque style
3.	**Asian and African Cultures**
	● Islamic and Asian Traditions ● India and Pakistan(Buddhist, Hindu, Jain Architecture) ● Western Influences ● Cambodia, Thailand, Indonesia, China, Korea, Japan
4.	**The Later Middle ages**
	● Elements of Gothic Style ● The Renaissance in Italy ● Baroque and Rococo In Italy and North Europe ● Renaissance, Baroque and Rococo in France and Spain, Renaissance to Georgian ● Colonial and Federal America
5.	**Post Industrial Revolution Era**
	● The Regency, revivals and Industrial Revolution ● The Victorian Era ● The Aesthetic Movements ● Art Nouveau and the Vienna Secession ● Eclecticism

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	A history of Interior Design	John Pile and Judith Gura	2013	Wiley Publications
Important Web Links				

Code: 25BIDCID1102	ART & DESIGN FUNDAMENTALS-I	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes(CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	Understand the terminology in relation to interior design	Understand	PO1, PO10	PSO1
CO2	Apply the principle of aesthetic pleasing and optimizesto improve their design journey.	Apply	PO1, PO2, PO4	PSO1, PSO2
CO3	Analyze the importance of composition of a good & balanced	Analyze	PO1, PO2	PSO1, PSO3
CO4	Examine and implement the elements & principles of design and also be able to differentiate betweenthem.	Evaluate	PO2, PO3	PSO1, PSO2, PSO3
CO5	Build the importance of color in our life, culture, nature and surroundings.	Create	PO1, PO3, PO5, PO12	PSO3

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	–	–	–	–	–	–	–	–	2	–	–	3	–	–
CO2	3	2	–	2	–	–	–	–	–	–	–	–	2	2	–
CO3	2	3	–	–	–	–	–	–	–	–	–	–	2	–	3
CO4	–	3	2	–	–	–	–	–	–	–	–	–	2	2	2
CO5	2	–	2	–	2	–	–	–	–	–	–	2	–	–	2
WT.	2.4	2	1.2	0.4	0.4	–	–	–	–	0.4	–	0.4	1.8	1	1.4

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Elements of design	06
2.	Principles of design	04
3.	Composition- 2D	06
4.	Color Theory	04
5.	Color Schemes and Psychology	04

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Elements of Design**
	• Introduction of unit • Elements of Design- Dot, Line, Shape, Form, Texture, Light, Depth, Pattern etc. • Hands on exercise for understanding elements of design. • Conclusion and summary of unit
2.	**Principles of Design**
	• Introduction of unit • Principles of design –Contrast, Harmony, Rhythm, Balance, Unity, Proportion, Scale etc. • Hands on exercise for understanding principles of design. • Conclusion and summary of unit

3.	**Composition- 2D**
	• Introduction of unit • Understanding shapes and forms, basic geometry in shapes. • 2D composition of geometrical shapes, free hand doodling and composition. • Conclusion and summary of unit
4.	**Color Theory**
	• Introduction of unit • Color and nature • Color System (RGB, CMYK, and PANTONE), Color Wheel (primary, secondary and tertiary colors), etc. • Conclusion and summary of unit
5.	**Color Schemes and Psychology**
	• Introduction of unit • Color Schemes • Color psychology, symbolism, expression-color basics- (physics of light, pigments etc.) • Conclusion and summary of unit

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	Universal principles of design	WilliamLidwell , Kritina Holden, Jill Butler	2010	Rockport Publishers
2	Visual imagination – An introduction of Art	Kurty D. Bruce	1964	New Jersey, Prentice Hall, Hayashi Studio.
3	Water Color Rendering,	Guerin, Jules.	2010	University of Michigan Library Publication
4	Manual of Rendering in pen and ink	Gill Robert W	1984	Van Nostrand Reinhold Publication.
5	Principles of three dimensional Design	Wucius Wong	1977	NY. NY. USA. Van NostrandReinhold Publication
6	Principles of two dimensional Design	Wucius Wong	1977	NY.NY. USA. Van Nostrand Reinhold Publication
7	Basic Design: the Dynamics of Visual Form	Sansmarg Maurice de	1964	UK, The Herbert press
8	Interaction of Colors	Albert, Josef	1963	U.S. Yale University Press
Important Web Links				

Code: 25BIDCID1201	BASIC DESIGN & CONCEPTS	8 Credits [LTP: 2-0-4]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes(CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the basics of the design process.	Understand	PO1, PO3	PSO1, PSO2, PSO3
CO2	**Experiment** competency in the use of design fundamentals as principal tools in establishing design criteria and developing the overall designprocess.	Apply	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO3	**Analyze** the application of basic rules of space planning and organization.	Analyze	PO1, PO2	PSO1, PSO2, PSO3
CO4	**Evaluate** the ideation generation of design.	Evaluate	PO1, PO2, PO4	PSO1, PSO2, PSO3
CO5	**Create** the brainstorming exercise for design development.	Create	PO1, PO2, PO3, PO4, PO5	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	-	2	-	-	–	–	–	–	–	–	–	2	2	1
CO2	2	2	2	-	-	–	–	–	–	–	–	–	2	1	1
CO3	2	3	-	-	-	–	–	–	–	–	–	–	1	2	1
CO4	1	2	-	2	-	–	–	–	–	–	–	–	2	2	2
CO5	1	1	1	1	1	–	–	–	–	–	–	–	3	1	1
WT.	**1.80**	**2.00**	**1.67**	**1.50**	**1.00**								**2.00**	**1.60**	**1.20**

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	The Design Process	12
2.	Design Objectives	18
3.	Ideation of design	12
4.	Research	18
5.	Conceptualizing Design	12

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**The Design Process**
	● Introduction of unit. ● Study of form and space ● Understanding design process ● Steps to design process. ● Defining the design project.
2.	**Design Objectives**
	● Introduction of unit. ● What are design objectives? ● Understanding design objectives and concepts.

3.	**Ideation of design**
	● Introduction of unit. ● Understanding Brainstorming, thinking outside the box, ideating a range of different, creative ideas that address the unmet user needs identified in the define phase.
4.	**Research**
	● Introduction of unit. ● Understanding beyond the generic information or brief given by the client. ● Researching further to understand the product/service and try to achieve clear and conclusive information about the design objective, customer preferences, competitors' design outlook, primary features, key value proposition, and so on. ● Creating a strong research work for client needs and demands.
5.	**Conceptualizing Design**
	● Introduction of unit. ● Understanding the process of design in different stages and conceptualizing a basic design. ● Studying the above units, student must understand the design complexities and create conceptual design.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	The Design Process	Karl Aspelund	2015	Fairchild books
2	Design Process in Architecture: From Concept to Completion	Geoffrey Makstutis	2018	Laurence King Publishing
Important Web Links				

Code: 25BIDCID1202	MATERIALS EXPLORATION DESIGN & MODEL MAKING – 1	4 Credits [LTP: 2-0-4]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes(CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** basic materials	Understand	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO2	**Apply** the use of basic materials and their uses in design and incorporating them in their projects. Materials for eq. Fiber, Yarn, Fabric, Plastic Leather etc.	Apply	PO1, PO2 ,PO3, PO5	PSO1, PSO2, PSO3
CO3	**Analyze** the materials on the different parameters.	Analyze	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO4	**Evaluate** the materials with their workability at different situation	Evaluate	PO1, PO2 ,PO3	PSO1, PSO2, PSO3
CO5	**Create** the understanding to mix different materials to create their final design projects.	Create	PO1, PO2 ,PO4	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	2	–		–	–	–	–	–	–	–	3	2	1	
CO2	3	1	1	–	1	–	–	–	–	–	–	–	3	1	1	
CO3	3	2	2	–	–	–	–	–	–	–	–	–	3	1	1	
CO4	3	1	2	–	–	–	–	–	–	–	–	–	2	1	1	
CO5	3	2	–	2	–	–	–	–	–	–	–	–	2	1	1	
WT.	**3.00**	**1.60**	**1.75**	**2.00**	**1.00**								**2.60**	**1.20**	**1.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Exploration I**	**10**
2.	**Exploration II**	**10**
3.	**Exploration III**	**10**
4.	**Exploration IV**	**10**
5.	**Fusion**	**08**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Exploration I**
	• Introduction of unit • Understanding of basic material's behavior, characteristic, properties etc. of basic materials (E.g. Paper and Card board, etc.) • Exploration and Manipulation of basic materials. • Conclusion and summary of unit
2.	**Exploration II**

	• Introduction of unit • Understanding of basic material's behavior, characteristic, properties etc. of basic materials (eg. Fiber, Yarn, Fabric, Plastic, Leather etc.) • Exploration and Manipulation of these materials. • Conclusion and summary of unit
3.	**Exploration III**
	• Introduction of unit • Understanding of basic material's behavior, characteristic, properties etc. of basic materials (eg. Soap, Clay, POP etc.) • Exploration and Manipulation of these materials. • Conclusion and summary of unit
4.	**Exploration IV**
	• Introduction of unit • Understanding of basic material's behavior, characteristic, properties etc. of basic materials (eg. Wood, Timber etc.) • Exploration and Manipulation of these materials. • Conclusion and summary of unit
5.	**Fusion**
	Technique for fusing the above materials.

E. RECOMMENDED STUDY MATERIAL

Sr.No	**Reference Book**	**Author**	**Edition**	**Publication**
1	Rendering with pen & ink	Robert W. Gill,	1984	Thames & Hudson Publishing
2	A Foundation Course in Drawing: A Complete Program of Techniques and Skills,	Peter Stayner& Terry Rosenberg	2003	Arcturus Publishing Ltd.
3	Color theory: An essential guide to color	Walter Foster Publishing.	2013	Chois Gallery Publishing
4	Designers Color Manual: The complete guide to color theory & application.	Tom Fraser & Adam Banks	2004	Chronicle Books
Important Web Links				
1				
2				

Code: 25BIDCID1203	INTERIOR GEOMETRY & DRAWING	3 Credits [LTP: 2-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes(CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping		PSO Mapping
CO1	**Understand** geometric, forms, space and structural relationship.	Understand	PO1,	PO2, PO5	PSO1, PSO2, PSO3
CO2	**Apply** the two dimensional geometric shapes on surface, planes	Apply	PO1,	PO2, PO3	PSO1, PSO2, PSO3
CO3	**Analyze** the principals and elements used in perspective	Analyze	PO1,	PO2, PO3	PSO1, PSO2, PSO3
CO4	**Measuring** the skills towards Isometric view, Axonometric View and Oblique View.	Evaluate	PO1,	PO2, PO3	PSO1, PSO2, PSO3
CO5	**Build** various skills in free hand perspective on the basis of the contributing factors responsible for their development.	Create	PO1,	PO2, PO4	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	-	-	1	–	–	–	–	–	–	–	3	2	1
CO2	3	2	1	-	-	–	–	–	–	–	–	–	2	1	1
CO3	3	2	1	-	-	–	–	–	–	–	–	–	3	2	1
CO4	3	1	3	-	-	–	–	–	–	–	–	–	3	2	2
CO5	3	2	-	2	-	–	–	–	–	–	–	–	2	2	2
WT.	**3.00**	**1.80**	**1.67**	**2.00**	**1.00**								**2.60**	**1.80**	**1.40**

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Drawing material and Equipment**	**06**
2.	**Free hand drawings**	**10**
3.	**Lettering, fonts and scale**	**10**
4.	**Plane geometry**	**10**
5.	**Plane, solid, section and intersection**	**12**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Drawing material and Equipment**
	● Basic introduction, Stationary and tools ● How to use drawing instruments
2.	**Free hand drawings**
	● Lines, Types of lines, Basic introduction of lines, Construction of lines, How to divide a line, Curves , Introduction of curve, To find center of an arch, Construction of ogee curve or reverse , curve, Objects, Basic introduction, Types of objects ● Application of free hand drawings, lines, curves and arches
3.	**Lettering, fonts and scale**

	• Introduction of lettering, Types of lettering, Single –stroke letters, Upper case and lower case letters, Introduction of fonts, Types of fonts , Scale, Scale on drawings, Types of scale, Plane scale, diagonal scale, comparative scale • Application of scales in architectural drawings
4.	**Plane geometry**
	• Principles of plane geometry, Plane and their types, Principles, Orthographic projection of a point and line, Principles of projections , Method of projections, Quadrant, First angle projection, third angle projection, Orthographic projection of a point, Orthographic projection of a line • How to use planes and projection methods to represent design drawings
5.	**Plane, solid, section and intersection**
	• Orthographic projection of a plane, Types of planes, Traces of planes, Projection of oblique plane, Orthographic projection of solids, Types of solids, Projection of solid in simple position, Projection of solid with inclination, Section of solids, Section of prism, Section of pyramid, Section of cylinder, Section of cone, Intersection of solids, Method of determining the line of intersection, Intersection of two prisms, Intersection of cylinder and cone • Use of projections of solids in architectural drawings.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	Engineering Drawing	P.S. Gill	2006	S.K. Kataria& Sons, New Delhi
2	Architectural Graphics	Francis D.K. Ching	2002	NA
3	Engineering material	N.D.Bhatt, V.M. Panchal	50th	Chartar Publishing House
Important Web Links				
1				
2				

Code: 25BIDCID1204	Digital Design – I	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

CO	Course Outcome Statement	Bloom's Level	PO Mapping	PSO Mapping
CO1	Understand and use Photoshop interface and basic editing tools.	Understand	PO1, PO2, PO3	PSO2
CO2	Apply image retouching and color correction techniques.	Apply	PO1, PO3, PO4	PSO1, PSO2
CO3	Work with layers, masks, and effects for image enhancement.	Evaluate	PO2, PO3, PO4, PO6	PSO2, PSO3
CO4	Use advanced tools for compositing and creative editing.	Analyze	PO3, PO4, PO5, PO6	PSO2, PSO3, PSO4
CO5	Create layouts with text and shapes; export designs for web/print.	Create	PO2, PO3, PO5, PO6, PO9	PSO2, PSO4

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	–	–	**2**	–	–	–	–	–	–	–	–	–	**2**	**1**	**1**	–
CO2	–	–	**2**	–	–	–	–	–	–	–	–	–	**2**	**1**	**1**	–
CO3	**2**	–	–	–	–	–	–	–	–	–	**2**	–	**1**	**2**	**1**	–
CO4	**3**	**2**	–	–	–	–	–	–	–	–	**3**	**2**	**3**	**1**	**1**	**1**
CO5	**1**	**2**	**3**	–	–	–	–	–	–	–	**1**	**2**	**2**	**1**	**1**	**1**
Weight (WT.)	**2**	**2**	**2.33**								**2**	**1.2**	**2**	**2**	**2**	**1**

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Introduction to Photoshop and Image Editing	08
2.	Tools for Editing and Retouching	07
3.	Working with Layers and Effects	07
4.	Advanced Features and Compositing	07
5.	Rendering and Presentation in Photoshop	07

D. DETAILED SYLLABUS

1.	Introduction to Photoshop and Image Editing
	• Overview of Photoshop Interface and Tools • Basic Image Editing: Cropping, Resizing, Rotation • Adjusting Brightness, Contrast, and Levels • Introduction to Photoshop Workspaces and Navigation
2.	Tools for Editing and Retouching

	• Using the Healing Brush, Spot Healing Tool, and Clone Stamp • Red Eye Removal and Simple Blemish Correction • Color Correction and Auto Adjustments • Introduction to Selection Tools (Marquee, Lasso, Magic Wand)
3.	Working with Layers and Effects
	• Understanding Layers and Layer Management • Creating, Grouping, and Organizing Layers • Layer Masks and Adjustment Layers • Applying Basic Effects and Filters
4.	Advanced Features and Compositing
	• Blending Modes and Opacity Settings • Use of Smart Objects and Transform Options • Introduction to Coloring and Shading Techniques • Compositing Multiple Images Seamlessly
5.	Rendering and Presentation in Photoshop
	• Designing Presentations and Visual Layouts • Typography and Text Tool Features • Shapes, Drawing Tools, Grids and Guides • Exporting Files for Web/Print (JPEG, PNG, PDF, PSD) • Exercises and Projects on Photoshop Rendering

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	Adobe Photoshop Classroom in a Book	Conrad Chavez, Andrew Faulkner	Latest Edition	Adobe Press
2	The Adobe Photoshop Book for Digital Photographers	Scott Kelby	Latest Edition	New Riders / Peachpit
3	Photoshop for Interior Designers: A Nonverbal Approach	Suining Ding	1st Edition	Fairchild Books
4	Adobe Photoshop CC for Dummies	Peter Bauer	Latest Edition	Wiley

Code: BUACHM1101	**LANGUAGE AND CONVERSATION**	**1 Credits [LTP: 0-0-2]**

COURSE OUTCOMES:

Course Outcome	At the end of this course, learners will be able to:	Bloom Level
CO1	Understand the communication process and communication theory.	Understand
CO2	Identify different types and barriers to communication.	Apply
CO3	Analyze the various elements of listening and reading skills.	Analyze
CO4	Practice professional conversational skills and deliver effective talks.	Apply
CO5	Engage in the learning and application of good telephonic etiquette.	Apply

A. OUTLINE OF THE COURSE

Unit No.	Title of the unit	Time required for the Unit (Hours)
1.	**Communication Process**	**6**
2.	**Types of Communication & Barriers to Communication**	**5**
3.	**Listening Skills & Reading Skills**	**5**
4.	**Conversation Skills**	**4**
5.	**Telephone Etiquette**	**4**

B. DETAILED SYLLABUS

Unit	Unit Details
1.	**Communication Process**
	● Introduction to the Unit ● What is communication? ● The communication models ● Elements of communication ● Importance of effective communication skills in the business world ● Components of Communication

	● Process, practicing effective communication, good communication Vs effective communication, styles of communication, intercultural communication skills- need for attitude change and benefits ● Conclusion & Real-Life Application
2.	**Types of Communication & Barriers to Communication**
	● Introduction to the Unit ● Verbal Communication ● Non-Verbal Communication ● Written Communication ● Do's and don'ts of each type ● Barriers to effective communication and how to overcome them ● Interaction of verbal and non-verbal communication, talents of a corporate communicator, silence- merits and limitations of each type ● Conclusion & Real-Life Application
3.	**Listening Skills & Reading Skills**
	● Introduction to the Unit ● What is listening ● Various types of listening – Active, passive, selective, listening and note taking, listening and comprehending, listening to speak, ● Principles of good listening ● Techniques to develop effective listening skills ● Reading Skills- skimming, scanning and inferring- common reading techniques, ● Practicing smart reading. ● Conclusion & Real-Life Application
4.	**Conversation Skills**
	● Introduction to the Unit ● Importance of conversation skills ● Features of a good conversation ● Tips to improve Conversation skills ● Importance of questioning skills, techniques to ask right questions- role play situations to practice the same, discussing issues (social, political and cultural), formal and informal conversation ● Conclusion & Real-Life Application
5.	**Telephone Etiquette**
	● Introduction to the Unit ● Basic rules of telephone etiquette- formal vs. informal; tone, pitch and vocabulary related to formal ways of speaking over the phone, leaving voice messages; practice sessions (role plays) ● Persuasive communication: What is persuasive communication, different techniques of persuasive communication, How to negotiate using persuasive communication, the act of negotiation, negotiation style and their contexts, fundamentals of negotiation, common hurdles in negotiation and how to overcome them ● Conclusion & Real-Life Application

C. RECOMMENDED STUDY MATERIAL:

Sr. No	Reference Book	Author	Edition	Publication
1	Effective Communication	John Adir	2003	London: Pan Macmillan Ltd.
2.	The Quick and Easy Way to Effective Speaking	Dale Carnegie	1977	New York: Sterling
3.	Speak with Power and Confidence	Collins, Patrick	2009	New York: Sterling
4.	Common Mistakes in English	Fitikides, T. J.	1984	London: Orient Longman

Code: 25BIDESE1201	**Introduction to AI**	**2.0 Credits [LTP: 1-0-2]**

COURSE OUTCOMES:

CO Code	Course Outcome Statement	Bloom's Level	PO Mapping	PSO Mapping
CO1	Understand the fundamental concepts, history, and relevance of Artificial Intelligence (AI) in design.	Understand	PO1, PO2	PSO1
CO2	Apply AI tools and technologies such as parametric modeling, image generation, and data-driven design in basic architectural workflows.	Apply	PO3, PO5, PO6	PSO2, PSO4
CO3	Analyze how AI techniques like machine learning and computer vision contribute to generative design, space planning, and creative innovation.	Analyze	PO2, PO4, PO6	PSO2, PSO3
CO4	Evaluate the effectiveness and limitations of AI-driven approaches in addressing real-world architectural and design challenges.	Evaluate	PO4, PO6, PO10, PO12	PSO3, PSO4
CO5	Create original AI-integrated design strategies that respond to ethical, social, and environmental considerations in professional practice.	Create	PO3, PO6, PO9, PO12	PSO2, PSO4

MAPPING MATRIX OF CO, PO AND PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	1	–	–	–	–	–	–	–	–	–	–	2	–	–	–
CO2	–	–	2	–	1	2	–	–	–	–	–	–	–	2	–	2
CO3	–	1	–	2	–	2	–	–	–	–	–	–	–	2	2	–
CO4	–	–	–	2	–	2	–	–	–	1	–	1	–	–	2	2
CO5	–	–	2	–	–	2	–	–	1	–	–	1	–	2	–	2
Weighted Avg.	1	1	2	2	1	2	–	–	1	1	–	1	2	2	2	2

OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	AI Fundamentals and Relevance	5
2.	Core AI Techniques Overview	5
3.	AI in Design & Planning	4
4.	AI Tools and Applications	4
5.	Ethics in AI Practice	6

B. DETAILED SYLLABUS

Unit	Unit Details
1.	**AI Fundamentals and Relevance**

	• Introduction to Artificial Intelligence: history, evolution, and key milestones • AI vs. Human Intelligence: understanding the parallels and differences • Relevance of AI in creative disciplines in design • Overview of AI fields: machine learning, robotics, vision, and language • Case studies: how AI is transforming creative industries globally
2.	**Core AI Techniques Overview**
	• Basics of machine learning: supervised, unsupervised, and reinforcement learning • Use of effective prompt to get desire output • Introduction to neural networks and deep learning (simplified models) • Natural Language Processing (NLP) and Computer Vision fundamentals • Data sets and algorithms: the building blocks of AI systems • Design-oriented examples: pattern recognition, style transfer, image analysis • Explore the possibilities of AI for getting better results through analysis of information (Simulation analysis)
3.	**AI in Design & Planning**
	• Generative design and parametric modeling powered by AI • AI in space planning, lighting analysis, and environmental optimization • Smart urban planning and responsive architecture • Use of AI in user behavior prediction and personalization • Role of AI in conceptual and iterative design processes
4.	**AI Tools and Applications**
	• Introduction to AI-based tools: Midjourney, DALL·E, Runway ML, etc. • Integration of AI with CAD/BIM tools (like Revit + Dynamo, Rhino + Grasshopper + AI plug-ins) • Using AI for image generation, visualization, and mood boards • Automating tasks: from floor plans to furniture arrangement • Design exercises using AI tools for creative output
5.	**Ethics in AI Practice**
	• Ethical considerations in AI: bias, transparency, and accountability • Sustainability and the environmental cost of AI computing • AI and authorship: who owns AI-generated designs? • Social impact: inclusion, accessibility, and equity in design with AI • Legal and regulatory frameworks related to AI in creative sectors

C. RECOMMENDED STUDY MATERIAL:

Sr. No	Reference Book	Author	Edition	Publication
1	Architecting Intelligence: AI in Architecture	Phil Bernstein	1st Edition (2022)	RIBA Publishing
2.	Machine Learning for Designers	Patrick Hebron	1st Edition (2016)	O'Reilly Media
3.	Artificial Intelligence: A Modern Approach	Stuart Russell, Peter Norvig	4th Edition (2020)	Pearson Education
4.	Artificial Intelligence for Architects	J. Parrish & H. Chalup	1st Edition (2019)	Springer

Code: 25BUVCVA1201 PERFORMING ARTS
(Global Moves: A Practice Course in Dance) 1 Credit [LTP: 0-0-2]

COURSE OUTCOMES:

Students would be able to:

CO1: Gain practical exposure to Indian and international dance styles, fostering cultural appreciation and diversity.
CO2: Develop physical awareness, rhythm, coordination, and stamina through structured training.
CO3: Learn and perform choreographies across diverse genres, enhancing versatility and adaptability.
CO4: **Enhance stage presence, group dynamics, and body confidence, crucial for performing arts.**
CO5: **Create original dance compositions using acquired vocabularies, culminating in a final polished performance and a comprehensive video portfolio.**

List of Activities

S.No.	Activity
1	Foundations of Movement • Introduction to body alignment, posture, balance, and rhythm • Daily warm-ups, isolations, strength-building, and flexibility training • Introduction to breath and movement synchrony Music and tempo awareness
2	Indian Folk Dance Practices I (dance styles such as Garba, Ghoomar, Bhangra, Kalbeliya)
3	Indian Folk Dance Practices II (dance styles such as Garba, Ghoomar, Bhangra, Kalbeliya)
4	Classical and Semi-Classical Basics I (Bharatanatyam, Kathak, Odissi)
5	Classical and Semi-Classical Basics II (Bharatanatyam, Kathak, Odissi)
6	International Groove Sessions I (Basics of Ballroom, Latin Dances, such as Salsa and Cumbia, Bacchata, Contemporary dance, Hip-Hop)
7	International Groove Sessions II (Basics of Ballroom, Latin Dances, such as Salsa and Cumbia, Bacchata, Contemporary dance, Hip-Hop)
8	International Groove Sessions III (Basics of Ballroom, Latin Dances, such as Salsa and Cumbia, Bacchata, Contemporary dance, Hip-Hop)
9	Choreography Lab 1 • Small group choreographies using Indian and global movement vocabularies • Music selection, improvisation games, transitions Peer-to-peer feedback and refinement
10	Choreography Lab 2 + Performance Skills • Full choreography creation (3–5 min group piece) • Focus on stage presence, projection, entrances/exits Styling, costumes, and syncing with music
11	Rehearsals and Filming • Rehearsal with stage lighting and mock performance runs On-camera performance practice and professional video shoot
12	Final Showcase • Public showing or campus performance • Reflection circle and feedback Video portfolio handed over to students

Code: 25BUVCVH2201 UNIVERSAL HUMAN VALUES AND PROFESSIONAL ETHICS LAB 1.0 Credit [LTP: 0-0-2]

COURSE OUTCOMES:

The student would be able to:

CO1: Identify what is valuable to human beings and what are the aspirations of life.
CO2: Apply the understanding of value education in solving various problems.
CO3: Observe and examine the issues related to harmony in self, society, and nature.
CO4: Focus on physical and mental fitness.
CO5: Apply the knowledge to their own self and in day-to-day life.

LIST OF ACTIVITIES

1	Introduce yourself in detail. What are the goals in your life? How do you set your goals in your life? How do you differentiate between right and wrong? What have been your salient achievements and shortcomings in your life? Observe and analyze them.
2	Now-a-days, there is a lot of talk about many techno-genic maladies such as energy and material resource depletion, environmental pollution, global warming, ozone depletion, deforestation, soil degradation, etc. - all these seem to be manmade problems, threatening the survival of life Earth - What is the root cause of these maladies & what is the way out in opinion? On the other hand, there is rapidly growing danger because of nuclear proliferation, arms race, terrorism, breakdown of relationships, generation gap, depression & suicidal attempts etc. - what do you think, is the root cause of these threats to human happiness and peace - what could be the way out in your opinion?
3	Observe that each of us has the faculty of „Natural Acceptance", based on which one can verify what is right or not right for him. (As such we are not properly trained to listen to our „Natural Acceptance" and may a time it is also clouded by our strong pre-conditioning and sensory attractions). Explore the following: What is Naturally Acceptable" to you in a relationship the feeling of respect or disrespect for yourself and for others? What is „naturally Acceptable" to you - to nurture or to exploit others? Is your living in accordance with your natural acceptance or different from it? 2. Out of the three basic requirements for fulfillment of your aspirations - right understanding, relationship and physical facilities - observe how the problems in your family are related to each. Also, observe how much time & effort you devote to each in your daily routine.
4	1. a. Observe that any physical facility you use, follows the given sequence with time: Necessary and tasteful - unnecessary but still tasteful - unnecessary and tasteless - intolerable b. In contrast, observe that any feeling in you is either naturally acceptable or not acceptable at all. If not acceptable, you want it continuously and if not acceptable, you do not want it

	any moment! 2. List down all your important activities. Observe whether the activity is of „I" or of Body or with the participation of both or with the participation of both „I" and Body. Observe the activities within „i". Identify the object of your attention for different momentss (over a period of say 5 to 10 minutes) and draw a line diagram connecting these points. Try to observe the link between any two nodes.
5	1. Write a narration in the form of a story, poem, skit, or essay to clarify a salient Human Value to the children. 2. Recollect and narrate an incident in your life where you were able to exhibit willful adherence to values in a difficult situation.
6	List down some common units (things) of Nature which you come across in your daily life and classify them in the four orders of Nature. Analysis and explain the aspect of mutual fulfillment of each unit with other orders.
7	Identify any two important problems being faced by the society today and analyze the root cause of these problems. Can these be solved on the basic of natural acceptance of human values? If so, how should one proceed in this direction from the present situation?
8	1. Suggest ways in which you can use your knowledge of Science/Technology/Management etc. for moving towards a universal human order. 2. Propose a broad outline for humanistic Constitution at the level of Nation.
9	**Project:** Every student required to take-up a social project e.g. educating children in needy/weaker section; services in hospitals, NGO's and other such work i.e. social work at villages adopted by respective institute/ college.

II SEMESTER

Code: 25BIDCID2101	HISTORY OF INTERIOR DESIGN-II	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the history of Interior design in the Modernism Era.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** the history of Interior design in the Art Deco and Industrial era.	Apply	PO3	PSO1, PSO3
CO3	**Structure** the history of Interior design of early modernism in Europe and America.	Analyze		PSO1
CO4	**Evaluate** the history of the Ascendancy of modernism.	Evaluate	PO2, PO12	PSO1, PSO2, PSO3
CO5	**Design** on the design parameter from the modernism to late Twentieth Century in the Contemporary world	Create	PO2, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO 4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	1	1	1	-
CO2	-	-	3	–	–	–	–	–	–	–	-	-	1	-	3	-
CO3	-	-	-	–	–	–	–	–	–	–	-	-	3	-	-	-
CO4	-	3	-	–	–	–	–	–	–	–	-	3	1	1	1	-
CO5	-	3	-	–	–	–	–	–	–	–	-	3	1	1	2	-
WT.		**3.00**	**3.00**									**3.00**	**1.40**	**1.00**	**1.75**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	The Modernism Era	04
2.	Art Deco and Industrial era	04
3.	Early modernism in Europe and America	06
4.	Ascendancy of modernism	04
5.	Twentieth Century and Contemporary world	06

D. DETAILED SYLLABUS

Unit	Unit Details
1.	The Modernism Era

	• The Early commissions • The philosophy of F.L Wright • Pioneers of the International Style • Gropius and Bauhaus • The philosophy of Mies Van der Rohe • Philosophy of Le Corbusier and Alvar Aalto
2.	**Art Deco and Industrial era**
	• Art Deco • Expressionism • Industrial Design • Residential Design
3.	**Early modernism in Europe and America**
	• The Netherlands, Germany and Austria, Italy Switzerland, Scandinavia • Architects and Designers in Modern America • Interior Decoration: The reaction to Modernism • Furniture and other Interior Furnishings
4.	**Ascendancy of modernism**
	• Italy • Scandinavia • France and Germany The Netherlands • United States • Furniture and other Interior Furnishings
5.	**Twentieth Century and Contemporary world**
	• Prophets of Design • High-Tech • Post-Modernism • The revival of Tradition • Contemporary Interior design

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Art Deco Complete: The Definitive Guide to the Decorative Arts of the 1920s and 1930s	Alastair Duncan	2009	Harry N. Abrams
2.	Creating Place in Early Modern European Architecture (Visual and Material Culture)	Elizabeth Merrill	1981	Amsterdam University Press
3.	History of Architecture	Sir Banister Fletcher		CBS Publishers & distributors, New Delhi
Important Web Links				
1				
2				

Code: 25BIDCID2102	MATERIAL STUDY - I	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the building materials, its components, uses and techniquesfor construction.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** the concepts of sustainability and identification of material in interior design	Apply		PSO1, PSO2, PSO3
CO3	**Analyze** the critical role of materials and methods for the design and their construction.	Analyze		PSO1, PSO2, PSO3
CO4	**Evaluate** and or create innovation with building materials.	Evaluate	PO2, PO12	PSO1, PSO2, PSO3
CO5	**Incorporate** the latest trends in practice and usage of new technology/materials in design solution.	Create	PO2, PO3, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	-	–	–	–	–	–	–	–	-	-	2	1	2	
CO3	-	-	-	–	–	–	–	–	–	–	-	-	2	2	1	
CO4	-	1	-	–	–	–	–	–	–	–	-	1	1	1	1	
CO5	-	3	2	–	–	–	–	–	–	–	-	3	1	1	2	
WT.		**2.00**	**2.00**									**2.00**	**1.60**	**1.20**	**1.40**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Rocks**	**05**
2.	**Bricks**	**05**
3.	**Stone**	**05**
4.	**Trees**	**05**
5.	**Timber**	**04**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Rocks**

	● Classification of rocks (Igneous, Sedimentary &Metamorphic) ● Geological, physical & chemical classification of rocks ● Sources of stones ● Rock-forming minerals ● Texture or structure of rock & its use in interiors. ●
2.	**Brick**
	● Comparison of brickwork and stonework ● Composition of good brick earth-Alumina, Silica, Lime, Oxide of iron, Magnesia ● Harmful ingredients in brick earth-Lime, Iron pyrites, Alkalies, Pebbles,Vegetation and organic, matter, etc. ● Classification of brick earth-Loamy, mild or sandy clay, Marls, chalky or calcareous clay, Plastic, strong or pure clay, etc. ● Manufacture of bricks, Properties of bricks& qualities of bricks ● Shape, tests, classification &uses of bricks
3.	**Stone**
	● Tests of stones & their uses in interiors. ● Qualities of a good building stone, stone quarrying, dressing of stone ● Deterioration, preservation of stones ● Artificial stones, Forms of artificial stones &Advantages of artificial stones
4.	**Trees**
	● Introduction to the Unit ● Converted Timber, Rough Timber & Standing Timber ● Trees for life their innovative use in interiors. ● Classification of trees (Exogenous trees & Endogenous trees) ● Structure of a tree (Macrostructure & Microstructure)
5.	**Timber**
	● Defects, Qualities, decay and preservation in timber ● Advantages & Disadvantages of timber construction ● Uses of timber in interiors, Method of seasoning &Storage of timber ● Properties, characteristics and application of all the discussed materials in various design components like walls, floors, roofs, staircases, furniture finishes ● Market Survey of these materials.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Engineering Materials	S.C. Rangwala	28th	Charatar Publishing house

2.	Building Materials	P.C. Uarghese	7th	Ashoke K. Ghosh
3.	Elementary Building Construction	Moxley, R. Mitchell		Technical Press Ltd.
4.	K.P. Engineering Materials used in India.	Chowdary	7th	Oxford and IBH, New Delhi,1990
5.	Building Construction Illustrated	Francis D. Ching		Wiley publishers, 2008.
6.	Building Construction: Planning Techniques and Methods of Construction	Bindra, S.P. and Arora	19th	Dhanpat Rai Pub., New Delhi, 2000
Important Web Links				
1				
2				

Code: 25BIDCID2201 INTERIOR DESIGN STUDIO – I 8 Credits [LTP: 2-0-4]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the elements of design and their interdependence using various exploratory 2D and 3D exercises.	Understand	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO2	**Apply** the principles of design and study of form by doing various designing exercises.	Apply	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO3	**Analyze** the understanding of the quality of space by doing various 3D exercises	Analyze	PO2, PO3 ,PO4	PSO1, PSO2, PSO3
CO4	**Evaluating** the usage of space defining elements of design in arts and architecture using exploratory design exercises in 2D & 3 D.	Evaluate	PO2, PO3 ,PO4	PSO1, PSO2, PSO3
CO5	**Create** designs based on the understanding of anthropometrics and translating it in the formof drawing.	Create	PO1, PO2, PO3	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	3	2	-	–	–	–	–	–	–	–	–	2	2	1	
CO2	2	1	3		–	–	–	–	–	–	–	–	1	1	2	
CO3	-	2	2	2	–	–	–	–	–	–	–	–	1	1	1	
CO4	-	1	3	1	–	–	–	–	–	–	–	–	3	2	1	
CO5	2	2	1	-	–	–	–	–	–	–	–	–	2	1	2	
WT.	2.00	1.80	2.20	1.50									1.80	1.40	1.40	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Introduction to Design Process	18
2.	Pre-Design Studies, Site analysis & zoning	18
3.	Ideation and Realization	18

4.	Measure Drawing(Introduction, Measurement, Documentation)	18
5.	Measure Drawing (Drawing and Presentation)	24

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Design Process**
	● Introduction to design problem and brief ● Understanding user needs and program analysis ● Area analysis and spatial requirements ● Basics of market survey and site analysis ● Overview of design stages and how the design process works ● Group discussion on existing exercises and student perspectives
2.	**Pre-Design Studies , Site analysis & zoning**
	● Introduction to the unit and scope ● Importance of case studies, standards, anthropometrics, and literature reviews in the design process ● Identification of furniture and user activities ● Defining design scope, goals, and limitations ● Critical analysis and inference from case studies
3.	**Site Analysis and Zoning**
	● Compilation and documentation of site analysis ● Development of zoning and circulation diagrams ● Use of bubble diagrams and adjacency planning ● Introduction to site planning principles ● Application of design elements and principles in site layout
4.	**Ordering Principles and Design Framework**
	● Understanding and applying ordering principles: axis, symmetry, hierarchy, datum, rhythm, repetition ● Concepts of visual perception: proximity, continuity and closure, figure-ground relationship ● Research and study of various design styles ● Integration of principles in conceptual development ● Summary and conclusion of theoretical design framework
5.	**Ideation and Realization**
	● Introduction to ideation techniques and conceptual design ● Development of concept sketches, plans, sections, elevations, and 3D views ● Model making and physical representation of concepts ● Iterative design: creating and refining design options ● Final presentation drawings and documentation ● Summary and conclusion of the design process

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	FORM, SPACE, AND ORDER	Francis D.K. Ching		
2	Interior Design Reference Manual.	Ballast, David Kent	2010	Belmont, CA: Professional Publications Inc.
3	Rendering with pen and ink ROBERT W. GILL How to design a Chair	Design Museum		

Code: 25BIDCID2202	MATERIAL EXPLORATION DESIGN & MODEL MAKING -II	3 Credits [LTP: 2-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the characteristics of materials and their uses for different modelling types.	Understand	PO1	PSO1, PSO2
CO2	**Apply** basic tools in workshop and their functioning involved and their use with different kind of material.	Apply	PO3, PO5	PSO1, PSO2, PSO3
CO3	**Analyze** the basic need of modelling indifferent areas of prototyping.	Analyze	PO1, PO3	PSO1, PSO2, PSO3
CO4	**Compare** and Contrast various styles on the basis of the contributing factors responsible for their development.	Evaluate	PO3, PO4	PSO1, PSO2, PSO3
CO5	**Develop** any kind of interior spaces in their projects and this will initiate them to create and conceptualize space and showcasing them.	Create	PO1, PO5	PSO1, PSO2

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	-	-	-	-	—	—	—	—	—	—	—	3	2	-	
CO2	-	-	3	-	2	—	—	—	—	—	—	—	2	2	2	
CO3	3	-	3	-	-	—	—	—	—	—	—	—	2	1	2	
CO4	-	-	3	3	-	—	—	—	—	—	—	—	2	1	1	
CO5	3	-	-	-	3	—	—	—	—	—	—	—	3	2	-	
WT.	**3.00**		**3.00**	**3.00**	**2.50**								**2.40**	**1.60**	**1.67**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Exploration I	08
2.	Exploration II	10
3.	Exploration III	10
4.	Fusion	10
5.	Innovation	10

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Exploration I**
	• Introduction of unit

	● Understanding of basic material's behavior, characteristic, properties etc. of various metals (e.g. Wire, Copper, Aluminum and other metals etc. ● Exploration and Manipulation of these materials. ● Conclusion and summary of unit.
2.	**Exploration II**
	● Introduction of unit ● Understanding of basic material's behavior, characteristic, properties etc. of Wood, Cork etc. ● Exploration and Manipulation of these materials. ● Conclusion and summary of unit.
3.	**Exploration III**
	● Introduction of unit ● Understanding of basic material's behavior, characteristic, properties etc. of stone etc. ● Exploration and Manipulation of these materials. ● Conclusion and summary of unit.
4.	**Fusion**
	● Introduction to fusion of materials, Characteristics, Properties etc. techniques of fusion in Interior Design Studio
5.	**Innovation**
	● Creating 3D forms using the various techniques in carpentry by prototyping the IDS furniture.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	Rendering with pen & ink	Robert W. Gill,	1984	Thames & Hudson Publishing
2	A Foundation Course in Drawing: A Complete Program of Techniques and Skills,	Peter Stayner& Terry Rosenberg	2003	Arcturus Publishing Ltd.
3	Color theory: An essential guide to color	Walter Foster Publishing.	2013	Chois Gallery Publishing
4	Designers Color Manual: The complete guide to color theory & application,	Tom Fraser & Adam Banks	2004	Chronicle Books
Important Web Links				
1				
2				

Code: 25BIDCID02203	CARPENTRY & METAL SOLDERING	3 Credits [LTP: 2-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Explain** the principles of material selection for carpentry and metal projects in interior design.	Understand	PO1, PO2	PSO1, PSO2
CO2	**Apply** measurement and layout skills to create accurate templates and designs for interior elements.	Apply	PO1, PO2	PSO1, PSO2
CO3	**Analyze** the structural requirements of interior design elements and choose appropriate carpentry and metalworking techniques to meet those requirements.	Analyze	PO1, PO2	PSO1, PSO2, PSO3
CO4	**Assess** the quality of finished carpentry and metal projects based on industry standards and design specifications.	Evaluate	PO1, PO2	PSO1, PSO2
CO5	**Develop** original design concepts for interior elements integrating carpentry and metal components.	Create	PO1, PO2	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	-	-	-	—	—	—	—	—	—	—	3	2	-	
CO2	3	2	-	-	-	—	—	—	—	—	—	—	2	3	-	
CO3	2	3	-	-	-	—	—	—	—	—	—	—	2	2	2	
CO4	3	2	-	-	-	—	—	—	—	—	—	—	3	2	-	
CO5	3	2	-	-	-	—	—	—	—	—	—	—	2	2	2	
WT.	**2.80**	**2.20**											**2.40**	**2.20**	**2.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Introducing	09
2.	The basics of Furniture Construction and Tools	06
3.	Plywood Construction Techniques	06
4.	Wooden floors and wall Paneling	06
5.	Furniture Model Making	09

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introducing**

	• Introduction of unit • Wood as a building material. • Introducing the techniques of planning, chiseling& jointing in timber to learn the use of hand tools. • Timber– characteristics of good timber, defects, and applications of timber like joints etc. Finishes in timber like flooring, paneling etc. Finishes to timber. • Conclusion and summary of unit.
2.	**The basics of Furniture Construction and Tools**
	• Introduction of unit • Joints (e.g. T-shaped joint, L-shaped joint, overlap joint, Tendon-mortise joint, halved joint, Cogged joint, Housed, notching joint, Notching joint, Bridal joint, Angle or corner joint. Measurement and measurement systems, Furniture Construction: Drawers, Cadenza, dining chairs, sofa, settee, cots detail. Preparation for finishing, Furniture Materials Specifying timber, finishes etc.) • Conclusion and summary of unit.
3.	**Plywood Construction Techniques**
	• Introduction of unit • Plywood as a building material, Layout techniques and machining plans. • Fabrication techniques - stapling, gluing. • Furniture Joinery - screw joinery, nail joinery, Mortise &tendon joints, Dovetail joints, Dowel joints, Edge joints. • Conclusion and summary of unit.
4.	**Wooden floors and wall Paneling**
	• Introduction of unit • Introduction to Types of floors, openings, staircases, roof forms etc., their characteristics, Properties and construction. • Conclusion and summary of unit.
5.	**Furniture Model Making**
	• Exercise involving the design of simple furniture and making a model of the same. Preparation of block models of furniture using materials like wood, boards, leather, fabric, thermo-coal, clay, soap/wax etc.

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	The book of the House,	BENN,		Ernest Benn Limited, London
2	Constructional Drawings & Architectural models	Jannsen,	1973	Karl Kramer Verlag Stuttgart
3	The art of making furniture in miniature	Harry W.Smith,	1982	E.P.DuttorInc., New York,
4	Engineering materials	S. C. Rangwala		Charotar Publishing, Anand
Important Web Links				
1				
2				

Code: 25BIDCID02204	Digital Design-II	3 Credits [LTP: 2-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes(CO):	At the end of this course, learners will be able to:	Bloom's Level	PO Mapping	PSO Mapping
CO1	Understand the role and significance of AutoCAD in architecture, including its interface, tools, and application in design.	Understand	PO1, PO2	PSO1
CO2	Apply basic AutoCAD commands (line, trim, circle, layers) to draft architectural plans, elevations, and sections.	Apply	PO3, PO5, PO6	PSO2, PSO4
CO3	Analyze drawings using layers, blocks, dimensions, and map digitization to structure architectural data effectively.	Analyze	PO2, PO3, PO6	PSO2, PSO3
CO4	Evaluate architectural drawings for accuracy, standard compliance, and software efficiency using AutoCAD tools.	Evaluate	PO4, PO6, PO12	PSO3, PSO4
CO5	Create complete architectural drawings (plans, sections, elevations) following professional standards and CAD conventions.	Create	PO3, PO6, PO12	PSO2, PSO4

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	2	–	–	–	–	–	–	–	–	–	–	2	–	–	–
CO2	–	–	3	–	2	2	–	–	–	–	–	–	–	2	–	2
CO3	–	2	2	–	–	2	–	–	–	–	–	–	–	2	2	–
CO4	–	–	2	2	–	3	–	–	–	–	–	2	–	–	2	2
CO5	–	–	3	–	–	2	–	–	–	–	–	2	–	2	–	2
WT.	2	2	2.5	2	2	2.25	–	–	–	–	–	2	2	2	2	2

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Introduction to AutoCAD	4
2.	Basics of AUTOCAD	12
3.	Map Digitization on AutoCAD	4
4.	Advanced AutoCAD	10
5.	AutoCAD Conclusion	6

D. DETAILED SYLLABUS

Unit	Unit Details

1.	**Introduction to AutoCAD**
	● Introduction to the Unit ● How these software play an important role for an architect, basic fundamentals for these software Basic introduction of Auto CAD To use AutoCAD to make plans, sections and elevations by projecting lines and usage of layers in AutoCAD
2.	**Basics of AUTOCAD**
	● Basic of Auto CAD, basic commands like line, trim, move, copy, circle, etc. To use AutoCAD to make plans, sections and elevations by projecting lines and usage of layers ● Exercise for drafting plans in AutoCAD, Exercise for drafting plans and elevations in AutoCAD, Exercise for drafting sections in AutoCAD
3.	**Map Digitization on AutoCAD**
	● Introduction to the Unit ● To use AutoCAD for rasterizing a scanned map.
4.	**Advanced AutoCAD**
	• Introduction to the Unit • Introduction to Unit, Drafting in layers, altering layer properties, Dimensioning and dimensioning styles, important commands like Blocks, align, xref etc., Tagging in AutoCAD. • Develop various template and drawing format require for professional practice • Conclusion & Summary of the unit.
5.	**AutoCAD Conclusion**
	• Architectural Drawing Standards: Understanding line types, scales, and conventions. • Basic Architectural Plans: Drawing floor plans, sections, and elevations using the software proficiently. • Introduction of 3D scanning tools to generate the drawings of existing structure

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	*AutoCAD 2024 for Beginners*	CADFolks	Latest	Independently Published
2	*Mastering AutoCAD 2021 and AutoCAD LT 2021*	Brian C. Benton, George Omura	1st	Sybex/Wiley
3	*AutoCAD 2024 Instructor*	James Leach, Shawna Lockhart	15th	SDC Publications
4	*Up and Running with AutoCAD 2023: 2D Drafting and Design*	Elliot Gindis, Robert Kaebisch	1st	Elsevier
Important Web Links				

Code: 2 5 BUACHM2208 LANGUAGE AND COMMUNICATION 1 Credits[LTP- 0-0-1]

COURSE OUTCOMES:

Course Outcome	At the end of this course, learners will be able to:	Bloom Level
CO1	Identify common errors in spoken and written communication.	Understand
CO2	Employ day-to-day English vocabulary and language proficiency skills.	Apply
CO3	Use sensible official writing and documenting skills.	Apply
CO4	Measure their personal and Technical Communication Skills	Evaluate
CO5	Produce an efficient way of expression in professional and personal spaces.	Apply

A. OUTLINE OF THE COURSE

Unit No.	Title of the unit	Time required for the Unit (Hours)
1.	**Everyday Conversations**	**8**
2.	**Asking for**	**7**
3.	**Reporting/ Describing**	**7**
4.	**Meeting People**	**7**
5.	**Expressing & Talking about**	**7**

B. DETAILED SYLLABUS

Unit	Unit Details
1.	**Everyday Conversations**
	• Introduction to the Unit • Introducing self/others • Weather • Classroom • Asking about facilities around • Describing a person/thing • Points to cover: Vocabulary, grammar, Construction of sentences, listening • Methodology: Role plays, Videos, Classroom conversation, worksheets

	• Conclusion & Real-Life Application
2.	**Asking for**
	• Introduction to the Unit • Help/ Suggestion/ ideas • Clarification/ Directions • Time/ food • Advice • Uses • Points to cover: Vocabulary, grammar, Construction of sentences, listening • Methodology: Role plays, Videos, Classroom conversation, worksheets • Conclusion & Real-Life Application
3.	**Reporting/ Describing**
	• Introduction to the Unit • Incidences • Personalities • Experiences • Wants/Needs • Intentions • Points to cover: Vocabulary, grammar, Construction of sentences, listening • Methodology: Role plays, Videos, Classroom conversation, worksheets • Conclusion Real-Life Application
4.	**Meeting People**
	• Introduction to the Unit • Greetings • Starting the Conversation • Small talks • Closing the conversation • Points to cover: Vocabulary, Grammar, Construction of sentences, listening • Methodology: Role plays, Videos, Classroom conversation, worksheet • Conclusion & Real-Life Application
5.	**Expressing & Talking about**

	• Introduction to the Unit • Happiness/Displeasure • Preferences • Doubts • Views • Unawareness • Points to cover: Vocabulary, grammar, Construction of sentences, listening • Methodology: Role plays, Videos, Classroom conversation, worksheets Interests • Different Cultures, Clothes, cars, institutes, situations • Schedules, prices • Points to cover: Vocabulary, grammar, Construction of sentences, listening Methodology: Role plays, Videos, Classroom conversation, worksheets • Conclusion & Real-Life Application

C. RECOMMENDED STUDY MATERIAL:

Sr. No	Reference Book	Author	Publication
1.	Speak Now Level I & II	Jack C Richards & David Bohlke	Oxford Press
2.	Business Benchmark, Level –	Guy Brook-Hart	Upper-Intermediate by Cambridge University Press
3.	Practical English Usage	Michel Swan	Oxford University Press
4.	Cambridge Grammar for English: A Comprehensive Guide for Spoken & written English	Ronald Carter, Michael McCarthy	(South Asian edition), Cambridge University Press

Code: 25BIDESE2201	Drawing, Color Study & Graphics – I	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes(CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the medium of drawing and its importance in visualization.	Understand	PO1, PO2, PO5	PSO1, PSO2, PSO3
CO2	**Apply** the understanding towards observation, visualization and visual experience through basic Elements of drawings	Apply	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO3	**Analyze** basic shapes and forms on a two-dimensional surface using Planes.	Analyze	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO4	**Evaluate** basic visual communication skills through interpretation and explanation of art works.	Evaluate	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO5	**Create new** ideas through implementation of natureand object drawing in different mediums and scales.	Create	PO1, PO2, PO4	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	–	–	1	–	–	–	–	–	–	–	3	2	1	
CO2	3	2	2	–	–	–	–	–	–	–	–	–	3	2	2	
CO3	3	2	2	–	–	–	–	–	–	–	–	–	3	2	2	
CO4	3	1	2	–	–	–	–	–	–	–	–	–	3	2	2	
CO5	3	2	–	2	–	–	–	–	–	–	–	–	3	2	2	
WT.	**3.00**	**1.80**	**2.00**	**2.00**	**1.00**								**3.00**	**2.00**	**1.80**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Drawing**	**04**
2.	**Shading and Value**	**05**
3.	**Perspective Drawing**	**05**
4.	**Anatomy and Figure Drawing**	**05**
5.	**Introduction to Color Theory**	**05**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Drawing**
	• Basic drawing tools and materials, line drawing, contour drawing • Line drawing exercises, contour drawings of simple objects
2.	**Shading and Value**
	• Techniques of shading (hatching, cross-hatching, stippling), value scales, light and shadow • Value scales, shaded drawings of geometric shapes • Ability to depict light and shadow, understanding of value in drawing
3.	**Perspective Drawing**

	• One-point, two-point, and three-point perspective Architectural elements: doors, windows, staircases • Perspective drawings of interior and exterior scenes
4.	**Anatomy and Figure Drawing**
	• Basic human anatomy, proportions, gesture drawing • Quick gesture sketches, detailed figure drawings
5.	**Introduction to Color Theory**
	• Color wheel, primary, secondary, tertiary colors, color schemes (complementary, analogous, triadic) • Creating a color wheel, color scheme exercises

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	The Complete Introduction to Drawing: A Professional Course for Every Artist	Barrington Barber	Revised Edition	Arcturus Publishing, 2004
2	Shading and Value Techniques for Artists	Simon Jennings	2nd Edition	Watson-Guptill, 2005
3	Perspective Made Easy	Ernest R. Norling	Reprint Edition	Dover Publications, 1999
4	Figure Drawing for All It's Worth	Andrew Loomis	Reprint Edition	Titan Books, 2011
Important Web Links				
1				
2				

Code: 25BUVCVA2201 **PERFORMING ARTS**
(Global Moves: A Practice Course in Dance) **1 Credit [LTP: 0-0-2]**

COURSE OUTCOMES:
Students would be able to:
CO1: Gain practical exposure to Indian and international dance styles, fostering cultural appreciation and diversity.
CO2: Develop physical awareness, rhythm, coordination, and stamina through structured training.
CO3: Learn and perform choreographies across diverse genres, enhancing versatility and adaptability.
CO4: **Enhance stage presence, group dynamics, and body confidence, crucial for performing arts.**
CO5: **Create original dance compositions using acquired vocabularies, culminating in a final polished performance and a comprehensive video portfolio.**

List of Activities

S.No.	Activity
1	Foundations of Movement • Introduction to body alignment, posture, balance, and rhythm • Daily warm-ups, isolations, strength-building, and flexibility training • Introduction to breath and movement synchrony Music and tempo awareness
2	Indian Folk Dance Practices I (dance styles such as Garba, Ghoomar, Bhangra, Kalbeliya)
3	Indian Folk Dance Practices II (dance styles such as Garba, Ghoomar, Bhangra, Kalbeliya)
4	Classical and Semi-Classical Basics I (Bharatanatyam, Kathak, Odissi)

5	Classical and Semi-Classical Basics II (Bharatanatyam, Kathak, Odissi)
6	International Groove Sessions I (Basics of Ballroom, Latin Dances, such as Salsa and Cumbia, Bacchata, Contemporary dance, Hip-Hop)
7	International Groove Sessions II (Basics of Ballroom, Latin Dances, such as Salsa and Cumbia, Bacchata, Contemporary dance, Hip-Hop)
8	International Groove Sessions III (Basics of Ballroom, Latin Dances, such as Salsa and Cumbia, Bacchata, Contemporary dance, Hip-Hop)
9	Choreography Lab 1 • Small group choreographies using Indian and global movement vocabularies • Music selection, improvisation games, transitions Peer-to-peer feedback and refinement
10	Choreography Lab 2 + Performance Skills • Full choreography creation (3–5 min group piece) • Focus on stage presence, projection, entrances/exits Styling, costumes, and syncing with music
11	Rehearsals and Filming • Rehearsal with stage lighting and mock performance runs On-camera performance practice and professional video shoot
12	Final Showcase • Public showing or campus performance • Reflection circle and feedback Video portfolio handed over to students

Code: 25BUVCVD2201 ENTREPRENEURSHIP 1 Credit [LTP: 0-0-2]

COURSE OUTCOMES:

Students would be able to:

CO1: Apply Business Analysis Techniques to Heritage Management

CO2: Develop strategic plans considering market opportunities, competitive advantages, and long-term sustainability while preserving cultural heritage.

CO3: Evaluate financial feasibility, revenue streams, and funding options like grants and sponsorships tailored for heritage ventures.

CO4: Assess engagement strategies, analyze social, cultural, and economic impacts on local communities, and implement responsible tourism practices.

CO5: Design models balancing economic profitability with cultural preservation, integrating conservation practices, and ensuring ethical management of heritage resources.

LIST OF ACTIVITIES

1.	Real-life case studies of heritage businesses, such as 'Jaipur Darshan Tour' – Amer Fort, Jantar Mantar, Jal Mahal, Albert Hall Museum, or cultural events, and explore the Heritage city for understanding of business models, challenges, and successes.
2.	Provide students with practical experience in assessing heritage sites or businesses to evaluate visitor experience, revenue generation methods, and preservation efforts through on-site assessments.
3.	Conduction of market research and surveys to gather data on visitor demographics, preferences, and trends pertaining to heritage tourism and businesses through market research and surveys.

4.	Facilitate workshops where students perform SWOT Analysis (Strengths, Weaknesses, Opportunities, and Threats) analyses on heritage businesses.
5.	Analysis of financial statements which develop ability to assess the financial health and sustainability of heritage businesses by analyzing their financial statements through practical exercises.
6.	Students role-play interactions with various stakeholders which enhances skill set by role-playing interactions with local communities, government bodies, and heritage preservation organizations during visits for Jaipur Darshan.
7.	Projects Assignment for assessment of the social, cultural, and economic impact of heritage businesses on local communities, considering factors like employment opportunities, cultural preservation, and infrastructure development.
8.	Conduct workshops to develop strategic plans for heritage businesses, considering factors like market positioning, differentiation strategies, and long-term sustainability goals.
9.	Identification of suitable funding sources such as grants, sponsorships, or crowdfunding platforms.
10.	Reflection paper submission on exploring the Mindset of Marwadi Entrepreneurs and its Applicability on New Startups.
11.	Presentation Lab on comprehensive business plans for hypothetical or real heritage ventures, showcasing their analysis, strategies, and recommendations to a panel of experts.

III SEMESTER

Code: 25BIDCID3101	THEORY OF INTERIOR FURNISHING	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the composition, construction, and finishes applied on fabrics for Furnishings.	Understand	PO1, PO3, PO11	PSO1, PSO2, PSO3
CO2	**Apply** on various household linen, their selection and care.	Apply	PO1, PO2 ,PO3, PO11, PO12	PSO1, PSO2, PSO3
CO3	**Analyze** recent trends in furnishings	Analyze	PO1, PO3, PO11	PSO1, PSO3
CO4	**Evaluate** various window treatments in interiors.	Evaluate	PO1, PO3 ,PO11	PSO1, PSO2, PSO3
CO5	**Create** a design solution.	Create	PO1, PO3, PO11	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	–	2	–	–	–	–	–	–	–	1	–	1	1	2	
CO2	1	1	1	–	–	–	–	–	–	–	1	1	1	1	3	
CO3	1	–	1	–	–	–	–	–	–	–	1	–	2	-	2	
CO4	2	–	1	–	–	–	–	–	–	–	2	–	1	1	1	
CO5	1	–	1	–	–	–	–	–	–	–	1	–	1	1	2	
WT.	**1.20**	**1.00**	**1.20**								**1.20**	**1.00**	**1.20**	**1.00**	**2.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Home Furnishings**	**06**
2.	**Commercial Furnishings**	**06**
3.	**Security System**	**04**
4.	**Lighting Fixtures**	**04**
5.	**Other Fixtures**	**04**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Home Furnishings**
	• Introduction of unit

	• Develop a motif suitable for foot mat, window grill, table mat and furnishing materials. Window Treatments – Types of windows, curtains, draperies, hanging curtains, pelmets and valances, accessories, blinds, shades. Cushion, cushion covers, Slip covers, bed linens, and Table linens. • Conclusion and summary of unit.
2.	**Commercial Furnishings**
	• Introduction of unit • Introduction, Venetian Blinds, Modern furnishing materials, Partitions etc. • Conclusion and summary of unit.
3.	**Security System**
	• Introduction of unit • Introduction, Residential security systems, Commercial security Systems. • Conclusion and summary of unit.
4.	**Lighting Fixtures**
	• Introduction of unit • Introduction, types of light fixtures, decorative fixtures etc. • Conclusion and summary of unit.
5.	**Other Fixtures**
	• Introduction of unit • Furniture fixtures, Decorative etc. • Conclusion and summary of unit.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Inside today's home	Faulkner, R.and Faulkner	Latest	Rinebart Winston, New York
2.	Interior Design & Decoration	SherrilWhiton	Latest	Prentice Hall
3.	Introduction to home furnishings	Stepat,D.D	Latest	The macmillancompany,New York
4.	The themes and Hudson manual of textile printing	Storeyjoyce	Latest	London
5.	Colour in interior Design	Jhon,F.P	Latest	Mc Graw Hill Company
Important Web Links				
1				
2				

Code: 25BIDCID3102	MATERIAL STUDY - II	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Memorize** the required physical, chemical and engineering properties of Building Materials.	Remember		PSO1, PSO2, PSO3
CO2	**Demonstrate** the ability to select appropriate materials based on functional and aesthetic considerations for specific interior design projects.	Apply		PSO1, PSO2, PSO3
CO3	**Perform** the different test for quality assurance of Building Materials.	Analyze	PO3	PSO1, PSO2, PSO3
CO4	**Evaluate** the appropriate advanced and modern building materials for various applications.	Evaluate	PO2, PO12	PSO1, PSO2, PSO3
CO5	**Design** and propose innovative solutions by integrating various materials into a cohesive and aesthetically pleasing interior design concept.	Create	PO2, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	-	–	–	–	–	–	–	–	-	-	2	1	2	
CO3	-	-	3	–	–	–	–	–	–	–	-	-	2	2	1	
CO4	-	3	-	–	–	–	–	–	–	–	-	3	1	1	1	
CO5	-	3	-	–	–	–	–	–	–	–	-	3	1	1	2	
WT.		**3.00**	**3.00**									**3.00**	**1.60**	**1.20**	**1.40**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Sand, Mud & Lime**	**05**
2.	**Cement & Coarse Aggregates**	**05**
3.	**Plastic & Polymers**	**04**
4.	**Glass & Ceramic**	**05**
5.	**Wood & it's Derivatives**	**05**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	Sand, Mud & Lime
	● Introduction of unit ● Sources of sand & impurities in sand, processing of sand. Classification of sand- pit, river sand, and their properties Alternate fine aggregate: Stone dust. ● Properties and characteristics of mud used for binding material in masonry ● Different forms of mud construction, Compressed Stabilized earth blocks(CSEB) ● The nature of material, visual and textural properties.

	• Classification and types of lime- Quick & Process of making lime mortar for masonry • Sources of lime and constituents of limestone, Slaking of quicklime • Conclusion and summary of unit.
2.	Cement & Coarse Aggregates
	• Introduction of unit • Mortars, concrete and RCC preparation, • Classification • Conclusion and summary of unit.
3.	Plastic & Polymers
	• Introduction of unit • History, composition, uses, properties etc. Polymerization, classification, resins, fabrication, properties, and uses of plastics. • Conclusion and summary of unit.
4.	Glass & Ceramic
	• Introduction of unit • Classification, composition, properties, types, manufacturing process, treatment of glass, special • varieties of glass etc.
5.	Wood & it's Derivatives
	• Introduction of unit • Veneers, ply boards (advantages and disadvantages of ply boards), industrial timber, industrial form batten, baulk, board, deal, end, hog, plak, pole, quartering, scantling. • Conclusion and summary of unit.

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Engineering Materials	S.C. Rangwala	28th	Charatar Publishing House
2.	Building Materials	P.C. Uarghese	7th	Ashoke K. Ghosh
3.	Building Materials	S.K. Duggal	3rd	New Age International
Important Web Links				
1				
2				

Code: 25BIDCID3201 INTERIOR DESIGN STUDIO – II AND MEASURED DRAWING 8 Credits [LTP: 2-0-4]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** ergonomic and anthropometric aspects of interior design with respect to individual habitats.	Understand		PSO1, PSO2, PSO3

CO2	**Apply** the relationship between scale, volume, activity, sequence of movement, perception, andaesthetic principles within individual spaces.	Apply		PSO1, PSO2, PSO3
CO3	**Analyze** all the dynamics involved within the design problem introduced	Analyze	PO2, PO12	PSO1, PSO2, PSO3
CO4	**Experiment** with the design form, spaces, inter-relationship in all functions, zoning, etc.	Evaluate	PO2, PO3 ,PO11, PO12	PSO1, PSO2 ,PSO3
CO5	**Create** the conceptual idea into drawings and detailed design	Create	PO2, PO3, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	-	–	–	–	–	–	–	–	-	-	3	1	2	
CO3	-	2	-	–	–	–	–	–	–	–	-	2	2	1	1	
CO4	3	2	-	–	–	–	–	–	–	–	3	2	2	1	2	
CO5	-	3	3	–	–	–	–	–	–	–	-	3	3	1	2	
WT.	**3.00**	**2.33**	**3.00**								**3.00**	**2.33**	**2.40**	**1.00**	**1.60**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to the Design Process and Project Brief**	**24**
2.	**Pre-Design Analysis and Spatial Planning**	**16**
3.	**Concept Ideation and Development**	**16**
4.	**Design Finalization and Documentation**	**16**
5.	**Measured Drawing – Site Measurement, Documentation, and Presentation**	**24**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to the Design Process and Project Brief**
	• Introduction to design problem and design thinking • Basics of the design process: user needs, program analysis, area analysis, market survey, site analysis • Understanding and reading a project brief for habitat interior design • Identification of design scope, limitations, and project requirements • Discussion based on existing exercises and students' understanding • Overview of anthropometrics, standards, literature studies, and case studies • Summary and reflection
2.	**Pre-Design Analysis and Spatial Planning**
	• Compilation and analysis of site data • Site zoning, bubble diagram, and circulation diagram • Introduction to spatial planning and site planning • Application of elements and principles of design • Ordering principles: axis, symmetry, hierarchy, rhythm, repetition, datum, figure-ground, continuity, proximity, closure • Research on design styles • Critical analysis of case studies and derivation of inferences • Conclusion of unit
3.	**Concept Ideation and Development**
	• Introduction to ideation and concept generation • Concept drawings and schematic designs (plans, sections, elevations, views) • Design exercises for small-scale habitat interiors • Creation and evaluation of multiple design options • Refinement into final design solutions • Physical and digital modeling techniques • Conclusion and summary of concept development
4.	**Design Finalization and Documentation**
	• Finalization of approved design with complete drawings • Preparation of technical documentation (plans, sections, elevations, views) • Presentation graphics and rendering • Model making and view generation • Final documentation in desired formats (manual/digital) • • Portfolio preparation and review
5.	**Measured Drawing – Site Measurement, Documentation, and Presentation**
	• Introduction to measured drawing and its importance in architectural documentation • Techniques and tools used for accurate site measurement • Thorough measurement of the entire site including architectural details and spatial dimensions • Preparation of scaled drawings based on measured data (plans, sections, elevations, and details) • Final documentation of the site in drawing format • Presentation techniques for showcasing the measured drawings • Conclusion and summary of the unit

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Designs for 20th century Interiors	Fiona Leolie	2000	VH Publications, London
2.	Interior Design; The New Freedom	Barbaralec Diamonstein	1982	Rizzoli International Publications, New York.
3.	Interior Colour by Design	Jonathan Poore	1994	Rockport Publishers

4.	Worldwide Interiors – International Federation of Interior, Architects & Designers.	Rikuyo-Sha	1987	Japan
5.	Time Saver Standards for Interior Design	Joseph De Chiara	Latest	McGraw Hill, New York
Important Web Links				
1				
2				

Code: 25BIDCID3202 FURNITURE DESIGN-I 2 Credits [LTP: : 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** about various styles, systems and products available in the market.	Understand	PO1, PO2	PSO1, PSO2, PSO3
CO2	**Apply** the knowledge of ergonomics, materials, design and working parameters in designing furniture.	Apply	PO4	PSO1, PSO2
CO3	**Analyze** the history of furniture design to blend it with the modern context.	Analyze	PO4	PSO1, PSO2
CO4	**Evaluate** different furniture systems and their construction techniques.	Evaluate	PO3, PO5	PSO1, PSO2
CO5	**Create** Furniture's of their design Projects by applying the all above knowledge.	Create	PO3, PO4, PO5	

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3	-	-	-	—	—	—	—	—	—	—	1	1	1	
CO2	-	-	-	3	-	—	—	—	—	—	—	—	2	2	-	
CO3	-	-	-	3	-	—	—	—	—	—	—	—	1	1	-	
CO4	-	-	3	-	3	—	—	—	—	—	—	—	2	2	-	
CO5	-	-	3	1	2	—	—	—	—	—	—	—	-	-	-	
WT.	**3.00**	**3.00**	**3.00**	**2.33**	**2.50**								**1.50**	**1.50**	**1.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction**	**09**
2.	**History of Furniture**	**09**
3.	**Furniture Systems**	**10**
4.	**Furniture Detailing and Construction**	**10**
5.	**Implementation in Design Problem**	**10**

D. DETAILED SYLLABUS

Unit	Unit Details

1.	**Introduction**
	• Introduction to Furniture Design. • Human factors, engineering and ergonomic considerations. • Principles of universal design and their application in furniture design. • Overview of Furniture categories. Exploration of the idea of furniture, role of furniture in interior design, • Design approaches in furniture design.
2.	**History of Furniture**
	• Awareness of the relationship of design history in order to create new designs in furniture. • An outline of the evolution of furniture from Ancient to present: • Various stylistic transformations. • Furniture designers and movements. • Exploration of furniture in terms of human values, social conditions, technology and design criteria. • Understanding the current design trends and the future visions in the field of furniture design.
3.	**Furniture Systems**
	• Furniture design for various context and spaces – residences, corporate, commercial etc. in terms of Seating design; Storage systems- kitchen cabinets, wardrobes, closets, book shelves, showcases, display systems etc.; • Multi-functional & space-saving furniture; modular approach to furniture design.
4.	**Furniture Detailing and Construction**
	• Introduction to different materials, joinery details and manufacturing methods most frequently adopted in furniture design such as Injection Molding, investment casting, sheet metal work, die casting, blow- molding, vacuum - forming etc.
5.	**Implementation in Design Problem**
	• Exercise oriented by innovative explorations, observation and constrains, to design a furniture, by providing measured drawing – plan, elevation and detailing on full scale, supported by prototype.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	The Encyclopedia of Furniture	Joseph Aronson	Third Edition 1961	
2.	Mid-Century Modern: Interiors, Furniture, Design Details	Bradley Quinn	2006	
3.	Furniture: A Concise History (World of Art)	Edward Lucie Smith	1985	Thames and Hudson
Important Web Links				
1				
2				

Code: 25BIDCID3203	BUILDING SERVICES-I	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the processes involved in developing services and linkages for interior spaces and built environments	Understand		PSO1, PSO2, PSO3
CO2	**Apply** the Electrical Distribution concepts in residential unit, small campus, and commercial buildings.	Apply	PO2, PO3, PO12	PSO1, PSO2, PSO3
CO3	**Analyze** the system of electrical distribution services in interior spaces	Analyze	PO1, PO11	PSO1, PSO2, PSO3
CO4	**Evaluate** the different electrical system as per the space requirements for designed interiors to develop functional solutions.	Evaluate	PO2, PO12	PSO1, PSO2, PSO3
CO5	**Design** lighting service solutions catering to specific briefs, for different interior spaces.	Create	PO2, PO3, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1
CO2	-	3	2	–	–	–	–	–	–	–	-	3	2	1	1
CO3	3	-	-	–	–	–	–	–	–	–	3	-	1	2	1
CO4	-	3	-	–	–	–	–	–	–	–	-	3	1	1	1
CO5	-	3	2	–	–	–	–	–	–	–	-	3	1	1	2
WT.	**3.00**	**3.00**	**2.00**								**3.00**	**3.00**	**1.40**	**1.20**	**1.20**

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Electrical Distribution**	**07**
2.	**Mains and Sub Distribution**	**07**
3.	**Introduction to Lighting Design**	**07**
4.	**Advanced Lighting Design**	**07**
5.	**Layout System**	**08**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Electrical Distribution**

	• Introduction to Electrical Systems, Methods of electricity generation • Electrical Distribution Components, Power generation and transmission • Substations and transformers, Distribution lines and cables • Importance of electrical distribution
2.	**Mains and Sub Distribution**
	• Introduction of unit • Switches and controls, general aspects of design of electrical domestic installations, power and light loads, MCB, MCCB, SFU, ELCB. • Wiring system • Electrical load estimation
3.	**Introduction to Lighting Design**
	• Introduction to Lighting and Vision • Understanding luminance, Illumination, luminous flux, luminous intensity, efficacy, Photometry and Measurement • Effects of Good Lighting, Considerations for Good Lighting including Key factors like brightness, glare, contrast, and diffusion, Economic Issues of Lighting • Laws of Illumination, Core principles of designing effective lighting systems, Different types of lighting like ambient, task, accent, decorative lighting, Various lighting fixtures available in the market and their applications
4.	**Advanced Lighting Design**
	• Daylighting, Advantages of Daylighting, Techniques to maximize natural light entry, Controlling Daylight with Methods like multiple glazing, orientation, and window treatments, Daylighting as an Energy Resource • Artificial Lighting, Understanding the color rendering and temperature of artificial lights, Strategies to combine natural and artificial lighting, Advanced systems like dimmers, sensors and smart lighting controls. • Types of Artificial Lighting, Lamp Types, Lighting Levels, Exploration of lamps available in the market, including cost and technical specifications.
5.	**Layout System**
	• Introduction of unit • Location & Layout system for electrical appliances like lighting, fans, telephones, etc. • Conduit Drawing showing connections to the mains and sub mains unit. • Conclusion and summary of unit.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Electrical Design, Estimating and costing	K. B. Raina, S. K. Bhattacharya		
2.	Electrical wiring, Estimating and costing	S.L. Uppal	2005	Khanna Publishers, New Delhi
3.	Electrical wiring	J. B. Gupta,	2005	S.K. Kataria& Sons, Delhi
4.	Building Services Handbook	Fred Hall and Roger Greeno	9th	Routledge, 2017

5.	National electrical Code (NEC)			
6.	House Wiring Hand Book,			International Copper Promotion Council (India), Power
7.	Guide for Electrical Layout in Residential Building		IS46481 968	Bureau of India Standards, Delhi
Important Web Links				
1				
2				

Code: 25BIDCID3204	Digital and virtual design I	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the role of Sketchup in the ongoing evolution of the practice of Interior design & Architecture	Understand	PO3	PSO1, PSO2, PSO3
CO2	**Integrate** the process of visualizing in depth and Detail in Sketchup.	Apply	PO3	PSO1, PSO2, PSO3
CO3	**Analyze** Sketchup as a vital tool that aids the designer in visualizing, detailing, costing and presenting interior design projects.	Analyze	PO1, PO11	PSO1, PSO2, PSO3
CO4	**Review** the symbiosis of conceptual and technical skills required by a designer, to cope with industry changes, and the impact of new technologies.	Evaluate	PO1, PO2, PO11, PO12	PSO1, PSO2, PSO3
CO5	**Create** an effective, aesthetically pleasing, appropriate, innovative, persuasive 3D	Create	PO1, PO2, PO3, PO11, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	2	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	2	–	–	–	–	–	–	–	-	-	2	1	1	
CO3	2	-	-	–	–	–	–	–	–	–	2	-	1	2	1	
CO4	3	2	-	–	–	–	–	–	–	–	3	2	3	1	1	
CO5	1	2	3	–	–	–	–	–	–	–	1	2	2	1	1	
WT.	**2.00**	**2.00**	**2.33**								**2.00**	**2.00**	**2.00**	**1.20**	**1.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Sketchup**	**09**
2.	**Techniques for creating 3D models**	**09**
3.	**Finalizing 3D models**	**06**
4.	**Introduction to V-Ray for SketchUp**	**06**
5.	**Rendering and Presentation on V-Ray**	**06**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to SketchUp and 3D Modeling Basics**

	● Introduction to SketchUp interface and navigation tools (Orbit, Pan, Zoom) ● Essential drawing and modeling tools: Line, Rectangle, Circle, Push/Pull, Move ● Practice exercises for basic modeling techniques ● Creating simple architectural forms: walls, floors, roofs using Push/Pull and Offset ● Using groups and components for efficient modeling ● Importing and scaling reference images for tracing
2.	**Applying Materials and Visual Enhancements in SketchUp**
	● Applying and editing materials using SketchUp's Materials Library ● Creating custom textures and understanding material mapping ● Significance of material selection in architectural visualization ● Rendering basic scenes within SketchUp to enhance visual representation
3.	**Introduction to V-Ray for SketchUp**
	● Importance of lighting in rendering and architectural presentation ● Exploring V-Ray lights: point lights, spotlights, area lights, IES lights ● Realistic lighting techniques: soft shadows, daylight simulation, artificial lighting ● Practical exercises: experimenting with various lighting setups in architectural scenes
4.	**Advanced Rendering and Presentation with V-Ray**
	● Overview of V-Ray material properties: diffuse, reflection, refraction, bump, displacement ● Creating realistic materials (wood, metal, glass, concrete) using V-Ray Material Editor ● Generate and use of different layouts ● Texture mapping techniques: UV mapping, box and cylindrical mapping ● Material refinement tips: scale, reflectivity, glossiness ● Hands-on assignments: applying materials, lighting, and rendering for final architectural presentation
5.	**SketchUp for Advanced Modeling**
	● Refining complex architectural forms using SketchUp ● Efficient use of components and groups for large-scale projects ● Importing CAD plans and aligning 3D models to real-world site context ● Applying high-quality textures and preparing models for external rendering ● Exporting SketchUp models for use in rendering engines (V-Ray, Lumion, etc.)

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	SketchUp for Dummies	Aidan Chopra and Rebecca Huehls	2nd Edition	For Dummies
2.	SketchUp: A Design Guide for Woodworkers: Complete Illustrated Reference	Joe Zeh	1st Edition	Schiffer Publishing
3.	V-Ray for SketchUp: A Quick-Start Guide	Ciro Sannino	Second Edition	Packt Publishing, 2018
Important Web Links				
1				
2				

Code: 25BIDCID3205	BUILDING CONSTRUCTION - I	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the various types of temporary supporting structures used in different locations in the building industry.	Understand	PO3	PSO1, PSO2, PSO3
CO2	**Apply** the fundamental preparing of drawings and designs based on the acquired knowledge base.	Apply	PO3	PSO1, PSO2, PSO3
CO3	**Analyze** door, window and ventilator details.	Analyze	PO1, PO2, PO11,	PSO1, PSO2, PSO3
CO4	**Articulate** properties and applications of various special materials.	Evaluate	PO1, PO3, PO11	PSO1, PSO2, PSO3
CO5	**Podcast** the details/ arrangements of staircases.	Create	PO1, PO2, PO11, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	2	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	3	–	–	–	–	–	–	–	-	-	2	1	1	
CO3	3	2	1	–	–	–	–	–	–	–	3	2	2	2	1	
CO4	3	-	3	–	–	–	–	–	–	–	3	-	2	1	1	
CO5	1	2	2	–	–	–	–	–	–	–	1	2	2	1	1	
WT.	**2.33**	**2.00**	**2.20**								**2.33**	**2.00**	**2.00**	**1.20**	**1.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Building Structures**	**07**
2.	**Introduction to Partitions**	**07**
3.	**Doors and Windows**	**07**
4.	**Staircase**	**07**
5.	**Hardware and Accessories**	**08**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Brick Masonry**

	• Brick Masonry Types of brick bats &closers, Types of Brick bonds for wall masonry- half, single, one & half thick wall. • Stone Masonry, Types of stone masonry, Random rubble masonry, Ashlar Masonry. • Foundation & Superstructure, General introduction to types of foundation • Lintels in Stone and brick masonry, Various types of arches, Construction of Brick & Stone arches
2.	**Introduction to Partitions**
	• Introduction to Partitions, Functions of Partitions, Materials Used • Types and Systems of Partitions, ex. Fixed Partitions, Demountable Partitions, Sliding and Folding Partitions, Operable Walls, Framed and Frameless Partitions, Glass Partitions • Design and Installation of partitions, Detailing and Specifications, Installation Processes, Jointing and Finishing • Advanced Partition Systems and Innovations like Acoustic Partitions, Fire-rated Partitions, Smart Partitions, Sustainable Partitions.
3.	**Doors and Windows**
	• Introduction to Doors, Windows, and Ventilators, Definition and Importance, Components and Terminology • Doors: Classification by operation: sliding, swinging, folding, revolving, Materials: wood, metal, glass, composite • Windows: Types: fixed, sliding, casement, awning, hopper, bay, bow, skylight, Materials: wood, aluminum, uPVC, steel • Ventilators: Types: fixed, operable, louvered, Materials: wood, aluminum, uPVC, glass
4.	**Staircase**
	• Introduction to Staircases, Staircase Terminology, Types of Staircases, Functions and Importance • Key factors in designing staircases, Ergonomics, Building Codes and Standards • Construction Techniques and Materials, Materials Used, Construction Methods • Advanced Staircase Concepts, Special Staircase Designs
5.	**Hardware and Accessories**
	• Introduction to Hardware and Accessories, Definition and their importance • Hardware for Partitions such as Connectors, fasteners, hinges, brackets, tracks, and supports. • Hardware for Doors and Windows such as Door Hardware: Types of hinges (butt, pivot, concealed), locks and latches (mortise, cylindrical, deadbolt), handles and knobs, closers, panic bars, stops, and Window Hardware: Types of locks, handles, stays, hinges. • Hardware for Staircases such as Balustrades, handrails, newel posts, brackets, fixings and non-slip treads

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Building construction	B.C.Punmia	10th	Laxmi publication
2.	Building construction	S.C.Rangwala	29th	Charatar publication
3.	A Text Book of Building Construction	S.P.Arora, S.P.Bindra	5th	Dhanpat Rai publication
4.	Building construction illustrated	FRANCIS D. K. CHING	3rd	
5.	Building Constructions	Mckay, W.B.	1 to 4 vol.	
Important Web Links				
1				

Code: 25BUAEID3101	**Introduction to IKS**	**2.0 Credits [LTP: 2-0-0]**

COURSE OUTCOMES:

CO Code	Course Outcome Statement	Bloom's Level	PO Mapping	PSO Mapping
CO1	Understand the foundational philosophy and historical context of Indian Knowledge Systems.	**Understand**	PO1, PO2	PSO1
CO2	Identify and classify components of IKS across disciplines like philosophy, science, arts, and language.	**Remember, Analyze**	PO1, PO3	PSO1, PSO3
CO3	Analyze the evolution of Indian thought and contributions of scholars across time periods.	**Analyze**	PO4, PO11	PSO3
CO4	Evaluate the relevance of IKS in contemporary global and educational contexts.	**Evaluate**	PO2, PO6, PO10, PO12	PSO2, PSO3
CO5	Apply IKS principles and methods to develop research questions and solve problems in ethical, wellness, and sustainability contexts.	**Create**	PO3, PO5, PO6, PO9, PO12	PSO2, PSO4

MAPPING MATRIX OF CO, PO AND PSO

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4
CO1	1	1	–	–	–	–	–	–	–	–	–	–	2	–	–	–
CO2	1	–	1	–	–	–	–	–	–	–	–	–	2	–	1	–
CO3	–	–	–	1	–	–	–	–	–	–	1	–	–	–	2	–
CO4	–	1	–	–	1	1	–	–	–	1	–	1	–	2	2	–
CO5	–	–	1	–	1	1	–	–	1	–	–	1	–	2	–	2
Weighted Avg.	1	1	1	1	1	1	–	–	1	1	1	1	2	2	1.5	2

A. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Essence of Indian Knowledge	5
2.	Components of Knowledge Traditions	5
3.	Evolution of Indian Thought	4
4.	IKS in Contemporary Contexts	4
5.	Applying IKS in Research	6

B. DETAILED SYLLABUS

Unit	Unit Details
1.	Essence of Indian Knowledge

	• Define Indian Knowledge Systems (IKS) and its philosophical foundation. • Explore the historical context and cultural importance of IKS. • Discuss the scope and diversity within IKS across disciplines. • Highlight the role of IKS in shaping Indian civilization and identity. • Examine the relevance of IKS in contemporary education and knowledge discourse.
2.	Components of Knowledge Traditions
	• Introduce key classifications: *Shruti*, *Smriti*, *Darshanas*, *Shastras*. • Explore different domains: philosophy, science, arts, medicine, and language. • Study the categorization of knowledge in ancient texts (e.g., *Vedas*, *Upanishads*). • Discuss the distinction between revealed and derived knowledge. • Highlight interdisciplinary links within IKS components.
3.	Evolution of Indian Thought
	• Trace the origins of IKS from Vedic to classical periods. • Examine the evolution of philosophical schools and scientific thought. • Analyze the impact of historical events on the transmission of IKS. • Study key contributors and scholars in various fields of IKS. • Understand the continuity and transformations in IKS traditions.
4.	IKS in Contemporary Contexts
	• Compare IKS with Western and other global knowledge systems. • Explore complementarities and conflicts between IKS and modern science. • Discuss efforts to integrate IKS in contemporary education and research. • Examine case studies where IKS informs sustainable practices and innovation. • Reflect on the challenges and opportunities in validating IKS today.
5.	Applying IKS in Research
	• Apply IKS concepts to ethical and philosophical dilemmas. • Use traditional frameworks to approach health and wellness questions. • Explore IKS-based methods in environmental conservation and sustainability. • Develop basic research questions integrating IKS perspectives. • Present examples of problem-solving inspired by IKS in various domains.

C. RECOMMENDED STUDY MATERIAL:

Sr. No	Reference Book	Author	Edition	Publication
1	The Foundations of Indian Culture	S. Radhakrishnan	Edition, 2016	Oxford University Press
2.	Indian Philosophy: Volume 1	S. Radhakrishnan	2nd Edition, 2014	George Allen & Unwin Ltd.
3.	Knowledge Systems of India: Volumes 1 & 2	Vishwa Bandhu Gupta	1st Edition, 2018	Indira Gandhi National Centre for the Arts (IGNCA)
4.	Science in India: A Historical Perspective	B. V. Subbarayappa	1st Edition, 2008	National Book Trust, India

Code: 25BIDESE3201	Drawing, Color study and graphics-II	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes(CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the scale of drawing and its importance in 2D and 3D visualization.	Understand	PO1, PO2, PO4	PSO1, PSO2, PSO3
CO2	**Apply** the sketching techniques about 3Dvisualization of furniture.	Apply	PO1, PO2	PSO1, PSO2
CO3	**Analyze** basic knowledge of rendering techniques and gradients.	Analyze	PO1, PO2	PSO1, PSO2
CO4	**Evaluating** the process of providing shades and shadow by the use of rendering technique.	Evaluate	PO1, PO2, PO3	PSO1, PSO2, PSO3
CO5	**Build** the new ideas through implementation of nature and object drawing in different medium and scales with rendering techniques.	Create	PO1, PO2, PO3	PSO1, PSO2

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	-	1		–	–	–	–	–	–	–	2	3	2	
CO2	3	1				–	–	–	–	–	–	–	3	2	-	
CO3	2	3			-	–	–	–	–	–	–	–	2	3	-	
CO4	3	2	2	-	-	–	–	–	–	–	–	–	2	2	2	
CO5	3	2	2	-	-	–	–	–	–	–	–	–	3	2	-	
WT.	**2.80**	**2.00**	**2.00**	**1.00**									**2.40**	**2.40**	**2.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Color Mixing and Application**	**04**
2.	**The Psychology of Color**	**05**
3.	**Digital Color Techniques**	**05**
4.	**Graphic Design Basics**	**05**
5.	**Typography**	**05**

D.DETAILED SYLLABUS

Unit	Unit Details
1.	**Color Mixing and Application**
	• Mixing primary colors to create secondary and tertiary colors, tints, tones, and shades • Color mixing charts, painting exercises

2.	**The Psychology of Color**
	• Emotional and psychological effects of color, cultural significance • Research and presentation on color psychology • Insight into how color influences perception and emotion
3.	**Digital Color Techniques**
	• Digital painting tools, color calibration, digital color mixing • Digital paintings using software like Photoshop or Procreate • Skills in applying color theory in digital media
4.	**Graphic Design Basics**
	• Principles of design (balance, contrast, emphasis, movement, proportion, rhythm, unity) • Design composition exercises • Application of fundamental design principles
5.	**Typography**
	• Anatomy of type, font classifications, typographic hierarchy • Creating typographic compositions • Ability to use typography effectively in design

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	Color Mixing Recipes for Oil & Acrylic	William F. Powell	Revised Edition	Walter Foster Publishing, 2004
2	Color Psychology and Color Therapy	Faber Birren	Reprint Edition	Citadel, 2013
3	Digital Color Correction	Dan Margulis	First Edition	Wiley, 2002
4	Graphic Design School: The Principles and Practice of Graphic Design	David Dabner, Sandra Stewart, and Abbie Vickress	Sixth Edition	Wiley, 2020
Important Web Links				
1				
2				

IV SEMESTER

Code: 25BIDCID4101	BASICS OF VAASTU	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** about scientific background and origin of Vaastu.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** for different areas for residential and commercial projects.	Apply		PSO1, PSO3
CO3	**Analyze** Vaastu tips for the projects, progressively and to enable them to represent the different buildingareas through relevant drawings.	Analyze	PO1, PO2, PO11, PO12	PSO2
CO4	**Evaluate** different steps of Vaastu methodology for step-by-step diagnosis of any problem and then applying Vaastu techniques for balancing.	Evaluate	PO2, PO12	PSO1, PSO2, PSO3
CO5	**Create** application of popular Vaastu remedies as well as using household objects as remedies for achieving desired results.	Create	PO1, PO2, PO11, PO12	PSO1, PSO2

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	-	–	–	–	–	–	–	–	-	-	1	-	2	
CO3	3	3	-	–	–	–	–	–	–	–	3	3	-	1	-	
CO4	-	2	-	–	–	–	–	–	–	–	-	2	2	1	1	
CO5	3	3	-	–	–	–	–	–	–	–	3	3	1	2	-	
WT.	**3.00**	**2.67**									**3.00**	**2.67**	**1.50**	**1.25**	**1.33**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction**	**04**
2.	**Interior and Exterior**	**05**
3.	**Orientation of Home**	**05**
4.	**Commercial Vaastu**	**05**
5.	**Remedial Vaastu and Pyramids**	**05**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction**
	• Overview of the history and scientific background of Vaastu • Understanding Life force Energy

	• Importance of Five Elements • Importance of Cardinal Directions • Principles of Vastu shastra • Selection of Land • Veedhi Shoola.
2.	**Space Planning**
	• Space planning as per Vastu Shastra • Building Design - Floor level, Height factors, Verandas, Balconies, Porch, Basements, Sumps & Borings, Boundary Walls, Parking, Security Guard Room, Overhead Tanks, Septic Tanks, Water flow, Mezzanine floors, Plants and Greenery
3.	**Vastu for Residence**
	• Importance of Vastu in residence design • Orientation and planning of Bed Room , Living Room, Kitchen, Dining Room, Bathroom, Drawing room, Study Room, Puja Room, Library, Store room, Doors, Main Entrance, Staircase, Servants room, Guest Room as per Vastu shastra • Interior decoration as per Vastu shastra
4.	**Commercial Vaastu**
	• External and Internal Planning for Offices, Shops, Restaurants, Showrooms, Schools, Hospitals and Other Commercial establishments according to Vastu shastra.
5.	**Remedial Vaastu and Pyramids**
	• Identifying the Vaastu Defects • Rectification of Vaastu Defects in Existing Building • Color therapy • Discussion on different building Plans • Introduction to Power of Pyramids • Application of Pyramids in Vaastu • Remedies with Pyramids

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Golden Rules of Vaastu Shastra -Remedies And Solutions	Suman Pandit		
Important Web Links				
1				
2				

Code: 25BIDCID4102	MATERIAL STUDY – III	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Memorize** the required physical, chemical and engineering properties of Building Materials.	Remember		PSO1, PSO2, PSO3
CO2	**Demonstrate** the ability to select appropriate materials based on functional and aesthetic considerations for specific interior design projects.	Apply		PSO1, PSO2, PSO3
CO3	**Perform** the different test for quality assurance of Building Materials.	Analyze	PO3	PSO1, PSO3
CO4	**Evaluate** the appropriate advanced and modern building materials for various applications.	Evaluate	PO2, PO12	PSO3
CO5	**Design** and propose innovative solutions by integrating various materials into a cohesive and aesthetically pleasing interior design concept.	Create	PO2, PO12	PSO1, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	-	–	–	–	–	–	–	–	-	-	1	1	1	
CO3	-	-	3	–	–	–	–	–	–	–	-	-	2	-	1	
CO4	-	3	-	–	–	–	–	–	–	–	-	3	-	-	2	
CO5	-	3	-	–	–	–	–	–	–	–	-	3	3	-	2	
WT.		**3.00**	**3.00**									**3.00**	**2.00**	**1.00**	**1.40**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Steel**	**04**
2.	**Iron and other Metals**	**04**
3.	**Doors & Windows materials & their Fittings**	**05**
4.	**Paints, Distemper & Varnishes**	**06**
5.	**Recycled and Green Building materials**	**05**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Steel**
	Composition, Properties, anticorrosive measures, mechanical and heat treatment of steel - Market forms of steel: Steel for Reinforcement - Hot rolled bars, CTD Bars, TMT bars , Welded wire fabrics; Steel for Pre stressed concrete; Structural steel; Stainless steel, steel alloys, current developments.

2.	**Iron and other Metals**
	Iron-Brief study on manufacture, composition, properties and uses of cast iron, wrought iron, pig iron. Other metals: Aluminum and its alloys, copper and its alloys.
3.	**Doors & Windows materials & their Fittings**
	● Standard sections – Channel, box, extruded etc. – Connections – Specifications. Door and window hinges like butt hinges, pin hinges, parliament hinges, garnet hinges, counter flap hinges, strap hinges, piano hinges, auto-closing hinges ● Door and window bolts like sliding door bolt, tower bolt, flush bolt ● Door handles- door locks-other fastenings to door and windows like hook and eyes, window stays, door stoppers, door closers, caster wheels, floor springs, pivots, magnetic catchers for wooden cupboards etc. ● Drawings – Steel windows and Doors, Aluminum doors, windows and hand rails, Door and window fittings.
4.	**Paints, Distemper & Varnishes**
	● PAINTS, DISTEMPERS & VARNISHES – types –composition – properties – application, Uses and BIS specifications.
5.	**Recycled and Green Building materials**
	● Introduction of renewable materials, need for recycle materials. ● The logic behind recycling – recycling of steel, wood, glass etc.–estimation of the quality of recycled timber – criteria for recycling of steel, glass etc. ● Green Building concept and materials

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Green Building Materials	SPIEGE	3rd	
2.	Building Materials	P.C. Uarghese	7th	Ashoke K. Ghosh
3.	Building Materials	S.K. Duggal	3rd	New Age International
4.	Engineering material	S.C. Rangwala	Latest	Charotar Publishing House
Important Web Links				
1				
2				

Code: 25BIDCID4201	INTERIOR DESIGN STUDIO - III	8 Credits [LTP: 2-0-4]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the anthropometric aspects of interior design with respect to individual habitats.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** the anthropometric aspects in the space considering scale, volume, and activity, sequence of movement, perception, and aesthetic principles within individual spaces.	Apply		PSO1, PSO2, PSO3
CO3	**Analyze** all the dynamics involved within the design problem introduced	Analyze	PO2, PO12	PSO1, PSO2, PSO3
CO4	**Evaluate** Innovate and Experiment with the design form, spaces, inter-relationship in all functions, zoning, etc.	Evaluate	PO1, PO2 ,PO11, PO12	PSO1, PSO2, PSO3
CO5	**Create** the conceptual idea into drawings and detailed design	Create	PO2, PO3, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	-	–	–	–	–	–	–	–	-	-	3	1	2	
CO3	-	2	-	–	–	–	–	–	–	–	-	2	2	1	1	
CO4	3	2	-	–	–	–	–	–	–	–	3	2	2	1	2	
CO5	-	3	3	–	–	–	–	–	–	–	-	3	3	1	2	
WT.	**3.00**	**2.33**	**3.00**								**3.00**	**2.33**	**2.40**	**1.00**	**1.60**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to design Project**	**20**
2.	**Case Studies**	**20**
3.	**Design Concept**	**20**
4.	**Technical drawings**	**20**
5.	**Layout Plans**	**20**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to design Project**

	• To introduce to students, the design of a building with complexities related to workspaces, services, structures and site planning. • Conclusion and summary of unit.
2.	**Case Studies**
	• Introduction of unit. • Understanding the role & process of a case study. • Choose & select relevant case examples related to your project. • Understanding the principles and standards of workspace and also the anthropometry and ergonomics inside a given space. • Study and analyze an existing workspace w.r.t. the design project.

3.	**Design Concept**
	• Developing concepts for the design project. • To help students evolve their design by understanding relationship between form, function and space. • Explain your design idea with the help of sketches.
4.	**Technical drawings**
	• Plan, Sectional Elevation**,** furniture layout. • Detailed interior drawings. • Make appropriate furniture details.
5.	**Layout Plans**
	• Electrical layout. • Lighting layout. • Plumbing layout • Flooring pattern • Ceiling plan • Wall finishes

E. RECOMMENDED STUDY MATERIAL

Sr. No	Reference Book	Author	Edition	Publication
1.	Designs for 20th century Interiors	Fiona Leolie	2000	VH Publications, London
2.	Interior Design; The New Freedom	Barbaralec Diamonstein	1982	Rizzoli International Publications, New York,
3.	Interior Color by Design	Jonathan Poore	1994	Rockport Publishers
4.	Worldwide Interiors – International Federation of Interior Architects & Designers	Rikuyo- Sha	1987	Japan
5.	Time Saver Standards for Interior Design	Joseph De Chiara	Latest	McGraw Hill, New York
6.	Commercial Space, Office Design and Layout	Cerver FA		Rotovision S A
Important Web Links				
1				
2				

Code: 25BIDCID4202	FURNITURE DESIGN - II	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the importance of furniture design into interior and manufacturing process	Understand		PSO1, PSO2, PSO3
CO2	**Apply** an understanding for advanced furniture systems	Apply		PSO1, PSO2, PSO3
CO3	**Analyze** the different furniture design through case specific examples.	Analyze	PO2, PO12	PSO1, PSO2, PSO3
CO4	**Evaluate** the current design with respect to the case specific examples	Evaluate	PO1, PO2 ,PO11, PO12	PSO1, PSO2, PSO3
CO5	**Create** a prototype of furniture for current project	Create	PO2, PO3, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	-	–	–	–	–	–	–	–	-	-	3	1	2	
CO3	-	2	-	–	–	–	–	–	–	–	-	2	2	1	1	
CO4	3	2	-	–	–	–	–	–	–	–	3	2	2	1	2	
CO5	-	3	3	–	–	–	–	–	–	–	-	3	3	1	2	
WT.	3.00	2.33	3.00								3.00	2.33	2.40	1.00	1.60	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Furniture design**	**08**
2.	**Manufacturing Processes**	**08**
3.	**Advanced Furniture Systems**	**08**
4.	**Furniture Case-studies**	**12**
5.	**Design Problem**	**12**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Furniture design**

	• Introduction of unit • Human factors, engineering and ergonomic considerations: principles of universal design and their application in furniture design, overview of Furniture categories, exploration of the idea of furniture, • Role of furniture in interior design, • Design approaches in furniture design. • Conclusion and summary of unit.
2.	**Manufacturing Processes**
	• Introduction of unit Study case examples of the following types of manufacturing processes:- Injection, Molding, Investment casting, Sheet metal work, Die casting, Blow- molding, Vacuum – Forming.
3.	**Advanced Furniture Systems**
	• Introduction of unit • Furniture design for large scale multi-functional spaces – residences, corporate, commercial etc. in terms of Seating design; Storage systems- kitchen cabinets, wardrobes, closets, book shelves, showcases, display systems etc.; multi-functional & space-saving furniture; modular approach to furniture design. • Conclusion and summary of unit.
4.	**Furniture Case-studies**
	• Introduction of unit • Study innovative & advanced contemporary furniture designs (seating / storage). • Conclusion and summary of unit.
5.	**Design Problem**
	• Introduction of unit • Exercise oriented by innovative explorations, observation and constrains, to design furniture, by providing measured drawing – plan, elevation and detailing on full scale, Conclusion and summary of unit of current design project.

E. RECOMMENDED STUDY MATERIAL

Sr. No	Reference Book	Author	Edition	Publication
1.	The Encyclopedia of Furniture	Joseph Aronson,	3rd edition	The Encyclopedia of Furniture
2.	Mid-Century Modern: Interiors, Furniture, Design Details	Bradley Quinn,	Conran Octopus Interiors	Mid-Century Modern: Interiors, Furniture, Design Details
3.	Furniture Design	Jim Postell,		Furniture Design
4.	Furniture: A Concise History (World of Art)	Edward Lucie-Smith		Furniture: A Concise History (World of Art)
5.	History of Interior Design and Furniture	Robbie.G. Blakemore		History of Interior Design and Furniture
Important Web Links				
1				
2				

Code: 25BIDCID4203	BUILDING SERVICES – II	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Remember** the basics of Building Services (Electrical/plumbing/ HVAC) solutions for interior spaces.	Remember		PSO1, PSO2, PSO3
CO2	**Apply** the processes involved in developing services and linkages for interior spaces and built environments.	Apply	PO1, PO11	PSO1, PSO2, PSO3
CO3	**Analyze** the impact of services on interior spaces.	Analyze	PO2, PO12	PSO1, PSO3
CO4	**Evaluate** various choices for designed interiors in the context of climate and services.	Evaluate	PO2, PO3 ,PO12	PSO1, PSO2, PSO3
CO5	**Create** theories for services and linkages, context, technology, current trends and strategies for services design for built environments.	Create	PO2, PO3 ,PO12	PSO1, PSO3

B. MAPPING MATRIX OF CO, PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	3	-	-	–	–	–	–	–	–	–	3	-	1	2	1	
CO3	-	2	-	–	–	–	–	–	–	–	-	2	1	-	2	
CO4	-	2	2	–	–	–	–	–	–	–	-	2	2	1	1	
CO5	-	3	3	–	–	–	–	–	–	–	-	3	2	-	2	
WT.	**3.00**	**2.33**	**2.50**								**3.00**	**2.33**	**1.60**	**1.33**	**1.40**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to the Plumbing & Drainage System**	**06**
2.	**Principles of HVAC System**	**06**
3.	**Fire Protection Systems**	**08**
4.	**Service Systems**	**08**
5.	**Building Automation Systems**	**08**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to the Plumbing & Drainage System**

	● Introduction of unit, Sources of water and Water purification ● Water conservation, Methods of conveyance of water and water lines product materials ● Requirements of water supply in various buildings, General principles of drainage and drainage lines. ● Connection to out-door drainage system, Basic plumbing requirements & calculations.
2.	**Principles of HVAC System**
	● Introduction to HVAC Systems, Principles of Heating ● Principles of Ventilation, Principles of Air Conditioning ● HVAC System Design, Ductwork and Piping ● Indoor Air Quality (IAQ), HVAC Controls
3.	**Fire Layout Systems**
	● Introduction to Fire Protection Systems, Spread of fire, heat transfer, smoke movement, and fire behavior in different environments ● Fire Detection Systems, Types of Detectors, Alarm Systems, Placement and Spacing ● Fire Suppression Systems, Sprinkler Systems, Fire Extinguishers, Special Suppression System, Standpipe and Hose Systems
4.	**Service Systems**
	● Introduction of unit ● Vertical Transportation Systems like Lifts, Escalators and Moving Walkways ● Pumps, air-conditioning system, computer systems, etc. ● Pipe and plate earthing, lighting protection in buildings. ● Conclusion and summary of unit.
5.	**Building Automation Systems**
	● Fundamentals of Building Automation Systems, BAS Design and Implementation ● HVAC Automation, Lighting Control Systems ● Security and Access Control, Fire Alarm and Life Safety Systems ● Building Energy Management, Intelligent Building Systems

E. RECOMMENDED STUDY MATERIAL

Sr. No	Reference Book	Author	Edition	Publication
1.	Basic plumbing with illustrations	Massey, H.	1st ed. Carlsbad 1994	CA: Craftsman Book Co.
2.	Plumbing design and installation	Ripka, L.	Third edition, 2006	American Technical Publishers.
3.	Sustainable design for interior environments	Winchip, S	1st ed., 2007	New York: Fairchild.
4.	Building Automation: Control Devices and Applications	In Partnership with NJATC	2nd	Cengage Learning, 2012
Important Web Links				
1				
2				

Code: 25BIDCID4204	Digital and virtual design II	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the fundamental principles of 3D modeling, including polygon modeling.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** the proficiency in navigating the 3ds Max interface, including understanding various panels.	Apply	PO3	PSO1
CO3	**Apply** techniques for creating realistic architectural visualizations using 3ds Max, including modeling buildings.	Apply	PO1, PO3 ,PO11	PSO2, PSO3
CO4	**Evaluate** materials accurately to architectural models, including textures.	Evaluate	PO3	PSO1, PSO2, PSO3
CO5	**Develop** the principles of lighting in architectural visualization and will be able to use various lighting techniques to achieve desired effects.	Create	PO1, PO2 ,PO3, PO11, PO12	PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	1	1	1	
CO2	-	-	3	–	–	–	–	–	–	–	-	-	1	-	-	
CO3	3	-	2	–	–	–	–	–	–	–	3	-	-	2	3	
CO4	-	-	3	–	–	–	–	–	–	–	-	-	1	1	1	
CO5	2	3	2	–	–	–	–	–	–	–	2	3	-	1	2	
WT.	**2.50**	**3.00**	**2.50**								**2.50**	**3.00**	**1.00**	**1.25**	**1.75**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to 3ds Max**	**08**
2.	**Basic 3D Modeling Techniques**	**10**
3.	**Advanced 3D Modeling Techniques**	**10**
4.	**Materials and Textures**	**10**
5.	**Lighting Techniques**	**10**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	Introduction to 3ds Max and Basic Modeling

	• Overview of 3ds Max interface and navigation • Understanding viewports and layouts • Creating, selecting, and transforming objects • Introduction to 3D modeling concepts • Creating primitive shapes and basic architectural elements (walls, doors, windows) • Introduction of various 3D tools like Rhino, grasshopper, dynamo etc.
2.	**Editable Geometry and Modeling Techniques**
	• Introduction to Editable Poly and Editable Mesh • Using modifiers like Bend, Twist, Taper, etc. • Boolean operations and their applications • Advanced Editable Poly techniques • Modeling complex architectural forms • Introduction to Spline and NURBS modeling
3.	**Materials, Textures, and UV Mapping**
	• Understanding materials and maps • Applying and editing materials using the Material Editor • Creating custom textures • UV Mapping and Unwrapping Techniques for complex surfaces
4.	**Lighting and Scene Setup**
	• Fundamentals of lighting in 3D scenes • Types of lights: Standard and Photometric • Daylight system and natural lighting integration • Techniques for effective indoor and outdoor lighting setups • Basic scene setup for rendering and visualization
5.	**3ds Max for Interior and Exterior Detailing**
	• Advanced modeling techniques for interior elements (joinery, decor, fixtures) • Creating parametric furniture and architectural features • Scene organization: Layers, groups, and naming conventions • Preparing models for lighting and camera placement • File exchange between SketchUp and 3ds Max (formats like FBX, OBJ)

E. RECOMMENDED STUDY MATERIAL

Sr. No	Reference Book	Author	Edition	Publication
1.	3ds Max Basics for Modeling Video Game Assets: Volume 1	William Culbertson, Michael M. McCarthy	1st	CRC Press, 2013
2.	Autodesk 3ds Max 2021 Basics Guide	Kelly L. Murdock	1st	SDC Publications, 2020
3.	3ds Max 2021 Complete Reference Guide	Kelly L. Murdock	1st	SDC Publications, 2020
4.	Mastering Autodesk 3ds Max 2013	Jeffrey Harper	1st	Sybex, 2012
Important Web Links				
1				
2				

Code: 25BIDCID4205	BUILDING CONSTRUCTION – II	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** properties of basic building materials, construction and their application in interior Spaces	Understand	PO3	PSO1, PSO2, PSO3
CO2	**Apply** the knowledge of how to develop strategies for Interior design taking into account structural, material and functional contexts	Apply	PO3	PSO1, PSO2, PSO3
CO3	**Analyze** the importance & use of eco-friendly materials in interiors.	Analyze	PO1, PO2, PO3, PO11, PO12	PSO1, PSO2, PSO3
CO4	**Evaluate** the weightage of wall finishing in interior design field.	Evaluate	PO1, PO3, PO11	PSO1, PSO2, PSO3
CO5	**Create** a design implementing structural and functional principles for interior architecture and design.	Create	PO1, PO2 ,PO3, PO11, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	2	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	-	3	–	–	–	–	–	–	–	-	-	2	1	1	
CO3	3	2	1	–	–	–	–	–	–	–	3	2	2	2	1	
CO4	3	-	3	–	–	–	–	–	–	–	3	-	2	1	1	
CO5	1	2	2	–	–	–	–	–	–	–	1	2	2	1	1	
WT.	**2.33**	**2.00**	**2.20**								**2.33**	**2.00**	**2.00**	**1.20**	**1.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Advanced Structural Details**	**08**
2.	**Flooring**	**08**
3.	**False Ceiling**	**08**
4.	**Wall finishing**	**06**
5.	**Hardware and Accessories**	**06**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Advanced Structural Details**

	• Wooden walls, flooring and Roofing, Construction details of wood stud framing, wood post • R.C.C. Foundation, Steel Foundation, their respective Construction and footings • Structural Elements like Beams, Columns, Slabs, Trusses etc. • Structural systems (e.g., load-bearing walls, frames, trusses, shells)
2.	**Flooring**
	• Introduction to Flooring, Overview of Flooring Materials, Subfloor Preparation, Basic Installation Techniques • Advanced Flooring Materials and Techniques, Natural Stone Flooring, Wood and Engineered Wood Flooring, Ceramic and Porcelain Tile Flooring, Concrete Flooring • Flooring Design and Applications, Specialty Flooring Applications, Acoustic and Thermal Considerations, Innovations in Flooring
3.	**False Ceiling**
	• Introduction to False Ceilings, Types of False Ceilings, Materials and Components • Installation and Construction Techniques, Planning and Preparation, Installation Process, Technical Considerations, Maintenance and Repair • Applications and Advanced Concepts, Applications in Different Building Types, Integration with Building Systems, Sustainable and Smart Ceilings
4.	**Wall finishing**
	• Introduction to Wall Finishing, Types of Wall Finishes, Surface Preparation, Materials and Tools • Techniques and Application of Wall Finishes, Plastering, Painting, Cladding, Tiling • Advanced Finishing Techniques and Maintenance, Specialized Finishes, Sustainable Finishes, Maintenance and Repair
5.	**Hardware and Accessories**
	• Flooring Hardware and Accessories as Adhesives, grouts, and sealants • False Ceiling Hardware and Accessories as Framework and suspension systems • Wall Finishing Hardware and Accessories as Screws, anchors, adhesives, trims, and moldings, Use of stencils and decals

E. RECOMMENDED STUDY MATERIAL

Sr. No	Reference Book	Author	Edition	Publication
1.	Building construction	B.C.Punmia	10th	Laxmi publication
2.	Building construction	S.C.Rangwala	29th	Charatar publication
3.	A Text Book of Building Construction	S.P.Arora, S.P.Bindra	5th	Dhanpat Rai publication
4.	Building construction illustrated	FRANCIS D. K. CHING	3rd	
5.	Building Constructions	Mckay, W.B.	1to 4 vol.	
Important Web Links				
1				
2				

Code: 25BIDEID4101	LIGHTING AND COLOR IN INTERIORS	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the importance of lighting and color in interiors.	Understand	PO1, PO2, PO3	PSO1, PSO3
CO2	**Apply** the knowledge into different types of design systems.	Apply	PO1, PO2, PO3, PO4, PO6, PO7, PO12	PSO1, PSO2, PSO3
CO3	**Analyze** a significant expansion of vocabulary.	Analyze	PO6, PO8, PO9, PO10, PO12	PSO3
CO4	**Evaluate** lighting system with the current market trends	Evaluate	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO11	PSO1, PSO2, PSO3
CO5	**Create** and implement in the design problem.	Create	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO9, PO11, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	1	1	-	-	-	-	-	-	-	-	-	2	-	1	
CO2	2	2	2	1	-	1	1	-	-	-	-	1	1	2	2	
CO3	-	-	-	-	-	1	-	1	1	2	-	1	-	-	1	
CO4	2	1	2	3	1	1	1	-	-	-	1	-	3	1	1	
CO5	3	3	3	3	1	1	1	-	1	-	1	1	1	1	1	
WT.	**2.00**	**1.75**	**2.00**	**2.33**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**2.00**	**1.00**	**1.00**	**1.75**	**1.33**	**1.20**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Lighting & Color in Interiors**	**07**
2.	**Design Systems**	**07**
3.	**Lighting Systems in Interiors**	**07**
4.	**Color Schemes in Interiors**	**07**
5.	**Design Scheme**	**08**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Lighting and Color in Interiors**
	• Introduction of Unit • Overview of layers of lighting, lighting fixtures and fittings
2.	**Design Systems:**
	• Analysis of various Lighting design and layouts in various commercial spaces, such as Museum, gallery, Retail showroom, Offices, etc. Understanding the implications of electric lighting on place making, spatial ordering, health, and human activities in indoor spaces. • Exploration of current tools, trends, materials, technology and energy efficient designs in lighting systems.
3.	**Lighting Systems in Interiors**
	• Introduction of unit • Exploration of current tools, trends, materials, technology and energy efficient designs in lighting systems. • Conclusion and summary of unit.
4.	**Lighting & Color Schemes in Interiors**
	• Introduction of unit • General aims, lighting needs, calculation of lighting levels, intensity levels, energy and installation costs and other factors, selection of fixtures, location and placing of fixtures. Principle of schematic lighting design and energy codes. • Understand different color schemes and produce design sketches with the help of color rendering: Acrylic colors or water colors implementing different color schemes.. • Conclusion and summary of unit.
5.	**Design Scheme**
	• Introduction of unit • Project oriented for lighting design based on research investigation and conceptual approach with detailing and prototype • Show the light and color effect on design project. • Do Color rendering of the ongoing design project. • Conclusion and summary of unit.

E. RECOMMENDED STUDY MATERIAL

Sr. No	Reference Book	Author	Edition	Publication
1.	Lighting: In Architecture and Interior Design	Wanda Jankowski	1995	pbcintl
2.	Concepts and practice of Architectural Day lighting	Moore Fuller,	Latest	Van Nostrand Reinhold co.
3.	National Lighting Code		2011	Govt. of India
4.	Concepts in Architectural lighting	David Egan. M.	Latest	Mcgraw Hill Book co.
5.	Interior Design Illustrated	Francis.D. Ching& Corky Bingelli	Latest	Wiley publishers.
Important Web Links				
1				
2				

Code: 25BIDEID4102	ENVIRONMENTAL CONTROL IN INTERIORS	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** about Multidisciplinary nature of environmental studies with focus on micro and macro climate with elements of climate	Understand	PO3, PO12	PSO2, PSO3
CO2	**Apply** Multidisciplinary nature of environmental studies, current environmental issues and its interconnectedness on architecture/development.	Apply	PO1, PO4, PO6, PO7	PSO2, PSO3
CO3	**Analyze** current environmental issue and its interconnectedness with various building materials and elements	Analyze	PO1, PO2 ,PO3, PO4, PO6, PO7	PSO1, PSO3
CO4	**Judge** and recommend architectural interventions to minimize current environmental issues.	Evaluate	PO1, PO2 ,PO4, PO6, PO7	PSO1, PSO2, PSO3
CO5	**Create** a design proposal for interior design of a project.	Create	PO1, PO3 ,PO4, PO5, PO6, PO7, PO8, PO11	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	1	-	-	-	-	-	-	-	-	1	-	1	1	
CO2	1	-	-	1	-	1	1	-	-	-	-	-	-	2	1	
CO3	2	1	1	1	-	2	2	-	-	-	-	-	1	-	1	
CO4	2	2	-	1	-	1	3	-	-	-	-	-	2	1	2	
CO5	3	-	3	2	1	2	3	1	-	-	1	-	2	2	3	
WT.	**2.00**	**1.50**	**1.67**	**1.25**	**1.00**	**1.50**	**2.25**	**1.00**			**1.00**	**1.00**	**1.67**	**1.50**	**1.60**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Interior Environment**	**04**
2.	**Vernacular Building Traditions**	**08**
3.	**Energy saving device & systems**	**08**
4.	**Interior Landscaping**	**08**
5.	**Design Exercise**	**08**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction**
	• Introduction to Interior Environment. • Role of Environment in Interior Design. • Evolution of Environmental studies in design, • Environmental Design issues. • Concept of sustainability and sustainable development. • Ecosystem: Structure and function of ecosystem • Energy flow in an ecosystem: food chains, food webs and ecological succession. • Biodiversity and its conservation: genetic, species and ecosystem diversity, Bio geographical classifications, hot-spots of biodiversity, threats to biodiversity, Conservation of biodiversity • Case studies of the innovative ways and means of acquiring environmental control in interiors.
2.	**Environmental Impact of Vernacular Building Traditions**
	• Vernacular building tradition-Meaning & theories. • Determinants of vernacular building tradition: Role of social, cultural, political, economic symbolic, climatic, technological contest in creation of form. • Impact of Vernacular Building traditions on environment. • Illustrated case studies of vernacular settlements/building typology • Historical case Studies, Mud/ Bamboo Architecture. • Principles of Organic Architecture, earth sheltered buildings, water bodies, Energy Efficient Building Design, green architecture, • Bionic Architecture along with case studies of various contemporary designs done with principles of sustainability • Group Assignment: Case study of Passive & Active Design.
3.	**Energy saving device & systems**
	• Energy saving lighting systems, smart windows, active solar& building integrated photovoltaic system, energy efficient HVAC • (Heating, Ventilation and Air-Conditioning)systems, energy storage systems
4.	**Passive & Active Environmental Design**
	• Impacts on ecology due to build environment, Control by design, • historical case Studies, Mud/ Bamboo Architecture, • Principles of Organic Architecture, landscaping; earth sheltered buildings, water bodies, Energy Efficient Building Design, green architecture, • Bionic Architecture along with case studies of various contemporary designs done with principles of sustainability

	• Group Assignment: Case study of Passive & Active Design. • Interior Landscaping and its impact on interior environment. • Enhance a space using Interior Landscaping. • Elements of Interior Landscape
5.	**Design Exercise**
	• Design a mural/product for your current design project using eco friendly (reuse and recycle) materials learnt during the course and create your own innovative solutions for the same.

E. RECOMMENDED STUDY MATERIAL

Sr. No	Reference Book	Author	Edition	Publication
1.	Environmental Studies	ErachBarucha	Latest	UGC
2.	Environmental Studies	Benny Joseph	Latest	Tata Mcgraw Hill
3.	Environmental Studies	R. Rajagopalan	Latest	Oxford University Press
4.	Principles of Environmental Science and Engineering	P. Venugoplan Rao	Latest	Prentice Hall of India.
5.	Environmental Science and Engineering	P. Meenakshi	Latest	Prentice Hall India.
Important Web Links				
1	http://www.energy.gov			
2	https://nptel.ac.in/courses/122102006/			

Code: 25BUAEID4101 **Indian Intellectual Heritage** **2.0 Credits**

COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

	Course Outcome Statement	Bloom's Level	Mapped POs	Mapped PSOs
CO1	Understand the core values, philosophies, and civilizational ethos of Indian intellectual traditions, particularly their influence on design thinking and culture.	**Understand**	PO1, PO6	PSO3

CO2	Apply ancient Indian knowledge (like vastu, traditional crafts, indigenous materials) to design solutions that reflect sustainability, aesthetics, and functionality.	**Apply**	PO2, PO7	PSO1, PSO2
CO3	Analyze how Indian intellectual and cultural traditions have shaped interior environments, spatial planning, and material usage in both domestic and global contexts.	**Analyze**	PO1, PO5, PO6	PSO1, PSO3
CO4	Evaluate the relevance of Indian design principles and philosophies (e.g., harmony with nature, minimalism, symbolism) in addressing contemporary interior design challenges.	**Evaluate**	PO3, PO6, PO7	PSO2, PSO4
CO5	Create concept-based interior design briefs by integrating ancient Indian knowledge systems with modern practices to deliver contextually relevant and innovative solutions.	**Create**	PO2, PO5, PO9	PSO4

MAPPING MATRIX OF CO, PO AND PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	-	-	-	1	3	-	-	-	-	-	-	2	3	3	-
CO2	-	2	1	-	2	-	3	-	-	-	-	-	3	3	2	-
CO3	3	-	-	-	2	2	-	-	-	-	-	-	2	3	3	-
CO4	2	1	2	-	3	3	3	-	-	-	-	-	2	2	3	2
CO5	-	3	3	-	3	-	2	-	3	-	-	-	2	2	3	3
WT. AVG	**2.67**	**2**	**2**	**–**	**2.2**	**2.67**	**2.67**	**–**	**3**	**–**	**–**	**–**	**2.2**	**2.6**	**2.8**	**2.5**

OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	Civilizational Values and Indian Ethos	5
2.	Domains of Ancient Indian Knowledge	5
3.	Education, Society, and Governance	4
4.	Relevance of Indian Wisdom Today	4
5.	IKS for Research and Inquiry	6

DETAILED SYLLABUS

Unit	Unit Details
1.	**Civilizational Values and Indian Ethos**
	• Explore the historical evolution of Indian thought and intellectual tradition. • Study the importance of oral traditions, scriptures, and knowledge transmission methods. • Understand concepts such as *Dharma*, *Rita*, *Shraddha*, and *Satya* as civilizational values. • Analyze the influence of intellectual heritage on ancient Indian social structures. • Reflect on the role of Indian wisdom in promoting harmony, pluralism, and coexistence.
2.	**Domains of Ancient Indian Knowledge**
	• Introduce the classification of Indian knowledge systems: *Shruti*, *Smriti*, *Shastra*. • Study key disciplines: *Vedas*, *Vedanga*, *Ayurveda*, *Jyotisha*, *Natyashastra*, etc. • Highlight contributions in mathematics (zero, decimal, geometry), astronomy, and metallurgy. • Explore classical Indian art, aesthetics, and performing arts in intellectual context. • Examine major schools of thought like *Nyaya*, *Vaisheshika*, *Sankhya*, and *Vedanta*.
3.	**Education, Society, and Governance**
	• Investigate the structure of Gurukul, Nalanda, Takshashila, and indigenous education models. • Understand the philosophical basis of Indian law, ethics, and governance (e.g., *Manusmriti*, *Arthashastra*). • Study the role of intellectual debate (*Shastrartha*) and discourse in shaping society. • Analyze how ancient knowledge influenced urban planning, environment, and architecture. • Explore the relevance of Indian intellectual values in shaping collective identity.
4.	**Relevance of Indian Wisdom Today**
	• Apply Indian philosophical ideas to questions of self, purpose, and well-being. • Explore solutions to sustainability, ethics, and social justice through traditional lenses. • Analyze case studies on traditional knowledge in water conservation, medicine, and education. • Reflect on modern reinterpretations of *Bhagavad Gita*, *Upanishads*, and *Dhammapada*. • Discuss how Indian heritage promotes mindfulness, resilience, and balanced living.
5.	**IKS for Research and Inquiry**
	• Learn research methodologies rooted in Indian traditions: textual study, *tarka*, commentary. • Identify research themes in IKS relevant to fields like architecture, management, health, and ethics. • Analyze primary and secondary sources using critical and comparative techniques. • Formulate a mini research project proposal integrating IKS with a modern discipline. • Present findings through seminars, papers, or creative formats like posters or storytelling.

RECOMMENDED STUDY MATERIAL:

Sr. No	Reference Book	Author	Edition	Publication

1	"Introduction to Indian Knowledge System: Concepts and Applications".	Mahadevan, B., Bhat Vinayak Rajat, Nagendra Pavana R.N.	PHI Learning Private Ltd. Delhi.	2022
2.	Pride of India: A Glimpse into India's Scientific Heritage	Samskrita Bharati	Samskrita Bharati, New Delhi.	2006
3.	"The Wonder that is Sanskrit"	Sampad and Vijay	2011	Sri Aurobindo Society, Puducherry.
4.	Indian Knowledge Systems: Concepts and Applications	Kapil Kapoor	1st Edition, 2022	Indian Institute of Advanced Study (IIAS), Shimla

Code: 25BIDESE4201 **DRAWING, COLOR STUDY & GRAPHICS – III** **1 Credits [LTP: 0-0-2]**

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes(CO):	At the end of this course, learners will be able to:	**Bloom Level**	**PO Mapping**	**PSO Mapping**
CO1	**Remember** foundational drawing techniques, including line work, shading, and composition.	Remember		PSO1, PSO2, PSO3
CO2	**Apply** color theory principles, including the color wheel, color harmony, and the psychological impact of colors.	Apply	PO1, PO3 ,PO11	PSO1, PSO2 ,PSO3
CO3	**Analyze** graphic design principles such as balance, contrast, hierarchy, and alignment into their artwork.	Analyze	PO1, PO11	PSO1, PSO2, PSO3
CO4	**Measure** the process of exploring various artistic styles and mediums to develop a unique personal style	Evaluate	PO1, PO2 ,PO11, PO12	PSO1, PSO2 ,PSO3

CO5	**Build** a portfolio of their work that demonstrates their skills and versatility in drawing	Create	PO3	PSO1, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	–	–	–	–	–	–	-	-	3	1	1
CO2	3	-	3	-	–	–	–	–	–	–	3	-	1	3	1
CO3	2	-	-	-	–	–	–	–	–	–	2	-	2	2	1
CO4	3	2	-	-	–	–	–	–	–	–	3	2	2	2	1
CO5	-	-	2	-	–	–	–	–	–	–	-	-	2	-	2
WT.	**2.67**	**2.00**	**2.50**								**2.67**	**2.00**	**2.00**	**2.00**	**1.20**

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Logo Design**	**04**
2.	**Layout and Composition**	**05**
3.	**Illustration Techniques**	**05**
4.	**Portfolio Development**	**05**
5.	**Final Project and Presentation**	**05**

D. DETAILED SYLLABUS

Unit	Unit Details
	Logo Design
	• Elements of a good logo, branding principles • Designing a logo for a fictional brand • Understanding branding
2	**Layout and Composition**
	• Grid systems, layout design for print and web • Designing layouts for brochures, websites • Creating effective layouts for various media
3.	**Illustration Techniques**
	• Styles of illustration, techniques for digital and traditional illustration • Creating illustrations in different styles • Versatility in illustration techniques and styles
4.	**Portfolio Development**
	• Selecting and presenting work, creating a digital portfolio • Compiling and refining a portfolio • A professional portfolio showcasing the student's best work
5.	**Final Project and Presentation**
	• Integrating drawing, color study, and graphic design into a comprehensive project • Final project, class presentation • Combine skills in a cohesive project, presentation skills

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Logo Design Love: A Guide to Creating Iconic Brand Identities	David Airey	2nd Edition	New Riders, 2014
2.	Grid Systems in Graphic Design: A Visual Communication Manual for Graphic Designers, Typographers and Three Dimensional Designers	Josef Müller-Brockmann	1st Edition (Reprint)	Niggli Verlag, 1996
3.	Illustration: A Theoretical & Contextual Perspective	Alan Male	2nd Edition	Bloomsbury Visual Arts, 2017
4.	Portfolio Design	Harold Linton	4th Edition	W. W. Norton & Company, 2012
5.	Presentation Zen: Simple Ideas on Presentation Design and Delivery	Garr Reynolds	3rd Edition	New Riders, 2019
Important Web Links				
1				
2				

V SEMESTER

Code: 25BIDCID5101	INTERIOR ESTIMATION & COSTING	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the fundamentals of cost and estimation in interior design project.	Understand		PSO1, PSO3
CO2	**Apply** the fundamentals on preparing the bill and cost estimation for architectural drawings.	Apply	PO2, PO3, PO12	PSO2, PSO3
CO3	**Evaluate** and estimating projects and deriving the expenditure.	Analyze	PO2, PO12	PSO1, PSO2, PSO3
CO4	**Assess** art of building construction through specification writing.	Evaluate		PSO1, PSO2
CO5	**Create** approximate estimate, detailed estimate for small scale building projects and low-cost housing.	Create	PO3	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	2	-	2	
CO2	-	3	3	–	–	–	–	–	–	–	-	3	-	2	2	
CO3	-	3	-	–	–	–	–	–	–	–	-	3	1	1	1	
CO4	-	-	-	–	–	–	–	–	–	–	-	-	1	3	-	
CO5	-	-	3	–	–	–	–	–	–	–	-	-	1	1	3	
WT.		**3.00**	**3.00**									**3.00**	**1.25**	**1.75**	**2.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction**	**04**
2.	**Rate analysis**	**04**
3.	**Introduction to Specification**	**04**
4.	**Estimate Formats**	**06**
5.	**Estimation and costing**	**06**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction**

	Estimation – definition, purpose, types of estimate, and procedure for Estimating the cost of work in order to implement an interior design project or to make products related to interior design like furniture, artifacts etc.
2.	**Rate analysis**
	Rate Analysis – definition, method of preparation, Bill of quantity , Tender , Bid for Interior design projects, contract , steps to prepare interior design contract, Purchase order , work order.
3.	**Introduction to Specification**
	Specification – Definition, purpose, procedure for writing specification for the purpose of calling tenders, types of specification. Specification for different item related to interior design project – woodwork for furniture window frames & pelmets, partitions etc., also of materials like steel aluminum glass of various kind. Wall paneling & false ceiling of materials like aluminum, steel, wood, electrical, plumbing, air conditioning & firefighting equipment's.
4.	**Estimate Formats**
	Detailed Estimate – data required factors to be considered, methodology of preparation, Abstract of Estimate, contingencies, labor charges, different methods of estimate for interior design works, methods of measurement of works.
5.	**Estimation and costing**
	Create Detail Estimation of Interior design project ongoing in Interior design studio of the same semester.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Estimation, Costing, Specification and Valuation in Civil Engineering	M. Chakraborti		
2.	Estimating and Costing	Dutta	1983	S. Dutta and Co., Lucknow
Important Web Links				
1				
2				

Code: 25BIDCID5201	INTERIOR DESIGN STUDIO – IV	8 Credits [LTP: 2-0-4]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the design as a 2-dimensional plan as well as a 3-dimensional form and its relevance with the surrounding context	Understand	PO3	PSO1, PSO2, PSO3
CO2	**Apply** the process of researching the design process involved in the existing design forms in various parts of the country and even abroad, themethods adopted by famous designers and experts and its results, and drawing inferences from the studies conducted in order to open the mind for newer innovations and alternatives	Apply	PO3	PSO1, PSO3
CO3	**Analyze** on the basis of design sustainably to improve Design vocabulary for presenting the design on any possible competitive platforms	Analyze	PO1, PO2, PO3, PO11, PO12	PSO1, PSO2, PSO3
CO4	**Evaluate** the various theories and techniques learnt in previous design projects and also develop the final design from the conceptual theme.	Evaluate	PO1, PO2, PO3, PO11, PO12	PSO1, PSO2, PSO3
CO5	**Create** ergonomic and anthropometric aspects of interior design with respect to design problem.	Create	PO1, PO2, PO3, PO11, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	2	-	–	–	–	–	–	–	-	-	3	1	1	
CO2	-	-	2	-	–	–	–	–	–	–	-	-	2	-	2	
CO3	2	2	3	-	–	–	–	–	–	–	2	2	2	2	2	
CO4	3	1	1	-	–	–	–	–	–	–	3	1	2	2	2	
CO5	1	2	3	-	–	–	–	–	–	–	1	2	1	2	2	
WT.	**2.00**	**1.67**	**2.20**								**2.00**	**1.67**	**2.00**	**1.75**	**1.80**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to design Project**	**06**
2.	**Case Studies**	**09**
3.	**Design Concept**	**06**
4.	**Technical drawings**	**06**
5.	**Layout Plans**	**09**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to design Project**
	● To introduce to students, the design of a building with complexities related to hospitality, services, structures and site planning. ● Conclusion and summary of unit.
2.	**Case Studies**
	● Introduction of unit. ● Understanding the role & process of a case study. ● Choose & select relevant case examples related to your project. ● Understanding the principles and standards of different areas of a hospitality space and also the anthropometry and ergonomics inside a given space. ● Study and analyze an existing hotel w.r.t. the design project.
3.	**Design Concept**
	● Developing concepts for the design project. ● To help students evolve their design by understanding relationship between forms, function and space. ● Explain your design idea with the help of sketches.
4.	**Technical drawings**
	● Plan, Sectional Elevation**,** furniture layout. ● Detailed interior drawings. ● Make appropriate furniture details.
5.	**Layout Plans**
	● Electrical layout. ● Lighting layout. ● Plumbing layout ● Flooring pattern ● Ceiling plan ● Wall finishes

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Campus design in India Kanvinde& Miller	Campus design in India Kanvinde& Miller		
2.	Time Saver Standards for Interior Design and Space Planning	Martin Zelnik and Julius Panero	Latest	
Important Web Links				
1				
2				

Code: 25BIDCID5202	WORKING DRAWING-I	3 Credits [LTP: 2-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the basic need of working drawings.	Understand	PO1	PSO1, PSO3
CO2	**Apply** the understanding on site layout with necessary details based on basic drawings	Apply	PO3, PO5	PSO2
CO3	**Analyze** detailed working drawing based on basic drawings	Analyze	PO3, PO5	PSO1, PSO2, PSO3
CO4	**Evaluate** the knowledge of construction, finishes and services for designing details with current market standards.	Evaluate	PO3, PO5	PSO1, PSO3
CO5	**Create** and document the entire set of working drawings with the aim of presenting the same for securing placement for practical training.	Create	PO1, PO5	PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	-	-	-	-	—	—	—	—	—	—	—	2	-	2	
CO2	-	-	3	-	2	—	—	—	—	—	—	—	-	3	-	
CO3	-	-	2	-	3	—	—	—	—	—	—	—	1	1	1	
CO4	-	-	3	-	3	—	—	—	—	—	—	—	1	-	1	
CO5	3	-	-	-	3	—	—	—	—	—	—	—	-	1	1	
WT.	**3.00**		**2.67**		**2.75**								**1.33**	**1.67**	**1.25**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Working plans**	**08**
2.	**Interior working details**	**08**
3.	**Working elevation(s) and sectional details**	**12**
4.	**Submission drawings & details**	**08**
5.	**Other drawings & details in interiors**	**12**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Working plans**
	• Introduction to Poject-1- previous semester apartment design. • Preparation of working drawings of a residence. • Drafting of working plans – floor, terrace & location; sections and elevations of 3BHK
2.	**Interior working details**

	• Introduction to interior working details • Preparation of furniture details, plan, elevation & sections. • Preparation of door and window schedule. • Preparation of kitchen and toilet details.
3.	**Working elevation(s) and sectional details**
	• Demonstration of working elevations and sections. • Drafting/conversion of sections & elevations to working drawings • Drafting of detailed drawing – Plans, Elevations and Sections & detailing of Staircase.
4.	**Submission drawings & details**
	• Lecture on formatting of submission drawings Location Plans, Floor Plans, Elevations, Sections • Lecture on detailed drawings • Elevations, site plan, area calculations, & opening schedules Compiling/formatting of submission drawing
5.	**Other drawings & details in interiors**
	• Drafting of detailed drawing – Plans, Elevations, Sections and Details of Boundary wall • Drafting of detailed drawing – Plans, Elevations, Sections and Details of Washroom(s) • Drafting of detailed drawing – Plans, Elevations, Sections and Details of Kitchen
	PROJECT 2 –Design Project of Current Semester
	• Preparation of current semester Design drawings according to exercise done under Project 1 • Column and grid placement in the final plans • Drafting/conversion of floor plans to working plans • Drafting/conversion of sections & elevations to working drawings • Compiling/formatting of submission drawing including location plan, floor plans, sections, elevations, site plan, area calculations, & opening schedules

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Working Drawing Handbook	Keith Syles	1998	Architectural Press Oxford
2.	Arch. Drawing and Light Construction	Edward J. Muller, James G. Gausett	1999	Grav – Prentice Hall, New Jersey
3.	Unified Building Regulation, Rajasthan		2017	Jaipur Development Authority
4.	Working Drawing Manual (P/L Custom Scoring Survey)	Fred A. Stitt	1998	McGraw- Hill Education
5.	The Professional Practice of Architectural Working Drawings	OsamuA.Wakita, Richard M. Linde & Nagy R. Bakhoum	4th edition (2011)	John Wiley & Sons
6.	Architectural Working Drawings	Ralph W. Liebing	3rd Edition (1990)	John Wiley & Sons
Important Web Links				
1				
2				

Code: BIDCID5203	BUILDING SERVICES – III	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the importance of acoustics in architecture.	Understand	PO3	PSO1, PSO2, PSO3
CO2	**Apply** various terminologies like RT, echo, noise rating, etc. and their values for different materials along with their application	Apply	PO2, PO3, PO12	PSO1, PSO3
CO3	**Analyze** the concept of noise and how it affects any interior/exterior space along with understanding the means and methods of reducing it to the maximum possible extent.	Analyze	PO3	PSO1, PSO2, PSO3
CO4	**Evaluate** the various acoustical materials and their properties	Evaluate	PO1, PO3, PO11	PSO1, PSO2, PSO3
CO5	**Create** and implement the knowledge gained in practical examples for achieving maximum efficiency of acoustics.	Create	PO3	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	3	–	–	–	–	–	–	–	-	-	2	1	1	
CO2	-	3	2	–	–	–	–	–	–	–	-	3	1	-	3	
CO3	-	-	3	–	–	–	–	–	–	–	-	-	1	3	1	
CO4	3	-	2	–	–	–	–	–	–	–	3	-	1	1	1	
CO5	-	-	3	–	–	–	–	–	–	–	-	-	1	1	2	
WT.	**3.00**	**3.00**	**2.60**								**3.00**	**3.00**	**1.20**	**1.50**	**1.60**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Acoustics**	**06**
2.	**Terminologies in Acoustics**	**09**
3.	**Noise**	**06**
4.	**Acoustical Materials**	**06**
5.	**Acoustical design process**	**09**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Acoustics**

	• Introduction to acoustics • Physics of sound, behavior of sound in an enclosed space. • Criteria for acoustic environment- location of building, geometry and shape, • Identification of Acoustics terminology, components and typology of acoustical treatments.
2.	**Terminologies in Acoustics**
	• Basic definitions • Basic understanding of echo, reverberation time, • sound absorption coefficient, • Noise rating curves. • Detailed study of the calculations of reverberation time, frequency, etc.
3.	**Noise**
	• Noise • Noise- physiological and psychological effects, transmission loss, flanking of sound, • Structure borne sound and noise from different mechanical equipments, • Noise control techniques and their applications, • Detailed study of types of noise and noise effect on human and its surroundings.
4.	**Acoustical Materials**
	• Acoustical Materials • selection of acoustic materials, construction details and fixing. • Advanced study of acoustical treatments, material specifications and study with case studies and market surveys.
5.	**Acoustical design process**
	• Acoustical design process • Predictions of acoustical conditions, • Approach to designing enclosure for predetermined acoustical responses, corrective of existing deficient enclosures, • Introduction to sound reinforcing system- amplification and distribution.

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	National Building Codes		2005	Bureau of Indian Standards
Important Web Links				
1				
2				

Code: BIDCID5204	Digital and Virtual Design II	3 Credits [LTP: 2-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the basic animation skills to create walkthroughs and fly throughs of architectural designs.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** 3ds Max with other software commonly used in architectural design workflows, such as AutoCAD and Revit.	Apply	PO3	PSO1
CO3	**Analyze** the software through hands-on projects, students will apply their 3ds Max skills to real-world architectural design scenarios.	Analyze	PO1, PO3, PO11	PSO2, PSO3
CO4	**Evaluate** the process of critical thinking skills by analyzing design problems and finding creative solutions through the application of 3ds Max tools and techniques.	Evaluate	PO3	PSO1, PSO2, PSO3
CO5	**Create** design ideas using 3ds Max visualizations, fostering teamwork and effective communication skills.	Create	PO1, PO2, PO3, PO11, PO12	PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	1	1	1	
CO2	-	-	3	–	–	–	–	–	–	–	-	-	1	-	-	
CO3	3	-	2	–	–	–	–	–	–	–	3	-	-	2	3	
CO4	-	-	3	–	–	–	–	–	–	–	-	-	1	1	1	
CO5	2	3	2	–	–	–	–	–	–	–	2	3	-	1	2	
WT.	**2.50**	**3.00**	**2.50**								**2.50**	**3.00**	**1.00**	**1.25**	**1.75**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Cameras, Animation, and Rendering Basics**	**06**
2.	**Advanced Rendering Techniques and Post-Processing**	**06**
3.	**Project Workflow and Software Integration**	**09**
4.	**Introduction to Rendering Tools & Workflow**	**06**
5.	**Final Project and Presentation**	**09**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Cameras, Animation, and Rendering Basics**

	• Setting up cameras: Free and Target Cameras • Camera settings and properties • Basic animation principles • Creating camera animations for architectural walkthroughs • Introduction to rendering concepts • Setting up and configuring render settings • Overview of rendering engines: Scanline, Mental Ray, and Arnold
2.	**Advanced Rendering Techniques and Post-Processing**
	• Global Illumination and Final Gather • Ambient Occlusion and HDRI Lighting • Rendering effects: Depth of Field, Motion Blur • Batch rendering techniques • Post-processing basics using Photoshop or After Effects
3.	**Project Workflow and Software Integration**
	• Importing and exporting files • Integration with AutoCAD and 3D Max • Best practices for file management and workflow optimization • Team collaboration techniques for visualization projects
4.	**Introduction to Rendering Tools & Workflow**
	• Overview of V-Ray, Arnold, and Lumion for architectural rendering • Workflow integration: modeling to rendering pipeline • Setting up cameras, lights, and environment for photorealistic output • Introduction to render settings and optimization for quality vs. speed • Exporting final renders for presentation and portfolio development
5.	**Final Project and Presentation**
	• Project planning and concept development • Creating a comprehensive architectural visualization • Incorporating modeling, texturing, lighting, animation, and rendering • Final presentation and peer/instructor critique session

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	3ds Max Modeling for Games: Insider's Guide to Game Character, Vehicle, and Environment Modeling	Andrew Gahan	2nd	Focal Press, 2010
2.	Introducing Autodesk 3ds Max 2013	Dariush Derakhshani, Randi L. Derakhshani	1st	Sybex, 2012
3.	3ds Max Projects: A Detailed Guide to Modeling, Texturing, Rigging, Animation and Lighting	Matt Chandler	1st	3DTotal Publishing, 2013
4.	3ds Max 9 Bible	Kelly L. Murdock	1st	Wiley, 2007
Important Web Links				
1				
2				

Code: 25BIDEID5201	HERITAGE INTERIORS	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Apply** knowledge of heritage in modern day context through different space making elements.	Apply	PO1	PSO1, PSO2, PSO3
CO2	**Understand** about various region wise cultural impact on the elements of interior design.	Understand	PO1, PO2, PO4	PSO1
CO3	**Research** and document existing interior elementsin context of heritage.	Analyze	PO1, PO3	PSO1, PSO2, PSO3
CO4	**Understand** different construction techniques, and art and craft involved in making spaces of heritage interiors.	Understand	PO4	PSO1, PSO2, PSO3
CO5	**Design** a space in modern context using the knowledge of heritage	Create	PO3, PO4	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	-	-	-	-	—	—	—	—	—	—	—	2	2	1	
CO2	2	2	-	2	-	—	—	—	—	—	—	—	3	-	-	
CO3	3	-	3	-	-	—	—	—	—	—	—	—	1	2	1	
CO4	-	-	-	2	-	—	—	—	—	—	—	—	1	1	1	
CO5	-	-	3	3	-	—	—	—	—	—	—	—	1	2	2	
WT.	**2.67**	**2.00**	**3.00**	**2.33**									**1.60**	**1.75**	**1.25**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to heritage interiors**	**06**
2.	**Cultural Impact of heritage interiors**	**06**
3.	**Lighting Systems in Interiors**	**06**
4.	**Color Schemes in Interiors**	**09**
5.	**Design Scheme**	**09**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to heritage interiors**

	• Introduction of unit • Broad overview about the Indian heritage since Indus valley civilization till post-colonial era. • Different elements of heritage interiors. • Design in historical context.
2.	**Space planning of heritage buildings**
	• To study about various region wise cultural impact on the elements of interior design. • Contextualization of spaces in buildings • Impact of climate, region and culture on space planning
3.	**Traditional design technology**
	• To study the design technology used during the older times. • Design and technology of heritage listed buildings. • Wall, floor, windows etc. treatments during heritage context. • Heritage conversions.
4.	**Research Study**
	• Research and document existing interior elements in context of heritage. • Identify different construction techniques, and art and craft involved in making space.
5.	**Documentation**
	• Documentation of the researched area with understanding of the historical context with present scenario.

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Adaptive Reuse of the Built Heritage: Concepts and Cases of an Emerging Discipline	Bie Plevoets, Koenraad Van Cleempoel	2019	pbcintl
Important Web Links				
1				
2				

Code: 25BIDEID5202	PRODUCT DESIGN	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the elements of Interior Design & its impact on the interior layout and understand the spatial relationships according to the function of the space by applying principles of space planning in an interior layout.	Understand	PO1	PSO1, PSO2, PSO3
CO2	**Acquire** knowledge about anthropometrics of a given space	Understand	PO1, PO2, PO4	PSO1
CO3	**Design** a chosen furniture by analyzing the different materials and produce detailed drawings	Create	PO1, PO3	PSO1, PSO2, PSO3
CO4	**Evaluate** the importance of clients, brief and innovation in design.	Evaluate	PO4	PSO1, PSO2, PSO3
CO5	**Design** a product considering universal design.	Create	PO3, PO4	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4		PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	-	-	-		-	–	–	–	–	–	–	–	2	2	1	
CO2	2	2	-	2		-	–	–	–	–	–	–	–	3	-	-	
CO3	3	-	3	-		-	–	–	–	–	–	–	–	1	2	1	
CO4	-	-	-	2		-	–	–	–	–	–	–	–	1	1	1	
CO5	-	-	3	3		-	–	–	–	–	–	–	–	1	2	2	
WT.	**2.67**	**2.00**	**3.00**	**2.33**										**1.60**	**1.75**	**1.25**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Product Design**	**06**
2.	**Anthropology & Product design**	**06**
3.	**Aspects of Product Design**	**09**
4.	**Product Design**	**09**
5.	**Industrial product design. Element design for differently abled**	**06**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Product Design**

	I A- Introduction to Product Design, Importance, Definitions, History, Elements, Relevance, Role of Product designers **I B- Designing a daily use small product. E.g.: Calendar, cup, stationary organizer, coasters, etc.**
2.	**Anthropology & Product design**
	II A - Human factors influencing product design and its application - Anthropology, activities, nature, behavior and effects - Physical environment, relationship between man and machine - Information processing and Control system in Humans - Application of anthropometry in response to environment **II B- Designing a daily use object applying human activities e.g.: Chair, table etc.**
3.	**Aspects of Product Design**
	III A- Understanding Human sensory system and its mechanism, Arrangement of physical space - Visual sensory, processing, qualitative and quantitative aspects - Alphanumeric, symbols & codes. **III B- Design a visual sensory based product**
4.	**Product Design**
	IV A- Design principles and elements applying specific criteria based on requirements or client brief, - Using innovative Material and construction technology and environment friendly - Flexible, versatile and user-friendly product designing **IV B- Designing a Multi utility product.**
5.	**Industrial product design. Element design for differently abled**
	V A- Introduction to Industrial design - Introduction to universal design in product - Understanding design for differently abled **V B- Designing Industrial design product considering universal design.**

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	An introduction to Art, Craft, Technique, Science & Profession of Interior Design	A Kasu		
2	Handbook of Speciality elements in Architecture	McGrawhill Co. USA	1982	
3	Time Saver standards for Interior Design			
4	An invitation to Design	Helen Maric Evans		
5	Interior design illustrated	D.K. Ching		
Important Web Links				
1				
2				

Code: BUACHM5230	CORPORATE COMMUNICATION SKILLS	Credits [LTP: 0-0-1]

COURSE OUTCOMES:

Course Outcome	At the end of this course, learners will be able to:	Bloom Level
CO1	Produce effective verbal communication skills to articulate ideas, strategies, and information clearly and confidently in a corporate setting.	Apply
CO2	Apply active listening techniques to enhance understanding and build stronger relationships with colleagues, clients, and stakeholders.	Apply
CO3	Present proficiency in written communication by creating persuasive business documents, reports, and professional emails.	Apply
CO4	Employ non-verbal communication strategies to enhance presentations, negotiations, and interpersonal interactions in a corporate environment.	Apply
CO5	Analyze and navigate cross-cultural communication challenges to foster inclusivity and successful collaboration in a global business context.	Analyse

A. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time Required for the Unit (Hours)
1	Self-Assessment and Goal Setting and Effective Communication Skills	**3**
2	Resume Writing, Cover Letter and Interview Preparation	**3**
3	Job Search Strategies	**3**
4	Professional Etiquette and Workplace Skills	**3**
5	Continuous Learning and Career Development	**3**

B. DETAILED SYLLABUS

Unit	Title of the Unit
1.	**Self-Assessment and Goal Setting and Effective Communication Skills**

	• Understanding personal strengths, weaknesses, and interests • Identifying long-term career goals • Setting short-term goals for employability enhancement • Verbal communication skills: speaking clearly, active listening, and non-verbal cues • Written communication skills: composing professional emails, memos and reports
2.	**Resume Writing, Cover Letter and Interview Preparation**
	• Crafting a targeted resume: structuring, formatting, and highlighting relevant skills and experiences • Writing a compelling cover letter: customizing for specific job applications • Understanding different interview formats (phone, video, in-person) • Researching the company and position • Practicing common interview questions and developing effective responses • Enhancing body language and non-verbal communication during interviews
3.	**Job Search Strategies**
	• Exploring various job search methods: online job portals, networking, career fairs, and social media • Developing an effective job search plan • Creating and optimizing online professional profiles (LinkedIn, etc.)
4.	**Professional Etiquette and Workplace Skills**
	• Understanding workplace norms and etiquette • Developing effective teamwork and collaboration skills • Time management and organization skills • Professionalism in the workplace: dress code, punctuality, and workplace ethics
5.	**Continuous Learning and Career Development**

	• Cultivating a growth mindset and embracing continuous learning • Exploring professional development opportunities (workshops, webinars, certifications) • Developing a career advancement plan

C. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	The Essentials of Corporate Communication	Cees B.M. van Riel, Charles J. Fombrun	2021	Routledge
2.	Effective Business Communication	Herta A. Murphy, Herbert W. Hildebrandt, Jane Thomas	2020	McGraw-Hill Education
3.	Corporate Communication: A Guide to Theory and Practice	Joep Cornelissen	2017	SAGE Publications Ltd.

Code: 25BIDESE5201 INTERIOR DESIGN PHOTOGRAPHY 2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	Understanding the contributions of photography to enhancing the aesthetics of architecture and to develop proficiency in this art using modern photographic techniques.	Understand	PO5, PO12	PSO1, PSO2, PSO3
CO2	Apply the equipment, processes, and procedures necessary for the photography of building exteriors and interiors, dusk/night and night architectural landscapes, and construction progress	Apply	PO10	PSO1, PSO3
CO3	Analyze concepts of architectural lighting, heightened sensitivity to light, ability to use High Dynamic Range (HDR), multiple exposures to create dramatic architecture/interior images without additional professional lighting, to control of Parallax	Analyze		PSO1, PSO2, PSO3

CO4	Evaluate the Advance photography for Interior Design.	Evaluate	PO3, PO5, PO8, PO10	PSO1, PSO2, PSO3
CO5	Create a collage of photography for the portfolio	Creating	PO1, PO10	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
CO1	-	-	-	-	1	-	-	-	-	-	-	1	2	1	1
CO2	-	-	-	-	-	-	-	-	-	1	-	-	1	-	3
CO3	-	-	-	-	-	-	-	-	-	-	-	-	1	3	1
CO4	-	-	1	-	1	-	-	1	-	1	-	-	1	1	1
CO5	2	-	-	-	-	-	-	-	-	1	-	-	1	1	2
WT.	**2.00**		**1.00**		**1.00**			**1.00**		**1.00**		**1.00**	**1.20**	**1.50**	**1.60**

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Interior Design Photography**	**04**
2.	**Composition and Lighting Techniques**	**05**
3.	**Equipment and Gear**	**05**
4.	**Styling and Staging**	**05**
5.	**Portfolio Development and Presentation**	**05**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Interior Design Photography**
	• Overview of interior design photography • History and evolution of interior design photography • Importance and significance of interior design photography in the design industry • Analysis of famous interior design photographers and their work • Basic principles of photography applied to interior spaces
2.	**Composition and Lighting Techniques**
	• Composition principles in interior design photography • Understanding light and its effects on interior spaces • Natural lighting vs. artificial lighting in interior photography • Techniques for capturing different lighting conditions (daylight, dusk, night) • Use of reflectors, diffusers, and other tools for lighting control
3.	**Equipment and Gear**
	• Overview of essential photography equipment for interior shoots • Cameras, lenses, and accessories suitable for interior photography • Tripods, stabilizers, and other support systems for steady shots • Understanding the role of post-processing software in interior photography • Budgeting and investment considerations for building a professional photography kit
4.	**Styling and Staging**
	• Importance of styling and staging in interior photography • Principles of interior styling and staging for the camera • Creating focal points and visual interest within a frame

	• Selection and arrangement of props and accessories • Collaboration with interior designers and stylists for photo shoots
5.	**Portfolio Development and Presentation**
	• Strategies for building a professional portfolio in interior design photography • Selecting and curating images for a cohesive portfolio • Creating an online presence through websites and social media platforms • Techniques for effective portfolio presentation and client interaction • Legal and ethical considerations in photography, including copyright and usage rights

E. RECOMMENDED STUDY MATERIAL

Sr. No	Reference Book	Author	Edition	Publication
1.	Interior Photography	Adrian Schulz	1st Edition	Rocky Nook, 2016
2.	Photographing Interiors: A Guide for Professional Photographers	John Siskin	1st Edition	Amherst Media, 2003
3.	Architectural Photography: Composition, Capture, and Digital Image Processing	Adrian Schulz	1st Edition	Rocky Nook, 2010
4.	Interior Photography: The Digital Photographer's Guide to Interiors	Stan Sholik	1st Edition	Amherst Media, 2007
5.	Lighting for Interior Design	Malcolm Innes	1st Edition	Laurence King Publishing, 2007
1				
2				

Code: 25BUAEID5101	Yogasutra (IKS)	2 Credits [LTP: 2-0-0]

COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	Understand core concepts of Ashtanga Yoga and Sankhya philosophy.	Understand	PO1, PO6	PSO1, PSO2
CO2	Apply yogic techniques to enhance physical and mental well-being.	Apply	PO1, PO3, PO7	PSO1, PSO3
CO3	Analyze the connection between yogic values and human behavior.	Analyze	PO1, PO6, PO8	PSO1, PSO2
CO4	Evaluate the role of yoga in stress management and personality development.	Evaluate	PO1, PO2, PO11	PSO1, PSO2, PSO3
CO5	Create a personalized yoga-based routine for holistic lifestyle improvement.	Create	PO3, PO12	PSO1, PSO3

MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	-	–	–	–	–	–	–	-	-	3	1	1	-
CO2	3	-	3	-	–	–	–	–	–	–	3	-	1	3	1	1
CO3	2	-	-	-	–	–	–	–	–	–	2	-	2	2	1	1
CO4	3	2	-	-	–	–	–	–	–	–	3	2	2	2	1	1
CO5	-	-	2	-	–	–	–	–	–	–	-	-	2	-	2	2
WT.	**2.67**	**2**	**2.5**								**2.67**	**2**	**2**	**2**	**1.2**	**1.2**

OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1	Foundations of Yoga Philosophy	6
2	Ashtanga Yoga and Daily Discipline	6
3	Mental and Physical Well-being in Yoga	6
4	Applied Yoga in Life and Relationships	6
5	Practical Yoga and Techniques	12

DETAILED SYLLABUS

Unit	Unit Details
1.	Foundations of Yoga Philosophy
	• Meaning and definition of Yoga; holistic benefits – laukik and adhyatmik • Introduction to Bharatiya Yoga Darshana – Sankhya, Patanjali Yogasutras, Gita, Upanishads • Streams of Yoga: Jnana, Bhakti, Karma, Hatha, Ashtanga • Understanding Yoga's roots, purpose, and evolution through major Indian traditions
2.	Ashtanga Yoga and Daily Discipline
	• Eight limbs of Yoga (Yama to Samadhi) with relevant sutras from Patanjali Yogasutras • Dinacharya – importance of daily routine in Yogic living • Daivi vs Asuri Gunas from the Bhagavad Gita and their relevance to self-discipline • Core values from Jnana Yoga: Viveka, Vairagya, Shat Sampatti, Mumukshutva
3.	Mental and Physical Well-being in Yoga
	• Concepts of Antahkarana (Manas, Buddhi, Ahankara, Chitta) and mental clarity • Emotional well-being through Navarasa, Buddhi, and Yogic psychology • Yogic hygiene (Shoucha Niyamas), Ahara-Vihara (diet and lifestyle) • Role of Asana, Pranayama, and cleansing practices (Shatkarma) for body-mind balance
4.	Applied Yoga in Life and Relationships
	• Use of Yoga in stress management, self-development, and workplace wellbeing • Psychology of Chitta Bhumis and Yogic counseling for addiction and mental health • Vaira Tyaga (forgiveness), Vishva Bandhutva (universal brotherhood) • Enhancing communication, leadership, and relationship harmony through Yogic value.
5.	Practical Yoga and Techniques
	• Practice of Surya Namaskaras, basic Asanas, Pranayama, Dharana, and Dhyana • Demonstration and practice of Shatkarma: Neti, Dhauti, Trataka, Nauli, etc. • Techniques for focus, memory, anger and time management, and voice culture • Yoga protocol for youth and positive psychology through Yoga-based routines

RECOMMENDED STUDY MATERIAL

Sr. No.	Title	Author/Editor	Edition	Publication
1	*Patanjali Yog Darshan* (based on Vyasa Bhashya)	Dr. P. V. Karambelkar	9th Edition	Kaivalyadham, Lonavla
2	*Spirituality and Indian Psychology*	D. P. S. Bhawuk	1st Edition	Springer, New York
3	*Universal Message of the Bhagavad Gita*	Swami Ranganathananda	Vol. 1–3 Combined	Advaita Ashrama
4	*Essays on the Gita, Vol. 13*	Sri Aurobindo	3rd Edition	Arya Publishing House, Calcutta
5	*Management with a Difference: Insights from Ancient Indian Wisdom*	Swami Anubhavananda & A. Kumar	1st Edition	Ane Books India, New Delhi
6	*Hatha Yoga Pradipika*	Swami Muktibodhananda	2nd Edition	Yoga Publications Trust, Munger

Code: 25BUAEID5102 Indian Ethics (IKS) 2 Credits [LTP: 2-0-0]

COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	Understand the foundational concepts of Nitishastra and its distinction from Western ethics.	Understand	PO1	PSO1, PSO2
CO2	Apply principles of Dharma, Svadharma, and Karma Yoga to ethical decision-making.	Apply	PO1, PO3, PO10	PSO1, PSO2, PSO3
CO3	Analyze ethical teachings of Indian thinkers like Kautilya, Vidura, and Bhartrihari.	Analyze	PO1, PO10	PSO1, PSO2, PSO3
CO4	Evaluate Indian perspectives on state ethics and compare them with contemporary systems.	Evaluate	PO1, PO2, PO11	PSO1, PSO2, PSO3, PSO4
CO5	Create ethical frameworks based on Indian traditions applicable to current policy or social issues.	Create	PO3, PO12	PSO1, PSO2, PSO3, PSO4

MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	-	-	-	-	-	-	-	-	-	-	-	3	2	-	-
CO2	3	-	2	-	-	-	-	-	-	2	-	-	2	2	2	-
CO3	2	-	-	-	-	-	-	-	-	2	-	-	2	2	2	-
CO4	3	2	-	-	-	-	-	-	-	-	2	-	2	2	2	2
CO5	-	-	3	-	-	-	-	-	-	-	-	3	2	2	2	2

OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time Required for the Unit (Hours)
1	Foundations of Indian Ethics	6
2	Individual Ethics and Moral Self-Development	6
3	Classical Thinkers and Niti Traditions	6
4	Ethics of Governance and Public Policy	6
5	Strategic and Administrative Ethics	6

DETAILED SYLLABUS

Unit	Unit Details
	Foundations of Indian Ethics
	• Definition of Nitishastra and difference from Western morality • Concepts of Dharma and Niti • Vedic ethics: Ṛta, Ṛṇa, Yajña • Upanishadic ethics: Śreyah, Preyah, Niśreyah • Puruṣārtha Chatuṣṭaya: Dharma, Artha, Kāma, Mokṣa
2	Individual Ethics and Moral Self-Development
	• Concepts of Svabhāva, Svadharma, and Sthitaprajña • Synthesis of Karma, Jñāna, and Bhakti Marga • Niṣkāma Karma Yoga and Lokasaṃgraha • Law of Karma and its ethical implications
3.	Classical Thinkers and Niti Traditions
	• Ethical teachings of Brihaspati, Shukra, Kautilya, Kamandaka • Bhīṣma Niti, Vidura Niti, Yudhiṣṭhira Niti, Bhartrihari's Niti • Niti-tattva in Manusmriti • Moral lessons from Pañcatantra and Hitopadeśa
4.	Ethics of Governance and Public Policy
	• Rājneeti and Dharma in Nitishastras • Duties and virtues of a king • Ethical systems of justice: Daṇḍa-vidhāna and crime • Taxation and governance principles in Indian tradition
5.	Strategic and Administrative Ethics
	• Four Upāyas: Sama, Dāna, Daṇḍa, Bheda • Appointment and roles of ministers, ambassadors, secret police • War-related ethics in Indian scriptures • Integration of Indian ethical models into modern policy contexts

RECOMMENDED STUDY MATERIAL

Sr. No.	Reference Book	Author	Edition	Publication
1	*Niti Manjari of Dya Dviveda*	Sitaram Jayaram Joshi	1933	Saligram Sharma, Banaras
2	*Kamandakiya Nitisara*	Khemraj Shrikrishnadas	1961	Mumbai
3	*Kautilya Arthashastra*	Prof. Sriyut Prannath Vidyalankar	1923	Lahore
4	*Moral Dilemmas in the Mahabharata*	Bimal Krishna Matilal (Editor)	1992	Indian Institute of Advanced Study, Shimla
5	*Kautilya's Arthashastra*	R. Samashastri	1999	Parimal Publications, Delhi
6	*Kamandaka's Nitisar*	Ganapati Sastri	1920	Trivandrum Sanskrit Series, Kerala
7	*Parashar Smriti*	Madhvacharya	1900	Trivandrum Sanskrit Series, Kerala
8	*Some Aspects of Ancient Indian Polity*	K.V. Rangaswamy Aiyangar	1916	Madras
9	*Vidura Niti*	Veda Vyas	2018	Chaukhamba Sanskrit Series, Varanasi
10	*Nitishatakam*	Bhartrihari	2021	Chaukhamba Surbharati Prakashan

VI Semetser

Code: 25BIDCID6101	ADVANCE MATERIALS	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** about the application of advanced materials and technologies	Understand	PO1	PSO1, PSO2, PSO3
CO2	**Apply** the material in various spaces in interiors and being updated with current market trends.	Apply	PO1, PO2 ,PO4	PSO1
CO3	**Analyze** the materials and technologies with regards to Automation, Advanced lighting technologies, HVAC and thermal comfort, wall coverings, Flooring, Smart furniture, Walling and partitions	Analyze	PO1, PO3	PSO1, PSO2, PSO3

CO4	**Evaluate** the Impact of these materials on environment	Evaluate	PO4	PSO1, PSO2, PSO3
CO5	**Create** a design proposal by using of advanced materials.	Create	PO3, PO4	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	-	-	-	-	—	—	—	—	—	—	—	2	2	1	
CO2	2	2	-	2	-	—	—	—	—	—	—	—	3	-	-	
CO3	3	-	3	-	-	—	—	—	—	—	—	—	1	2	1	
CO4	-	-	-	2	-	—	—	—	—	—	—	—	1	1	1	
CO5	-	-	3	3	-	—	—	—	—	—	—	—	1	2	2	
WT.	**2.67**	**2.00**	**3.00**	**2.33**									**1.60**	**1.75**	**1.25**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction**	**04**
2.	**Designing interiors spaces to accommodate future uses**	**04**
3.	**Trends in global and Indian market**	**04**
4.	**Impact on environment - Green rating for materials**	**06**
5.	**View and Presentations**	**06**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction**
	● Understand the advanced materials and technologies available. ● The need and importance of advanced materials in interior design
2.	**Designing interiors to accommodate future uses**
	● Design multipurpose spaces that allow for adaptability, both for future uses and for several uses by the same occupants. · ● Use modular design to foster adaptability. ● Using modular or systems furniture, which allows for ongoing reconfiguration of space without major disruption to the permanent interior layout and electrical/mechanical distribution systems. ● Exploring a wide range of materials and technologies with regards to Automation, Advanced lighting technologies, HVAC and thermal comfort, wall coverings, Flooring, Smart furniture, Walling and partitions
3	**Trends in global and Indian market**

	• Interior products with recycled content trending globally • Renewable materials like- Wheat straw, Corn stalks, Polylactide (PLA) (made from corn starch), Cork, Bamboo, Sunflower seed hulls, Soybeans, Wool, Linen, Silk, Ramie • Understand physical properties and visual characteristics of the materials like- dry wall, ceiling tile, insulation, carpet and carpet tile, resilient flooring, metal components, furniture, fabrics, tile, wall covering, and composite wood-based products. Many are made from sawmill waste, a pre-consumer recycled material. • Application, installation, maintenance and cost
4	**Impact on environment - Green rating for materials**
	• Understanding the impact of advanced materials on environment. • The importance and need of green rating for materials.
5	**Implementation**
	• Detailed study report on materials through case studies, factory visits, market studies • Design exercise: Design a space using advanced materials

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1	Interior Materials and Surfaces: The Complete Guide	Helen Bowers	Interior Materials and Surfaces: The Complete Guide	Helen Bowers
2	Material Matters: New Materials in Design	Phil Howes Zoe Laughlin (Author)	Material Matters: New Materials in Design	Phil Howes Zoe Laughlin (Author)
Important Web Links				
1				
2				

Code: 25BIDCID6201 **INTERIOR DESIGN STUDIO - V** **8 Credits [LTP: 2-0-4]**

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the importance of case studies, and learn to do so.	Understand	PO3	PSO1
CO2	**Apply** design concepts for the design problem introduced.	Apply	PO3	PSO1, PSO2, PSO3
CO3	**Analyze** the conceptual idea into drawings & prepare technical design drawings for design problem.	Analyze	PO1, PO2, PO3, PO11, PO12	PSO1, PSO2, PSO3
CO4	**Evaluate** on the basis of ergonomic and anthropometric aspects of interior design with respect to individual spaces.	Evaluate	PO1, PO2 ,PO3, PO4, PO11, PO12	PSO1, PSO2, PSO3

CO5	**Create** a solution for a project.	Create	PO1, PO2 ,PO3, PO11, PO12	PSO1

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	2	-	—	—	—	—	—	—	-	-	3	-	-	
CO2	-	-	1	-	—	—	—	—	—	—	-	-	1	2	1	
CO3	3	2	2	-	—	—	—	—	—	—	3	2	1	1	1	
CO4	3	1	1	1	—	—	—	—	—	—	3	1	1	2	2	
CO5	2	3	2	-	—	—	—	—	—	—	2	3	3	-	-	
WT.	**2.67**	**2.00**	**1.60**	**1.00**							**2.67**	**2.00**	**1.80**	**1.67**	**1.33**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to design Project**	**16**
2.	**Case Studies**	**20**
3.	**Design Concept**	**20**
4.	**Technical drawings**	**20**
5.	**Layout Plans**	**20**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to design Project**
	● To introduce to students, the design of a building with complexities related to hospitality, services, structures and site planning. ● Conclusion and summary of unit.
2.	**Case Studies**
	● Introduction of unit. ● Understanding the role & process of a case study. ● Choose & select relevant case examples related to your project. ● Understanding the principles and standards of different areas of a RESORT and also the anthropometry and ergonomics inside a given space. ● Study and analyze an existing resort w.r.t. the design project.
3	**Design Concept**
	● Developing concepts for the design project. ● To help students evolve their design by understanding relationship between forms, function and space. ● Explain your design idea with the help of sketches.
4	**Technical drawings**
	● Plan, Sectional Elevation**,** furniture layout. ● Detailed interior drawings. ● Make appropriate furniture details.
5	**Layout Plans**

	• Electrical layout. • Lighting layout. • Plumbing layout • Flooring pattern • Ceiling plan • Wall finishes

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Interior Design Reference Manual.	Ballast, David Kent	2010	Belmont, CA: Professional Publications Inc.
2.	Product and Furniture Design.	Kim, Young-Yun and Thompson, Rob	2011	London: Thames and Hudson.
3.	Furniture Design and Construction for the Interior Designer.	Natale, Christopher	2009	New York: Fairchild Books.
4.	Furniture: 50 Real-Life Projects Uncovered.	Saville, Laurel and Stoddard, Brooke.	2008	Minneapolis, MN: Rockport Publishers.
Important Web Links				
1				
2				

Code: 25BIDCID6202	WORKING DRAWING – II	3 Credits [LTP: 2-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the basic need of working drawings.	Understand	PO1	PSO1, PSO3
CO2	**Apply** the understanding on interior drawings with necessary details based on basic drawings	Apply	PO3, PO5	PSO2
CO3	**Analyze** detailed working drawing based on basic drawings	Analyze	PO3, PO5	PSO1, PSO2, PSO3
CO4	**Evaluate** the knowledge of construction, finishes and services for designing details with current market standards.	Evaluate	PO3, PO5	PSO1, PSO3
CO5	**Create** and document the entire set of working drawings with the aim of presenting the same for securing placement for practical training.	Create	PO1, PO5	PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	-	-	-	-	—	—	—	—	—	—	—	2	-	2	
CO2	-	-	3	-	2	—	—	—	—	—	—	—	-	3	-	
CO3	-	-	2	-	3	—	—	—	—	—	—	—	1	1	1	
CO4	-	-	3	-	3	—	—	—	—	—	—	—	1	-	1	
CO5	3	-	-	-	3	—	—	—	—	—	—	—	-	1	1	
WT.	**3.00**		**2.67**		**2.75**								**1.33**	**1.67**	**1.25**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Center Line Plan**	**08**
2.	**Preparation of Service Drawings**	**10**
3.	**Preparation of Interior Drawings**	**10**
4.	**Preparation of BOQ**	**10**
5.	**Construction Detail**	**10**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Center Line Plan**
	• Preparation of Centre Line plan of large scale building
2.	**Preparation of Service Drawings**
	• Preparation of Supporting Drawing. • Preparation of Door Window Schedule and Details • Electrical Layout of all floors • Plumbing and Drainage Plan of All floors and terrace • HVAC layout
3.	**Preparation of Interior Drawings**
	• For the large scale project, the following set of drawings need to be produced. • Flooring detail, False Ceiling detail, • Wall finishes drawing, Specifications sheet
4.	**Preparation of BOQ**
	• Preparation of BOQ for major design project of Vth semester
5.	**Construction Details**
	• Other construction details related to the project.

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Working Drawing Handbook	Keith Syles	1998	Architectural Press Oxford
2.	Arch. Drawing and Light Construction	James G. Gausett , Edward J. Muller	1999	Grav – Prentice Hall
3.	The Professional Practice of Architectural Working Drawings	Osamu A. Wakita, Richard M. Linde and Nagy R. Bakhoum	4th edition (2011)	John Wiley & Sons
Important Web Links				
1				
2				

Code: 25BIDCID6203	PRE-THESIS	4 Credits [LTP: 2-0-4]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the basic framework of research process.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** the understanding of various research designs and techniques.	Apply	PO1, PO12	PSO1, PSO2, PSO3
CO3	**Analyze** various sources of information for literature review and data collection.	Analyze	PO1, PO3, PO12	PSO1, PSO3
CO4	**Evaluate** the proposal with ethical dimensions of conducting applied research.	Evaluate	PO2	PSO2, PSO3
CO5	**Prepare** a project proposal (to undertake a project	Create	PO1, PO2 ,PO3, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–		-	2	1	1	
CO2	2	-	-	–	–	–	–	–	–	–		2	1	1	1	
CO3	1	-	3	–	–	–	–	–	–	–		1	3	-	1	
CO4	-	3	-	–	–	–	–	–	–	–		-	-	3	2	
CO5	1	2	1	–	–	–	–	–	–	–		1	3	1	1	
WT.	**1.33**	**2.50**	**2.00**									**1.33**	**2.25**	**1.50**	**1.20**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Research Formulation**	**08**
2.	**Research Design**	**08**
3.	**Research Data**	**12**
4.	**Research Analysis & Report**	**08**
5.	**Thesis Seminar**	**12**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Research Formulation**
	Research Formulation: The students of the final year are required to undertake research on a topic related to the field of spatial planning on issues emerging out of the present trends and future prospects of the Thesis Project selected. The Thesis Project should be sufficiently large and complex so that student can demonstrate the Skills and Knowledge acquired during the course. The project selected for the Thesis project should be large enough for a built up area more than 7500 Sqm. The project program can be hypothetical however the site selected should be real. Students may select live projects that have real program and objective.
2.	**Research Design**
	Once the problem is formulated the student has to undertake extensive literature survey and state in clear terms the working hypothesis. Students are required to state the conceptual structure within which research would be conducted by defining the aim, objectives, scope & limitations of work.
3.	**Research Data**

	Data shall be collected keeping in mind the cost, time and other resources. Primary data can be collected either through experiment, through survey or by observation such as personal interviews, telephonic interview, mailing of questionnaire or through schedules. Secondary data such as census data, literature studies, unpublished or published thesis or dissertation can be collected.
4.	**Research Analysis & Report**
	The analysis of data requires a number of closely related operations such as establishment of categories. The application of these categories to see data through coding, tabulation and then drawing statistical inference. Draw conclusions and identify architectural issues involved in the project design and construction. Define strategy to address these issues in the design proposal. Prepare a report of what has been done. The interior layout of the report should be as follows: the preliminary pages, the main text and end matter. The preliminary pages carry title, declaration, certificate, acknowledgement, list of illustration & tables. The main text of the report should have introduction, review of literature & methodology. The end matter will include glossary and annexure.
5.	**Thesis Seminar**
	Criteria of selection of the site for the thesis project and justification for how the project will support the conceptual idea for the project. Mood board, zoning regulators & standards applicable to the project. Analytical studies of building prototypes as a whole or in part comparable to the selected project. Formulation of programme of requirements. Conceptual Site analysis and zoning of activities on site.

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Architectural Research Methods	Groat L, Wang D.		John Wiley & Sons, Inc
2.	The Conduct of Inquiry	Kaplan A.		Chandler, San Francisco
3.	Thinking Architecture;	Zumthor P.		Birkhauser, Basel, Switzerland
4.	Methodology of Research and issues in Education	Shinde S.P. (Dr.)		Surabhi Educational Society, Hyderabad
Important Web Links				
1				
2				

Code: 25BIDCID6204	INTERIOR LANDSCAPE DESIGN	3 Credits [LTP: 2-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** about the importance of interior landscaping in enhancing indoor environments.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** principles of plant selection and placement in different interior spaces.	Apply	PO1, PO2 ,PO11, PO12	PSO1, PSO3
CO3	**Analyze** the environmental and aesthetic factors influencing plant choices.	Analyze	PO1, PO3, PO11	PSO1, PSO2, PSO3
CO4	**Assess** the impact of interior landscaping on user experience and mood.	Evaluate	PO1, PO11	PSO1, PSO2, PSO3
CO5	**Design** and develop an original interior landscaping plan for a specific space.	Create	PO1, PO3, PO11	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	1	1	1	
CO2	3	3	-	–	–	–	–	–	–	–	3	3	2	-	1	
CO3	3	-	3	–	–	–	–	–	–	–	3	-	2	1	1	
CO4	3	-	-	–	–	–	–	–	–	–	3	-	1	1	1	
CO5	2	-	3	–	–	–	–	–	–	–	2	-	1	1	3	
WT.	**2.75**	**3.00**	**3.00**								**2.75**	**3.00**	**1.40**	**1.00**	**1.40**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Interior landscaping**	**12**
2.	**Physical requirements of plants**	**12**
3.	**Interior landscaping elements & principles**	**12**
4.	**Exercise on interior landscape**	**12**
5.	**Landscape design development**	**12**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Interior landscaping**

	• Definition of landscape • Classification of plants, indoor plants and their functions, layout & components, Floriculture – commercial, ornamental, Selection of plants & pest control. • Hardscape and Soft scape
2.	**Physical requirements of plants**
	• Physical requirements of plants – light, temperature, water, planting medium, soil separator, weight of plants, acclimatization & maintenance. • Techniques to meet physical requirements. • Plant selection criteria in landscape based upon visual, functional, micro-climatic and ecological aspects. • Understanding effect of time on planting design. • Site analysis and Site planning.
3.	**Interior landscaping elements & principles**
	• Various interior landscaping elements – water bodies - pools, fountains, cascades • Plants, rocks, artefacts, paving & lighting, Design guidelines- plant texture & colour, plant height, plant spacing. • **ROOF AND DECK LANDSCAPE** • Protection of the integrity of the roof and structure, provisions for drainage, light weight planting medium, irrigation, selection of materials, water proofing, provision for utilities and maintenance.
4.	**Exercise on interior landscape**
	• Introduction to **Design Concept development** • Design exercise for pervious semester design problem. • Conceptual zoning of landscape areas. • Conceptualization of different zones and materials required for it. • Segregation of hardscape & softscape.
5.	**Landscape design development**
	• Documentation and presentation of master plan. • Layout plan • Material plan • Planting plan • Lighting plan • Basic gradation plan • Sections and elevations

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Time saver standards for landscape architecture			
2.	Planting design	TheodoreD.Walker		VNR Publications New York
3.	Landscaping Principles and Practices	Jack E.Ingels		Ingels,Delmar Publishers.
Important Web Links				
1				
2				

Code: 25BIDEID6101	HISTORY OF RAJASTHAN ART & CULTURE	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Classify** the user needs of the past times and how they translate into program and manifestationin design in terms of space, materials and culture.	Understand		PSO1, PSO2, PSO3
CO2	**Learn** about the different classifications of arts and crafts based on nature and materials used.	Understand	PO3	PSO1, PSO3
CO3	**Identify** the process of building stone formations and its wide usage in Rajasthan.	Apply		PSO1
CO4	**Explore** the new artisans and craftsmanship innovation and the role of technology and applications in stone.	Analyze	PO2, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	1	1	1	
CO2	-	-	3	–	–	–	–	–	–	–	-	-	1	-	3	
CO3	-	-	-	–	–	–	–	–	–	–	-	-	3	-	-	
CO4	-	3	-	–	–	–	–	–	–	–	-	3	1	1	1	
WT.		**3.00**	**3.00**									**3.00**	**1.50**	**1.00**	**1.67**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Background & regional formation of Rajasthan**	**09**
2.	**Classification of Arts & Crafts based on nature and material used**	**03**
3.	**Building stone craft tradition in Rajasthan**	**09**
4.	**Building elements in stone**	**09**
5.	**Reinterpretation of stone craftsmanship**	**06**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Background & regional formation of Rajasthan**

	• Traditional geographical, political and cultural divisions • Pre-and proto history of Rajasthan focusing on various prehistoric cultures • Inter-religious interactions- Aspects of arts and crafts, literature and cultural relations with neighboring states during respective historical eras.
2.	**Classification of arts & crafts based on nature and material used**
	• The *Chhatis karkhana* of Jaipur; Crafts - Jewelry, metal, wood, lac-based crafts, textiles, paper crafts • Miscellaneous arts – Miniature painting, frescoes, Araish etc.; Tribal crafts; Influence of arts and crafts on built form
3.	**Building stone craft tradition in Rajasthan**
	• Stone types of Rajasthan • Shaping the stone – quarrying, selection, dressing, finishing, carving and patterning; Stone craft clusters in Rajasthan; • Stone Masonry (walls; dry and with lime mortar / cladding and finishes).
4.	**Building elements in stone**
	• Architectural elements in stone (jharokhas, copings, railings, jaalis); Landscape elements in stone (fountains, water bodies, benches, signage, lamps) • Interior elements/sculptures/artifacts of various sorts; Maintenance of Stone Buildings.
5.	**Reinterpretation of stone craftsmanship**
	• The new generation artisan • Innovations and adaptations to new tools and applications in stone • Contemporary use of stone while studying works of Raj Rewal, Charles Correa, Ashok B Lall and Nimish Patel.

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Rima Hooja, History of Rajasthan, Rupa Co., New Delhi		2006	
2.	The Stone Crafts of Rajasthan- A Manual, CDOS, Jaipur		2011	
3.	V.S. Bhatnagar, Life and times of Sawai Jai Singh, Impex India, New Delhi		1979	
4.	Rajasthan Sate Gazeteers, Volume – 2, History and culture, Directorate District Gazetteers, GoR& Volume-3, Economic Structure and Activities			
5.	Jadunath Sarkar, History of Rajasthan			
Important Web Links				
1				
2				

Code: 25BIDEID6102	SUSTAINABLE DEVELOPMENT IN INTERIOR DESIGN	2 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** about the need for Environmental Clearance, role of various agencies/committees, environmental laws, regulatory authorities and process of clearance	Understand		PSO1
CO2	**Apply** the EIA guidelines for any design proposals	Apply		PSO1, PSO2
CO3	**Analyze** different green rating agencies and their criteria's for providing certification both applicable in India and Abroad	Analyze	PO1, PO2, PO11,P O12	PSO2
CO4	**Evaluate** on the basis of the guild lines with LEED and GRIHA as a tool for measuring and rating a building's environmental performance.	Evaluate	PO1, PO2, PO3, PO11, PO12	PSO3
CO5	**Create** the guild lines and implement on the design problem.	Create		

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	-	-	—	—	—	—	—	-	-	3	-	-	
CO2	-	-	-	-	-	—	—	—	—	—	-	-	3	2	-	
CO3	3	1	-	-	-	—	—	—	—	—	3	1	-	3	-	
CO4	3	1	1	-	-	—	—	—	—	—	3	1	-	-	2	
CO5	-	-	-	-	-	—	—	—	—	—	-	-	-	-	-	
WT.	**3.00**	**1.00**	**1.00**								**3.00**	**1.00**	**3.00**	**2.50**	**2.00**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Concepts of sustainability**	**06**

2.	**Sustainable Concept in Interior Designing**	**06**
3.	**Sustainable Building Materials and Construction**	**06**
4.	**Recycling and Reuse**	**09**
5.	**Case Studies and Rating systems**	**09**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Concepts of sustainability**
	● Introduction to Unit ● Energy and Global environment, Energy use and Climate change – Its impact, Types of Energy systems, ● Concept of Sustainability - Principles of conservation -synergy with nature ● Ethical- environmental degradation ● Summary & conclusion of unit
2.	**Sustainable Concept in Interior Designing**
	● The Concept of Sustainable Interiors. ● Sustainable interiors designing by adopting various policies. ● Principles of Sustainable Interior Design. ● Benefits of Green Interiors ● Indoor Environment Quality (IEQ) ● Elements associated to IEQ
3.	**Sustainable Building Materials and Construction**
	● Introduction to Unit ● Properties, Uses and Examples of -Primary, secondary and Tertiary Sustainable Materials, Principles to improve the energy efficiency - siting and vernacular design, shade, ventilation, earth shelter, thermal inertia and air lock entrances. ● Techniques of sustainable construction - technologies, methods of effectiveness, and design synthesis ● Alternative materials and construction methods: ● Use of local materials and on site growth of food, fuel and building materials ● Summary & conclusion of unit
4.	**Recycling and Reuse**
	● Pre building, Building, Post building stages - Architectural Reuse, Waste prevention, ● Construction and Demolition recycling- Conservation of natural and building resources ● Energy and material savings ● Types of wastes ● Elimination of waste and minimize pollution- various Decomposing methods ● Innovative reuse of various wastes
5.	**Case Studies and Rating systems**

	• Sustainable Development Case Studies: illustrated examples of the planning, development, and construction. • Green Interiors and various national and international rating systems for sustainability in the field of Interior Design • Conduct a study on concept of green building. Visit any green building; absorb the place, design, interior elements, materials and construction techniques. Interview with appropriate persons and make a case study report.

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Integrated approach to sustainable Development	B.C.Bose		Rajat Publications, Delhi
2.	Environmental control systems Heating, Cooling, Lighting	Fuller Moore		McGraw Hill, Newyork.
3.	Sustainable practices in built environment	Caring A.Langston, Grace K.C.Ding	2 nd Edition	Butterworth-Heinmann Linacre House Jordanhill, Oxford
4.	Sustainable Building Design Manual Vol I & II			TERI, New Delhi
5.	GRIHA Manual (Vol 1-5)			TERI, New Delhi
Important Web Links				
1				
2				

Code: 25BUACHU6120	Presentation & Interview Skills	1 Credits [LTP: 2-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	**Bloom Level**	**PO Mapping**	**PSO Mapping**
CO1	Understand the importance of effective presentation skills in various interior contexts.	Understand	PO1, PO6, PO7, PO8, PO9, PO10	PSO1, PSO2, PSO3
CO2	Apply the ability to research, organize, and structure content effectively for interior presentations.	Apply	PO1, PO2, PO3, PO5, PO1(	PSO1, PSO2, PSO3
CO3	Analyze the proficiency in creating visually compelling presentations by applying principles of graphic design.	Analyze	PO1, PO3, PO5, PO10	PSO1, PSO2, PSO3
CO4	Evaluate effective interview skills, including the preparation of a professional portfolio.	Evaluate	PO1, PO5, PO8, PO9, PO10, PO11	PSO1, PSO2
CO5	Exhibit professional behavior and networking strategies	Create	PO8, PO9, PO10, PO11, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	1					2	3	1	1	1			3	2	1	
CO2	2	2	3		2					2			1	3	2	
CO3	3		1		3					3			2	1	3	
CO4	1				1			2	2	1	3		3	2		
CO5								3	3	2	1	2	1	3	1	
WT.	1.75	2.00	2.00		2.00	2.00	3.00	2.00	2.00	1.80	2.00	2.00	2.00	2.20	1.75	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction to Presentation Skills**	**04**
2.	**Presentation Preparation Techniques**	**05**
3.	**Visual Communication in Interior design**	**05**
4.	**Interview Skills for Interior Designers**	**05**
5.	**Professionalism and Networking**	**05**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction to Presentation Skills**
	• Understanding the importance of effective presentation skills in interior design • Types of presentations in interior design: design reviews, client presentations, public presentations, etc. • Basics of verbal and non-verbal communication • Developing confidence and overcoming presentation anxiety
2.	**Presentation Preparation Techniques**
	• Research and gathering of information for presentations • Organizing and structuring content effectively • Visual aids and presentation tools: slideshows, digital renderings, physical models, etc. • Practice techniques for improving delivery and timing
3.	**Visual Communication in Interior design**
	• Principles of graphic design and layout for interior presentations • Techniques for creating visually compelling presentations • Incorporating sketches, drawings, diagrams, and photographs into presentations • Digital rendering software and techniques for interior visualization
4.	**Interview Skills for Interior Designers**
	• Understanding the purpose and format of interior design job interviews • Preparing a portfolio: selecting and organizing work samples • Crafting a compelling resume and cover letter • Techniques for answering common interview questions and discussing design projects
5.	**Professionalism and Networking**
	• Professional etiquette and behavior in interior practice • Building and maintaining professional relationships

	• Networking strategies for architects: industry events, online platforms, etc. • Portfolio reviews and mock interviews for practical skill development

E. RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Presentation Skills for Students	Joan van Emden, Lucinda Becker	3rd Edition	Palgrave Macmillan, 2016
2.	Slide:ology: The Art and Science of Creating Great Presentations	Nancy Duarte	1st Edition	O'Reilly Media, 2008
3.	Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques	Maureen Mitton	5th Edition	Wiley, 2018
Important Web Links				
1				
2				

VII SEMESTER

Code: 25BIDCID7301	THESIS DESIGN PROJECT	23 Credits [LTP: 2-0-14]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Remember** the principles of design and their application in interior spaces.	Understand	PO1, PO7, PO11	PSO1, PSO2, PSO3
CO2	**Apply** design principles to solve specific interior design challenges.	Apply	PO2, PO4, PO12	PSO2, PSO3
CO3	**Analyze** existing interior spaces in terms of functionality and aesthetics.	Analyze	PO1, PO2, PO3, PO11, PO12	PSO1, PSO3
CO4	**Assess** the ethical implications of design choices, considering environmental and social factors.	Evaluate	PO1, PO3 ,PO11	PSO3
CO5	**Develop** a comprehensive and well-documentedthesis design project.	Create	PO2, PO3 ,PO6, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	-	-	-	-	-	1	-	-	-	2	-	1	2	1	
CO2	-	2	-	2	-	-	-	-	-	-	-	2	-	3	2	
CO3	2	1	1	-	-	-	-	-	-	-	2	1	2	-	3	
CO4	1	-	1	-	-	-	-	-	-	-	1	-	-	-	2	
CO5	-	2	2	-	-	1	-	-	-	-	-	2	2	1	1	
WT.	**1.67**	**1.67**	**1.33**	**2.00**		**1.00**	**1.00**				**1.67**	**1.67**	**1.67**	**2.00**	**1.80**	

C. DETAILED SYLLABUS

Unit	Unit Details
1.	Large scale project (more than 10,000 sqft site Area) having complexity of Interior Design resolutions. Culmination of all the skills acquired of Interior Design. Individual understanding of Interior Design theory, philosophy and style. Student shall engage in study, documentation, analysis and design process of the project. The theoretical part to be put together in the form of a report and the design solution to be presented in hard/soft copy with a model.

Code: 25BIDCID7201	PORTFOLIO DEVELOPMENT & PRESENTATION	2 Credits [LTP: 1-0-2]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Summarize** the essential elements that make a portfolio effective.	Understand		PSO1, PSO2, PSO3
CO2	**Apply** graphic design principles to create a visually appealing and cohesive portfolio layout.	Apply	PO3	PSO1, PSO3
CO3	**Evaluate** the effectiveness of design choices within a portfolio and their impact on the viewer.	Evaluate	PO1, PO3 ,PO11	PSO1, PSO2, PSO3
CO4	**Assess** the strengths and weaknesses of a given portfolio, considering both content and presentation.	Analyze	PO3	PSO1, PSO2, PSO3
CO5	**Develop** a personalized and professional interior design portfolio that showcases a range ofskills and design projects.	Create	PO1, PO2, PO3, PO11, PO12	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	1	1	1	
CO2	-	-	3	–	–	–	–	–	–	–	-	-	3	-	1	
CO3	3	-	2	–	–	–	–	–	–	–	3	-	2	1	1	
CO4	-	-	3	–	–	–	–	–	–	–	-	-	1	1	2	
CO5	2	3	2	–	–	–	–	–	–	–	2	3	2	2	1	
WT.	**2.50**	**3.00**	**2.50**								**2.50**	**3.00**	**1.80**	**1.25**	**1.20**	

C. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Hours)
1.	**Introduction**	**06**
2.	**Photography**	**06**
3.	**Compilation**	**06**
4.	**Presentation**	**09**
5.	**E-portfolio & virtual portfolio**	**09**

D. DETAILED SYLLABUS

Unit	Unit Details
1.	**Introduction**
	Importance of portfolio, Types of portfolios, Themes etc.
2.	**Photography**
	Stylized photography, Photo composition, effectiveness, etc.
3.	**Compilation**
	Selection and Compilation of work.
4.	**Presentation**
	Final presentation in the form Exhibition, Jury and print etc.
5.	**E-portfolio & virtual portfolio**
	Introduction to e-portfolio & virtual portfolio

E.RECOMMENDED STUDY MATERIAL

Sr.No	Reference Book	Author	Edition	Publication
1.	Figure Drawing for Fashion Design,	Drudi, E.	2011	Amsterdam, Pepin Press.
2.	Fashion Artist: Drawing Techniques to Portfolio Presentation	Bruke, S.	2006	U.K.,Burke Publishing.
3.	9.Heads: A Guide to Drawing Fashion London	Riegelman, N.	2006	London, Thames a Hudson.
4.	Colors for Modern Fashion: Drawing Fashion with Colored Markers	Riegelman, N.	2006	London, Thames a Hudson.
Important Web Links				
1				
2				

VIII SEMESTER

Code: 25BIDCID7201 PRACTICAL TRAINING (INTERNSHIP) FOR 110 WORKING DAYS AND ITS SEMINAR 26 Credits [LTP: 0-0-0]

A. COURSE OUTCOMES AND THEIR RESPECTIVE MAPPING

Course Outcomes (CO):	At the end of this course, learners will be able to:	Bloom Level	PO Mapping	PSO Mapping
CO1	**Understand** the terminology used in industry	Understand		PSO1, PSO2, PSO3
CO2	**Apply** the learnings & exposure gained during the Academic into the day to day working.	Apply	PO1, PO2, PO11, PO12	PSO2, PSO3
CO3	**Analyze** the learnings and knowledge gained during the training and use them in architecture field & academics in the most appropriate manner.	Analyze	PO1, PO3, PO11	PSO1, PSO2, PSO3
CO4	**Appraise** the outcomes gained from the training &their usage in the field as well as academics.	Evaluate	PO1, PO11	PSO1, PSO2, PSO3
CO5	**Design** a portfolio of works done during the training period containing the drawings, quantities, details, photographs, analysis & other documents and use them in the future academics and field.	Create	PO1, PO3, PO11	PSO1, PSO2, PSO3

B. MAPPING MATRIX OF CO,PO, & PSO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	-	-	-	–	–	–	–	–	–	–	-	-	1	1	1	
CO2	3	3	-	–	–	–	–	–	–	–	3	3	-	2	3	
CO3	3	-	3	–	–	–	–	–	–	–	3	-	1	1	1	
CO4	3	-	-	–	–	–	–	–	–	–	3	-	1	2	2	
CO5	2	-	3	–	–	–	–	–	–	–	2	-	1	2	1	
WT.	**2.75**	**3.00**	**3.00**								**2.75**	**3.00**	**1.00**	**1.60**	**1.60**	

A. OUTLINE OF THE COURSE

Unit No.	Title of the Unit	Time required for the Unit (Days)
1.	**Practical Training (Internship) & its Seminar**	**110**

C. DETAILED SYLLABUS

Unit	Unit Details
1.	**Practical Training (Internship) & its Seminar**
	● Student shall work for a period of 140 days in an office of Architect/Interior Designer/Product Designer approved by the institution. ● Student shall be submitting weekly/monthly work report ● Student shall be submitting critical appraisal of built projects ● Student shall be submitting documentation of architectural details and site supervision of built projects. ● Student will also have to submit the research as per the supervision by the Guide.