B.Des ID

BACHELOR OF DESIGN [INTERIOR DESIGN]

[4 YEAR FULL TIME PROFESSIONAL DEGREE COURSE]

REGULATION CURRICULUM AND SYLLABUS

2024– 2025 Batch

CHOICE BASED CREDIT SYSTEM

(CBCS)

FACULTY OF ARCHITECTURE DESIGN AND PLANNING

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed to be University Established Under Section 3 of UGC Act, 1956)

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed to be University Established Under Section 3 of UGC Act 1956)

Pollachi Main Road,Eachanari Post, Coimbatore – 641021. INDIA

B.DES- REGULATIONS

2024 – 2025 Batch (Credit System)

These regulations are effective from the academic year 2024 - 2025 and applicable to the candidates admitted to B. Des during 2024 - 2025 and onwards.

The B.Des. Degree program (professional, under-graduate level) aims at producing design professionals who will assume major leadership role in shaping the built environment, the quality of which is the major determinant of the quality of life. The main goal is to inculcate the ability to visualize, conceive, formulate and design according to various requirements & needs.

1. ADMISSION

Candidates seeking admission to the first semester of the eight semesters B.Des Degree Programme: Should have compulsorily passed the Higher Secondary Examination of (10+2) Curriculum (Academic Stream) as prescribed by the Indian Institute of Interior Design(IID), Mumbai.

Lateral Entry

As per IIID norms **No lateral entry admission** directly into any higher semester is possible in this course.

Migration

The University may at its discretion permit B.Des candidates from other institutions to migrate course to the maximum number of students not exceeding the permitted maximum intake in a class as well as satisfying other academic requirements.

2. PROGRAMMES OFFERED

a) Faculty of Architecture,Design and Planning offers B.Des(Interior Design – 4 years duration) programmes
b) Faculty of Architecture,Design and Planning offers B.Des (Fashion Design – 4 years duration) programmes

3. MODE OF STUDY

Full-Time:

In this mode of study, the candidates are required to attend regular classes so as to satisfy Universityattendance and assessment requirements.

4. STRUCTURE OF PROGRAMMES

Every Programme will have curricula with syllabi consisting of theory, studio and practical:

a) General core courses comprising History and Theory of Interior, Materials and Construction, BuildingServices.
b) Core courses of Interior Design.
c) Elective courses for specialization in related fields.
d) Skill based courses such as Art and Craft, Workshop practice, computer applications, construction yard, practical training, seminar presentation, project work, educational tours, case studies etc.

e) There shall be a certain minimum number of core courses and sufficient number of elective courses that can be opted by the student. The blend of different courses shall be so designed that the student, at the end of the programme, would have been trained not only in his / her relevant professional field but also would have developed as a socially conscious human being.

Each semester curriculum shall normally have a blend of lecture, studio and practical courses, not exceding 7 in total per semester.

f) The prescribed credits required for the award of the degree shall be within the limits specified below.

PROGRAMME	MANDATORY CREDITS (minimum)
B. Des.	**188**

The **medium of instruction for all Courses, Examinations, Seminars, Presentations and Aproject / Thesis / Dissertation report is English.**

5. DURATION OF THE PROGRAMME

A student is ordinarily expected to complete the B.Des Programme in 8 semesters (four academicyears) but in any case not more than 12 Semesters for all Candidates.

Each semester shall consist of 18 weeks in which 6 hours a day i.e. 30 hours per week as contact hours between the faculty & students and does not include the time spent at Internal & External examination &other such activities. The Faculty imparts instruction as per the number of periods / hours specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught.

The Dean may arrange additional classes for improvement, special coaching, conduct of model test etc., over and above the specified periods. But for the purpose of calculation of attendance requirement or writing the end semester examinations (as per clause 9) by the students 540 hours conducted within the specified academic schedule alone shall be taken into account and the overall percentage of attendance shall be calculated accordingly.

The total period for completion of the programme reckoned from the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.

6. REQUIREMENTS FOR COMPLETION OF THE SEMESTER

A candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

Ideally every student is expected to attend all classes and secure 100% attendance. However, in order to allow for certain unavoidable reasons, the student is expected to attend at least 75% of the classes.

A candidate who has secured attendance between 65% and 74% (both included), due to medical reasons (Hospitalization / Accident / Specific Illness) or due to participation in University / District / State / National / International level sports or due to participation in Seminar / Conference / Workshop / Training Programme / Voluntary Service / Extension

activities or similar Programme with prior permission from the Registrar shall be given exemption from prescribed attendance requirements and shall be permitted to appear for the examination on the recommendation of the Head of the Department concerned and Dean to condone the lack of attendance. The Head of the Department has to verify and certify the genuineness of the case before recommending to the Dean.

A candidate who has secured less than 65% of attendance in any semester will not be permitted to take the regular examination and has to continue the study in the subsequent semester. The candidate has to redo the course by rejoining the semester in which attendance is less than 65% with proper approval of the Registrar.

7. FACULTY ADVISER

To help the students in planning their courses of study and for general advice on the academic programme, the Dean/Head of the Department will attach a certain number of students to a teacher of the Department who shall function as **Faculty Adviser** for those students throughout their period of study. Such Faculty Advisers shall advise the students and monitor the courses undergone by the students, check the attendance and progress of the students attached to him/her and counsel them periodically. If necessary, the faculty adviser may display the cumulative attendance particulars in the Department notice board and also discuss with or inform the Parents/Guardian about the progress of the students.

8. CLASS COMMITTEE

8.1. Every class shall have a class committee consisting of teachers of the class concerned, student representatives [two boys and two girls] and the concerned Dean/Head of the Department. It is like the 'Quality Circle' (more commonly used in industries) with the overall goal of improving the teaching-learning process. The functions of the class committee include

- Solving problems experienced by students in the studios, class room and in the laboratories.
- Clarifying the regulations of the degree programme and the details of rules therein particularly clause 4 and5 which should be displayed on department Notice-Board.
- Informing the student representatives the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- Informing the student representatives the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing / project work / seminar etc.) the breakup of marks for each experiment / exercise /module of work, should be clearly discussed in the class committee meeting and informed to the students.
- Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- Identifying the weak students, if any and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

The class committee for a class under a particular branch is normally constituted by the Head of the Department. However, if the students of different branches are mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Dean.

The class committee shall be constituted within the first week of each semester.

At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee. The Chairperson of the Class Committee may convene the meeting of the class committee.The Dean may participate in any Class Committee of the institution.

The Chairperson is required to prepare the minutes of every meeting, submit the same to Dean within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the Management, the same shall be brought to the notice of the Registrar by the HOD through the Dean.

The first meeting of the Class Committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weight age of assessments within the framework of the regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness ofthe teaching-learning process.

9. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESMENT

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD'(Logbook) which consists of attendance marked in each lecture, studio or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the department periodically (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the Department shall sign with date after due verification. At the end of the semester, the record should be verified by the Dean who will keep this document in safe custody (for five years).

Records of attendance and assessment of both current and previous semesters shall be submitted for Inspectionto the team appointed by the University/any other approved body.

Continuous Internal Assessment (CIA): The performance of students in each course will becontinuously assessed by the respective teachers as per the guidelines given below:

THEORY COURSES:

S. No.	CATEGORY	MAXIMUM MARKS
1.	Assignments	10
2.	Attendancce	5
3.	Seminar	5
3.	Test – I	10
4.	Test – II	10
Continuous Internal Assessment : TOTAL		**40**

PATTERN OF TEST QUESTION PAPER: (Theory courses)

INSTRUCTION	REMARKS
Maximum Marks	50 marks for all Tests
Duration	2 Hours
Part – A	Five mark Questions (4 x 5 = 20 Marks); Choice: 4 out of 6
Part- B	Ten mark Questions (3 x 10 = 30 Marks); Choice: 3 out of 5

STUDIO COURSES:

S. No	CATEGORY	MAXIMUM MARKS
1.	Internal Jury (5 Jury x7 marks)	35
2.	Attendance	5
Continuous Internal Assessment: TOTAL		40*

PRACTICAL COURSES:

S. No	CATEGORY	MAXIMUM MARKS
1.	Internal Jury (Exercise/sheet valuation)**	35
2.	Attendance	5
Continuous Internal Assessment: TOTAL		40*

* - proportionate increase for all categories will be based on the total marks allotted for Continuous Internal Assessment for the concerned course.
** - No of Exercise/Sheets depends on particular course.

ATTENDANCE

Marks Distribution for Attendance

S. No.	Attendance %	Marks
1	Between 91 % and 100%	5
2	Between 86 % and 90%	4
3	Between 81 % and 85%	3
4	Between 76 % and 80%	2
5	Less than 75 %	0

10. REQUIREMENTS FOR APPEARING FOR UNIVERSITY EXAMINATION

A candidate shall normally be permitted to appear for the University Examination of any semester commencing from I semester if he/she has satisfied the semester completion and attendance requirements and has registered for examination in all courses of the semester. Registration is mandatory for Semester Examinations as well as Arrears Examinations failing which the candidate will not be permitted to move to the higher semester. A candidate already appeared for courses or any course in a semester and passed the examination is not entitled to reappear in the same course or courses of the semester for improvement of grades
/ marks.

11. END SEMESTER EXAMINATIONS

End Semester Examination (ESE): End Semester Examination will be held at the end of each semester for each course, which consists of 100 marks later scaled down to 60marks.

PATTERN OF ESE QUESTION PAPER: (Theory courses)

INSTRUCTION	REMARKS
Maximum Marks	100 marks for all Semester Examinations.
Duration	3 Hours
Part – A	Six mark Questions (**5 x 6 =30 Marks**); Choice: 5 out of 10.
Part- B	Fourteen mark Questions **(5 x 14 =70 Marks);** Choice: either or type (internal choice) with two questions from every unit.

PATTERN OF ESE QUESTION PAPER: (Practical & Studio courses)

The ESE for practical and studio courses shall be conducted as an examination and/or as a final jury (viva- voce) for marks as per scheme of examination (attached Annexure A) comprising external architect/related professionals with minimum 3 years' experience in practice or teaching.

12. PASSING REQUIREMENTS

Passing minimum: The passing minimum for CIA is 50% (i.e. 20 out of 40 marks). The passing minimum for ESE is 50% (i.e. 30 out of 60 marks). The overall passing minimum for every course is50% i.e.50 out of 100 marks (Sum of his/her score in internal and external examination).

If the candidate fails to secure a pass in a particular Theory course as per clause 12.1, it is mandatory that candidate shall register and reappear for the examination in the subsequent semester as a arrear when examination is conducted in that course. Further the candidate should continue to register and reappear for the examination till a **pass** is secured in End Semester Examination of such arrear courses.

The Continuous Internal Assessment marks obtained by the candidate in the first appearance shall be retained by the Office of the Controller of Examinations and improved CIA marks may be considered for all subsequent attempts till the candidate secure a pass.

If the candidate fails to secure a pass in a particular Studio/Practical course as per clause 12.1, the candidate shall register and reappear for the examination in that course within 20days from day in which results are published. Further the candidate should continue to register and

reappear for the examination till a **pass** is secured in End Semester Examination of such arrear courses.

The Continuous Internal Assessment marks obtained by the candidate in the first appearance shall be retained by the Office of the Controller of Examinations and improved CIA marks may be considered for all subsequent attempts till the candidate secure a pass.

13. AWARD OF LETTER GRADES

All assessments of a course will be done on absolute marks basis. However, for the purpose of reporting the performance of a candidate, letter grades, each carrying certain number of points, will be awarded as per the range of total marks (out of 100) obtained by the candidate in each course as detailed below:

Letter grade	Marks Range	Grade Point	Description
O	91 - 100	10	OUTSTANDING
A+	81-90	9	EXCELLENT
A	71-80	8	VERY GOOD
B+	66-70	7	GOOD
B	61-65	6	ABOVE AVERAGE
C	55-60	5	AVERAGE
D	50-54	4	PASS
RA	<50		REAPPEARANCE
AB		0	ABSENT

GRADE SHEET

After results are declared, Grade Sheets will be issued to each student which will contain the following details:

a) The list of courses enrolled during the semester and the grade scored.
b) The Grade Point Average (**GPA**) for the semester and
c) The Cumulative Grade Point Average (**CGPA**) of all courses enrolled from first semester onwards.
d) **GPA** is the ratio of the sum of the products of the number of credits (**C**) of courses enrolled and the points corresponding to the grades (**GP**) corresponding to the grades scored in those courses, taken for all the courses, to the sum of the number of credits of all the courses in the semester to the sum of the credits of all courses registered.

$$\textbf{GPA} = \frac{\textbf{Sum of [C * GP]}}{\textbf{Sum of C}}$$

CGPA will be calculated in a similar manner, considering all the courses enrolled from first semester. **"RA**
grade will be excluded for calculating **GPA** and **CGPA**.

Whenever students, having arrear courses, appear for the end semester examination during which there are no regular batch of students writing the same courses, then, the letter grades for the arrears courses shall be awarded based on the range of marks.

REVALUATION

A candidate can apply for revaluation of his/her semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Department and Dean. **A candidate can apply for revaluation of answer scripts for not exceeding 5 courses at a time.** Photocopies of answer scripts will be issued to candidate by paying prescribed fees. The Controller of Examination will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Department and Dean. Revaluation is not permitted for Practical Courses, Seminars, Practical Training and for Project Work.

14. ELIGIBILITY FOR THE AWARD OF THE DEGREE

A student shall be declared to be eligible for the award of the Degree if he/she has:

- Successfully gained the required number of total credits as specified in the Curriculum corresponding to his/herProgramme within the stipulated time.
- Successful completion of Thesis, Practical Training and Study Tours and other requirements as stipulated in the curriculum.
- No disciplinary action is pending against him/her.

15. CLASSIFICATION OF THE DEGREE AWARDED

A candidate who qualifies for the award of the Degree having passed the examination in all the coursesin his/her first appearance within the specified minimum number of semesters and securing a **CGPA of not less than 8.00** shall be declared to have passed the examination in **First Class with Distinction.** For this purpose the withdrawal from examination will not be construed as an appearance. Further, the authorized break of study will not be counted for the purpose of classification.

A candidate who qualifies for the award of the Degree having passed the examination in all the courses within the specified minimum number of semesters plus one semester (i.e. n+1 semesters), and securing **CGPA of not less than 6.50** shall be declared to have passed the examination in **First Class**. For this purpose the withdrawal from examination will not be construed as an appearance. Further, the authorized break of studywill not be counted for the purpose of classification.

All other candidates (not covered in clauses 15.1 and 15.2) who qualify for the award of the degree shall be declared to have passed the examination in **Second Class**.

A candidate who is absent in semester examination in a course / project work after having enrolled for the same shall be considered to have appeared in that examination for the purpose of classification.

16. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

A candidate, may for valid reasons and on prior application, be granted permission to withdraw from appearing for the examination of any one course or consecutive examinations of more than one course in a semester examination. Such withdrawal shall be permitted only once during the entire period of study of the degree programme.

Withdrawal application is valid only if it is made within 10 days prior to the commencement of the examination in that course or courses and recommended by the Head of the Department and Dean and approved by the Registrar.

16.3.1 Notwithstanding the requirement of mandatory TEN days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

Withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction. This provision is not applicable to those who seek withdrawal during X semester.

Withdrawal from the End semester examination is **NOT** applicable to arrears courses of previous semesters.
The candidate shall reappear for the withdrawn courses during the examination conducted in the subsequent semester.

17. PROVISION FOR AUTHORISED BREAK OF STUDY

Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the candidate may apply for additional break of study not exceeding another one year by paying prescribed fee for break of study. If a candidate intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Registrar, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Department and Dean stating the reasons therefore and the probable date of rejoining the programme.

The candidate thus permitted to rejoin the Programme after the break shall be governed by the Curriculum and Regulations in force at the time of rejoining. Such candidates may have to do additional courses as per the Regulations in force at that period of time.

The authorized break of study (for a maximum of one year) will not be counted for the duration specified for passing all the courses for the purpose of classification. However, additional break of study granted will be counted for the purpose of classification.

The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 4.1 irrespective of the period of break of study (vide clause 17.3) in order that he/she may be eligible for the award of the degree.

If any student is detained for want of requisite attendance, progress and good conduct, the period spent in that semester shall not be considered as permitted 'Break of Study' or 'Withdrawal'.

18. PRACTICAL TRAINING

As a part of the degree requirement, all candidates have to mandatorily undergo Practical Training in the 7^{th} semesters under a registered Architect/ Interior Designer for a period of 6 months (with a minimum of 90working days in a semester)

Internal Assessment (400 marks) for Practical Training will be evaluated by the Architect/ Interior Designer for Drawings/Detailing, Application of knowledge & skill, Professional attitude. (for 300 marks) under whom the candidate has been trained and by the Training

Co-coordinator (for 100 marks) of the Faculty of Architecture.

End semester exam (ESE - 600 marks) for Practical Training will be held as a Viva-Voce examined by a jury comprising external architect / Interior Designer members (for 300 marks) and by internal members of the Training Committee (for 300 marks) of the Faculty of Architecture .

Upon passing both the CIA and the ESE with the minimum required marks (50% of marks), the candidate shall also be certified by the Faculty of Architecture to have successfully completed the practical training.

A Training Committee shall be established well before the commencement of the practical training for the purpose of overseeing and regulating all aspects of the student's practical training and shall comprise minimum three faculty members from the faculty of Architecture & minimum one external member from practice/industry. The HoD/Dean shall be the Convener; and the concerned class tutor of the batch shall be the Coordinator of this committee respectively.

20. THESIS

As a part of the degree requirement, all candidates have to submit a thesis in the 8th semester under a faculty guide and/or external guide. This thesis is to be submitted individually by each candidate and is intended to assess individual research, methodology and design skills as a culmination of the knowledge accumulated throughout the course. This thesis shall be submitted as drawings, reports, models, slides, presentations, walkthroughs etc.

The topic selection, scope, criteria for evaluation, periodic reviews and all other matters related to the Thesis except Final ESE shall be decided by the Thesis Committee of the Faculty of Architecture later to be approved by Vice Chancellor/Registrar.

Continuous Internal Assessment (CIA- 400 marks) for Thesis shall be held as a Viva-Voce examined by a jury comprising the Thesis Committee (for 200 marks) and by the Thesis Guide (for 200 marks) of the Faculty of Architecture. Four to six reviews are to be conducted which needs to be decided by Thesis committee and the same to be approved by Vice Chancellor/Registrar.

End Semester Examination (ESE-600 marks) for Thesis shall be held as a Viva-Voce examined by a jury comprising external architect / Internal designer members (for 300 marks) and by internal members of the Thesis Committee (for 300 marks) of the Faculty of Architecture.

A Thesis Committee shall be established well before the commencement of the Thesis for the purpose of overseeing and regulating all aspects of the student's thesis work and shall comprise minimum two faculty members from the concerned department, minimum one external faculty member from academic background and another one external members from practicing background. The HoD/Dean shall be the Convener; and the concerned class tutor of the batch shall be the coordinator of this committee respectively.

20. ELECTIVES

Electives shall be theory, practical or studio course to satisfying their course requirements.

21. DISCIPLINE

Every student is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the University. The erring student will be referred to the Disciplinary Committee constituted by the University, to enquire into acts of indiscipline and recommend the University about the disciplinary action to be taken. If a student indulges in malpractice in any of the University / Internal Examination he / she shall be liable for punitive action as prescribed by the university from time to time.

23. REVISION OF REGULATION AND CURRICULUM

The University may from time-to-time revise, amend or change the Regulations, Scheme of Examinations and syllabi if found necessary at any stage of the course.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):

1. To prepare students to excel in computer applications to succeed in industry/ technical profession. The need to Design and present the ideas onto the working format
2. To provide students with solid foundation in technical design and aesthetics combination fundamentals required to solve related projects and also to pursue higher studies and research.
3. To train students with good design breadth with material understanding so as to comprehend, analyze, design and create design solutions for the real-life projects.
4. To inculcate students in professional and ethical attitude, effective communication skills, multidisciplinary approach and an ability to relate design issues to broader social context.
5. To foster professionals who understand the managerial responsibilities related to issues such as social, ethical and environmental aspects of Interior design.

PROGRAMME OUTCOMES (POs):

On successful completion of the program,

1. Graduates will acquire knowledge of basic design, digital fundamentals, design concepts, materials and a broader understanding into services and execution.
2. Graduates will have an ability to practically identify, formulate and implement design solutions and foray into main stream of the professional practice.
3. Graduates will have an ability to design and conduct experiments, analyze and interpret design data and make suitable drawings and 3d visualizations for execution.
4. Graduates will be able to design variety of projects based on the user study analysis and formulate requirements and design types along with styles and aesthetics related to the above.
5. Graduates will cultivate ethical and managerial duties associated with matters like the social, moral, and ecological facets of the architecture and interior design.

PROGRAMME SPECIFIC OUTCOME (PSO):

1. Graduates will demonstrate skills to use modern tools, software and equipment to analyze project solutions.
2. Graduates will exhibit the knowledge of professional and ethical responsibilities. Graduates will have a Confidence for self-education and ability for continuous learning on trends and technologies along with an Attitude to excel in the field

MAPPING OF PROGRAMME EDUCATIONAL OBJECTIVES WITH PROGRAMME OUTCOME:
A broad relation between the programme objectives and the outcome is given in the following table

PEO	*PO1*	*PO2*	*PO3*	*PO4*	*PO5*	*PSO1*	*PSO2*
1			▪			▪	▪
2	▪		▪				
3		▪	▪				▪
4				▪	▪	▪	▪
5				▪		▪	▪

COURSE MATRIX CHART

	DESIGN BASED	SCIENCE AND TECHNOLOGY BASED
Semester I	Design Fundamentals, Design Studio, Design Thinking.	Environmental Studies, Visual arts, Interior Materials and Construction, Interior Graphics - I
Semester II	Psychology of interiors, Evolution of interiors, Model making, Interior design - II	Computer studio-I, Interior materials and construction -II, Interior Graphics -II
Semester III	Space planning and Ergonomics, Workshop (Wood, cane &Bamboo engineered wood), Interior design -III, Interior Landscape.	Interior services -1-Plumbing and water supply, Computer studio -II, Advanced materials and applications
Semester IV	Contemporary interiors, W o r k s h o p ,Interior Design – IV.	Interior services-II- electrical writing, lighting and air conditioning, Computer Graphics, Furniture construction detailing & Modular/Custom made, Acoustics in Interior Design.
Semester V	Interior design -V. Signage and graphics, Product design, Set Design, Life Style Accessories Design.	Sustainable interior design, Interior Services-III, Transformable Systems and Spaces, Working drawing detailing, Interior design -V,Estimation costing.
Semester VI	Practical Training	Field Study and Documentation
Semester VII	Advanced Workshop, Interior Design - VI Interior Design for special needs. Visual Merchandising.	Design Technology and Innovation, Project management and Entrepreneurship, Interior Digital media and Journalism, Research and Development, Integrated Project work. Interior Website and Blogging, Marketing Techniques, Adaptive reuse and recycling, Presentation Techniques.
Semester VIII	Design Thesis	Professional Practice

B.DES - CURRICULUM

2024 - 2025Batch

PROGRAM STRUCTURE:

Course Legend: IDT – Theory -0, IDP – Practical-1, IDS – Studio-2, IDE – Elective-3, IDV – Value-4
L- lecture, T- Theory, P/S- Practical /Studio C- Credits

Abbreviation: CIA – Continuous Internal Assessment; ESE – End Semester Exam.

Exam Hours: Theory (T)-3 Hrs. Practical (P)-6 Hrs. Studio(S)- 6 hrs.

Course code	Name of the course	EN, EM, SD	Objectives and outcomes		Instruction hours / week			Credit(s)	Maximum Marks		
			PEOs	POs	L	T	P/S		CIA	ESE	Total
									40	60	100
SEMESTER – I											
24IDT101	Design Fundamentals	SD	3	1,6	2	-	-	2	40	60	100
24IDT102	Environmental Studies	SD	2	1,6	2	-	-	2	40	60	100
PRACTICAL AND STUDIO COURSES											
Course code	**Name of the course**	**EN, EM, SD**	**Objectives and outcomes**		**Instruction hours / week**			**Credit(s)**	**Maximum Marks**		
			PEOs	**POs**	**L**	**T**	**P/S**		**CIA**	**ESE**	**Total**
									40	**60**	**100**
24IDP111	Design Thinking	SD	2	3,6	1	-	3	3	60	90	150
24IDS121	Basic Design Studio	EN	2	2,4,5	-	-	12	8	160	240	400
24IDS122	Visual Arts	SD	3	1,4,6	1	-	3	3	60	90	150
24IDES*	Elective- I	EM	3	1,6,7	1	-	5	4	80	120	200
24IDES**	Elective- II	EM	1	1,6,7	-	-	6	3	60	90	150
24IDOE141	Sports and Yoga		-	-	1	0	0	2	100	-	100
Semester Total					8	0	29	27	600	750	1350

List of courses for Studio 23IDSE*-Elective -1	**List of courses for Studio** 23IDSE** -Elective -II
24IDES131 – Interior Materials and Construction-I 24FDES132 – Fashion Orientation	24IDES133 – Interior Graphics- I 24FDES134 – Digital Design – I

Course code	Name of the course	EN, EM, SD	Objectives and outcomes		Instruction hours / week			Credit(s)	Maximum Marks		
			PEOs	POs	L	T	P/S		CIA	ESE	Total
									40	60	100
SEMESTER – II											
24IDT201	Psychology of Interiors	SD	**3**	**1.4,7**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
24IDT202	Evolution of Interiors-1	SD	**2**	**1,4,7**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
PRACTICAL AND STUDIO COURSES											
Course code	**Name of the course**	**EN, EM, SD**	**Objectives and outcomes**		**Instruction hours / week**			**Credit(s)**	**Maximum Marks**		
			PEOs	**POs**	**L**	**T**	**P/S**		**CIA**	**ESE**	**Total**
									40	**60**	**100**
24IDP211	Computer Studio -I	SD	**1**	**3,6,7**	**1**	**0**	**3**	**3**	**60**	**90**	**150**
24IDP212	Model Making	EN	**2**	**3,6,7**	**1**	**0**	**3**	**3**	**60**	**90**	**150**
24IDS221	Interior Design - II	EN	**3**	**3,6,7**	**0**	**0**	**12**	**8**	**160**	**240**	**400**
24IDS222	Interior Materials and Construction - II	EM	**3**	**1,6,7**	**1**	**0**	**6**	**4**	**80**	**120**	**200**
24IDS223	Interior Graphics - II	SD	**1**	**1,6,7**	**1**	**0**	**4**	**3**	**60**	**90**	**150**
Semester Total					**8**	**0**	**28**	**25**	**500**	**750**	**1250**

Course code	Name of the course	EN, EM, SD	Objectives and outcomes		Instruction hours / week			Credit(s)	Maximum Marks		
			PEOs	POs	L	T	P/S		CIA	ESE	Total
									40	60	100
SEMESTER – III											
24IDT301	Evolution of Interiors-II (Indian Context)	EM	**3**	**2,4, 7**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
24IDT302	Interior Services - I - Plumbing and Water Supply	EM	**2**	**1,5, 7**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
PRACTICAL AND STUDIO COURSES											
Course code	**Name of the course**	**EN, EM, SD**	**Objectives and outcomes**		**Instruction hours / week**			**Credit(s)**	**Maximum Marks**		
			PEOs	**POs**	**L**	**T**	**P/S**		**CIA**	**ESE**	**Total**
									40	**60**	**100**
24IDP311	Computer Studio-II	SD	**1**	**2,6, 7**	**1**	**0**	**3**	**3**	**60**	**90**	**150**
24IDP312	Workshop (Wood, Cane, Bamboo and Engineered Wood)	EM	**2**	**1,6, 7**	**0**	**0**	**6**	**3**	**60**	**90**	**150**
24IDS321	Interior Design - III	EN	**5**	**3,4, 7**	**0**	**0**	**12**	**8**	**160**	**240**	**400**
24IDS322	Advanced Materials and Applications	EM	**4**	**3,4, 7**	**1**	**0**	**6**	**4**	**80**	**120**	**200**
24IDS323	Interior Landscape	EM	**5**	**1,2, 7**	**0**	**0**	**4**	**3**	**60**	**90**	**150**
Semester Total					**6**	**0**	**31**	**25**	**500**	**750**	**1250**

Course code	Name of the course	EN, EM, SD	Objectives and outcomes		Instruction hours / week			Credit(s)	Maximum Marks		
			PEOs	POs	L	T	P/S		CIA	ESE	Total
									40	60	100
SEMESTER – IV											
24IDT401	Contemporary Interiors	EM	**3**	**1,3,4**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
24IDT402	Space Planning and Ergonomics	EM	**2**	**1,5,7**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
PRACTICAL AND STUDIO COURSES											
Course code	**Name of the course**	**EN, EM, SD**	**Objectives and outcomes**		**Instruction hours / week**			**Credit(s)**	**Maximum Marks**		
			PEOs	**POs**	**L**	**T**	**P/S**		**CIA**	**ESE**	**Total**
									40	**60**	**100**
24IDP411	Computer Graphics	SD	**1**	**2,5,6**	**1**	**0**	**2**	**3**	**60**	**90**	**150**
24IDP412	Workshop	EM	**2**	**1,3,6**	**0**	**0**	**4**	**3**	**60**	**90**	**150**
24DS421	Interior Design - IV	EN	**5**	**3,6,7**	**0**	**0**	**12**	**8**	**160**	**240**	**400**
24IDS422	Furniture Construction Detailing and Modular/ Custom Made	EM	**4**	**1,3,4**	**0**	**0**	**6**	**4**	**80**	**120**	**200**
24IDS423	Interior Services - II– Electrical Wiring, Lighting and Air Conditioning	EN	**4**	**1,4,7**	**1**	**-**	**2**	**3**	**60**	**90**	**150**
Semester Total					**6**	**0**	**26**	**25**	**500**	**750**	**1250**

Course code	Name of the course	EN, EM, SD	Objectives and outcomes		Instruction hours / week			Credit(s)	Maximum Marks		
			PEOs	POs	L	T	P/S		CIA	ESE	Total
									40	60	100
SEMESTER – V											
24IDT501	Sustainable Interior Design	EM	**2**	**1,4,6**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
24IDT502	Interior Services – III-Advance Services	EM	**2**	**1,5,6**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
PRACTICAL AND STUDIO COURSES											
Course code	**Name of the course**	**EN, EM, SD**	**Objectives and outcomes**		**Instruction hours / week**			**Credit(s)**	**Maximum Marks**		
			PEOs	**POs**	**L**	**T**	**P/S**		**CIA**	**ESE**	**Total**
									40	**60**	**100**
24IDP511	Transformable System and Spaces	SD	**1**	**2,3,6**	**1**	**0**	**3**	**3**	**60**	**90**	**150**
24IDP512	Working Drawings and Detailing	EM	**5**	**1,3,4**	**1**	**0**	**5**	**3**	**60**	**90**	**150**
24IDS521	Interior Design - V	EN	**5**	**3,6,7**	**0**	**0**	**12**	**8**	**160**	**240**	**400**
24IDS522	Estimation Costing	EM	**4**	**5,6,7**	**1**	**0**	**5**	**4**	**80**	**120**	**200**
24IDES*	Elective -III		**4**	**1,6,7**	**1**	**0**	**3**	**3**	**60**	**90**	**150**
Semester Total					**8**	**0**	**28**	**25**	**500**	**750**	**1250**

List of Elective-III -23IDSE*courses

24IDES531 – Signage and Graphics

24IDES532 – Product Design

24IDES533 - Set Design

24IDES534- Lifestyle Accessories Design

SEMESTER – VI											
PRACTICAL AND STUDIO COURSES											
Course code	**Name of the course**	**EN, EM , SD**	**Objectives and outcomes**		**Instruction hours / week**			**Credit(s)**	**Maximum Marks**		
			PEOs	**POs**	**L**	**T**	**P/S**		**CIA**	**ESE**	**Total**
									40	**60**	**100**
24IDP611	Practical Training	EN	**5**	**6,7**	**0**	**0**	**0**	**16**	**320**	**480**	**800**
24IDS621	Field Study and Documentation	EM	**4**	**1,6,7**	**0**	**0**	**6**	**4**	**80**	**120**	**200**
Semester Total					**0**	**0**	**6**	**20**	**400**	**600**	**1000**

Course code	Name of the course	EN, EM, SD	Objectives and outcomes		Instruction hours / week			Credit(s)	Maximum Marks		
			PEOs	POs	L	T	P/S		CIA	ESE	Total
									40	60	100
SEMESTER – VII											
24IDT701	Design Technology and Innovation	EM	4	6,7	2	0	0	2	40	60	100
24IDT702	Project Management in Interior Design	EM	5	6,7	2	0	0	2	40	60	100
PRACTICAL AND STUDIO COURSES											
Course code	**Name of the course**	**EN, EM, SD**	**Objectives and outcomes**		**Instruction hours / week**			**Credit(s)**	**Maximum Marks**		
			PEOs	**POs**	**L**	**T**	**P/S**		**CIA**	**ESE**	**Total**
									40	**60**	**100**
24IDP711	Advanced Workshop	EM	2	1,3,7	1	0	1	3	60	90	150
24IDS721	Interior Design - VI	EN	5	3,6,7	2	0	10	8	160	240	400
24IDS722	Integrated Project Work	EM	5	1,6,7	0	0	6	4	80	120	200
24IDES*	Elective - IV	EN	4	2,3,5	0	0	4	3	60	90	150
24IDES**	Elective -V	EN	4	1,6,7	1	0	1	3	60	90	150
Semester Total					8	0	22	25	500	750	1250

List of Elective-IV * courses

24IDES731 : Interior Digital Media and Journalism

24IDES732 : Interior Website and Blogging

List of Elective-V ** courses

24IDES733 Marketing Techniques

24IDES734 Interior Design for Special Needs

24IDES735 Adaptive Reuse and Recycling

24IDES736 Visual Merchandising

Course code	Name of the course	EN, EM, SD	Objectives and outcomes		Instruction hours / week			Credit(s)	Maximum Marks		
			PEOs	POs	L	T	P/S		CIA	ESE	Total
									40	60	100
SEMESTER – VIII											
24IDT801	Professional Practice	EM	**4**	**2,6,7**	**2**	**0**	**0**	**2**	**40**	**60**	**100**
PRACTICAL AND STUDIO COURSES											
Course code	**Name of the course**	**EN, EM, SD**	**Objectives and outcomes**		**Instruction hours / week**			**Credit(s)**	**Maximum Marks**		
			PEOs	**POs**	**L**	**T**	**P/S**		**CIA**	**ESE**	**Total**
									40	**60**	**100**
24IDS821	Design Thesis	EN	**5**	**5,6,7**	**1**	**0**	**28**	**16**	**320**	**480**	**800**
Semester Total					**3**	**0**	**28**	**18**	**360**	**540**	**900**

Course Content Percentage Chart

S.No	Courses	Nos	Credits	Total Credits
1.	Theory Courses	13	2	26
2.	Practical			
2a.	Practical	10	3	30
2b.	Practical Training	1	16	16
3	Elective			
3a.	Elective- Practical			
3b.	Elective – studio	14	3	42
		2	4	8
4	Studio			
4a	Studio	6	8	48
4b	Studio	5	4	20
4c	Studio	5	3	15
5	Thesis			16
	Total			**221**
	Studio (4a+4b+4c+4d)– total			**84**
	Credits to be earned			**188 +2**

Total Marks :

Semester	Total Credits	Marks
Semester- I	27	1350
Semester- II	25	1250
Semester- III	25	1250
Semester- IV	25	1250
Semester- V	25	1250
Semester- VI	25	1250
Semester- VII	20	1000
Semester- VIII	18	900
Total	**190**	**9450**

24IDT101	DESIGN FUNDAMENTALS								SEMESTER-I
Marks	Internal	40	External			60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	P/S	0	T	0	Credits			2

COURSE OBJECTIVE:

- Understanding various aspects such as form, scale, light, dimension, height, transitional elementsetc.
- Understanding and applying design vocabulary such as Point, Line, shape, color, texture, areaetc.
- Understanding and applying design principles such as ratio, proportion, scale, balance, harmony, unity, variety, rhythm, emphasis.
- Understanding the color theory and color psychology.
- Understanding anthropometrics and ergonomics in design.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the in-depth concepts of design and definition of design	Understand
CO2	Analyze the elements and forms in design.	Analyze
CO3	Have a change in design perspective.	Understand
CO4	Have a deeper knowledge and understanding of colors.	Understand
CO5	Understand the significance of anthropometrics and ergonomics in design	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	S	M					
CO2	S	L					
CO3	S	L					
CO4	S	L					
CO5	S	L					

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - DESIGN VOCABULARY

Design thinking and design vocabulary- Geometry of design -Point, line, Plane s Solids. Elements of design - texture, Color, value, space – Applications of elements of design in buildings, products etc.

UNIT II - DESIGN PRINCIPLES & COMPOSITION

Principles of Design- Balance, Emphasis, Repetition, Movement, Proportion, Gradient, Contrast, Hierarchy, Rhythm, Pattern, Variety and Unity. Principles of composition- using grids, negative and positive space, symmetrical/asymmetrical, Rule of Thirds Center of Interest and photography.

UNIT III - COLOR THEORY AND COLOR PSYCHOLOGY

Color wheel primary, secondary, tertiary colors, color wheel, color schemes color value, intensity, and modification of color hues–tints, shades, neutralization. Color charts–types, making and using. Color harmony, use of color harmony. Psychological impact of color– warm, cool and neutral colors, impact of specific hues, meanings of color, color and form, color and light, color and surface qualities, color and distances and scales. Relevant case studies to understand the Color psychology in spaces. Site visits to visualize the form and space are recommended

UNIT IV- ANTHROPOMETRICS

Definition, significance, theory of standard dimension based on human figures for activities, functions, circulation, furniture design, fashion design, spatial requirements –Data collection from literature study and comparisons between the current functional spaces.

UNIT V- ERGONOMICS

Definition, significance, principles of ergonomics - application in design furniture, tools, fixtures and materials- relationship between anthropometrics and ergonomics- Human intervention and functionality to both anthropometry and ergonomics in day-to-day scenario

TOTAL: 30 PERIODS

REFERENCES

1. Gasson, P. (1974). *Theory of Design*. Batsford.
2. Design, second edition: The definitive Visual Guide, by DK and Judith Miller (2021)
3. Elements of Design: Rowena Reed Kostellow and the Structure of Visual Relationships, by Gail GreetHannah (2002)
4. Design elements, Third Edition: Understanding the rules and knowing when to break them-A VisualCommunication Manual, by Timothy Samara (2020)
5. Linda Holtzschue. Understanding color, An introduction for designers, by Van Nostrand (1995)
6. The Design of Everyday Things, by Don Norman (2013)
7. Emotional Design: Why we Love (or Hate) Everyday Things, by Don A. Norman (2005)
8. Sam. F. Miller, Design process – a primer for Architectural and Interior Design, VanNostrandReinhold.(2095)
9. Gary Gordon, Interior lighting for designers John Wiley& Sons Inc.(2003)
10. Harold Linton,Colour in Architecture, McGraw Hill(2099)
11. Jonathan Poore, Interior Color By Design, Rock Port Publishers.(2094)
12. JohannessItten, The Art of Color, John Wiley and Son(2093)
13. Introduction to Ergonomics, 2nd Edition, by Taylor and Francis (2003)
14. Anthropometry, Apparel sizing & Design Woodhead Publishing edited byDeepthiGuptha&NoraasdaZakaria

NPTEL courses to refer:

1. Design Thinking: A Primer by Prof. Ashwin Mahalingam, Prof. Bala Ramadurai | IIT Madras
2. Innovation by Design by Prof. B.K. Chakravarthy | IIT Bombay

24IDT102	ENVIRONMENTAL STUDIES							SEMESTER-I
Marks	Internal	40	External		60	Total	100	Exam Hours	3
Instruction Hours /Week	L	2	T	0	P/S	0		Credits	2

COURSE OBJECTIVE:

- To create the awareness about environmental problems among people.
- To develop an attitude of concern for the environment.
- To motivate public to participate in environment protection and improvement.
- To be introduced to a sustainable approach in the dwelling formats.
- To create an ardent respect for the depleting resources of the world.
- To understand the biodiversity and the impact of introducing building environments in thevarious bio diverse surroundings.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the core concepts and methods from ecological and physical science.	understand
CO2	Analyze and evaluate the environmental policies	understand
CO3	Appreciate the ethical, cross-cultural, and historical context of environmental	Understand & remember
CO4	Apply sustainable approach that could be environmentally friendly toreduce the carbon footprint.	Apply
CO5	Understand the changes in the ecosystems due to the intervention of the human race.	Understand & remember
CO6	Understand and help in the global green revolution that is initiated to produce green environments for the future to come.	Understand & remember

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**M**						
CO2	**M**		**M**				
CO3	**M**			**S**			
CO4	**M**		**L**	**L**			
CO5	**L**	**M**	**L**				
CO6	**M**						

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - INTRODUCTION - ENVIRONMENTAL STUDIES & ECOSYSTEMS

Environment-definition, scope and
importance; Ecosystem- structure and
functions of eco system;
Energy flow-food chains and food webs-ecological succession;

Classification of eco system: forest ecosystem, grassland ecosystem, desert ecosystem, aquatic ecosystems(ponds, streams, lakes, rivers, oceans, estuaries).

UNIT II - NATURAL RESOURCES - RENEWABLE AND NON-RENEWABLE RESOURCES

Natural resources: Renewable and non – renewable resources.
Land resources and land use change, land degradation, soil erosion and desertification.
Forest resources - Deforestation: Causes and impacts due to mining, dam building on environment, forests,biodiversity and tribal populations.
Water resources: Exploitation of surface and ground water, floods, droughts, conflicts over water.
Use of alternate energy sources- growing energy needs- case studies- role of an individual in conservation ofnatural resources- equitable use of resources for sustainable lifestyles.

UNIT III - BIODIVERSITY AND ITS CONSERVATION

Levels of biological diversity: Genetic, species and ecosystem diversity.
Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational value. Bio-geographical classification of India- biodiversity patterns (global, national and local levels)- hotspots ofbiodiversity- India as a mega-diversity nation- endangered and endemic species of India.
Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts.
Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity.

UNIT IV - ENVIRONMENTAL POLLUTION

Definition, causes, effects and control measures of: air pollution, water pollution, soil pollution, noise pollution- nuclear hazards and human health risks- Solid waste management and control measures of urban and industrial wastes- Role of an individual in prevention of pollution- Case studies.

UNIT V - SOCIAL ISSUES AND THE ENVIRONMENT

Concept of sustainability and sustainable development- Water conservation- Rain water harvesting, watershed management- Climate change, global warming, ozone layer depletion, acid rain and its impacts on human communities and agriculture- Environment Laws (Environment Protection Act, Air Act, Water Act, Wildlife Protection Act, Forest Conservation Act).

TOTAL: 30 PERIODS

REFERENCES:

1. Anonymous. 2004. A text book for Environmental Studies, University Grants Commission and BharatVidypeeth Institute of Environmental Education Research, New Delhi.
2. AnubhaKaushik., and Kaushik, C.P. 2004. Perspectives in Environmental Studies. New AgeInternational Pvt. Ltd. Publications, New Delhi.
3. Arvind Kumar. 2004. A Textbook of Environmental Science. APH Publishing Corporation, New Delhi.
4. Daniel, B. Botkin., and Edward, A. Keller. 2095. Environmental Science John Wiley and Sons, Inc.,New York.

5. Mishra, D.D. 2010. Fundamental Concepts in Environmental Studies. S.Chand& Company Pvt. Ltd.,New Delhi.
6. Odum, E.P., Odum, H.T. and Andrews, J. 2071. Fundamentals of Ecology. Philadelphia: Saunders.
7. Rajagopalan, R. 2016. Environmental Studies: From Crisis to Cure, Oxford University Press.
8. Sing, J.S., Sing. S.P. and Gupta, S.R. 2014. Ecology, Environmental Science and Conservation. S.Chand & Publishing Company, New Delhi.
9. Singh, M.P., Singh, B.S., and Soma, S. Dey. 2004. Conservation of Biodiversity and NaturalResources.Daya Publishing House, New Delhi.
10. Tripathy. S.N., and Sunakar Panda. (2004). Fundamentals of Environmental Studies (2nd ed.). Vrianda Publications Private Ltd, New Delhi.
11. Verma, P.S., and Agarwal V.K. 2001. Environmental Biology (Principles of Ecology). S. Chand andCompany Ltd, New Delhi.

24IDP111	DESIGN THINKING							SEMESTER-I
Marks	Internal	60	External		90	Total	150	Exam Hours	6
Instruction Hours/Week	L	1	P/S	3	T	0	Credits		3

COURSE OBJECTIVE

- Identifying problems and providing feasible solutions are essential qualities for a designer. With this context, this course is devised to introduce to the students, design thinking skills that can be practiced to solve complex problems by approaching it from the user's perspective.
- It also aims to turn their ideas into tangible, testable products as quickly as possible.
- To understand the design thinking process and techniques
- To familiarize them with the design thinking process.
- To learn about human centric design approach.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Analyze and understand different kinds of thinking skills used in design.	Analyze
CO2	Apply design thinking skill and endeavor the design problem.	Apply
CO3	Understand about human centric approach process	Understand
CO4	Practice and solve complex problems by approaching from user's perspective	Analyze
CO5	Understand the techniques and tools and apply them to arrive at solutions quickly	Understand and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**M**	**S**	**M**				
CO2		**S**					**M**
CO3					**L**		
CO4	**M**						
CO5						**S**	

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I – INTRODUCTION TO DESIGN THINKING

Introduction to design thinking, origin and purpose of Design Thinking and innovation – Design Thinking and its Benefits – Cognitive models applied in Design Thinking - critical thinking- creative thinking. Choose a product/ service to apply thedesign thinking process to arrive at a solution to create or improvise the product/ service.

UNIT II – INTRODUCTION TO DESIGN THINKING FRAMEWORK

5 actionable steps in design thinking framework. Do case study.

1. Empathize- getting to know the users and their challenges
2. Define- knowing what problem exactly needs to be solved

3. Ideate- Outside of the box thinking and what solutions and angles can be discovered.
4. Prototype- creating something tangible those users can then try out.
5. Testing- giving your prototype to real users who will determine if your solution is valid or not

UNIT III –DESIGN THINKING APPROACH AND TECHNIQUES

1. Empathize with the users- ask the right questions, observation & empathy
2. Define the problem- point of view, pattern recognition and Connecting dots.
3. Ideate- develop potential solution, feedback on the solution
4. Prototype- create and review, get feedback, types of prototyping
5. Testing- test final ideas, testing types

UNIT IV – DESIGN THINKING PRACTICES

Visualization techniques and diagrams such as empathy mapping, revisiting the wall, affinity diagram, mind map, journey map. Story telling techniques and improvisations. Assumptions, pitfalls and cautions. Scamper, Brainstorming, mind mapping, etc.

UNIT V –FINAL PROJECT

Present the design thinking process for the design problem chosen.

TOTAL: 60 PERIODS

REFERENCES

1. Design thinking handbook, by Eli Woolery
2. The Little Booklet on Design Thinking: An Introduction: 1, by Monika Hestad Silvia Rigoni AndersGrnli | 1 January 2017
3. Fashion Thinking: Creative Approaches to the Design Process, by Fiona Dieffenbacher | 12 November 2020
4. Models for Sustainable Framework in Luxury Fashion: Luxury and Models (Textile Science and Clothing Technology), by Subramanian SenthilkannanMuthu | 21 February 2018
5. Returns on Omni channel Marketing. Towards a holistic framework to manage and measure Omni channel strategy's success in the premium fashion industry, by InsaSchniedermeier | 26 July 2017
6. Jeanne Liedtka , Andrew King, Kevin Bennett , “Book - Solving Problems with Design Thinking - Ten Stories of What Works” (Columbia Business School Publishing), 2013.
7. Idris Mootee, "Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School", John Wiley & Sons 2013.
8. Hasso Plattner, Christoph Meinel and Larry Leifer (eds), "Design Thinking: Understand – Improve– Apply", Springer, 2011.

24IDS121	BASIC DESIGN STUDIO							SEMESTER-I
Marks	**Internal**	**160**	**External**		**240**	**Total**	**400**	**Exam Hours**	**6**
Instruction Hours/Week	**L**	**0**	**T**	**0**	**P/S**	**12**	**Credits**		**8**

COURSE OBJECTIVE:

- To give an understanding of design as creating form towards a purpose at various scales.
- To enable exploration of the universal visual, experiential and cognitive aspects of design throughengaging elements and principles of form.
- Understanding various aspects such as form, scale, light, dimension, height, transitional elementsetc.
- Understanding and applying design vocabulary such as Point, Line, shape, color, texture, areaetc.
- To give an insight into the ways in which form/ morphology and use/effect can come together

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the totality and components of form in the creation of design.	Understand
CO2	Explore the visual/ cognitive language and grammar of the universal elements and principles of design.	Understand and Analyze
CO3	Understand needs as encompassing functional, behavioral, cultural, experiential, etc.,	Understand
CO4	Engage awareness towards creating morphology that fulfills stated intents and needs.	Analyze and create
CO5	Understand the design vocabulary and create designs with design principles	Understand and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1			**M**				
CO2	**L**		**M**				
CO3	**M**	**M**	**M**				
CO4		**M**					
CO5	**S**						

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - ELEMENTS OF DESIGN

Point, line, shape, volume, texture and color–in relation to light, pattern etc and exercises to represent abstractexpressions through sheets and models.

UNIT II - PRINCIPLES OF DESIGN

Balance, Emphasis, Repetition, Movement, Proportion, Negative Space, Contrast, Hierarchy, Rhythm, Pattern, Variety and Unity- exercises to represent abstract expressions through sheets and models.

UNIT III - FORM STUDIES

Developing shapes and forms- Addition, subtraction and transformation techniques. Choose an object from nature and represent in the following ways- realistic, stylized, simplified, geometric & abstract

UNIT IV - PRINCIPLES OF COMPOSITION

grids, negative and positive space, symmetrical/asymmetrical, Rule of Thirds, Center of Interest, Gestalts Theory of Visual Composition and exercises to represent these ideas through sheets and models.

UNIT V - COLOUR THEORY

Create color wheel and make compositions of the different color schemes as sheets and models, explore and study relationship between color and light, surface qualities, scale and distances.

TOTAL: 180 PERIODS

REFERENCES

1. Visual Grammar by Christian Leborg
2. Design, second edition: The definitive Visual Guide, by DK and Judith Miller (2021)
3. Elements of Design: Rowena Reed Kostellow and the Structure of Visual Relationships, by Gail Greet Hannah (2002)
4. Design elements, Third Edition: Understanding the rules and knowing when to break them- A Visual Communication Manual, by Timothy Samara (2020)
5. Linda Holtzschue. Understanding color, An introduction for designers, by Van Nostrand (1995)
6. The Design of Everyday Things, by Don Norman (2013)
7. Emotional Design: Why we Love (or Hate) Everyday Things, by Don A. Norman (2005)
8. Sam. F. Miller, Design process – a primer for Architectural and Interior Design, Van Nostrand Reinhold.(2095)
9. Gary Gordon, Interior lighting for designers John Wiley& Sons Inc.(2003)
10. Harold Linton,Colour in Architecture, McGraw Hill(2099)
11. Jonathan Poore, Interior Color By Design, Rock Port Publishers.(2094)
12. JohannessItten, The Art of Color, John Wiley and Son(2093)

24IDS122	VISUAL ARTS							SEMESTER-I
Marks	Internal	60	External		90	Total	150	Exam Hours	6
Instruction Hours/Week	L	1	T	0	P/S	3	Credits		3

COURSE OBJECTIVE:

- To improve students' observation skill.
- To make the student practice drawing to create muscle memory and improve hand eyecoordination.
- To expose them to the basic drawing techniques.
- To explore the different drawing mediums.
- To help them observe, study and decode techniques used by artists in their paintings
- To help them gain confidence while communicating design visually in the future throughdrawing.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Observe and see things from different perspectives leading to creative spark.	Understand and Analyze
CO2	Develop the eye for detail.	Understand
CO3	Have knowledge of the different drawing techniques and mediums.	Understand
CO4	Develop their personal style of visual representation.	Analyze and create
CO5	Understand that drawing is an effective skill while Communicating design.	Understand and apply
CO6	Gain confidence to represent their ideas visually.	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**	**M**	**M**				
CO2		**S**					
CO3		**S**					
CO4	**L**	**S**	**M**				
CO5		**S**					

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - BASIC TECHNIQUES

Sketching Basics- Basic techniques such as positioning and usage of fingers and hand. Introduction to basic drafting properties such as different grades of pencils and its applications. Representation of textures. Basic principles of free hand plotting and layout.

Understanding and sketching Texture – Sketching various examples of different textures found in natural things, For example – Leaves, wood, etc.,.

UNIT II - FREE HAND SKETCHING AND PENCIL TECHNIQUE

Free hand sketching – Understanding visual proportion of objects and sketching to improve line drawing skills.

Pen and ink- Understand back ground and fore ground and represent outdoors using pen and ink to show positive and negative spaces.

Pencil technique 1- Select and object or combinations of objects, observe proximity, light and shadow, proportion and represent using 6 different pencil shading techniques (Smudging, Hatching, Cross Hatching, Contour, Scribble and Stippling) to understand lighting and levels.

Pencil technique 2- To explore different color mediums select an object and color it with different mediums.

UNIT III -PRESPECTIVE DRAWING

Perspective drawing- Learn the basics of perspective, sketch various interior and exterior spaces to understand different types of perspective drawings

UNIT IV - COMPLEX COMPOSITION

life 1 –Sketch a combination of objects placed in a complex composition using color pencils to improve representation techniques and to understand different representation of textures.

Self-portrait- Select a medium and explore abstract art with a self-portrait. Case study any famous artist works to understand application techniques.

UNIT V- LIVE EXPOSURE

An interaction session between the students and artist- exposing to different artistic techniques.

TOTAL: 60 PERIODS

REFERENCES

1. Keys to Drawing, North Light Books (1990)
2. Art Fundamentals, 3dtotal Publishing (2013)
3. Perspective made Easy, by Ernest R. Norling (1999)
4. How to Draw what you See, by Rudy de Reyna (1996)
5. Drawing for the absolute and utter beginner, by Claire Watson Garcia (2018)
6. Pen & Ink drawing, by Alphonso Dunn (2015)
7. The Natural Way to Draw, by Kimon Nicolaides (1990)
8. Paul Laseau, Freehand Sketching: An Introduction. 2003
9. Robert S. Oliver,, The Complete Sketch, Van Nostrand Reinhold, New York, 2089.
10. Tokyo Musashino Academy of Art - Introduction to Pencil Drawing, Graphic - Shaw Publishing Co. Ltd., Japan, 2091.
11. Alwyn Cranshaw, Learn to paint with Water colours, Acrylic colours, Boats and Harbours, Sketch, Still life, landscapes, William Collins Sons and Co. Ltd., London, 2081.
12. Drawing – A creative Process, Francis D.K. Ching, John Wiley Sons, New York
13. How to paint & draw, BodoW.Jaxtheimer, Thames & Hudson, London
14. Innovative product design practice: Carl Liu's Design Book, by Carl Liu (2007)
15. Learning Curves: An inspiring guide to Improve your Design Sketch Skills, by Klara Sjolen and Allan Macdonald (2011)

24IDES131	ELECTIVE-1: INTERIOR MATERIALS AND CONSTRUCTION-I							SEMESTER-I
Marks	Internal	80	External			120	Total	200	Exam Hours	6
Instruction Hours/Week	L	1	T	0	P/S	5	Credits			4

COURSE OBJECTIVE:

- Understanding the basic components of the buildings that envelope a small building
- Understanding the different types in each element and different treatments for the same.
- Understanding function of each component of a building like foundation, walls, beams,column, and roofs.
- Understanding simple roof & floor finishes.
- To understand the primary basics of the loading in a structure and the distribution of the load
- To understand the composition and properties of the materials.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the Interior construction details with building materials	Understand
CO2	Judge the structure before making any structural changes.	Analyze and evaluate
CO3	Work with different materials	Understand and apply
CO4	Understand the Technical drawing and their mode of drawing representation	Understand
CO5	Draw the technical plan, elevation and section along with sketches	Analyze , Apply and create
CO6	Apply the best materials suited for the respective spaces	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**M**	**M**	**L**		**L**		
CO2		**M**	**L**				
CO3		**M**					
CO4	**M**		**L**		**L**		
CO5		**M**	**L**		**L**		
CO6	**L**				**M**	**M**	

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - INTRODUCTION TO BUILDING COMPONENTS AND NOMENCLATURE

Drawings of the components of a building indicating

- Foundation –brick footing, stone footing & column footing
- Concrete flooring, plinth beam & floor finish
- Superstructure- brickwork with sill, lintel, windows& sunshade
- R.C.C oof with weathering course, parapet & coping.

UNIT II -INTRODUCTION TO INTERIOR BUILDING COMPONENTS AND NOMENCLATURE

Studying and observing various interior elements and components of a space.

Introduction to building interior elements such as partitions, flooring, false ceiling, paneling, handrails, etc., Different kinds of systems and methods. Drawings/ sketches of the principles. Understanding of product literature. Site visits with documentation in the form of sketches/ photos.

UNIT III -INTRODUCTION TO INTERIOR MATERIALS

Wood-Soft and hardwood, Plywood, laminated wood and particle boards Commercial forms of wood plywood, block board, particle board and other products available in the market– properties, manufacture & uses.

Cane and bamboo, tools and techniques of joinery, application to build forms and interiors.

Synthetic Materials–Different types of Glass, their properties, manufacturing processes and uses.

Plastics – injection molding & other manufacturing methods, etc.

Timber: classification of trees, characteristics of good timber, defects in timber, seasoning of timber, uses in building construction and interiors., industrial timber.

Gypsum and their different types. Aluminum, PVC/UPVC,glass, etc.

Metal: The application of various metals in interiors and various finishing options. Cast iron, Wrought Iron, Steel, Mild Steel, Stainless Steel, Aluminum, Brass, Coper, Zink, Lead Alloys, Bronze.

Laminates: Properties and application of all types of plastic laminates. Manufacturing process and preservation and maintenance of laminates. Types of Laminates etc.

Fabrics – textile, Jute, leather etc. different types and their uses

Seminars from various vendors to understand the current trend of the materials, its properties and usage of materials

UNIT IV: PRODUCT AND MATERIAL WORKSHOP

Small scale models/ material board with usage of materials available in market

UNIT V: INDUSTRIAL SITE VISIT

Site visit – students should visit a On- Going building site to understand the exterior and interior building Component

TOTAL: 90 PERIODS

REFERENCES

1. S. C. Renewal - Engineering materials – Charotar Publishing, Anand2003
2. Francis D. K. Ching - Building Construction Illustrated, VNR, 2075,
3. Parker, Harry, 2057, Materials and Methods of Architectural Construction, John Wiley & Sons, London2057
4. Understanding Buildings: A Multidisciplinary Approach (Paperback) by Esmond Reid
5. R.J.S.Spencke and D.J. Cook, Building Materials in Developing Countries, John Wiley and Sons, 2083.

6. HUDCO - All you want to know about soil stabilized mud blocks, HUDCO Pub., New Delhi, 2089.
7. UNO - Use of bamboo and reeds in construction - UNO Publications.2075
8. Rangwala, S.C - Building Construction: Materials and types of Construction - John Wiley and Sons, Inc., New York.
9. Dr. B.C Punmia., Building materials, New Age International Publishers, 4 th Ed., (2012)
10. Drew Plunkett, Construction and detailing for Interior design, Laurence King Pub, (2014)
11. USG,The gypsum construction Handbook, RS Means; 7 edition (2014)
12. J.Rosemary Riggs, Materials and components of interior architecture, Prentice hall;8 edition (2013)
13. David Kent, Interior detailing; components of construction, John Wiley &sons (2010)
14. Jim Postell,Nancy Gesimondo , Materiality and interior construction ,Wiley;(201

24FDES132	ELECTIVE-1: FASHION ORIENTATION							SEMESTER-I
Marks	Internal	80	External		120	Total	200	Exam Hours	6
Instruction Hours/Week	L	1	P/S	5	DS	0	Credits		4

COURSE OBJECTIVE:

- This course helps students understand the idea of fashion design and gives an overview of the fashion industry on a brief note including the need for fashion, multiple roles and responsibilities of a fashion designer & factors influencing fashion.
- This knowledge would help them to explore and discover their specific field of interest through the 4-year program.
- The entire process of designing and producing fashion apparels is covered as to give a foundation of how this field works.
- This course will give an overview of fashion design and elaborate on different aspects like elements of design, understanding of the body and fashion industry.
- It aims to provide students a clear perspective on creativity and its application in innovative fashion design
- Helps to familiarize students with essential fashion terminology and theories and provide information about fashion designers and brands

COURSE OUTCOMES:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Identify more explorations and improve their fashion vocabulary.	Knowledge
CO2	Develop a deeper knowledge and understanding about the factors affecting fashion	Apply
CO3	Explore and learn to see fashion from different perspectives.	Analyze & Understand
CO4	Enhance skill development in communication and impactful presentations.	Apply
CO5	Explore national and international designers and their works.	Analyze
CO6	Explore the various opportunities in the fashion industry.	Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	S		M	S	S	S	M
CO2	S		M	S	S	S	M
CO3	S		M	S	S	S	M
CO4	S		M	S	S	S	M
CO5	S		M	S	S	S	M
CO6	S		M	S	S	S	M

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - INTRODUCTION TO FASHION

Fashion- Definition; Classification of fashion- Avant-garde, Haute Couture and Ready to wear; Types of fashion styles- Casual, Formal, Sportswear, Active wear, Vintage, Street style, etc. Fashion Capitals of the world and renowned designers both Indian and International.

UNIT II - FACTORS AFFECTING FASHION

Factors affecting fashion: social, cultural, economic, political, technological, sports, music, designers, etc.Fashion cycle- Fashion theories of adoption: Trickle-down theory, trickle-up theory and Trickle-across theory- Fashion systems model and Populist model fashion as a response to subcultures. Factors: Personality and Expression, Age, Climate, Income, Occasion, Body type and Fashion

UNIT III - ELEMENTS AND PRINCIPLES OF FASHION

Learn the Elements of fashion, exercises to collect images/ sketches to understand the topic better and to identify how designers have used it in their design collections. Learn the Principles of fashion, exercises to collect images/ sketches to understand the topic better & to identify how designers have used it in their design collections.

UNIT IV - CLIENT STUDY

Learn how to study a client, body type, demographics, psychographics, identifying needs, etc. Choose a peer student as a client and style and outfit according to the client study.

UNIT V - CLIENTELE STUDY

Learn how to do clientele study, age group characteristics, consumer research websites, how to decode the zeitgeist, WGSN. Choose a brand and study their clientele.

TOTAL: 90 PERIODS

REFERENCES

1. The Lives of 50 Fashion Legends, Fashionary International Limited, 2018
2. Fashionpedia: The Visual Dictionary of Fashion Design, Fashionary (2016)
3. The Hidden Facts of fashion, Fashionary (2020)

Concept of Fashion: Study Material- Swami Vivekanand Subharti University, Uttar Pradesh (2021)

24IDES133	ELECTIVE-2: INTERIOR GRAPHICS- I								SEMESTER-I
Marks	**Internal**	**60**	**External**			**90**	**Total**	**150**	**Exam Hours**	**6**
Instruction Hours/Week	**L**	**0**	**P/S**	**6**	**T**	**0**	**Credits**			**3**

COURSE OBJECTIVE:

- To help students to learn &understand the techniques of various methods of drawing
- To make them understand the use of colors & their effects in drawings.
- To understand various geometrical shapes.
- To be able to scale geometry and understand the sizes.
- To understand sciography and its representation.
- To be able to improve different lettering.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Construct the 3d views and perspective drawings of the Interiors	Create
CO2	Understand the advanced documentation and measured drawing techniques.	Understand
CO3	Express design in all dimensions and ability to improve drawing skills	apply
CO4	Understand the various measurements of the drawings.	Understand
CO5	Express and exhibit drawings to the best understanding for professional practice.	Apply and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1			**S**			**S**	
CO2		**S**					
CO3	**L**	**S**					
CO4		**S**			**L**		
CO5			**S**		**S**		

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - INTRODUCTION TO BASIC GEOMETRY.

Basic exercises on drafting. Lettering Exercise - with sizes and scale, layout and composition of sheet, . Exercises on drafting with line types, thickness, of basic two-dimensional geometric forms

UNIT II - TWO-DIMENSIONAL DRAWINGS - ORTHOGRAPHIC PROJECTIONS.

Orthographic projections to scale of single and two-dimensional geometric forms - Simple and complex objects- straight, curvilinear etc.- Plans, Sections, Elevations of solid, hollow objects, etc.

UNIT III - THREE DIMENSIONAL DRAWINGS - METRIC PROJECTIONS

Isometric, Axonometric, Oblique Projections as three-dimensional geometric forms- Simple and Combined Solids.

UNIT IV MEASURED DRAWING -1

Introduction to measured drawing – drawing two and three-dimensional projections to scale of indoor elements – Tables, Chairs, Doors Windows, Staircase, Handrails Columns, etc.

UNIT V FREE HAND SKETCHING OF INDOOR & OUTDOOR ELEMENTS.

Free Hand sketching of basic forms, effect to finest or present textures- shading exercises etc. Outdoor elements - representing Lawns, Bushes, Water Bodies, Plants &Trees through sketching in different media. Indoor elements – door, windows furniture's, wall panels etc.

TOTAL: 90 PERIODS

REFERENCES

1. Paul Lareau, Freehand Sketching: An Introduction.2003
2. Robert S. Oliver, The Complete Sketch, Van Nostrand Reinhold, New York, 2089.
3. Tokyo Musashino Academy of Art - Introduction to Pencil Drawing, Graphic - Shaw Publishing Co.Ltd., Japan, 2091.
4. Freehand Drawing for Architects and Interior Designers (Paperback) by Magali Delgado Yanes(Author), Ernest Redondo Dominguez (Author)2005
5. AlwynCranshaw, Learn to paint with Water colours, Acrylic colours, Boats and Harbours, Sketch,Still life, landscapes, William Collins Sons and Co. Ltd., London, 2081.
6. IH. Morris, Geometrical Drawing for Art Students - Orient Longman, Madras, 2082.
7. Francis D. K. Ching, Architectural Graphics, Van Nostrand Rein Hold Company, New York, 2064.
8. C. Leslie Martin, Architectural Graphics, The Macmillan Company, New York, 2064.
9. Architectural Drawing: A Visual Compendium of Types and Methods (3rd edition) by Rendow Yee2013
10. Drawing – A creative Process, Francis D.K. Ching, John Wiley Sons, New York
11. How to paint & draw, BodoW.Jaxtheimer, Thames & Hudson, London
12. Geometrical drawing forart students, 2ndrevised edition- I.H.Morris,OrientLongman,Calcutta,2095.
13. Architectural drafting and design, 4thedition – Ernest R. Weidhaas,Allyn and Bacon, Boston, 2081.
14. Building drawing, 3rdedition – M G Shah, C M Kale, Tata Mcgraw– Hill publishing, New Delhi.

24FDES134	ELECTIVE-2: DIGITAL DESIGN- I								SEMESTER-I
Marks	Internal	60	External			90	Total	150	Exam Hours	6
Instruction Hours/Week	L	0	P/S	6	T	0	Credits			3

COURSE OBJECTIVE:

- To help students understand the meaning and types of visual art.
- To understand the elements and principles of graphic design.
- To improve their creative thinking skills through various exercises.
- To develop motifs and patterns through an inspiration.
- To understand the different parts of a computer like RAM, ROM etc and their working.
- To have clarity on the basics of digital design with regard to presenting design ideas both visually andverbally.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Gain knowledge of the various ways to communicate design visually and its significance.	Understand
CO2	Attain strong foundation of graphic design and its applications.	Apply
CO3	Develop skills like abstractions, interpretations, representations and expression.	Understand and Apply
CO4	Create and explore with prints and patterns.	Create
CO5	Determine about system requirements and file management	Understand
CO6	Experience management of digital design projects from conception to completion.	Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	S		S	S		M	
CO2	S		S	S			
CO3	S		S	S			
CO4	S			S			
CO5	S		S	S			
CO6	S			S			

COURSE CONTENT:

UNIT I GRAPHIC DESIGN BASICS

Introduction to visual arts- Image making: lines, shapes, color and typography- Explore manually through art and craft.

UNIT II GRAPHIC DESIGN BASICS - II

Principles of graphic design- Composition: balance, alignment and hierarchy- Explore manually through art and craft.

UNIT III PRINT & PATTERNS

Creation of motifs through elements of design- Techniques to create patterns- Exercise includes creating a rangeof patterns through an inspiration using physical materials both 2D and 3D.

UNIT IV INTRODUCTION TO DIGITAL DESIGN

Introduction to computer hardware & software- basic functions of file Management- understanding fileextensions- viewing storage devices and network connections- exposure to online resources for designers;

UNIT V PRESENTATION TECHNIQUE

Aspect Ratio- crop- resolution- color gamut- understanding pixels- communicating design.

TOTAL: 90 PERIODS

REFERENCES

1. Graphic Design: The new basics, by Ellen Lupton (2015)
2. Graphic Design School: A foundation course for Graphic Designers, by David Dabner& SandraStewart (2020)
3. Graphic design thinking: Beyond brainstorming, by Ellen Lupton (2014)
4. Just my type, by Simon Garfield (2012)
5. Shady Charcters, Keith Houston (2015)
6. How to, by Michael Bierut (2021)
7. A designer's research manual, by Jenn Visocky O'Grady (2017)
8. This means this, this means that, 2nd Edition: A user's guide to semiotics, by Sean Hall (2012)
9. Logo design love, by David Airey (2014)
10. Graphic Design Rules: 365 Essential design do's and don'ts, by Stefan G. Bucher (2017)
11. Color Design Workbook, By Sean Adams (2006)
12. Making and Breaking the Grid, By Timothy Samara (2017)
13. Thinking with type: A critical guide for designers, by Ellen Lupton (2010)
14. The Graphic Design Exercise book: Creative briefs to enhance your skills and develop your portfolio,by Carolyn Knight & Jessica Glaser (2010)
15. It's not how good you are, It's how good you want to be, by Paul Arden (2003)
16. Steal like an artist, by Austin Kleon (2014)

24IDOE141	SPORTS AND YOGA								SEMESTER-I
Marks	Internal	100	External			0	Total	100	Exam Hours	0
Instruction Hours/Week		L	1	T	0	P/S	0	Credits		2

COURSE OBJECTIVES:

The goal of this course, is for the students:
• To have knowledge of Physical fitness and exercise management to lead better quality life
• To enable to officiate, supervise various sports events and organize sports events
• To acquire the knowledge of Physical Education, Sports and Yoga an understand the purpose and its development
• To gain knowledge to plan, organize and execute sports events

COURSE OUTCOMES:
Upon completion of this course, the student will be able to:
• Practice physical activities and yoga for strength, flexibility and relaxation.
• Use techniques for increasing concentration and decreasing anxiety for stronger academic performance.
• Perform yoga exercises in various combination and forms.
• Improve personal fitness through participation in sports and yoga activities.
• Follow sound nutritional practices for maintaining good health and physical
• performance.

UNIT I- INTRODUCTION TO PHYSICAL FITNESS
Explain importance of physical education - Describe importance of Physical Fitness & Wellness - Explain the components of physical fitness - Demonstrate healthy life style - Prevent health threats by changing life style

UNIT II- FUNDAMENTALS OF ANATOMY & PHYSIOLOGY IN SPORTS & YOGA
Explain importance of anatomy and physiology - Describe effects of exercise in various body systems - Describe concept of correct posture - Explain corrective measures for posture deformities.

UNIT III- YOGA & PRANAYAMA
Explain importance of yoga - Perform various pranayama for increasing concentration - Use meditation and other relaxation techniques for improving concentration.

TOTAL: 15 PERIODS

REFERENCES:
1. Ajmer Singh, Modern Trends and Physical Education class 11 & class 12, Kalyani Publication, New Delhi ISBN: 9789327264319.
2. B.K.S. Iyengar, Light on Yoga, Thomson's Publication, New DelhiISBN: 8172235011
3. V.K.Sharma, Health and Physical Education, NCERT Books; Class11,12 Saraswati House Publication, New Delhi
4. Acharya Yatendra, Yoga and Stress Management, Fingerprint Publishing ISBN: 938905303

24IDT201	PSYCHOLOGY OF INTERIORS							SEMESTER-II
Marks	Internal	40	External		60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits		2

COURSE OBJECTIVE:

- To create environments and spaces that encourages balance, achievement, positive interaction, and personal wealth for yourself and your clients.
- To exercise creativity and expertise and sculpt beautiful, and profoundly meaningful places andspaces.
- To create spaces that are psychologically pleasing and also understand the need to understandthe requirements of the clients.
- To understand the hidden meanings behind the clients thoughts
- To understand psychology in various platforms like scale, color, volume and other such parameters.
- To understand the human behavior in various psychological settings.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Construct, relate and understand the basic principles of psychology	Understand and create
CO2	Research and utilize techniques that are related to the social,economic and community behavior of human.	Understand & Evaluate
CO3	Understand the design process for the individual preference of each client.	understand
CO4	Understand spaces in relation to the color, scale,volume and other parametric of the design theory.	Understand
CO5	Understand the psychology of the client and analyze possibilities of design application.	Understand and analyze

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		L	S				
CO2	L		S				
CO3		S	L				S
CO4	S	M					
CO5		M	M				

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I -GESTALT PRINCIPLES

Perception of space through understanding associative aspects relating to space. Understanding cognitive theories and Gestalt principles of psychology related in the field of space making to develop an understandingof place making.

UNIT II- SPATIAL ELEMENTS - MOVEMENT

Relationship of spatial elements like floor, column, wall, window, door, stair, roof, light, color, textures to the psychology and perception of space.

Kinaesthetic – Understanding perception while in movement and space organization around such a phenomena.

UNIT III- SOCIAL PATTERNS

Analysis of human mind and his/her image of the world - social behavior patterns, traditional thinking andbehavior and reflection of social world into physical environment.

Assignment: Space planning for public areas- restaurant, café, theatre lounge, waiting rooms, hotel foyer etcbased on analysis of human behavior and perception of space.

UNIT IV-BEHAVIORAL DESIGN

Human being and his behavior in various public and private areas – change of patterns in various cultures.Human behavior in a group. Activities and its relationship with grouping of people

Assignment: Study human behavior and Implementation of human behavior in the design of products, furniture,spaces etc

UNIT V- INFLUENCE OF LIGHT AND COLOR

Understanding different types of Light (Natural and artificial light) visual efficiency, sources of light, day lightfactor concept, design sky concept, day lighting requirements and their impacts on the spaces.

Colors, color schemes - Monochromatic, analogous, complementary color schemes, triadic and tetradicschemes, effects of color in different areas, color temperature, psychological effects of color in interiors, Factors affecting color, Prang theory – Color wheel, Munsellsystem and Oswald system.

TOTAL: 60 PERIODS

REFERENCES

1. Bryan Lawson, Language of Space, Architectural Press, 2001.
2. Yi- Fu Tuan, Steven Hoelscher, Space and Place: The perspective of experience, University ofMinnesota Press, 2001.
3. Setha. M. Low, Denise Lawrence – Zunigias, Anthropology of Space and place: Locating Culture,Wiley – Blackwell publishers, 2003.
4. Irwin Altman &Erwin. H. Zube, Public spaces and places, (Human Behavior and environment),Springer link, 2089.
5. Roger Downs, David Stea, Kenneth. E. Boulding, Image and environment, Transaction Publishers,2005.

24IDT202	EVOLUTION OF INTERIORS-I								SEMESTER-II
Marks	Internal	40	External			60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits			2

COURSE OBJECTIVE:

- To assist the students in comprehending the development of interior design art and to gain the knowledge of skilled work and its historical prevalence.
- To understand the significance of decorative motifs in the development of building and interiordesign
- To comprehend the past of the world and how it applies to design.
- To give students the chance to learn from the rich tradition of aesthetic design.
- To comprehend the prehistoric construction and building methods.

.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Comprehend different interior and architectural features from ancient civilizations	Understand
CO2	Understand the various European styles influenced during the Middle Ages.	Understand and remember
CO3	Understand classic styles and oriental inspirations from the past.	Understand
CO4	Understand the various artistic styles used around the globe in the 19th and 20th centuries.	Understand
CO5	Understand the various things that might influence National change.	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**M**	**M**					
CO2	**M**	**L**					
CO3	**M**	**L**					
CO4	**M**						
CO5	**M**						

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I- ELEMENTS OF STYLE – THE BEGINING

Elements of style – Pre historic cave paintings and indigenous expression - Primitive Design - determinants of Interior environments in Ancient Civilization: emphasis shall be on Ensemble of arts and crafts like sculpture, furniture design, pottery etc, Architectural elements, colours & materials. Egyptian - Indus Valley Civilisation - The ancient Near East – History of furniture development in each era.

UNIT II - CLASSICAL WORLD AND ORIENTAL INFLUENCES

Greek, Roman architecture: Roman architecture grew out of the influence of Greek and Etruscan styles, Doric and Ionic orders, masculine and femine, Greeks built Temples to their gods, the Romans were far more interested in building amphitheaters, Basilicas, palaces, bathhouses, and were generally more secular in their mind-set.

Eastern influences - China and Japan.

UNIT III - MIDDLE AGESTORENAISSANCE AND DECORATIVESTYLES

Early Christian and Byzantine, Romanesque and Gothic - English, French and Italian Gothic Styles, Renaissance. Ornamentation and decoration - Baroque, Rococco, and other royal styles – Understanding life style changes, cultural codes embedded in image, interior elements, furniture and other interior furnishings.

UNIT IV- NEW DIRECTIONS IN ART

Context for new directions in art in the late 19th and early 20th century - Impressionism - post Impressionism

– Fauvism- Expressionism- Cubism –Dadaism – Surrealism - abstract art – Futurism - Constructivism – Surrealism –- De Stijl -Abstract Expressionism - Pop art - Op art- new forms and media of art. Study of famous and influential Artists, Craftsmen and people who pioneered innovations in their own fields and theirinfluence on design and other fields. Works of Van Gogh, Dali, William Morris, Picasso, Da Vinci.

UNIT V- ASSIGNMENTS

Implying theoretical knowledge into project works or hands – on practice through assignments, group discussion and site visits.

TOTAL: 30 PERIODS

REFERENCES

1. Jeannie Ireland, History of Interior Design, air child publications, illustrated ed., 2013
2. Elaine, Michael Dywer, Christopher Mackinnon, Norman A. J. BerisfordDenby , A History ofInterior Design, Rhodec International, 2000
3. GiedionSigfried, Space, Time and Architecture: The growth of a new tradition, 5th ed. HarvardUniversity Press, Cambridge, 2008
4. Pile. F John, Gura Judith (2013) A History of Interior Design, Wiley, New York, 4th edition
5. Sir Banister Fletcher, A History of Architecture, CBS Publications (Indian Edition),20th Edition2002.
6. Rengel, R. J. (2016, March 10). The Interior Plan: Concepts and Exercises.

24IDP211	COMPUTER STUDIO- I								SEMESTER-II
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	3	Credits			3

COURSE OBJECTIVE:

- To make them digitally strong in the design related software.
- To make them understand and realize importance of presentations.
- Understand the nuances related to this course.
- To represent ideas using technology and to be update in the use of software's.
- To learn about the various fundamentals of 2D Drafting process and techniques in digital.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Express using digital tools in the realm of visualc composition and drafting.	Understand and apply
CO2	Represent ideas digitally for client understanding.	Understand and apply
CO3	Understand the fundamentals of 2D drafting process and techniques to represent in digital	Understand and apply
CO4	Understand the designing 3d to ensure the elimination of design flaws when translated from 2d	Understand and apply
CO5	Induce digital drawing reading and performing capacity.	Understand and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1			S			M	
CO2			S			M	
CO3			S			M	L
CO4			S			M	L

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT – I: DRAFTING BASICS:

Introduction to Digital Drafting – Representation and symbols of Design – door, window, materials, glass, etc.,

UNIT – II: DRAFTING FOR ARCHITECTURAL DESIGN:

Geometry Basics – Creating tools – Editing tools - Precision – Layers – Properties – Blocks – Hatching – AUTOCAD Commands

UNIT – III: DRAFTING DOCUMENTATION:

Layout – Annotation – Dimensions – Revisions – Print

UNIT – IV: MINI PROJECT:

Mini Project – Drawings – Plan – Elevation – Section – Details

UNIT – V: PROJECT WORK:

Project of Drafting details – Examples like working drawing – electrical drawing etc.,

TOTAL: 60 PERIODS

REFERENCES

1. Cherly R. Shrock Beginning AUTOCAD. New Age International Publishers. New Delhi. 2006.
2. AutoCAD architectural users guide - Autodesk Inc., 2098.AutoCAD 2011 User Manual, Autodesk 2011.
3. Aouad, 'Computer Aided Design guide for Architecture, Engineering and construction', Sponprocess,2012.

24IDP212	MODEL MAKING								SEMESTER-II
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	3	Credits			3

COURSE OBJECTIVE:

- Acquisition of hands-on experience in model –building.
- To understand the suitability of different materials for different design requirements.
- To understand scale of a building and its structural challenges.
- To understand the relation of the building with its surrounding areas.
- To understand the nuances of design detailing in model making.
- The use of replicable materials to attain the best to real model.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Handle model making materials.	Understand and apply
CO2	Understanding of ideas in 3d and physical models.	Understand and Apply
CO3	Understand the difference in executing block models and detailed models	Understand
CO4	Understand scale in a building and its relation to a human user.	Understand
CO5	Understand the properties of materials and to understand various site and building levels.	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**	**M**					
CO2	**L**	**M**	**M**				
CO3	**M**	**M**					
CO4	**M**	**M**					
CO5	**S**	**M**					

S-Strong; M-Medium; L-Low

UNIT I -INTRODUCTIONTO MODELMAKING- BLOCK MODLLING

Introduction to concepts of model making and various materials used for model making

Preparation of base for models using wood or boards. Introduction to block models of buildings (or 3D Compositions) involving the usage of various materials like Thermopolis, Soap/Wax, Boards, Clay etc.

UNIT II - PROPOTION AND SCALE

To create models to scale and to check the proposition by observing real life objects or examples. The models created will follows various theoretical understanding such as Fibonacci Series or Golden Proposition Series

UNIT III -DETAILED MODELLING

Making detailed models which includes their presentation of various building elements like Walls, Columns, Steps, Windows/glazing, Sunshades, Handrails using materials like Mount board, Snow-white board, acrylic sheets.

Representing various your face finishes like brick/stone representation, stucco finish etc.

Various site elements – Contour representation, Roads/Pavements, Trees/Shrubs, Lawn, Water bodies,Street furniture, Fencing etc.

UNIT IV INTERIOR MODELS OF INTERIOR SPACES

Making models of the various interior spaces such as

- Residences
- Offices
- Retail Spaces
- Recreational Spaces

Scaled models of furniture.

UNIT – V CARPENTRY- Live exposure

Introducing the techniques of planning, chiseling & jointing in timber to learn the use of hand tools.

Exercise involving the design of simple furniture and making a model of the same.

TOTAL: 60 PERIODS

REFERENCES

1. BENN, The book of the House, Ernest Benn Limited, London2007
2. Jannsen, Constructional Drawings & Architectural models, Karl Kramer Verlag Stuttgart, 2073.
3. Harry W.Smith, The art of making furniture in miniature, E.P.Duttor Inc., New York, 2082

24IDS221	INTERIOR DESIGN - II							SEMESTER-II
Marks	Internal	160	External		240	Total	400	Exam Hours	3
Instruction Hours/Week	L	0	T	0	P/S	12	Credits		8

COURSE OBJECTIVE:

- To develop an understanding of various degrees of enclosures and various types of relationshipbetween spaces.
- Understanding of the various effects that could be created by manipulating the enclosing elementssuch as walls, roof etc.
- To understand the design proximity and relation of spaces.
- To understand the basic concepts for the size of the project.
- To develop understanding of the scale, function and options existing when designing small- scalespaces in residences such as toilets, kitchens, living, bedrooms etc.
- Development of ideas with regard to false ceiling, wall paneling, flooring, floor coverings, curtains,windows, doors and other elements of residential interiors.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the qualities of different elements as well as their composite fusions.	Understand and Evaluate
CO2	Combine the elements of design and create desired qualities and effects	Create
CO3	Analyze the pre data of the concepts	Analyze
CO4	Understand the representation	Understand
CO5	Understand the basic functional aspect of designing simple building	Understand
CO6	Reciprocate and sensitize the design/concept to the environment and the design skill of theproject	Analyze and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**		**M**		**S**		
CO2	**L**		**M**		**S**		
CO3			**M**		**S**		
CO4		**L**	**M**		**S**	**L**	
CO5	**L**			**M**			
CO6			**M**		**S**	**M**	

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I -DESIGN PROCESS

Design Process: Evolution from Program and Conditions to Concept & Design - Graphical Representation of the Process. Design Strategies and Methods. Designing in Context; Design & Function; Constituents of Design; Working with materials and Structures; Arriving at Ideas.

UNIT II -HORIZONTAL MOVEMENT

Horizontal movement- single bay - passive energy type spaces. Design Exercises shall be simple functional units with universal access compliance such as: Toilet for a physically handicapped person. Hostel room, bed room, kitchen, Shop, Workshop, pavilions, snack bar.

UNIT III- DESIGN PROBLEMS

Design problems involving simple space organization. Design Exercises shall be multiple spaces and understanding their inter-relationships, such as: Residence, petrol bunk, fire station, police station, Cottage for an elderly couple

UNIT IV- ANTHROPOMETRY

The study of space standards and anthropometrics related to each problem. Anthropometry as related to physically handicapped and elderly persons is required to be studied. Different Techniques shall be used for presentation.

UNIT V- PROJECT PRESENTATION

Sheet composition and presentation techniques.

TOTAL: 180 PERIODS

REFERENCES

1. The Fundamentals of Architecture (Fundamentals (Ava)) (Paperback) by Lorraine Farrelly (Author)2007
2. Francis D.K.Ching- Architecture - Form Space and Order Van No strand Reinhold Co., 2098
3. Design Methods (Architecture) (Paperback), by John Chris Jones (Author).2081
4. How Designers Think, Fourth Edition: The Design Process Demystified (Paperback) by BryanLawson.2005
5. Basics Design Ideas (Paperback) by Bert Bielefeld (Author), Sebastian El khouli (Author).2007
6. Graphic Thinking for Architects, Paul Laseau.2080
7. Design Drawing, Francis D. K. Ching.2011
8. The Nature of Design, Peg Faimon& John Weigand.2004
9. Foundations of Art and Design (Paperback) by Alan Pipes (Author)2017

10. John W.Mills- The Technique of Sculpture, B.T.Batsford Limited, New York - Reinhold PublishingCorporation, London, 2066.
11. C.Lawrence Bunchy - Acrylic for Sculpture and Design, 450, West 33rd Street, New York, N.Y.10001,2072.
12. The Elements of Graphic Design: Space, Unity, Page Architecture, and Type (Paperback) by Alexander W.White (Author)2002
13. Geometry of Design: Studies in Proportion and Composition, Kimberly Elam.David Gibson2051

24IDS222	INTERIOR MATERIALS AND CONSTRUCTION - II							SEMESTER-II
Marks	Internal	80	External		120	Total	200	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	6	Credits		4

COURSE OBJECTIVE:

- Understanding the basic components of the buildings that envelope a small building
- Understanding the different types in each element and different treatments for the same.
- Understanding function of each component of a building like foundation, walls, beams, column,and roofs.
- Understanding simple roof & floor finishes.
- To understand the primary basics of the loading in a structure and the distribution of the load
- To understand the composition and properties of the materials.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the Interior construction details using naturally occurringbuilding materials.	Understand
CO2	Judge the structure before making any structural changes required in renovation.	Apply and analyze
CO3	Understand Working format with for materials	Understand and apply
CO4	Produce drawing plates comprising of technical plan, elevation and section along with sketchesand details showing method of construction.	create
CO5	Use the material knowledge during construction and can find best materials suited for apt activities.	Understand, analyze and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**	**L**		**S**		
CO2	**L**	**S**				**L**	
CO3	**L**	**M**			**S**		
CO4		**M**					
CO5	**M**	**M**					

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - INTRODUCTION TO BASIC MATERAILS AND ITS USAGE IN INTERIOR SPACE

Lime-mud- brick- stone -clay. Types of Masonry, interior cladding, its properties usage in interior space

UNIT II- FLOORS

Floor coverings-softwood, hardwood-resilient flooring-linoleum, asphalt tile, vinyl, rubber, cork tiles-terrazzo, marble & granite– properties, uses & lying.

Floor tiles – ceramic glazed, mosaic and cement tiles-properties, uses and laying, and details for physically handicapped.

UNIT III- FALSE CEILING

False ceiling – Basic Principles ,types of construction of various false ceiling such as thermacol, plaster of paris, gypsum board, metal sheets, glass and wood.

False ceiling for different functionality -Commercial space, residential space , Hospitality etc.

UNIT IV - BUILDING FINISHES-FLOOR and CEILING

Introduction to building finishes. Different types of paints, their composition, characteristics and uses. Types to include enamels, distemper, plastic emulsion, polyurethane, special paints such as fire retardant, luminous and bituminous paints. Preparation of surface and application for different paints/ finishes. Gypsum and POP finishes. Adhesives and sealants.

UNIT V- INDUSTRIAL VISIT AND SEMINAR

Site visit – students should visit a On- Going building site to understand the exterior and interior building Component Seminar from the experts to be conducted

TOTAL: 135 PERIODS

REFERENCES

1. S.C Rangwala – engineering materials– Charotar publishing, Anand 2082
2. W.B Mckay, buildingconstruction, VOL 1-4 , Longmans, u.k2081
3. Laxmi publications Pvt. Ltd., New Delhi, 2093.
1. Dr. B.C Punmia , building construction, Laxmi publications Pvt. Ltd., New Delhi, 2093.
2. M.S Shetty, concrete technology, S. Chand & co. Ltd., New Delhi, 2086.

24IDS223	INTERIOR GRAPHICS - II								SEMESTER-II
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	4	Credits			3

COURSE OBJECTIVE:

- To help students to learn &understand the techniques of various methods of drawing
- To make them understand the use of colors & their effects in drawings.
- To understand various interior building component.
- To be able to scale geometry and understand the sizes.
- To understand socio-graphy and its representation.
- To be able to improve different lettering.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Construct the 3d views and perspective drawings of the Interior.	Apply and create
CO2	Understand the advanced documentation and measured drawing techniques.	Understand and create
CO3	Express design in all dimensions	Apply and create
CO4	Understand the drawing techniques and various measurements of the drawings	Understand and create
CO5	Express and exhibit drawings to the best understanding for professional practice.	Apply and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1			**S**			**M**	
CO2				**L**		**L**	
CO3			**M**			**M**	
CO4		**M**		**L**			
CO5		**S**	**M**				

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - MEASURED DRAWING –BUILDING COMPONANTS

SCIOGRAPHY - Introduction to Sciography – study of shade and shadow of simple geometric object - Representing sciography in Plan & Elevation of simple / combined geometric forms and built forms etc.

UNIT II - MEASURED DRAWING –INTERIOR SPACES

PERSPECTIVE DRAWINGS WITH RENDERING -1 - Perspective projections of Simple and combined geometric forms - One point perspective, Two point perspective, Three point perspective, - Cone of Vision- Scientific method and shortcut method, etc.

UNIT III - MEASURED DRAWING- FIELD STUDY

PERSPECTIVE DRAWINGS WITH RENDERING- 2 - Perspective projections of building interiors - One point perspective, Two point perspective, Three point perspective, - Cone of Vision- Scientific method and shortcut method, etc.

UNIT IV- RENDERING TECHNIQUES

MEASURED DRAWING- FIELD STUDY Field trip for the students- to Measure a small commercial space (such as Kiosk/ stand by stalls/shops) with all interior features to represent it in plan, section and three-dimensional drawing.

UNIT V- MEASURE DRAWING- DETAILING A DESIGNED INTERIOR SPACE

Detailing the interior project with all technical drawings (Plan, section, elevation)

TOTAL: 75 PERIODS

REFERENCES

1. Edward J.Muller,Jemes G. Fauselt, Philip A. Graw Architecture Drawing and Light Construction Prentice Hall Publishers Columbus. 2099.
2. Ernest Norling, Perspective drawing, Walter Fostor Art Books, California, 2086.
3. Bernard Alkins - 147, Architectural Rendering, Walter Foster Art Books, 2086.
4. Learn to paint with Water Colours, Acrylic colours, Boats and Harbours, Sketch, Still life, landscapes. Author: Alwyn Cranshaw, Publisher: William Collins Sons & Co. Ltd., London, 2081.
5. Architectural Rendering, A Technique of Contemporary Presentation, Author: Albert O. Halse, Publisher, Mc Graw Hill Book Company, New York, 2072.
6. Elisabetta Drudi, Figure Drawing for Fashion Design, The Pepin Press Singapore. 2001.

24IDT301	EVOLUTION OF INTERIORS – II (Indian Context)							SEMESTER-III
Marks	Internal	40	External			60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits			2

COURSE OBJECTIVE:

- To assist the students in comprehending the development of interior design art
- To Gain the knowledge of skilled work and its historical prevalence.
- To understand the significance of decorative motifs in the development of building and interiordesign
- To understand the traditional and culture of various region of India and their adaption in Interiors.
- To give students the chance to learn from the rich tradition of aesthetic design.
- To comprehend the Islamic culture, construction and building methods.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Comprehend different interior and architectural features from Indian culture.	Understand
CO2	Comprehend how various styles influenced interior design throughout the ages.	Understand and remember
CO3	Understand different styles and take inspirations from the past.	Understand and analyze
CO4	Analyze the various artistic styles used.	Analyze
CO5	Analyze and understand various things that influences national change.	Understand and analyze

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**M**						
CO2	**M**	**L**					
CO3	**M**	**L**		**M**			
CO4	**M**						
CO5	**M**						

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - REGIONAL VERNACULAR INTERIORS.

Elements of style, materials and concepts of interiors in vernacular secular architecture across North andSouth India -Rajasthan, Gujarat, Andhra, Tamil Nadu, Madhya Pradesh– examples and case studies.

UNIT II - ISLAMIC INFLUENCES

Interiors in Islamic world – embedded values of culture in the interior environment – Islamic era – Umayyad era – Abbasid era – Early regional styles – characteristics – gardens, courtyards, vaulting, Iwan – Design, detail and styles of Domes & Muqarnas – Balconies and screenings, Ornamentation – Elements in style and Influences.

UNIT III - NON – EUROPEAN & NORDIC TRADITIONS

Influence of Pre – Columbian American Art & culture, African influences in Interiors – Design principles in Sweden, Finland, Norway – works of Aalvar Alto, Gunar Asplund, Eero Saarinen etc., Scandinavian minimalism.

UNIT IV - RECENT DIRECTIONS

Design movements such as Late Modernism, High Technology, Post Modernism and De-Constructivism and Minimalism.

UNIT V - ASSIGNMENTS

Implying theoretical knowledge into project works or hands – on practice through assignments, group discussion and site visits.

TOTAL: 30 PERIODS

REFERENCES

1. Lawson, B. (2001), Language of Space, Architectural Press.
2. Tuan, Y., Hoelscher, S., (2001). Space and Place: The perspective of experience, University of Minnesota Press.
3. Low S., Lawrence D., (2003). Zunigias, Anthropology of Space and place: Locating Culture, Wiley - Blackwell publishers
4. Altman I., Zube E., (1989). Public spaces and places, (Human Behavior and environment), Springer.
5. Downs R., Stea D., Boulding K., (2005). Image and environment, Transaction Publishers
6. Pile. F John, Gura Judith (2013) A History of Interior Design, Wiley, New York, 4th edition
7. Sir Banister Fletcher, A History of Architecture, CBS Publications (Indian Edition),20th Edition2002.
8. PublicationsonTraditionalArts&CraftsofIndia, Ministry of Handicrafts Development, Government of2001.

24IDT302	INTERIOR SERVICES – I- PLUMBING AND WATER SUPPLY							SEMESTER-III
Marks	Internal	40	External		60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits		2

COURSE OBJECTIVE:

- To understand hennaed and applications of water supply and sanitation in buildings withexposure to various fixtures and fittings,
- water supply and sanitary installations at worksites.
- To understand the practical course of water sanitation needs both outdoors and indoor.
- To arrive at various calculation of tanks and sumps to physically build it in the site.
- To understand the basic toilet design
- To understand the services piping in large scale projects.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the water supply, sewage, drainage and waste systems in buildings.	Understand
CO2	Conceptually plan/ design the above for a given simple context.	Understand and apply
CO3	Understand the sustainable principles and best practices.	Understand and apply
CO4	Understand the need and execution of dry ad wetconcepts in toilets.	Understand and apply
CO5	Understand the differences and treatments for water,sewage and sullage disposal systems.	Understand and apply
CO5	Understand the technical issues during the servicing of the pipes, and the importance of ducts in largerscale of buildings.	Understand and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**		**M**			
CO2	**L**	**M**		**L**			
CO3	**L**	**M**					
CO4		**M**					
CO5		**S**					

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I- WATER SUPPLY IN BUILDINGS

Standard of portable water and methods of removal of impurities, Consumption order of water for domestic purposes, Service connection from mains, House-service design, tube well, pumping of water, types of pumps, cisterns for storage.

Overhead tanks, underground sumps, firefighting storage, water meter, R.O. Plant, water heating systems, solar water heaters, fixtures and fittings for a small building/ campus. Design calculations for the same and related mechanical equipment. Sustainable practices and systems.

UNIT II -BUILDING DRAINAGE

Layout, Principles of drainage, Trap type, materials and functions, Inspection chambers, Design of Septic tanksand soak pits, Ventilation of house drains

Anti-syphonage or vent pipes, one and two pipe systems

Sinks, bath tub, water closets, flushing cisterns, urinals, wash basins, bidet, shower panel etc.

UNIT III- PLUMBING

Basic principles of plumbing. Plumbing, sanitary fittings and their requirements for a small building - wash basins, water closets, urinals, bidets, sinks, gate valve, float valve, flap valve, ball valve, flush valve, etc, Common hand tools used for plumbing and their description and uses, Joints for various types of pipes,Sanitary fitting standards for public conveniences

Different types of pipes and accessories for water supply, controlling fixtures like valves, taps, etc.

Fittingsand Choice of materials for piping: cast iron, steel, wrought iron, galvanized lead, copper, cement concrete and asbestos pipes, PVC pipes

different types of taps, faucets, stop cocks, bib cocks, 'P', 'Q', 'S', floor/bottle traps

Sizes of pipes and taps for house drainage, testing drainage pipes for leakage-smoke test, water test etc, CIpipes for soil disposal and rain water drainage, wrought iron, steel and brass pipes.

Rainwater disposal drainage pipes spouts, sizes of rainwater pipes

UNIT IV- SOLID WASTE DISPOSAL

Solid wastes collection and removal from buildings. On-site processing and disposal methods. Aerobic andanaerobic decomposition

UNIT V- SERVICES STUDIO

Preparation of plumbing layout of as in multi storey building& working drawings of various fittings and fixturesof water supply and sanitary installations.

TOTAL: 30 PERIODS

REFERENCES

1. Charangith shah, Water supply and sanitary engineering,Galgotia Publishers 2002
2. AKamala&DLKanthRao,EnvironmentalEngineering,TataMcGraw–HillpublishingCompany Ltd 2093
3. Technical teachers Training Institute (Madras), Environmental Engineering, Tata McGraw – Hillpublishing Company Limited 2088
4. Marrimuthu, Murugesan, Padmini, Balasubramanian, *Environmental Engineering,* Pratheebapublishers 2086
5. S.C. Renewal, Watersupply and sanitary engineering, Charotar publishing hous

24IDP311	COMPUTER STUDIO - II								SEMESTER-III
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	3	Credits			3

COURSE OBJECTIVE:

- To make them digitally strong in the design related software.
- To make them understand and realize beautiful presentations.
- To represent ideas using technology and to be update in the use of software.
- To help the student understand the technology of computer and its terminology.
- To enable the student to understand the applications of the software and graphic system.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	BloomsLevel
CO1	Express using digital tools in the realm of visual composition, drafting.	Understand and create
CO2	Express using digital tools 3D visualization and rendering	Understand and create
CO3	Represent ideas digitally for client understanding.	Create
CO4	Understand the design in 3d and to will be able eliminate the design flaws when translated from 2D	Understand ,apply and create
CO5	Read the digital drawings and the representation of each material.	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1			S			M	
CO2			S			M	
CO3			S			M	
CO4			S			M	
CO5			S			M	

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT – I 3D FOUNDATIONS:

Introduction to 3D – Types of 3D Models – Importance of 3D Modeling in Design Industry – Introduction to 3D modeling software.

UNIT – II 3D SOFTWARE BASICS:

Interface Introduction – Basic tools explanation – Navigation tools – Editing tools – view tools

UNIT – III MODELING WORKFLOW:
Creation of 3D Models – Composition of models – Materials – Textures – Solid and Mesh Modeling –Manipulation of Models.

UNIT IV- VISUALIZATION:
Understanding Rendering – Materials properties – Lighting – Leveraging camera views – Export and Import .

UNIT V-PROJECT WORK:
Project – 3D Modeling of Residence –Institutional – Commercials etc.,

TOTAL: 60 PERIODS

REFERENCES

1. Teyapoovan. T., Engineering Drawing with Auto CAD 2000. Vikas Pub House Pvt Ltd, New Delhi,2000.
2. Parker, Daniel and Rice, Habert. Inside Auto CAD Daniel, 2087.
3. Georgeomura, Auto CAD, Release 2000.
4. Oscar RieraOjed ,Lucast Guerre, Hyper realistic Computer Generated Architectural Renderings . 2096
5. GiulianoZampi Conway Lloyd Morgan, Virtual Architecture 2098

24IDP312	WORKSHOP (WOOD, CANE, BAMBOO AND ENGINEEREDWOOD)							SEMESTER-III
Marks	Internal	60	External		90	Total	150	Exam Hours	3
Instruction Hours/Week	L	0	T	0	P/S	6	Credits		3

COURSE OBJECTIVE:

- To understand the basic methods of furniture making with focus on hands on methods regarding workshop practices in wood, cane, bamboo and engineered wood
- To understand the usage of various materials as required with its properties.
- To understand the usage of engineered wood against the solid wood.
- To understand the fixing details of multiple materials and its interaction with each other.
- To be introduced to alternate materials
- To relate the various capacities into creative pursuits of design.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand and construct furniture to live size and understanding the scale of drawing to life size	Understand and create
CO2	Use tools related to wood glass and alternative substitution to wood.	Understand and create
CO3	Understand properties and usage of materials henceforth.	Understand and apply
CO4	Understand modular furniture through engineered wood.	Understand and apply
CO5	Understand the various capacities of hardware for the various materials and to understand wood joints and its usage in various circumstances.	Understand and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**		**M**		**L**		
CO2		**L**	**M**		**L**		
CO3	**M**		**M**			**M**	
CO4	**M**		**M**			**M**	
CO5		**L**	**M**			**M**	

S-Strong; M-Medium; L-Low

UNIT I - WOOD

Types of wood –natural and artificial and its properties
Engineered wood – plywood, MDF, HDF, Etc.

Working with wood and wood products to understand material parameters. Wooden joinery and its strength. Wood polishes and other finishes – color and surface quality. Laminates also should be treated as one of the wood finishes with lapping and other techniques

UNIT II- SCALES

Making of elements of various scales in the built form such as interior space making elements, furniture forms, various products, Art & Artifacts by using wood.

UNIT III - ALTERNATIVE MATERIALS- CANE &BAMBOO

Introduction to cane/bamboo; working with cane/ bamboo and their products to understand material parameters. Bamboo and cane joinery and its strength. Polishes and other finishes. Understanding the material and tools by making objects which allow students to explore the forms, surfaces, textures and patterns. Explore different joinery, support conditions, and woven surfaces.

UNIT IV - STORAGE & MODULAR

Storage systems: Functional analysis of storage systems and thereby deriving types of cabinets needed for interior spaces – kitchen cabinets, wardrobes closets, book cases, show cases, display systems etc. Assignment: Exercise to design kitchen cabinets for a given kitchen.

Modular approach to furniture design – various materials, combination of materials and its application – design parameters, ergonomics etc. Drawings and prototype. Survey of several modular systems available for different functions in the market. Exploration of wood, metal, glass, plastics, FRP as materials for system design. Cost criteria of furniture design. Assignments: Typology of furniture with respect to the different states in India.

Design for middle and lower middle-income groups- elements of living units, education institutes, health facilities, street elements etc.

UNIT V - LIVE EXPOSURE

Live exposure to workshop involved with different wood, cane and bamboo

TOTAL: 90PERIODS

REFERENCES

1. Carol Stangler, The crafts and art of Bamboo, Rev. updated edition, Lark books, 2009.
2. Dr Angelika Taschen, Bamboo style: Exteriors, Interiors, Details, illustrated edition, 2006.
3. Albert Jackson & David Day, The complete manual of wood working, knopf publishers, 2096.
4. Lonnie Bird, Jeff Jewitt, Thomas lie- Nielsen, Taunton's Complete Illustrated Guide to Woodworking,Taunton, 2005.
5. Peter Korn, Wood working Basics: Mastering the essentials of craftsmanship, Taunton ,2003.

24IDS321	INTERIOR DESIGN - III								SEMESTER-III
Marks	Internal	160	External			240	Total	400	Exam Hours	3
Instruction Hours/Week		L	0	T	0	P/S	12	Credits		8

COURSE OBJECTIVE:

- To develop an understanding of various degrees of enclosures and various types of relationshipbetween spaces.
- Understanding of the various effects that could be created by manipulating the enclosing elementssuch as walls, roof etc.
- To understand the design proximity and relation of spaces.
- To understand the basic concepts for the size of the project.
- Development of ideas with regard to false ceiling, wall paneling, flooring, floor coverings, curtains,windows, doors and other elements of commercial interiors

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the qualities of different elements	Understand
CO2	Combine the elements of design and create desiredqualities and effects.	Understand and create
CO3	Analyze the pre data	analyze
CO4	Describe an understanding that is both in representationand verbally present the same.	Understand
CO5	Understand the basic functional aspect of designing simple building	Understand
CO6	Reciprocate and sensitize the design/concept to the environment and the design skill of the project	Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**					**L**
CO2		**M**					**M**
CO3		**M**	**M**		**S**		**M**
CO4		**M**	**S**				**L**
CO5		**M**	**S**		**S**		**M**
CO6		**S**					**L**

S-Strong; M-Medium; L-Low

UNIT I STUDY

Planning for retail activity – anthropometrics – types of Shop layouts Modular units. Materials used in counters, shelves, worktops, their comparative study. Lighting & color scheme – natural & artificial light.

UNIT II COMMERICIAL SPACES

The art of selling-displays/products/marketing, design of display units, design of boutiques, showrooms. Concepts in modern day Retail interiors – materials & finishes – color, texture & pattern.

UNIT III SHOPPING MALLS

Product display – windows/internal displays/hierarchy of product display/power of visual communication/graphics Exhibition spaces – display for exhibition Lighting design for commercial spaces – task/display/atmospheric/focal lighting Coloring commercial spaces – coding/decoding/visual communication Design of commercial Environments such as Malls, Shopping Arcades Etc.

UNIT IV DESIGN PROBLEM

Single room residence, Doctor's clinic, kindergarten school, Architect's studio, small cafeteria, Bank extension counter, Departmental store, local police station, local post office, products used by architects in the studio, products for children in kindergarten etc.

UNIT V

Time problem : At least two major exercises and two minor design/time problems should be given.
In the end exam, which is a viva-voce the students have to present the entire semester work for assessment.

TOTAL: 180 PERIODS

REFERENCES

1. Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 2092.
2. Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & spaceplanning, 2nd edition, Mc-Graw Hill professional, 2001.
3. Francis.D. Ching & Corky Bingelli, Interior Design Illustrated, 2nd edition, Wiley publishers, 2004.
4. Julius Panero& Martin Zelnick, Human Dimension & Interior Space: A source book of DesignReference standards, Watson – Guptill, 2079.
5. Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and PresentationTechniques. John Wiley and Sons, 2003
6. Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 209

24IDS322	ADVANCED MATERIALS AND APPLICATIONS							SEMESTER-III
Marks	Internal	80	External		120	Total	200	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	6	Credits		4

COURSE OBJECTIVE:

- Understanding the different advanced materials and its applications.
- Understanding the how the advanced technologies have overtaken the old technologies
- To understand the various components of interior space as doors, windows, staircases.
- To understand the wall systems and various treatment possible in respect to the functionality of the space
- To enhance about the different advance wall finishes available in the market and its uses pertaining to its functionality in different spaces

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand Interior construction details using naturally occurringbuilding materials.	Understand and apply
CO2	Judge the structure before making any structural changes required in renovation.	Apply and analyze
CO3	Understand the various components of interior space – door , windows and staircases.	Understand
CO4	Create the technical drawings with the advance materials .	Create
CO5	Understand different wall systems and wall finishes and use the apt once in the respective spaces	Understand , Analyze

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**	**L**			**L**	
CO2		**S**		**S**		**L**	**M**
CO3		**M**				**L**	**S**
CO4		**M**					
CO5		**M**					**M**

S-Strong; M-Medium; L-Low

UNIT I- DOORS, WINDOWS AND VENTILATORS; TIMBER DOORS, WINDOWS AND VENTILATORS

Introduction to doors, windows and ventilators. Their types according to material (timber, industrial timber, steel, aluminum, concrete), swing (single, double, degree of swing), mechanisms of operation (fixed, openable, sliding, folding, sliding and folding, pivoted, revolving, top hung, bottom hung, louvred), nature (French, corner,

bay). Understanding through sketches/product literature/ case studies.

UNIT II- WALL SYSTEMS

Wall paneling, Space Dividers and Partitions

Details of fixed, sliding and sliding and folding partitions with wood, steel and aluminum Frames & panels inglass, particle board, MDF, gyp-board and plywood, cork sheets, fiberglass wool &fabric for sound insulation and wall paneling for thermal insulation.

UNIT III - WALL FINISHES

Introduction to Wall finishes. Different types of paints, their composition, characteristics and uses. Types to include enamels, distemper, plastic emulsion, polyurethane, special paints such as fire retardant, luminous and bituminous paints. Preparation of surface and application for different paints/ finishes. Gypsum and POP finishes. Adhesives and sealants.

To detail space dividers in different materials – To Construct partitions using wooden, gypsum board, bison panels and other experimentation materials. Wet and Dry wall cladding in different materials.

UNIT IV- PROJECT:

Detail a small commercial space with respect to the opening schedules, door, window, ventilator and partition details with material finishes.

UNIT V -SEMINAR

A) Industrial visit to understand the wall paneling materials, Space dividers, Wall finishes and fixer details.
B) Seminar by an Industrial person explaining the Openings, wall paneling materials, Space dividers, Wall finishes and fixer details.

REFERENCES

1. Dr. B.C Punmia., Building materials, New Age International Publishers, 4 th Ed., (2012)
2. S.C Rangwala– engineering materials– Charotar publishing House, 30th Ed., Anand 2012
3. Drew Plunkett, Construction and detailing for Interior design, Laurence King Pub, (2014)
4. USG,The gypsum construction Handbook, RS Means; 7 edition (2014)
5. J.Rosemary Riggs, Materials and components of interior architecture, Prentice Hall;8 edition (2013)
6. David Kent, Interior detailing; components of construction, John Wiley &sons (2010)
7. Jim Postell,Nancy Gesimondo , Materiality and interior construction ,Wiley;(2011)

24IDS323	INTERIOR LANDSCAPE								SEMESTER-III
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	0	T	0	P/S	4	Credits			3

COURSE OBJECTIVE:

- To develop an understanding about the design of interior landscape
- To give special emphasis on the choice and care of plant materials used in the interior spaces.
- To study about the various landscaping elements and their application in interior spaces.
- To develop and understanding between outdoor and indoor landscape areas.
- To have apt knowledge of the regional or vernacular plantation to use in particular regions andclimates.
- To understand the various features using natural and manmade elements in landscape detailing.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand role of landscape design with respect to macro scale of sustainability	Understand and analyze
CO2	Understand about the elements of landscape design and their scope.	Understand
CO3	Be Sensitive towards evolution of different garden and landscape	Understand
CO4	Understand the landscape design with respect to site planning and different functional typologies of spaces	Understand and create
CO5	Use landscape according to the region, climate and location	Understand and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**M**	**M**					**L**
CO2	**M**	**S**					
CO3	**M**	**S**				**L**	
CO4	**L**	**S**					**L**
CO5	**L**	**M**					

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I -LANDSCAPE AND BUILT ENVIRONMENT

Role of landscape design in the built environment. Definition and classification of plants. Indoor plants and their functions, layout & components. Selection of plants & pest control.

UNIT II- PHYSICAL REQUIREMENTS OF PLANTS

Physical requirements of plants–light, temperature, water, planting medium, soil separator, weight of plants, acclimatization & maintenance. Plant Biology – Soil , Moisture , light, nutrient and atmospheric conditions. Growing medium, pests, and diseases.

UNIT III - INTERIOR LANDSCAPING ELEMENT S& PRINCIPLES

Basic Principles of Design - Physical attributes of plants and their relation to design.
Appearance, functional, and visual effects of plants in landscape design. Various interior landscaping elements – water bodies- pools, fountains, cascades. Design guide lines-plant texture & color, plant height, plant spacing. Vertical landscaping, Zen Garden, Japanese landscaping, Bonsai , Ikebana styles.

UNIT IV - HARDSCAPE AND ROOF LANDSCAPE

Hardscape elements - rocks, artifacts, paving, sculptures, lighting, garden furniture, and architectural features. 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. Use of Plants, rocks, artifacts, paving &lighting. Practical Exercise on interior landscape - courtyard design , outdoor room design ,Terrace Garden

UNIT V - SITE VISIT

Site visit to any landscape spaces : Commercial, residential, Public spaces, Specialized indoor gardens.

TOTAL: 60 PERIODS

REFERENCES

1. Time Saver Standards Design Data -Chiava. J. & Callender. J.
2. Chris Calori, Signage and Way finding Design: A Complete Guide to Creating Environmental Graphic Design Systems, Wiley and sons, 2007.
3. Garden structures – wiles Richard raphic Guide to Frame Construction (1991) Thallon, R. Newtown: The Taunton Press, Inc
4. Laurie, Michael, An Introduction to Landscape. 2nd edition, Prentice Hall, New Jersey, 1986.
5. Trivedi. P.Prathiba. Beautiful Shrubs. Indian council of Agricultural Research. New Delhi, 1990.
6. Gerald Robert Vizenor , A Guide to Interior Landscapes, Univ of Minnesota Press, 1990.
7. Nelson Hammer and Mel Green, Interior Landscape Design, Mc Graw Hill, 1991.

24IDT401	CONTEMPORARY INTERIORS							SEMESTER-IV
Marks	Internal	40	External			60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits			2

COURSE OBJECTIVE:

- To help the student understand the designs from the industrial age to the present information age.
- To know more on the Modern Movements in Interior design from the beginnings of20thcentury.
- To help students acquire knowledge of the current happenings and the classification of the importance of a particular information.
- To understand and execute various styles like modernism, post modernism, contemporary, etc, To be able to understand the concepts of minimalism, and international design style.
- To be able to design a particular style of the interiors based on these understandings.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the spread and varied later directions of modern interiors across the world.	Understand and remember
CO2	Understand the familiarity with contemporary forces and directions in interiors across the world.	Understand
CO3	fore thought and to be able to design for the future with an understanding of the recent history.	Understand and analyze
CO4	Appreciate and be a critic to all works of famous architects under each movement	Understand and evaluate
CO5	Understand different regions and its interior design style tobe able to regain global cultures	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**	**M**					
CO2		**S**					
CO3	**L**	**S**		**M**			
CO4	**M**	**S**					
CO5	**M**	**S**					

S-Strong; M-Medium; L-Low

UNIT I - EARLY PIONEERS

Art nouveau, the post-Industrial era works of Charles Renée Mackintosh, Antonio Gaudi, and their expressionistinterior design.

UNIT II - BAUHAUS ANDPOST WAR MODERNISTS

Walter Gropius/ Bauhaus, De Stijl (Gerrit Rietveld), Mies Van Der Rohe, Art Deco, Postwar Modernism.

UNIT III - MODERNISM

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

UNIT IV - INTERNATIONAL STYLE
The works of Alvar Alto, Phillip Johnson, Charles and Ray Eames, Eero Saarinen, Eero Arnio, Arne Jacobsen.

UNIT V -POST MODERNISM AND MINIMALISM
Interiors of Zaha Hadid, SantiagoCalatrava, Frank Gehry and Peter Eisenmann.

TOTAL: 60 PERIODS

REFERENCES

1. Interior Design Course, Mary Gilliat Coyran, Octopus Ltd., London2012
2. Interior Design& Decoration, Sherril Whiton, Prentice Hall2006
3. Interior Design, Francis D.K. Ching, John Wiley &Sons, New York2004
4. History of Architecture, Sir Banister Fletcher,CBS Publishers & distributors, New Delhi2096
5. Time Saver Standards for Interior Design, Joseph De Chiara, McGraw Hill, New York.

24IDT402	SPACE PLANNING AND ERGONOMICS							SEMESTER-IV
Marks	Internal	40	External		60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits		2

COURSE OBJECTIVE:

- To develop an understanding of various degrees of enclosure, various types of relationshipbetween spaces.
- To understand the various effects that could be created by manipulating the enclosingelements such as walls, roof etc.
- To understand design with relation to a human being with respect to size, shape, and color.
- To understand a human bodies and its various movements and to accommodate the same intodesign standards.
- To understand spatial parameters with respect to the function and implications inflictedregarding the same.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the relationship of human being withits environment and implement the study into design.	Understand and apply
CO2	Design spaces based on patterns of circulation, proximity and levels of privacy zones.	Apply and create
CO3	Understand the different postures and positions with dimensions of the human body	Understand and apply
CO4	Bring a relation with design principles and the human being usingthe design principle.	Understand and apply
CO5	Create a project in direct relation to this course and hence be able to apply theoretical knowledge into practical construction .	Apply and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**M**	**L**					
CO2	**M**	**L**					**L**
CO3			**M**	**S**			**L**
CO4				**S**			**L**
CO5				**S**			**L**

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - ANTHROPOMETRICS and ERGONOMICS

Basic anthropometrics – average measurements of human body in different postures – its proportion andgraphic representation, application in the design of simple household and furniture. Ergonomics in workplaces, universal design considerations for ergonomics in various spaces and elements in interior design

UNIT II - SPATIAL PARAMETERS

Role of mannequins in defining spatial parameter of design. Basic human functions and their implications for spatial planning. Minimum and optimum areas for various functions. Preparing user profile, bubble and circulation diagrams.

UNIT III - DESIGN METHDODOLOGY AND VISUAL ANALYSIS

Introduction to design methodology; Approach to a new design, analyzing the site condition – interior and exterior, analyzing the factors influencing the design aspects. Detailed study of spaces such as living, dining, bedrooms, kitchen, toilet etc. including the furniture layout, circulation, clearances, lighting and ventilation, etc. Case study of existing house and analysis of the spaces. Visual analysis of designed spaces noted for comfort and spatial quality; analysis of solid and void relations, positive and negative spaces.

Assignment: pick a residential project by an iconic designer and investigate its spatial planning and design methodology

UNIT IV - FURNITURE AND ITS SPACIAL RELATIONSHIP

Furniture categories, exploration of the idea of furniture, role of furniture in interior design, Design approaches in furniture design and its spatial relationship.

Assignment: Measured drawing of a piece of furniture – plan, elevation and drawings on full scale

UNIT V - PROJECT and INDUSTRIAL VISIT

Integration of spaces and function in the design of bus shelter, milk booth, watchman's cabin, traffic police kiosk, flower stall, ATM center, etc.

Students should have an IV related to space planning and ergonomics.

TOTAL: 30 PERIODS

REFERENCES

1. Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 2092.
2. Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & spaceplanning, 2nd edition, Mc-Graw Hill professional, 2001.
3. Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004.
4. Julius Panero& Martin Zelnick, Human Dimension & Interior Space: A source book of DesignReference standards, Watson – Guptill, 2079.
5. Karlen Mark, Kate Ruggeri & Peter Hahn, Space Planning Basics, Wiley publishers, 2003.

24IDP411	COMPUTER GRAPHICS								SEMESTER-IV
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	2	Credits			3

COURSE OBJECTIVE:

- To make them digitally strong in the design related software.
- To make them understand and realize beautiful presentations.
- To represent ideas using technology and to be update in the use of software.
- To introduce to basic features of Artificial intelligence
- To enable the student to understand the applications of the software and graphic system.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Express using digital tools in the realm of visualcomposition, drafting.	Understand and apply
CO2	Express using digital tools 3D visualization and rendering	Understand and Apply
CO3	Represent ideas digitally for client understanding.	Understand and evaluate
CO4	Understand the designing 3 d to ensure the elimination of design flaws when translated from 2d	Understand and Apply
CO5	Express using digital tools in the realm of visual composition, drafting, 3D visualization and rendering	Apply and Evaluate

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**		**M**	**M**		**M**	
CO2		**L**	**M**	**L**			
CO3		**L**	**S**	**L**			
CO4			**S**	**L**			
CO5			**S**			**M**	

S-Strong; M-Medium; L-Low

UNIT I - INTRODUCTION TO ADVANCED 3D MODELLING

Complex Modeling Techniques - Curved surfaces, organic forms. Parametric Design - Introduction to parametric modelling.

UNIT II - INTRODUTION TO 3D EXTENSIONS

Understanding 3D extensions – Modelling with popular Parametric modelling extensions like Curviloft, Bezier spline , Shape bender , S4U Make Face, etc.

UNIT III -TEXTURESAND TEXTURE MAPPING

Using material editor, material browser, mapping textures.

UNIT IV - LIGHING AND AI RENDERS

Lighting, cameras and render effects, environment mapping, fogs and atmospheres, AI renders.

UNIT V- RENDERING SOFTWARES-3D &2D

Different interface, creating and saving images, basic image editing, tool box and tools,Using layers, special effects.

TOTAL: 45 PERIODS

REFERENCES

1. ***"Architectural Design with SketchUp: 3D Modeling, Extensions, BIM, Rendering, Making, and Scripting" by Alexander C. Schreyer***
2. PhotoshopCS Bible – Deke McClelland
3. Adobe Photoshop 7.0 classroom in abook – Adobe creative team

24IDP412	WORKSHOP								SEMESTER-IV
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	0	T	0	P/S	4	Credits			3

COURSE OBJECTIVE:

- To understand the basic methods of furniture making with focus on hands on methods regarding workshop practices in wood, metal, plastic, textiles etc.to understand the usage of various materials as required with its properties.
- To understand the usage of engineered wood against the solid wood.
- To understand the fixing details of multiple materials and its interaction with each other.
- To relate the various capacities into creative pursuits of design. To understand the basic methodsof furniture making with focus on hands on methods regarding workshop practices in metal
- To understand the joineries and also understand the properties in these materials. This will helpthem add new elements into their design which could be their own personal idea

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand and construct furniture to live size andunderstanding the scale of drawing to life size	Understand and apply
CO2	Understand properties and usage of materials .	Understand
CO3	Understand the various capacities of hardware for the various materials.	Understand
CO4	Use tools related to glass, steel and stone and alternative substitution to the materials	Understand and apply
CO5	Understand the details to fix multiple materials and its interaction with each other	Understand and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**			**M**		
CO2	**L**	**M**			**S**		
CO3		**M**		**L**	**S**		**L**
CO4		**M**			**S**		**L**
CO5		**M**					**L**

S-Strong; M-Medium; L-Low

UNIT I - GLASS

Working with glass and understand blowing techniques, hardware fixing, polishing, etching, sand blasting techniques of the glass material. Understanding of the properties and using the same in an exercise to create 3d model with glass. Also understanding the usage and finishing of glass in various interior models.

UNIT II - STONE

Different types of natural stones used in interior design, Classification of different types of stone masonry,Understanding usage of stone as interior design tool.

UNIT III - ENGINEERED STONE

Description for engineered stone, Production and composition of engineered stone, Application and usage ofengineered stone. Understanding different types of engineered stones with its applications.

UNIT IV - METAL & STEEL

Types of metals, properties of metals, definitions of terms with reference to properties and uses of metals, various methods of working with metals, fixing and joinery in metals, finishing and treatment of metals., finishes on metals. Standard specifications

Metals in built form activity – horizontal, vertical and inclined surfaces – in interior environment elements- products and furniture forms- doors, windows, Jali, railing, stair etc. Metals and other materials – form and joinery.

UNIT V - LIVE EXPOSURE

Workshop by experts and hands on workshop should be conducted.

Note: Learning should be by feel and working with metals to explore design.

TOTAL: 60 PERIODS

REFERENCES

1. John .F. Pile, Interior Design, Harry. N Abrams, Inc. New York .2095.
2. Ron Fournier, Metal Fabricator‟s Handbook, Rev. Illustrated edition, HP Books, 2090.
3. Stanford Hohauser, Architectural and Interior models, Van Nostrand Reinhold, 2070.
4. Indoor & outdoor - the beauty of natural stone - digital book - ETA-PLUS publishing

24IDS421	INTERIOR DESIGN - IV								SEMESTER-IV
Marks	Internal	160	External			240	Total	400	Exam Hours	3
Instruction Hours/Week		L	0	T	0	P/S	12	Credits		8

COURSE OBJECTIVE:
VERNACULAR CRAFTS: PROCESSES, COLLABORATION AND CULTURAL PRACTICES

- To develop an overall understanding of vernacular and rural craft communities and settlements
- History and craft traditions
- Mapping of traditional building elements
- Mapping of vernacular furniture and objects
- Detail research and documentation
- Issues related to traditional and vernacular craft practices
- Design process/ techniques/ methodologies
- Understanding Indigenous knowledge base and creativity
- Documenting spatial crafts (sketching measured Drawing and photo documentation)
- Anthropometry and ergonomics
- Material research
- Economy and market study
- Innovations and design collaborations
- Incorporation of vernacular crafts in modern day interior design

COURSE OUTCOME:
At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Collect, assimilate and integrate knowledge in a holisticmanner.	Understand and apply
CO2	Be Sensitive towards the nature and produce collective design.	Understand and apply
CO3	Conduct field research, ethnographic studies and develop tools and analyse for the same.	Analyze ,Apply and create
CO4	Describe and understand that is both graphical and verbal representation designprocess and methodology.	Apply and create
CO5	Understand traditional craft practices, its process, and issues covered with inputs from field research.	Understand and evaluate
CO6	Reciprocate and sensitize with the craft practice, using this field research as amethod of inquiry.	Analyze and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**S**					
CO2	**M**	**S**			**M**		**M**
CO3	**M**	**S**		**M**		**M**	
CO4		**S**		**M**			**L**
CO5		**S**		**M**			**L**

S-Strong; M-Medium; L-Low

The list of suggested topics to be covered as design problems:

- Thematic space making with Art and craft forms of our own culture in India – East, West, North, Centraland so on.
- Design of living units of various geographical locations and culture by involving historical periods, stylesand use of craft in its inherent quality and form – craft and living environment.
- Applications of art / craft at public level spaces and modern interior design
- Response to today's situation of urban society – For a given craft practice and community – needs, realities,value system, market study etc.

Note: At least two major exercises and two minor design/time problems should be given.
In the end exam, which is a viva-voce the students have to present the entire semester work for assessment.

TOTAL: 180 PERIODS

REFERENCES

1. Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 2092.
2. Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & spaceplanning, 2nd edition, Mc-Graw Hill professional, 2001.
3. Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004.
4. Julius Panero& Martin Zelnick, Human Dimension & Interior Space : A source book of DesignReference standards, Watson – Guptill, 2079.
5. Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and PresentationTechniques. John Wiley and Sons, 2003
6. Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 2093.
7. Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals ,2002
8. Neufert Ernest, Architect‟s Data, Granada pub. Ltd. London, 2000.
9. John F. Pile, A history of interior design, Laurence King Publishing, 2005.
10. Robin D. Jones, Interiors of Empire: Objects, Space and Identity within the Indian Subcontinent,Manchester University Press; illustrated edition, 2008
11. Handmade in india, book by Aditi ranjan
12. The Historic Environment and Cultural Heritage Skills Survey: Creative & Cultural Skills andEnglish Heritage
13. Towards a Definition of Heritage Craft: Prepared for Creative & Cultural Skills by Hilary Jennings
14. Clusters and ClusterBased Development: A Literature Review and Policy Discussion: Hal Wolman,Diana Hincapie

24IDS422	FURNITURE CONSTRUCTION DETAILING AND MODULAR /CUSTOM MADE							SEMESTER-IV
Marks	Internal	80	External		120	Total	200	Exam Hours	3
Instruction Hours/Week	L	0	T	0	P/S	6	Credits		4

COURSE OBJECTIVE:

.

- To understand the various types of furniture's from history to the current date.
- To produce designs that will suit the function, location and the ergonomics.
- To make different styles of furniture both in modular and in customized.
- During this semester students will focus on the craft of the Furniture -Maker, utilizing state of-the- industry procedures and equipment.
- Emphasis will be on wood and wooden products as a construction medium

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the role of light and color in design with respect to macro scale of sustainability and ecology as well as in the micro scale of shaping of outdoor environments	Understand and apply
CO2	Knowledge about the elements of light and color	Understand and evaluate
CO3	Sensitive towards evolution of different color combination and realization of color in different lighting.	Analyze and create
CO4	Understand the furniture in plans sections and elevation and to have ergonomic detail compliance in everyformat	Understand Apply and create
CO5	Construct the and understand the furniture design anddetailing and to Understand the anthropometry of the furniture and materials usedto crate comfort and aesthetics.	Understand and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**	**S**					
CO2	**S**	**M**		**M**			
CO3	**L**	**M**		**M**	**L**	**S**	
CO4		**M**				**S**	
CO5		**M**					

S-Strong; M-Medium; L-Low

UNIT I - INTRODUCTION TO WOOD

Wood as a building material: Identification, selection, application, types of wood, commercial Classification, nomenclature, structure Anatomy and Ultra structure, Conversion figure and natural defects,availability of wood products, wood-based panels such as plywood ,MDF,HDF, Particle board , pre laminatedboards etc.

Plywood as building material, Layout techniques and machining plans. Fabrication techniques - stapling, gluing.

Furniture Joinery - screw joinery, nail joinery, Mortise& tenon joints, Dovetail joints, Dowel joints, Edge joints.

UNIT II - THE BASICS OF FURNITURE CONSTRUCTION & TOOLS

Measurement and measurement systems, Furniture Construction: Drawers, Cadenza, dining chairs, sofa, settee, cots detail. Preparation for finishing, Furniture Materials Specifying timber, finishes etc . Detailed construction drawings & explaining construction and material finishes.

Analysis of furniture in terms of human values, social conditions, technology and design criteria.

UNIT III - FURNITURE MATERIALS, PROCESS AND MANUFACTURES

Plywood as building material, Layout techniques and machining plans. Fabrication techniques - stapling, gluing. Furniture Joinery - screw joinery, nail joinery, Mortise& tenon joints, Dovetail joints, Dowel joints, Edge joints.

UNIT IV - MODULAR SYSTEMS & FURNITURE MODEL MAKING

Modular workstations, modular partitions and space dividers, different types of modular systems etc Modular kitchens, components basis of Construction involving, layouts, car case, hardware selection, fixing details finishes and special types such as tall units, grain trolleys, and carousels fold outset.

A detailed project involving the design of a small kitchen using modular components.

Preparation of block models of furniture using wood, boards, leather, fabric, thermacol, clay, soap/wax etc.

UNIT V - WORKSHOP

Experts talk/ seminar to be conducted on furniture construction detailing and its process.

TOTAL: 90 PERIODS

REFERENCES

1. S. C. Renewal - Engineering materials –CharotarPublishing, Anand2080
2. Francis D. K. Ching - Building Construction Illustrated, VNR, 2075,
3. Fevicol Furniture series
1. W.B.Mckay –Building construction Vol1 –Longmans, UK 2081
2. W.B.Mckay –Building construction Vol3 –Longmans, UK 2081

24IDS423	INTERIOR SERVICES - II – ELECTRICAL WIRING, LIGHTING AND AIR CONDITIONING								SEMESTER-IV
Marks	**Internal**	**60**	**External**			**90**	**Total**	**100**	**Exam Hours**	**3**
Instruction Hours/Week	**L**	**1**	**T**	**0**	**P/S**	**2**	**Credits**			**2**

COURSE OBJECTIVE:

- To understand the need and application so air conditioning,
- To provide details of electrification and mechanical services in buildings with exposure tovarious systems, methods and fixtures.
- To be able to provide fire safety standards to buildings that are specified in the bye laws.
- To understand sound insulation methods and to be able to insulate rooms based of thedecibel levels that will be required to be maintained.
- To understand the refrigeration process and to be able to execute the best system based onthe function and need of the AC in buildings.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the basic concepts of air-conditioning and to be able to produce suitable drawings for execution of the same in thebuilding drawings.	Understand and remember
CO2	Calculate the load on air-condition and to be able tosuggest the power and input required for the cooling system	Understand and analyze
CO3	Produce suitable electrification and mechanical methods for the cooling system.	Analyze and create
CO4	Understand the need of heating system and to understand the provision of the same and to understand the difference betweenthe cooling and heating systems.	Understand and analyze
CO5	Understand the sustainable principles and best practices along withacoustics and detailing.	Understand and evaluate

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**S**			**L**		
CO2	**M**	**S**					**M**
CO3	**M**	**S**			**L**		
CO4		**S**			**L**		**M**
CO5		**S**			**L**		**M**

S-Strong; M-Medium; L-Low

UNIT I - BASIC CONCEPTS AND SYSTEM COMPONENTS IN AIR CONDITIONING

Compressors – Evaporators –Refrigerant control devices – Electric motors – Air handling units – Cooling towers. HVAC- meaning ventilation- importance, Types of ventilation , Heating, Cooling systems

UNIT II - AIR-CONDITIONING SYSTEM AND APPLICATIONS

Window type and packaged air conditioners – Chilled water plants–Fan coiled systems–Water piping–Cooling load.

Air-conditioning systems for different types of buildings – Duct lay out etc.

UNIT III - LIGHTING

Introduction to lighting fixtures materials, construction and components

Electric lamps , Incandescent, Halogen, Fluorescent, HID, LED

Wiring- switches- lighting effects- controlling light- luminaire optics and distribution

UNIT IV - ELECTRICAL SYSTEMS

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

UNIT V - SEMINAR

Seminars from experts for air-conditioning , Lighting and Electrical

TOTAL: 45 PERIODS

REFERENCES

1. M.H.Lulla, Air conditioning2003
2. V.K.Jain, Fire Safety in Buildings.2012
3. Peter templeton& Saunders – Detailing for architectural acoustics –Architectural press, 2094
4. R.G.HopkinsonandJ.D.Kay, the Lighting of Buildings, Faber and Faber, London,2096 Note: Detailed acoustic design and lighting should be done for any one type of building.
5. Jason Livingston ,Designing with light: The art, Science and practice of Architectural Lighting Design,John Wiley &sons
6. John.F.P,(1997)Color in Interior Design, McGraw Hill company, New York.

24IDT501	SUSTAINABLE INTERIOR DESIGN							SEMESTER-V
Marks	Internal	40	External		60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits		2

COURSE OBJECTIVE:

- To understand the need of Indoor Environmental Quality and control
- To understand the factors affecting indoor environment
- To be able to understand various climatic factors and influences in indoor environment
- To understand the thermal comfort in Indoors
- To understand the lighting strategies for the indoor environment
- To understand the ventilation, sound quality and appropriate green materials

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the overall environmental quality of Indoors	Knowledge and understand
CO2	Understand the thermal comfort factors and methods to bring in comfort	Understand and apply
CO3	Understand about the efficient lighting strategies	Understand and apply
CO4	Understand about the effective ventilation strategies for indoor environment	Understand and apply
CO5	Understand about the noise control and quality and will Analyze various green materials and its usage.	Understand and Analyze

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**		**S**			
CO2		**M**		**S**			
CO3	**L**	**M**		**S**	**M**		**L**
CO4	**L**	**M**		**S**	**M**		**L**
CO5		**M**		**S**			**L**

S-Strong; M-Medium; L-Low

UNIT 1 - INTRODUCTION TO SUSTAINABLE AND GREEN BUILDING CONCEPTS

Definition- Sustainable , Green building technology- concepts, impact on human health and natural environment, need, importance and benefits of green buildings- policies and incentives encouraging sustainability.

UNIT II - INDOOR ENVIRONMENTAL CONTROL & QUALITY-THERMAL COMFORT

Indoor environmental control and Quality-Introduction –factors affecting Indoor environment-Visual, Thermal, Noise, Air Quality- CFC free, VOC free. – Physiological and Psychological -Climate and built form interaction. Global climatic factors, elements of climate, impact and issues of climatic balance in traditional and contemporary built environments, implications of climatic forces in indoor spaces. Thermal comfort and heat flow-Thermal comfort factors, physiological aspects. Body heat balance-comfort zone – factors to achieve indoor thermal comfort

UNIT III - INDOOR LIGHTING AND SOUND QUALITY

Sun and Design process – Day lighting in Indoors- Visual comfort — Passive Design Strategies to achieve good lighting- Hybrid Strategies- Artificial lighting types- energy efficient lighting,Indoor Ventilation – natural ventilation- Passive design Strategies to achieve good natural Ventilation- Hybrid Strategies-Introduction – Noise – Noise level for Human Comfort- Reduction techniques in indoors

UNIT IV - WATER CONSERVATION TECHNOLOGIES-INDOOR

Water- estimating the use, reductions in consumption, recycling , reuse , landscape requirements. Difference between portable water and non-portable water.

Plumbing systems, Piping layout, sanitary fixtures, fittings and standards for kitchen ,Toilet ,appliances and equipment.

Strategies and technology for indoor water conservation.

UNIT V - SUSTAINBLE INTERIOR MATERIALS.

Materials and resources- segregation, recycling , reduction in waste , reuse of materials and renewability. Sustainable alternative materials available in the market.

Seminar from a vendor explaining the sustainable products and its uses in interior spaces.

TOTAL: 30 PERIODS

REFERENCES

1. Koeinsberger, O.H. and others, Manual of Tropical Housing and Building. Orient Longman, Chennai,2003.
2. Konya Allan, Design for Hot Climates.2013
3. Kukreja. C.P. Tropical Architecture. Tata McGraw Hill Pub. Co. Ltd. New Delhi, 2078.
4. Markus, T.A and Morris. E.N. Buildings. Climate and Energy, Pitman Pub Ltd., London, 2080.
5. Olgay and Olgay, Solar Control and Shading Devices.
6. Arvind Krishnan & Others – Climate Responsive Architecture, Tata Mcgraw –Hill New Delhi 2001
7. Riggs,J.P(1992) Materials and components of Interior design, Regents Hall , New jersey
8. Pratap R.M(1988) Interior design principles and practice, standard publishers' distribution, Delhi.

24IDT502	INTERIOR SERVICES - III – ADVANCE SERVICES							SEMESTER-V
Marks	Internal	40	External		60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits		2

COURSE OBJECTIVE:

- To give exposure to the science behind Fire handling systems, the different types and applications.
- To enable understanding of Design aspects related to Fire systems and take appropriate design decisions.
- To inform about fire protection, fire safety and fire fighting in buildings and how to plan for the same
- To inform about Various security and communication system , how to plan them considering the emergency purpose.
- To give information about integration of systems with each other and with building construction

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand different fire safety standards systems, their context of use and basics of planning involved.	Understand and evaluate
CO2	Understand the fire safety, firef ighting, fire prevention and installations in buildings.	Understand and apply
CO3	Understand the mechanical, communication and security systems in a building.	Understand
CO4	Understand about different building automation control systems.	Understand and apply
CO5	Analyze and create design building layouts and sections for service integration	Analyze and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**M**					**L**	
CO2	**S**	**L**				**M**	
CO3	**S**	**L**				**M**	
CO4	**S**	**L**					
CO5	**S**	**L**					

S-Strong; M-Medium; L-Low

UNIT I - FIRE SAFETY

Statutory Standards and codes for fire safety. Objective and essential components and working of a Fire Alarm System. Type of detection technology in the Fire alarm system. Basic knowledge on working, design and installation of Fire alarm system. Fire suppression systems. Components, working and installation. various types of technologies currently in use.

UNIT II - SECURITY, SURVEILLENCE AND COMMUNCATION SYSTEMS

Introduction to Access Control, Intruder Alarm, Essential Components of each System, and Various types of Technologies employed in the system, Basic knowledge as how they work, are designed and installed.

Introduction to CCTV, Perimeter protection system, Essential Components of each System, and Various types of Technologies employed in the system, Basic knowledge as how they work, are designed and installed. Public Address System and other communication systems and their requirements.

UNIT III - INTEGRATED BUILDING MANAGEMENT SYSTEM

Overview of various components, technology, sensors, etc., that are common to more than one system. Integrated Building Management System IBMS. Integrated approach in design, maintenance and management system. Current trend and innovation in building automation systems. Impact of Information Technology

UNIT IV - ACOUSTICS AND SOUND INSULATION

Room acoustics - resonance, reverberation, echo, and reverberation time, simple exercise using Sabine's formula. - Acoustical requirements of different types of building. – Sound absorption, absorption co-efficient and their measurements, Absorbing materials used and their choices, exercises involving reverberation time and absorption co-efficient. Sound insulation materials

UNIT V - INDUSTRIAL VISIT

Live case study- Visit any multi-storied space which includes special and advance services. Analysis the integration of different services. Seminar from experts.

TOTAL: 30 PERIODS

REFERENCES

1. Basics Fire Safety by Helmerking And Diana, Birkhauser
2. John L. Bryan, Fire Suppression Detection System
3. Vivian Capel, Security Systems and Intruder Alarm System,
4. Mike Constant & Peter Turnbull, The Principles and Practice of Closed Circuit Television.
5. Building Automation Systems – A Practical Guide to Selection and Implementation, Maurice EykeNational Building Code of India

24IDP511	TRANSFORMABLE SYSTEM AND SPACES							SEMESTER-V			
Marks	**Internal**	**60**	**External**			**90**	**Total**	**150**	**Exam Hours**		**3**
Instruction Hours /Week	**L**	**1**	**T**	**0**	**P/S**	**3**	**Credits**				**3**

COURSEOBJECTIVE:

- To develop creative thinking as well as an understanding of structures in interiors
- To Prepare a base for the students to gain an understanding into the fundamental issues ofdesigning/transforming existing spaces
- To develop the skill to create floor plans considering all the factors affecting spatialcomposition.
- To develop a research and case study methodology amongst students to carry out a brief practicein connection to the typology of projects they would execute.

COURSEOUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the role of mechanization in the establishment of contemporary design	Understand and apply
CO2	Understand the concept of different structures involved in terms of interior designing	Evaluate and create
CO3	Understand and gain Knowledge of properties, methods and techniques used in transforming space	Apply and create
CO4	Understand to integrate knowledge of properties and construction methods of basic materials in the design of spacetransforming.	Understan dand apply
CO5	Analyze and create the floor plans with the techniques of transformable systems	Analyze and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**		**S**			**M**
CO2	**L**	**L**		**S**			**M**
CO3	**L**			**S**			**M**
CO4	**L**			**S**			**M**
CO5	**S**	**M**					

S-Strong; M-Medium; L-Low

UNIT I - INTRODUCTION

Introduction to transformable space, planning & design, terms and intent - necessity of space planning &design - Importance, considerations, Methods, techniques, technologies
Concept of structures used in the interiors and their application

UNIT II – MATERIALS AND FINISHES

Building materials and finish – detailed study of core materials – cement, concrete, brick, stone and wood – definitions, their types, properties, advantages and disadvantages and their application.
Finished surfaces – laminates, veneers, paints, woods, tiles, vinyl and carpets - definitions, their types, properties, advantages and disadvantages and their application.

UNIT III - SPECIFICATIONS

Visual characteristics- Types of Finishes, Textures- visual and tactile, thermal properties, applicationprocess, advantages and disadvantages.
Product specific materials – types of materials used in interior accessories, furniture, light fixtures, finishes. Physical, behavioral and visual properties of the following materials and their use in th e construction of floor, walls, ceilings, doors, windows, staircase, built in furniture and other components ofinterior architecture. (Wood, glass, metals, cement, brick, POP, stone, paint, plaster, tiles).

UNIT IV - SPACE STRUCTURE AND TECHINQUES

Basic Fittings and Fixtures- Screws, clamps, hinges, glue, nails, locks, rivets, connectors, nuts, bolts and other miscellaneous fittings- Uses- Advantages and disadvantages and their application.

UNIT V - CONCEPT DEVELOPMENT , SEMINAR

Transformable space design Concept Development - importance, factors & considerations- model makingthrough computer aided design tools- developing physical model

Expert talks / seminar on transformable system and spaces.

TOTAL: 60 PERIODS

REFERENCES

1. Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 1992
2. Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & spaceplanning, 2nd edition, Mc-Graw Hill professional, 2001.
3. Karlen Mark, Kate Ruggeri & Peter Hahn, Space Planning Basics, Wiley publishers, 2003
4. Design Elements : Form and Space – Dennis M Puhalla
5. Principles of Form and Design by Wucius Wong
6. Chowdary, K.P. Engineering Materials used in India, 7th ed. Oxford and IBH, New Delhi, 1991

24IDP512	WORKING DRAWINGS AND DETAILING							SEMESTER-V
Marks	Internal	60	External		90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	5	Credits		3

COURSE OBJECTIVE:

- Reading of working drawing, their co-relation and cross-referencing in various technical projections.
- To produce detailed measured drawings in plans, elevations, sections, detailing etc.
- To understand the various parameters involved in the detail drawing and to be able to produce the same.
- To incorporate all service drawings with respect to fire and safety, water supply and plumbing, electrical, acoustics and any such that will be accounted for.
- To be able to detail out each part into sub parts and to be able to provide construction execution details of the same.
- To be able to produce circulation patterns in the plan and to able to detail out the standards that are used in the design.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the aspects of the making the Interiors design to the drawing format used for execution.	Understand and Apply
CO2	Resolve spatial concerns with technical aspects of the interiors.	Understand and apply
CO3	Understand the structural components of the buildings and to be able to make changes in the floor layout.	Understand and apply
CO4	Understand designs in all parameters such as plans sections elevations and detailed drawings.	Understand and evaluate
CO5	Understand and create the complete of interior working drawings required for construction	Apply and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	L	M			M		
CO2	L	M		S	S	S	
CO3	L	M	L		S	S	
CO4	L	M	L		S		
CO5	L	M	L		S		

S-Strong; M-Medium; L-Low

UNIT I - WORKING DRAWINGS

Preparation of working drawings – Suitable scales of drawings, methods of giving dimensions and standards on plans, sections, elevations, details etc. Elevations and Sections – Detailed sectional elevations of all the walls in the interior with all the required dimensions and specifications.

UNIT II - ARCHITECTURAL WORKING DRAWING

Preparation of working drawings for Architectural plan– Centerline drawing, Detailed dimensions and standards on plans with joinery (doors and window) schedule

UNIT III - INTERIOR WORKING DRAWINGS

Preparation of working drawing for all the rooms and Interior Spaces showing detailed plan with furniture and clearances- all 4 sides wall elevations – sections with furniture - toilet details, kitchen details, staircase details, furniture details, Interior finishing details, material, color and texture details,
Fixture and fixing and joinery details.

UNIT IV - SERVICES

Details of all services – layouts for flooring, ceiling, electrical, plumbing, lighting, firefighting etc., toilet details, kitchen details, staircase details, furniture details, Interior finishing details, material, color and texture details,
Fixture and fixing and joinery details.

UNIT V - SPECIFICATIONS WRITING

Specifications writing: Writing detailed clause by clause specifications for materials pre and post execution, tests, mode of measurements, manufacturer's details and specifications etc.

TOTAL: 90 PERIODS

REFERENCES

1. Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and PresentationTechniques. John Wiley and Sons, 2003
2. Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 2093.
3. Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals, 2002
4. Neufert Ernest, Architect‟s Data, Granada pub. Ltd. London, 2000.
5. Maryrose McGowan & Kelsey Kruse, Interior Graphic Standards, Wiley and sons, 2004.

24IDS521	INTERIOR DESIGN - V								SEMESTER-V
Marks	**Internal**	**160**	**External**			**240**	**Total**	**400**	**Exam Hours**	**03**
Instruction Hours/Week	**L**	**0**	**T**	**0**	**P/S**	**12**	**Credits**			**8**

COURSE OBJECTIVE:

- To understand the process involved in
  - Space planning process (block diagram, concept statement)
  - Furniture
  - Historic style
  - Structural integration
  - Material selection
  - Color
  - Rendering
  - Design Process/methodology
  - Creativity/originality
  - Documenting space (sketch and photo documentation)
  - Anthropometry and ergonomics
  - Graphic design (page layout and composition)
  - Concepts sketching
  - Application of design principles and elements
  - Portfolio development
- To create understanding of human-built environment as a holistic, living entity from macro tomicro scales,
- Shaped by geographic and socio-cultural forces as well as by historic, political and economicfactors, through study of and design within the context of rural settlements.
  - To enable a comprehensive study of rural settlement and Interior design in order tounderstand them as exemplar of collective design that evolved through various parameters.
  - To observe changes in the above, analyze their nature and causes for them

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Collect, assimilate and integrate knowledge in a holisticmanner.	Understand and Apply
CO2	Understand, Observe and analyze changes in the layout and project future transformations.	Understand and Apply
CO3	Sensitive towards the nature and values of unselfconsciousand collective design.	Understand and Apply

Co4	Analyze the pre data of the concepts and to introduce design solutions using a creative approach.	Analyze ,Apply and create
CO5	Understand the basic functional aspect ofdesigning simple building type and its relevant spatial organization.	Understand
CO6	Reciprocate and sensitize the design/concept to the environment and the design skill of the project	Understand and Evaluate

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1			**M**	**S**		**M**	
CO2		**S**	**M**	**S**		**M**	
CO3			**M**	**S**		**S**	
CO4			**M**	**M**		**S**	
CO5			**S**	**M**		**S**	
CO6	**S**	**M**					

S-Strong; M-Medium; L-Low

The primary focus should be on –

- Introduction to building codes
- Way finding, Signage and graphics
- Universal Design
- Accessible design
- Design Disabled
- Materials, furniture and finish selections
- Introduction to construction detailing
- Ergonomics and Human Factors
- Digital representation (3 D modeling)
- Space planning process
- Color
- Interior environmental control issues
- Rendering
- The list of suggested topics to be covered as design problems:
- Institutional spaces in urban, semi-urban and rural contexts with an aim to explore and understand transformation and adaptive re-use.
- Historic and abandoned sites provide scope for rejuvenation through multi-dimensional programs covering functions like museums, cultural and resource centers, libraries, convention centers, exhibitions etc. that also aim in making a social contribution.
- Recreational spaces such as auditoriums, halls, cinema houses, stage design etc. Knowledge of audio-visual communication, color and light interaction, sound control system, design of interior elements, products and furniture forms.

Design issues in addition to the primary focus for the above are statement of institution characterthrough interior environment responses to site and context, integration of interior architectural.

Elements to other interior elements, dialogue between the existing and the newly added insert,interpretation of institutional activities and their spatial correlation.

Note: At least two major exercises and two minor design/time problems should be given. In the end exam, which is a viva-voce the students have to present the entire semester work for assessment.

TOTAL: 180 PERIODS

REFERENCES

1. Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 2092.
2. Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & spaceplanning, 2nd edition, Mc-Graw Hill professional, 2001.
3. Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004.
4. Julius Panero& Martin Zelnick, Human Dimension & Interior Space : A source book of DesignReference standards, Watson – Guptill, 2079.
5. Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and PresentationTechniques. John Wiley and Sons, 2003
6. Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 2093.
7. Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals, 2002
8. Neufert Ernest, Architect‟s Data, Granada pub. Ltd. London, 2000.
9. Maryrose McGowan & Kelsey Kruse, Interior Graphic Standards, Wiley and sons, 2004.

24IDS522	ESTIMATION COSTING								SEMESTER-V
Marks	Internal	80	External			120	Total	200	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	5	Credits			4

COURSE OBJECTIVE:

- To equip the students to prepare the Estimate in order to fore see the cost of the work
- To implement an interior design project & also to monitor / control project cost.
- To be able to make specification of the materials used and hence regulate the cost to keep it in the budget specified by the client.
- To understand various finishes and its rates to be executed as per the budget and the designer's choice.
- To be able to provide a rough estimate and a detailed estimate as in need of the project.
- To be able to learn to control the cost and time with respect to the project.

COURSEOUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand and write specification for the construction projects	Understand and apply
CO2	Estimate the building interiors with various quantities	Understand and Apply
CO3	Know about the latest materials available in the market and to be able to substitute materials to attain cost goals.	Understand and apply
CO4	Understand the budget limits of the client and hence will be able to make suitable suggestions to the client.	Understand and Evaluate
CO5	Analyze and alter the specification and to adjust the final cost though the changes.	Analyze ,Apply and Evaluate

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1				S			
CO2	L			S			
CO3	L			S			
CO4	L			S			
CO5				S			

S-Strong; M-Medium; L-Low

UNIT I - INTRODUCTION TO ESTIMATION

Introduction to costing, terminology, its application and benefits, cost influences and construction costs, furniture, fixtures and equipment, contractor's overhead and profit, professional fees, taxes and contingencies other installation.

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.

UNIT II - RATE ANALYSIS & ESTIMATION FORMAT

Rate Analysis – definition, method of preparation, quantity & labor estimate for wood work, steel work,Aluminum work, glass & its rate for different, thickness & sections, finishing (enamel paint, ducopaints,

Melamine, DUcoats, Handpolishing, veneering and laminating) for walls & ceilings. Electrical & plumbing products, wiring, ducting etc., and laying of tiles & wall paneling in the estimate format of the project.

UNIT III - DETAILED ESTIMATE

Detailed Estimate – data required factors to be considered, methodology of preparation, abstract of Estimate, contingencies, labor charges, bill of quantities, different methods of estimate for interior design works, methods of measurement of works.

UNIT IV - COSTING OFFIXTURES & FITTINGS

Cost of the following items : electrical fitting like, luminaries, fan, cables, switches, etc., tiles in skirting &dado, cement plaster, joinery in wood, steel & aluminum, painting to walls – cement paint, oil paints, Distemper acrylic emulsion, enamel paint painting to joinery, varnishing, and French polishing plumbing.

Equipments like piping, shower panels, cubicles, tubs, Jacuzzis, taps, motors, fountains, false ceiling of Aluminum panels, steel & wooden frame work ,thermocol etc. wall paneling of ceramic tiles & other tiles of materials suitable for the same, partitions made of materials like aluminum wood, steel etc

Flooring - Plank and Tile Flooring –Resilient Flooring and Soft Flooring, Area Rugs– Explanation of product, product sizing and packaging – Commonly used flooring products and their estimation and costing.

UNIT V - INTRODUCTIONTO SPECIFICATION AND TENDERS

Specification – Definition, purpose, procedure for writing specification forth purpose of calling tenders, types of specification. Specification for different item related to interior design project – wood work for Furniture window frames & pelmets, partition setalso of materials like steel aluminum glass of various kind. Wall paneling & false ceiling of materials like aluminum, steel, wood, electrical, plumbing, air-conditioning & fire fighting equipments.

Types of tenders, Contract, Billing, certificates of payments. Data – Schedule of rates – Analysis of rates – Specifications – sources – Detailed and general specifications for buildings, Office Tenders – Contracts – Types of contracts, BOT – Arbitration and legal requirements.

TOTAL: 90 PERIODS

REFERENCES

1. M. Chakraborti, .Estimation, Costing, Specification and Valuation in Civil engineering.2092
2. Dutta, Estimating and Costing, S. Dutta and Co., Luck now 2083
3. S. C. Rangwala, Elements of Estimating and costing, Charoter publishing House,Anand, India, 2084.
4. The interior designers guide: to pricing, estimating budgeting. By Theo Susan2000
5. Carol Simpson, Estimating for Interior Designers, Watson Guptill, Rev. Sub edition, 2001
6. Carol E Farren, Planning and Managing Interior projects, Robert Snow Means Company, 2000
7. Barbori Balboni, Interior Cost Data, R.S. Means company, 2001

24IDES531	SIGNAGE AND GRAPHICS								SEMESTER-V
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week		L	1	T	0	P/S	3	Credits		3

COURSE OBJECTIVE:

- Knowledge about the various styles of signage manufactured in various materials is vital toan designer.
- Understanding the methods and techniques involved in signage and graphics.
- Understanding the signage location and using apt design and material is important.
- To understand the visibility factor and the importance of the signage.
- To be able to differentiate the various types of signage and to se it aptly in strategic locations.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Design products in signage using graphics.	Understand and create
CO2	Understand the needs of the industry and give betterproducts in design	Understand and apply
CO3	Analyze and experiment with different materials	Analyze and create
CO4	Provide proper lighting for the signage to be legible.	Understand Apply
CO5	Produce signage for large spaces and to be unique in design and to be able to understand the hardware system and to be integrated to the project in total	Apply and evaluate

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	L		M			S	
CO2			S	L		S	
CO3			S	L			
CO4			S	L			
CO5			S	M			

S-Strong; M-Medium; L-Low

UNIT I - INTRODUCTION

Introduction – environmental graphic Design, way finding, Need, importance etc.

UNIT II - DEFINITION

Information content system – kinds of sign information, hierarchy of content, developing the sign information content, Navigation – message hierarchy and proximity, Other factors affecting sign information content, pictorial information content, signage master plans.

UNIT III - THE GRAPHIC SYSTEM

The Graphic system - Typography overview, choosing a typeface, typographic treatment, typographic considerations in signage for no sighted and low sighted people, symbols and arrows, other graphic elements, color, layout, overview of signage graphic process.

UNIT IV - THE HARDWARE SYSTEM

The hardware system – shape, connotations of form, sign mounting considerations, sign size consideration s, sign lighting overview, sign materials overview, basic sign materials, electronic message displays, stock sign hardware systems, sign materials and codes, overview of coatings and finishes applied to signs.

UNIT V - SIGNAGE DESIGN

Signage Design – Eyelevel, light, Fonts, typographical systems and type area, pictograms, arrows, color – contrast, language, systems, tones, Coding, privacy and protection, Room identification.

TOTAL: 60 PERIODS

REFERENCES

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

24IDES532	PRODUCT DESIGN								SEMESTER-V
Marks	**Internal**	**60**	**External**			**90**	**Total**	**150**	**Exam Hours**	**3**
Instruction Hours/Week	**L**	**1**	**T**	**0**	**P/S**	**3**			**Credits**	**3**

COURSE OBJECTIVE:

- Knowledge about the various styles of furniture manufactured in various materials is vitalto a Designer.
- Understanding the methods and techniques involved in furniture and product design.
- To understand the importance of a digital product and then to create a digital product.
- The process involved in the design of a product to be understood.
- To understand the detailing of the furniture and its feasibility for production
- To understand mass production techniques and the production line formation of the same.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the need and to be able to justify the product to bedesigned.	Understand and Apply
CO2	Understand the needs of the industry and give efficient product design.	Understand and apply
CO3	Follow design procedure and to understand the process to make aproduct.	Understand and Apply
CO4	Understand various materials and to execute the best possible material for a particular design.	Understand and evaluate
CO5	Create a digital product and to be able to display the product details of the same	Apply and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**			**S**		
CO2		**M**	**S**		**L**		
CO3	**M**		**S**		**L**		
CO4		**M**			**L**		
CO5	**M**	**M**			**L**		

S-Strong; M-Medium; L-Low

UNIT I - INTRODUCTION

An brief introduction to Product Designing – Various elements – History of Product Design – Definition of Product Design, understanding of Product Design - Purpose of Product Design – Role of Product Designers.

UNIT II - HUMANFACTORS

Definition of human factors, Application of human factors data. Human activities, their nature and effects. Man- machine system and physical environment. Human performance and system reliability. Information input and processing. Human control systems. Applied anthropometry – Human response to Climate.

UNIT III - ASPECTSOFPRODUCTDESIGN

Visual, Auditory, Tactual, Olfactory human mechanisms, Physical space and arrangement. Visual display, process of seeing, visual discrimination, quantitative and qualitative visual display, Alphanumeric and related displays, Visual codes and symbols.

UNIT IV - PRODUCT DESIGN

Form, Color, Symbols, User specific criteria, Material, Technology and recyclability, Packaging. Multiple Utility oriented approach to Product Design.

UNIT V - DESIGN EXERCISES

Design of Household elements, tools and devices – Spoon/Cutlery.
Design of furniture – Chairs/Computer table, Kitchen racks,
Cabinets etc.
Design of Industrial Product – Watch Dial, Gear Wheels, Automobile Headlights
etc.Element design for the physically and mentally different people.

TOTAL: 60 PERIODS

REFERENCES

1. Time Saver Standards for Interior Design2001
2. Andrew Alpern, Handbook of Specialty Elements in Architecture, McGraw-Hill Co., USA, 2082.
3. Francis D.K.Ching, Interior Design Illustrated, VNR Publications, New York, 2087.
4. An invitation to Design, Helen Marie Evans.2001

24IDES533	SET DESIGN								SEMESTER-V
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	3	Credits			3

COURSE OBJECTIVE:

- Knowledge about the various styles of sets manufactured in various materials is vital to an designer for a foray into the film industry.
- Understanding the methods and techniques involved in set designs.
- To understand the defiance of temporary structures.
- To acquire knowledge of materials and construction techniques used in temporary structures.
- To understand the area and field specific for the film industry.
- To be able to design and imagine various backgrounds for the set design

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Design products and sets suitable to situations in concern	Understand and create
CO2	Understand the needs of the industry and give efficient product in design	Understand and Apply
CO4	Understand about various temporary structural methods.	Understand and Apply
CO5	Understand history and security in the film industry andto be able to use the techniques already introduced And understand theater sit up and the rolling screen design.	Understand and apply
CO6	Understand to set up stage and platforms for future	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**	**M**	**S**		**L**		
CO2		**M**	**S**		**S**		
CO3		**L**	**S**		**S**		
CO4		**L**	**M**		**S**		
CO5		**L**			**S**		

S-Strong; M-Medium; L-Low

UNIT I - FILM AND SOCIETY

Examination of the twentieth-century culture and society through film. Critical analysis of cultural and social conflicts are portrayed and worked out in popular films, and examination of how motion pictures create a window into modern society. Film as cultural texts to better understand history and culture manifestations.

UNIT II - HISTORY AND THEATER FILM SET DESIGN

Investigation the production methods, dramatic theory and conventions, and scene design of various performance media since the popularization of the motion picture, and how it has influenced all entertainment design in the 21th and 21st centuries.

UNIT III - GRAPHIC DESIGN AND TYPOGRAPHY FOR EXHIBIT DESIGN

Principles of layout for creating effective visual signage and explore the unique problems, technique, theory, and approaches of signage in film, theatre, and other forms of mediated exhibition. Introduction to the design applications for building signage.

UNIT IV - SET DESIGN AND CONCEPT WRAP

Introduction to the basic concepts, through theory and practice, of scene design in theatre, film, and other fine arts and entertainment media. Students will learn how to analyze scripts for proper scenery, how to conceptualize designs that will translate into actual sets, and develop visual thinking within the creative process.

UNIT V - STAGE DESIGN

Stage design process from inception to performance, script analysis, visual arts analysis, research skills, and the application of principles and elements of design. Understanding stage setting through language, color, and architectural analysis.

TOTAL: 60 PERIODS

REFERENCES

1. Time saver standards for building types,DeChiara and Callender, Mc Graw hill company 2001
2. Neufert Architect's data, BousmahaBaiche& Nicholas Walliman, Blackwell science ltd2002

24IDES534	LIFESTYLE ACCESSORIES DESIGN								SEMESTER-V
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	3	Credits			3

COURSE OBJECTIVE:

- To introduce students to all accessories that could be used in each and every space in design.
- To make students understand the need for aesthetics in design
- To use all above said materials in the most creative fashion that they could use.
- To help the student understand day lighting and technology of artificial lighting.
- To equip the student to understand and successfully apply lighting techniques with coloreffects.
- To be able to experiment new materials and to understand the properties of the materials.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the importance of appropriateaccessories to fill in the space as per design requirements.	Understand and evaluate
CO2	Understand the luxury element in interior design whichleads to a picture-perfect assimilation of items in design principles.	Apply and create
CO3	Understand the development and technology of the product andthe procedure of manufacturing.	Apply and create
CO4	Approach the design with the utmost importanceto the function and the aesthetics to be incorporated. To be able to physically make a product that faces all challenges laid for the execution and design of the same.	Understand and evaluate
CO5	Assess the working of the project and to be able toredesign with the errors o be minimized as much as possible.	Understand ,evaluate and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**					
CO2		**M**	**S**			**S**	
CO3		**M**	**S**	**L**		**S**	
CO4		**M**		**L**			
CO5		**M**		**L**			

S-Strong; M-Medium; L-Low

UNIT I - INTRODUCTION

Overview of lifestyle accessories and their significance in interior design. Historical perspectives on lifestyle accessories and their evolution. Understanding the relationship between lifestyle accessories and interior spaces. Analysis of current trends and market demands in lifestyle accessories design

UNIT II - MATERIALS AND TECHNIQUES

Exploration of various materials used in lifestyle accessories design (e.g., wood, metal, glass, textiles). Techniques for crafting and manufacturing lifestyle accessories. Sustainability considerations in materials selection and production processes. Hands-on exercises and workshops to experiment with different materials and techniques.

UNIT III - CONCEPT DEVELOPMENT AND IDEATION

Generating design concepts for lifestyle accessories based on user needs and preferences. Research methods for gathering inspiration and understanding target demographics. Developing mood boards, sketches, and prototypes to visualize design concepts.

UNIT IV - DESIGN APPROACH

Design considerations for different interior spaces (e.g., living room, bedroom, kitchen). Adapting lifestyle accessories design to suit various themes and aesthetics. Incorporating cultural influences and historical references into design concepts. Case studies and real-world examples of successful lifestyle accessories designs for specific spaces and themes.

UNIT V - PROJECT

A detailed study involving all the design aspects of any of the following lifestyle accessories: luminaire design, glassware, lighting, textiles, mirrors, clocks, wall coverings etc.

TOTAL: 60 PERIODS

REFERENCES

1. Laura Slack, What is product Design? Roto Vision publishers, 2006
2. Treena Crochet and David Vleck, Designer‟s Guide to Decorative Accessories, Prentice Hall, Istedition, 2008.
3. Michael Ashby, Kara Johnson, Materials and Design: The Art and Science of material selection inproduct design, Butter Worth Heinemann, 1st edition, 2002.
4. International Design Yearbook, 2095: Furniture, Lighting, Tableware, Textiles and Products, BooksNippan, 2096.
5. Karl. T. Ulrich, Steven D. Eppinger, Product Design and Development, McGraw-Hill EducationSingapore; 4th edition, 2007
6. William Lidwell, Kritina Holden, Jill Butler ,Universal principles of Design, Rockport publishers,2003.

24IDP611	PRACTICAL TRAINING								SEMESTER-VI
Marks	**Internal**	**320**	**External**			**480**	**Total**	**800**	**Exam Hours**	**3**
Instruction Hours/Week		**L**	**0**	**T**	**0**	**P/S**	**0**	**Credits**		**16**

COURSE OBJECTIVE:

- To introduce the challenges of interior design practice.
- To enable overall understanding of different stages in real life interior design projects inpractice.
- To create involvement in these stages as much as possible within the scope of a specificinterior design practice–
- Students will be involved in initiation of project, development of concepts into schematic drawings, approval process, presentations and working drawings, involvement in office discussions and client meetings, integrating structural and service concerns, estimation and tendering processes,
- Students will visit the site for supervision and coordination in the construction process

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the overall idea of the nuances of interior design practice.	Understand
CO2	Understanding about the total process that goes into the making of an interior in a building.	Understand
CO3	Reciprocate the experience gained from internship in the thesis project.	Apply and create
CO4	Handle clients and translate the design requirements in to design projects.	Apply and create
CO5	Do professional detailing and to be able to produce drawings that is good for construction.	Apply and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1				**M**			**S**
CO2				**M**			**S**
CO3				**M**			**S**
CO4				**M**			**S**
CO5				**M**			**S**

S-Strong; M-Medium; L-Low

Every student must work in an interior designer's office as a full-time trainee for a period of 21 calendar weeks (excluding viva – voce) from the date of commencement of training. The chief Interior Designer in the firm should have a minimum of 5 years of practical/ professional experience after his /her graduation.

The student should involve herself /himself in various aspects of work in an office like working drawings, presentation drawings, quantity estimation, site supervision etc.
Students should understand professional practice methods of various interior designers, design process from client contacts to production documents, tender documents, production drawings for various works, site supervision etc.
For various works. They should also know the Coordination of various agencies – client, members of design team, consultants, contractors, craftsmen and construction supervisors.

Detailed instructions regarding the training, the frequency of reporting to the department etc will be issued at the end of Seventh semester, which the student must strictly follow.

After completion of training, every student will have to submit a detailed report with a set of drawings on at least two projects in which he / she has worked during the twenty calendar weeks of the practical training period.

This report will be evaluated at viva – voce by a jury consisting of one external, one internal and head of the department or his nominee. After submission of the report the department at its convenience will arrange for the conduct of the viva – voce examination.

Extra validation for students applying for established firms.

24IDS621	FIELD STUDY AND DOCUMENTATION								SEMESTER-VI
Marks	**Internal**	**80**	**External**		**120**	**Total**	**200**	**Exam Hours**	**3**
Instruction Hours/Week	**L**	**0**	**T**	**0**	**P/S**	**6**		**Credits**	**4**

The choice of the building shall be Contemporary, Heritage, Vernacular or even a settlement/small area in the city of training. This field study and documentation shall be submitted in the form of an architectural report with sketches, pictures and drawings and presented in the form of videos, presentation, slideshow etc covering the following aspects:

- History and Cultural Impact
- Style and Function
- Form and Spatial Studies
- Key Elements and Features
- Materials and Technology

24IDT701	DESIGN TECHNOLOGY AND INNOVATION							SEMESTER-VII	
Marks	Internal	40	External			60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits			2

OBJECTIVE

- To introduce and give knowledge about trending techniques and Technology in Design field
- To understand about Digital Fabrication with their merits and demerits in design intervention.
- To understand about Artificial intelligence and Virtual reality in the field of design.
- To study about the advance techniques in building a smart homes and other strategies.
- To understand the support of technology to build a sustainable environment.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Work on the smart digital platform for interior design	Understand
CO2	Understand how digital fabrication can enhance the designing process in interior design	Understand and apply
CO3	Understand the basics of artificial intelligence and virtual reality	Understand
CO4	Understanding and usage of basic Application of artificial interiordesign	Understand and Apply
CO5	Understanding and enhancing the knowledge of smart homes and smart management ininterior spaces	Understand and apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1			**L**			**M**	**L**
CO2					**M**		**S**
CO3					**M**	**M**	
CO4					**M**		
CO5					**M**		

S-Strong; M-Medium; L-Low

At the end of this course, students will be able to

COURSE CONTENT:

UNIT I - INTRODUCTION TO DIGITAL FABRICATION

Introduction to Digital Fabrication; Advantages of Digital Fabrication; Evolution of digital fabrication in Interior design, overview of the impact the technology, new realm of possibilities for design expression, Etc.,

UNIT II - ARTIFICIAL INTELLIGNECE and VIRTUAL REALITY

Introduction to Artificial Intelligence and Virtual Reality; various opportunities of AI and VR in the field of Interior design. I powered interior design tools; Brain computer interface (BCI); AI for marketing strategies.

UNIT III - FUTURE OF INTERIOR DESIGN

Introduction to Virtual and Augmented reality; Smart homes- advance automation; 3d Printing.

UNIT IV - INNOVATION TECNOLOGY LEADING TO SUSTAINABLE DESIGN

Smart technologies that promote highly efficient spaces, reducing the operating cost; materials and technical strategies involved to attain sustainable design.

UNIT V - CASE STUDY AND SEMINAR

Investigate and analysis the trending technology through various case studies and to be discussed among thestudents.

TOTAL: 30 PERIODS

REFERENCES

1. Artificial Intelligence Basics: A Non-Technical Introduction- Tom Taulli
2. **Architecture in the Age of Artificial Intelligence** By: Neil Leach (Author) , Neil (Florida International University, USA) Leach (Author) | Publisher: Bloomsbury Academic | Publisher Imprint: Bloomsbury Visual Arts
3. **NPTEL course:** Design, technology and Innovation.
4. **Digital Fabrication in Interior Design - Body, Object, Enclosure** Edited By JonathonAnderson, Lois Weinthal,Copyright Year 2022.Designing Interfaces**, 3rd Edition: Patterns for Effective Interaction Design**

24IDT702	PROJECT MANAGEMENT IN INTERIOR DESIGN							SEMESTER-VII
Marks	Internal	40	External		60	Total	100	Exam Hours	3
Instruction Hours/Week	L	2	T	0	P/S	0	Credits		2

COURSE OBJECTIVE:

- To introduce different management techniques suitable for planning and construction projects.
- To enable understanding of management systems for accomplishing the task efficiently in termsof quality, time and cost.
- To understand the elements of network and be able to take the project completion analysis.
- To understand various methods for the analysis and hence arrive at the management procedures.
- To handle and calculate risk in delays and hence suggesting corrections to beat time lag in projects.
- To update project in the process and be able to control man power management

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand a project from concept to commissioning, feasibility study & facility programme, design, construction to commissioning.	Understand and Apply
CO2	Apply project management techniques in achievingobjectives of a project like client needs quality, time &cost.	Understand and Apply
CO3	Understand the principles of management, construction scheduling, scope definition and team roles	Understand and Apply
CO4	Differentiate the management into time, labor, ad materials mainly apart from other contingencies.	Understand and Evaluate
CO5	Allocate various jobs works to different vendors and vendor management and to enable the smooth functioning of the project andto move towards completion in time.	Apply and Evaluate

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1					**S**		**M**
CO2					**S**	**L**	
CO3					**S**		**M**
CO4					**S**	**L**	**M**
CO5					**S**		**M**

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - INTRODUCTION

Understanding the fundamentals of project planning, scheduling, and controlling. Exploring the role of decision-making in project management and its impact on project success. Methods of planning and programming projects for effective execution. Considering the human aspects of project management and their influence on project outcomes. Introduction to work breakdown structure (WBS) and its significance in project organization. Analysing the life cycle of a project and identifying challenges with traditional management systems.

UNIT II - ELEMENTS OF NETWORK

Defining key elements of network analysis: events, activities, dummies, and network rules. Guidelines for constructing graphical networks and numbering events. Understanding the relationships between different network elements and their implications for project scheduling.

UNIT III - CRITICAL PATH METHODAND PERT ANALYSIS

Utilizing CPM for network analysis and identifying critical paths in project schedules. Implementing Program Evaluation and Review Technique (PERT) for time estimation and analysis. Computation of project time and analysing network performance using CPM and PERT techniques.

UNIT IV - PROJECT TIMEREDUCTION AND OPTIMIZATION

Evaluating project costs, including indirect and direct project costs. Understanding the slope of the direct cost curve and its implications for project duration. Determining total project cost and identifying the optimum duration for cost optimization. Strategies for contracting the project network to achieve cost and time optimization. Steps involved in cost-time optimization to enhance project efficiency and effectiveness.

UNIT V - PROJECT UPDATING AND ALLOCATION

Determining when to update project progress and the data required for updating. Step-by-step process for updating project schedules and analysing resource usage. Utilizing resource usage profiles, histograms, resource smoothing, and resource levelling techniques. Exploring the role of computer applications in project management and their benefits in scheduling, resource allocation, and tracking project progress.

TOTAL: 30 PERIODS

REFERENCES

1. Dr. B.C.Punmia et al. Project planning and control with PERT and CPM, Laxmi Publications, 2002
2. 1.JeromeD.WiestandFerdinandK.Levy,AManagementGuidetoPERT,CPM,prenticeHal lofIndia Pub, Ltd., New Delhi, 2082
3. 2.R.A.BurgessandG.White,BuildingproductionandprojectManagement,Theconstructionpress, London,2097
4. Khan and Jain – Management accounting 5th Edition ,2010
5. Bellon Whittington- comrting through Innovation ,Pretice 2006

24IDP711	ADVANCED WORKSHOP								SEMESTER-VII	
Marks	**Internal**	**60**	**External**				**90**	**Total**	**150**	**Exam Hours**	**3**
Instruction Hours/Week	**L**	**1**	**T**	**0**	**P/S**	**1**			**Credits**	**3**

COURSE OBJECTIVE:

- To relate the various capacities of fabric into creative pursuits of design.
- To understand and acquire knowledge in interior workshops for hands on experience inbuild and construct design processes.
- To understand the elements and principles of textile deign in interior spaces.
- To understand the fabrics properties and its usage in interior design
- To coordinate and use different materials with fabric with multi understanding about all the material properties.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the design process along with fabric and textile industry	Knowledge and understanding
CO2	Analyze the design possibilities in alternative material	Analyze and apply
CO3	Understand the various capacities of fabric along with for the variousmaterials.	Understand and evaluate
CO4	Develop a keen eye for compositions through workshops.	Understand and create
CO5	Use all materials in coordination with other materials and create an understanding of multi material compositions.	Apply and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**			**S**		**M**	
CO2	**L**			**S**		**M**	
CO3	**L**			**S**		**M**	
CO4	**L**			**S**		**M**	
CO5	**L**		**M**	**M**		**M**	

S-Strong; M-Medium; L-Low

At the end of this course, students will be able to

COURSE CONTENT:

UNIT I - INTRODUCTION

Introduction to fabric design; understanding different material property and its usage

UNIT II - DEVELOPMENT

Development of textile design in different cultures from primitive art to contemporary designs. Criteria of design of the elements and principles of textile design. Analysis of a motif, developing repeat as a basic unit of design in textile printing.

UNIT III - BLOCK PRINTING

Block printing – developing block, understanding the material used, colors, types and their mixing process, various color printing.

UNIT IV - SCREEN PRINTING

Screen printing – design evolution for wall hangings, preparing screen and understanding the technique, printing on paper and printing on fabric.

UNIT V - PROJECT

Fabric design concept for furniture/ wall hanging/ wall covering to be developed for live scale.
External member workshop – Block printing/ screen Printing .

TOTAL: 30 PERIODS

REFERENCES

1. June Fish, Designing and printing textiles, Crowood press, 2005
2. R.W.Lee, Printing on Textiles by Direct and Transfer Techniques, Noyes Data Corporation, 2081
3. Fabrics: A guide for architects and Interior Designers, Marypaul Yates, Norton publishers, 2002.
4. Materials for Interior Environments, Corky Bingelli, John wiley and sons, 2007

24IDS721	INTERIOR DESIGN - VI								SEMESTER-VII	
Marks	**Internal**	**160**	**External**				**240**	**Total**	**400**	**Exam Hours**	**3**
Instruction Hours/Week		**L**	**2**	**T**	**0**	**P/S**	**10**	**Credits**			**8**

COURSE OBJECTIVE:

- To create understanding of human built environment as a holistic, living entity from macro to micro scales shaped by geographic and socio-cultural forces as well as by historic, political and economic factors, through study of and design within the contextof rural settlements.
- To observe changes in the above, analyze their nature and causes for them
- Understanding a Design Programme and the Components of the Design Problem.
- To introduce buildings as consumers of resources for human needs and to enableresponsible, creative addressing of this fact through design choices.
- To enable an understanding of interior design as integrating diverse functionalconcerns in a building through analysis and innovation.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Collect data, assimilate and integrate knowledge in a holistic manner.	Analyze and evaluate
CO2	Understand the design Programme and the Components of the Design Problem.	Understand and Analyze
CO3	Understand the interior design as integrating diverse functional concerns in a building through analysis.	Understand
CO4	Balance diverse aspects/concerns of buildings by making innovative design.	Understand
CO5	Apply knowledge intensively in realms such as sustainablebuilt environment, services	Understand, Analyze and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**L**	**L**		**M**		
CO2		**M**		**S**	**M**		**M**
CO3		**M**			**M**		**M**
CO4		**L**	**L**		**M**		
CO5		**M**	**L**	**S**	**S**		**M**

S-Strong; M-Medium; L-Low

COURSE

- Interior Construction Detailing
- Way finding/signage and graphic identification
- Decorative Accessories
- Building Codes.
- Rendering (hand and computer generated).
- Custom designed furniture and cabinetry
- Specification Writing
- Cost estimating
- Selection of sustainable/green materials
- The list of suggested topics to be covered as design problems:
- Hospitality Design, Retail Design, Healthcare Design and Office systems
- Urban Interiors – Shopping malls, streets, Town squares, Fair grounds
- Interior Ports – air ports, Bus stops, Railway stations, boats/ports
- Exhibition displays – urban level and National level.
- Mobile units – buses, cars, railway coaches etc.

Note: One major design in detail and two minor design/time problems should be given.

TOTAL: 180 PERIODS

REFERENCES

1. Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 2092.
2. Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & spaceplanning, 2nd edition, Mc-Graw Hill professional, 2001.
3. Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004.
4. Julius Panero& Martin Zelnick, Human Dimension & Interior Space : A source book of DesignReference standards, Watson – Guptill, 2079.
5. Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and PresentationTechniques. John Wiley and Sons, 2003
6. Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 2093.
7. Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals, 2002
8. Neufert Ernest, Architect‟s Data, Granada pub. Ltd. London, 2000.
9. Maryrose McGowan & Kelsey Kruse, Interior Graphic Standards, Wiley and sons, 2004.
10. Mary Jo Peterson, Universal Kitchen and Bathroom Planning: Design That Adapts to People,McGraw-Hill Professional Publishing, 2098.
11. David Kent Ballast, Interior Construction & Detailing for Designers and Architects, ProfessionalPublications, Inc.; Fourth Edition, 2007.

24IDS722	INTEGRATED PROJECT WORK							SEMESTER-VII
Marks	**Internal**	**80**	**External**			**120**	**Total**	**200**	**Exam Hours**	**3**
Instruction Hours/Week	**L**	**0**	**T**	**0**	**P/S**	**6**	**Credits**	**4**		

COURSE OBJECTIVE:

- To understand the process of transforming a concept into product design
- Understanding a Design Programme and the Components of the Design Problem.
- To enable an understanding of interior design as integrating diverse functional concerns in a buildingthrough analysis and innovation
- To introduce buildings as consumers of resources for human needs and to enable responsible, creative addressing of this fact through design choices.
- To enable an understanding of integrated project as a process of transforming a concept into productdesign.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand to collect, assimilate and integrate knowledge in a holisticmanner.	Understand , Evaluate
CO2	Observe and analyze changes in the above.	Analyze and apply
CO3	Project the future transformations and give possible/ appropriate ways to address issues, if any	Analyze
CO4	Critically understand and address issue of resources	Analyze
CO5	Balance diverse aspects/concerns of buildings by making informed choices and innovative design	Analyze and apply
CO6	Understand the duties and liabilities of an Interior designer	Understand and analyze

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1			**S**	**M**		**M**	
CO2	**L**		**S**			**M**	
CO3			**S**	**M**		**M**	
CO4			**S**	**M**			
CO5			**S**	**M**		**M**	
CO6			**S**			**M**	**L**

S-Strong; M-Medium; L-Low

The student has to submit a project feasibility report on the project done in the design studio by integrating the knowledge and skills acquired from all the courses studied till date.

The report may consist of the following -

- Environmental impact assessment of the project following the standards and specifications
- Socio-economic appraisal of the project and the design considering factors such as behavioral aspects, security considerations, costs for different user groups, aesthetic preferences etc.
- Technical feasibility – through execution and detailing of different spaces and elements of design,checking the feasibility of layout for service systems and specifications
- Costing of the project – bill of quantities, schedule of rates, specifications etc. economic viability andfinancial viability
- Space planning aspects/ issues – user activity spaces, access to physically challenged, fire safety, otherservices, green rating etc.

Note : The report has to presented for internal assessment

TOTAL: 90 PERIODS

REFERENCES

1. M.P. Birkett, An appraisal of project work as an educational tool within interior design education attertiary level and its relation to professional practice, Royal College of Art, 2085.
2. Griff Boyle, Design Project Management, Ashgate Publishing; illustrated edition, 2003.

24IDES731	INTERIOR DIGITAL MEDIA AND JOURNALISM								SEMESTER-VII
Marks	**Internal**	**60**	**External**			**90**	**Total**	**150**	**Exam Hours**	**3**
Instruction Hours/Week	**L**	**0**	**T**	**0**	**P/S**	**4**			**Credits**	**3**

COURSE OBJECTIVE:

- To help the student understand the principles and technology of photography.
- To enable the student to understand the applications of photographs in interior
- To enable students to learn and understand the methods for blogging and logging
- To build the ability in students to create a website and be able to host it as well.
- To enable students to be updated and also to bring the interest of technology into the work.
- To ensure the student understands the various aspect of composition lighting ,color
- And integration of all these aspects into one project.
- To understand and acquire knowledge in interior journalism, Documentation and analysis ofworks.

COURSE OUTCOME

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Develop a keen eye for compositions and capture the essence of aesthetics in Interior design projects.	Apply and Create
CO2	Appreciate the various compositions in the nature and in natural elements.	Evaluate, Apply
CO3	Integrate all aspects of design in the process and todevelop a keen eye for compositions through photography.	Apply
CO4	To be able to deliver and write in adapt the design through journalism.	Evaluate
CO5	Choose the stream of interior journalism as an alternative career path in Interior Design	Apply and Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1					**L**		**M**
CO2		**L**				**S**	**M**
CO3		**L**				**S**	**M**
CO4						**S**	**M**
CO5						**S**	**S**

S-Strong; M-Medium; L-Low

At the end of this course, students will be able to

COURSE CONTENT:

UNIT I - INTRODUCTION TO INTERIOR JOURNALISM AND PHOTOGRAPHY

Overview of interior journalism and photography; Historical and contemporary perspectives on interior storytelling; Ethical considerations and responsibilities in interior journalism and photography.

UNIT II - INTERIOR JOURNALING AND STORYTELLING

. Principles of journalistic writing and storytelling; Techniques for researching, interviewing, and reporting on interior topics; Crafting compelling narratives and features on interior journalism.

UNIT III - INTERIOR PHOTOGRAPHY BASICS

. Fundamentals of photography: exposure, composition, lighting; Introduction to interior photography techniques and equipment; Field trips and hands-on exercises in interior photography.

UNIT IV - ADVANCED INTERIOR PHOTOGRAPHY

. Advanced composition techniques for interior photography; Digital image processing and post-production workflow; Developing a personal style and vision in interior photography.

UNIT V - MULTIMEDIA STORYTELLING AND FINAL PROJECT

. Exploring multimedia formats for interior storytelling (e.g., audio, video, interactive media); Integration of text, images, and multimedia in interior journalism. Final project: Students will produce a multimedia interior feature or portfolio showcasing their skills in journalism and photography.

Interaction session with a journalist/ workshop with a expert- Photography

TOTAL: 60 PERIODS

REFERENCES

1. Dave Sounders, Professional Advertising Photography, Merchurst, London 2088
2. Roger Hicks, Practical photography, Cassell, London 2096
3. Julian Calder and john Garrett, The 35mm Photographer's Handbook, Pan Books, London 2099
4. Julie Adair King, Digital Photography for Dummies, COMDEX, New Delhi 2098
5. Digital Storytelling: Capturing Lives, Creating Community by Joe Lambert
6. Multimedia Journalism - A Practical Guide by Andy Bull

24IDES732	INTERIOR WEBSITE AND BLOGGING								SEMESTER-VII
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	0	T	0	P/S	4	Credits			3

COURSE OBJECTIVES:

- To help the student understand the principles and technology of photography.
- To enable the student to understand the applications of photographs in interior
- To enable students to learn and understand the methods for blogging and logging
- To build the ability in students to create a website and be able to host it as well.
- To enable students to be updated and also to bring the interest of technology into the work.
- To ensure the student understands the various aspect of composition lighting ,color

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand and create the compositions through photography.	Understand and create
CO2	Admire and capture the essence of aesthetics in Interior design projects.	Evaluate
CO3	Appreciate the various compositions in the nature and in natural elements.	Evaluate and Apply
CO4	Understand of the play in interiors through various interior lighting ideas.	Evaluate , Applyand create
CO5	Understand and apply color theory through color wheel and colorpsychology	Apply and create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		**M**					
CO2		**M**	**L**		**M**	**M**	
CO3		**M**			**S**	**M**	
CO4		**M**	**L**		**L**		
CO5		**M**					

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - PRINCIPLES OF COMPOSITION

Rule of thirds, perspective-worm's eye view, normal eye view, bird's eye view, one-point perspective, two- point perspective, three-point perspective, exercises in composition

UNIT II - PRINCIPLES OF PHOTOGRAPHY

Technical definitions, understanding a camera**,** anatomy of a SLR camera, technical setting in a SLR camera, different types of lenses

UNIT III - PRINCIPLES OF INTERIOR LIGHTING

Technical definitions, lighting sources, types of lighting fixtures, types of lamps, calculating lighting levels,flash photography, types of flashes, controlling lighting levels with flash photography

Exercise in interior lighting photography with artificial light and black and white photos

UNIT IV - PRINCIPLES OF COLOUR

Color rendering in photographic medium, color rendering in photographs under different lighting condition,lighting colors and its effect on a photograph, color filters in a camera

Exercise on color photography of interiors

UNIT V - INTEGRATION

- Project work/exercise in integrating all prior units
- Interaction session with an expert.

TOTAL: 60 PERIODS

REFERENCES

1. Point view- The art of architectural photography ,E.Manny A Ballan, VNR 2010

2. Professional photography –photographing buildings, David Wilson, Rotovision2001

24IDES733	MARKETING TECHNIQUES								SEMESTER-VII
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	1	Credits			3

COURSE OBJECTIVES:

- To understand the need of techniques to market the creative ideas of the studio.
- To understand various methods of marketing that can be applied during the client meetings.
- To understand and build a marketing strategy.
- To be able to understand the customers and hence provide design by understanding thepsychology of the client.
- To understand the hierarchy of the management chain and to execute project with strategy
- To understand the organizational capabilities and to understand the responsibility in amarketing position.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	market and to sell the knowledge gained and to be able to build the requirements of the clients through proper communication and understanding.	Analyze and evaluate
CO2	Modulate and design a technology to market a serviceor a product	Analyze and Evaluate
CO3	Understand the various tools that is used in marketing and to use the most suitable one in the presentation and execution.	Analyze and Evaluate
CO4	Responsible to the customer's needs and to be able to organize and delegate the process to the next team for the carryover.	Analyze and apply
CO5	Understand the position in marketing and hence behavioral pattern to be regulated.	Analyze and Evaluate

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1						**M**	**L**
CO2						**M**	
CO3				**L**	**M**	**S**	**L**
CO4				**L**		**S**	
CO5				**L**		**M**	**L**

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - INTRODUCTION ABOUT MARKETING

Introduction, definition, Organizational conditions and USP, Environmental factors, marketing concept –marketing strategy – marketing tactics, Planning, operation and Implementation.

UNIT II - BUILDING A MARKETING STRATEGY

Competitive settings, marketing decisions in a competitive setting, formulating overall marketing strategy, factors in selecting marketing inputs, the three C's of a marketing strategy, Components of a product/market strategy, hierarchy of strategies, how to develop a product/market strategy, finding a suitable market strategy.

UNIT III - UNDERSTANDING CUSTOMERS

How marketing influences society – economic aspects, buyers behavior, the environment, how society influences marketing – public opinion and political pressure, legislative action, pitfalls of neglecting customers, management mistakes, benefits of understanding customers, types of benefits, feature Vs benefits.

UNIT IV - MANAGING VALUE

Components of perceived value, perceived value analysis, measuring perceived value, customer management, role of perceived value in competition, strategic themes, increasing perceived value.

UNIT V - ORGANISATIONAL CAPABALITIES AND MARKETING POSITIONING

Analyzing competitors, capabilities and market strategies, types of capabilities, evaluating capabilities, competitive advantage and benefit advantage, macro trends, market segmentation, characteristics of market segment, determining a target market, role of segments and target market in marketing strategy, segment identification analysis, segments and decision making, market selection criteria, types of market segments, what is positioning, competitive advantage analysis, determining positioning, positioning and perceived value.

Note: Interaction with an expert talk and the students is mandatory.

TOTAL: 30 PERIODS

REFERENCES

1. Marketing 101, Don Senton, Wiley. 2011
2. Fundamentals of Modern marketing, Edward w. cundiff, Richard R.Still, Norman A.P Goroni, PHI. 2001
3. Marketing Management, Phillip Kotter, PHI.2015

24IDES734	INTERIOR DESIGN FOR SPECIAL NEEDS							SEMESTER-VII	
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week		L	1	T	0	P/S	1	Credits		3

COURSE OBJECTIVES

- To enable the students to acquire knowledge of basic principles involved in planning, organizing & evaluating interiors for special needs.
- To enable students to understand various types of disabilities and their spatial needs.
- To help students to turn the knowledge into design solutions.
- To enable students to become interior designers as resource persons concerning a non-handicapping environment, universal design and a barrier -free society.
- To enable students to be more responsible in designing to the society.

COURSE OUTCOME

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the various and diverse needs of people with special needs with regards to interior design and Architecture.	Understand
CO2	Understand the concept of barrier free design, accessible design, Universal Design and Design for all.	Understand And apply
CO3	Understand and create adaptable, accessible, barrier free environment and universal designs.	Understand, Apply and Create.
CO4	Apply the design concept and principles in design interiors of special needs	Understand and apply
CO5	Understand the interior designers as resource persons concerning a non- handicapping environment, universal design and a barrier -free society.	Understand, Analyze, Apply and Create.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1		L		M			
CO2			L			S	
CO3			L	M			
CO4			L	M		S	
CO5				M		S	

S-Strong; M-Medium; L-Low

UNIT – I INTRODUCTION TO DESIGN FOR SPECIAL NEEDS

Introduction to design for special needs – Classification of disabilities - Functional needs – person to person need variations - comfortable space requirement for every individual unit in a building depends upon its function – different rooms and specific functions – relation of spaces with adjoining units with regards to function and Convenience – Consider space with relation to : Ventilation, flexibility, sanitation, lighting, cleanliness, privacy, comfort and luxury.

UNIT – II FUNCTIONAL NEEDS

Design and Planning on workable human centric basis – provision for essential needs : Space, Light, Safety – Determine function of daily living of people with special needs – accommodate appropriate furniture – equipment for each habitable space – Needs : Physical, Psychological, Social, Sensory – Standards : I S 4963: Recommendations for Buildings and Facilities for the Physically Handicapped - Bureau of Indian Standards (BIS), National Building Code

UNIT – III SPATIAL RELATIONSHIP AND CIRCULATION PATTERN

Arrangement of rooms – proper relation – exterior and interior conditions – accessible habitat rooms – circulation pattern – should function satisfactorily – convenient relationship to outdoor areas – movement as per building codes and standards – problems faced by people with special needs with regards to movement.

UNIT – IV INCLUSIVE DESIGN

Teaching students of design – inclusive design – strategy of the future – approaches, principles and 8 step process of universal design – Iterative design process – ISO 13407 Human centric design process for interactive systems – John Clarkson : Inclusive design toolkit – Elements in inclusive design process.

UNIT – V DESIGN ACTIVITIES

Basic activities : Walking, passing, kneeling, bending.
Elemental Activities : Kitchen and Toilet
Recommended Clearance in drawing : Dining areas – chair, table, cabinet appliances accessories
Special requirement : On clutches, visually impaired with guide dog / long Crane, wheelchair.

To design interior spaces for specially needed users as mentioned above and produce presentation sheets containing concepts, study, design sketches, layouts, furniture layout and details of of spaces for groups with special needs, 3D Rendering or physical model.

Case study/ expert talk about designing space for special needs.

TOTAL: 30 PERIODS

REFERENCES

1. CPWD Guidelines for Space Standards for Barrier Free Built Environment for Disabled & Elderly Persons, CPWD, New Delhi.
2. Joseph De Chiara et.al, Time Saver Standards for Building Types, McGraw Hill International, Singapore, 3rded., 1995
3. Joseph De Chiara et.al, Time Saver Standards for Housing & Residential Development, McGraw Hill International, Singapore, 3rded., 1995

24IDES735	ADAPTIVE REUSE AND RECYCLING								SEMESTER-VII
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	1	Credits			3

COURSE OBJECTIVES

- To enable the student to understand the need for adaptive reuse of old heritage buildings
- To enable the students to develop a design with the applications of recycled materials.
- To enable students to understand the importance of the nature and its materials that can berecycled.
- To introduce adaptive reuse or up cycling of products and the challenges hence faced.
- To understand the Need for conservation.

COURSE OUTCOME

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the basics of adaptive reuse and recycling	Understand
CO2	Understand the importance of heritage buildings and the treasures within the same that can be reused and recycles.	Understand , Analyze
CO3	Be responsible to the environment and to practice sustainable designthrough recycling and reuse.	Understand , Apply and create
CO4	Understand and differentiate the materials that cannot be reused.	Analyze, Evaluate
CO5	Understand about the materials that has natural resources in abundance in the environment.	Understand , Analyze

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	**L**		**M**				
CO2	**L**						**M**
CO3	**L**	**M**	**M**				
CO4	**L**		**M**				**S**
CO5	**L**						**M**

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT - I INTRODUCTION TO ADAPTIVE REUSE

Introduction to the concept of adaptive reuse – history and various theories of adaptive reuse - Cultural inheritance – heritage buildings and old structures – ascertaining the structural stability – estimation of the prolonged life of the building – strategies of adaptive reuse – investigation into material finishes etc. Understanding adaptive re-use of buildings as a key to sustainable development.

UNIT II - NEED FOR RECYCLING OF MATERIALS

The logic behind recycling – recycling of steel, wood, glass etc - estimation of the quality of recycled timber – criteria for recycling of steel, glass etc.

UNIT III - CONCEPT OF SUSTAINABILITY and NEED FOR CONSERVATION

Earth summit declaration – definition of sustainability – economic, social and environmental issues – green rating of buildings – criteria for LEED rating.

Architectural conservation – conservation of heritage and important buildings – levels of intervention –structural, construction related, finishes etc. Revival of old building techniques and finishes.

UNIT IV - DESIGN GENERATION PROCESS IN ADAPTIVE REUSE

Analysis of the existing structure - Importance of building assessment report – process of documentation and condition mapping in deciding design recommendations. - Understanding the design logic. Role of various parameters in concept generation. - Strategies for re-modelling.

UNIT V - INDUSTRIAL VISIT

Students should visit a Interior site which is – renovated/ reused .

Expert talk about adaptive reuse and recycling.

TOTAL: 30 PERIODS

REFERENCES

1. Harimohan Pillai – Heritage conservation and cultural continuity – Saraswatham publishers, 2002
2. Sustainable building design manual – TERI publication, 2004.
3. Waste management and recycling – Compiled by C.T. Lakshmanan, SRM University.
4. Sandra F Mendler - The HOK Guide book for sustainable design – John Wiley and Sons, Canada,2002.
5. Conservation guidelines for pondichery – DTCP, Pondichery – INTACH 2000.
6. Robert W. Burchell, "The Adaptive Reuse Handbook", Transaction Publishing , New Jersey.
7. J. Stanley Rabun, "Building Evaluation for Adaptive Reuse and Preservation", 2009, John Wiley & Sons.

24IDES736	VISUAL MERCHANDISING							SEMESTER-VII	
Marks	Internal	60	External			90	Total	150	Exam Hours	3
Instruction Hours/Week	L	1	T	0	P/S	1	Credits			3

COURSE OBJECTIVES

- To train students to be able to promote the image, product and service offerings of businesses by utilizing their design skills.
- To enable students to comprehend the fundamentals of design and software skills
- The students to trained to understand the consumer psychology to succeed as creative visual merchandisers.
- To help students use the skills learned to design captivating visualization and display for retail setup.
- To enable students to become designers by knowing the principles required to design an arresting storefront and to design a layout for stores that will maximize customer flow.

COURSE OUTCOME

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand of the concept of Retail and brands.	Understand and Apply
CO2	Understand of merchandising principles and be able to apply them.	Understand And Apply
CO3	Understand the bigger picture of the Retail context by gaining a knowhow of User and Business criteria, Supply chain processes and Service Interfacing.	Understand, Analyze, Apply and Create.
CO4	Apply the design concept and principles in design interiors of retail spaces.	Apply and Create
CO5	Strategies the retail concepts and the translation of the concept to spaces with appropriateness of material, process, consumer habits, brand parameters, etc.	Analyze, Apply and Create.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1				**M**			
CO2			**L**			**S**	
CO3			**L**	**M**			
CO4			**L**	**M**		**S**	
CO5				**M**		**S**	

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - INTRODUCTION TO RETAILING AND VISUAL MERCHANDISING.
Introduction to retailing: Definition and scope - evolution of retailing - Strategic retailing planning - retailing marketing mix - Retailing technical terms - retail operations and human resources –

Understanding Retail in India - Role of Retail in Nations Economy. Visual Merchandising: Definition, Meaning and Functions - Functions of Visual Merchandising - History and Evolution of Visual Merchandising - Trends in Visual Merchandising in India - Visual Merchandising and the Changing Face of Retail.

UNIT II - COMPONENTS OF VISUAL MERCHANDISING.
Principles and elements of visual merchandising and its applications in Visual Merchandising ; role and tools for Visual Merchandising - Concept of store Interior : aroma, music, fixtures, display units, properties - Concept of store exterior : marquee, façade, sign boards, window displays – Focal point of merchandise – Display theme – Color vitals – Lighting.

UNIT III - PRODUCT AND DISPLAY, FIXTURE DESIGN & TYPES.
Purpose ,Types of display units and cost - Choosing the right display for the right product - Display methods and techniques – Composition in Visual Merchandising - Importance of Fixture Design - POP display ,Virtual Merchandising tool kit - Modular Fixtures ,special Fixtures for accessory display.

UNIT IV - STORE PLANNING AND EXTERNAL FAÇADE & SIGNAGE
Purpose and principles of Store planning - Types of stores and store selection procedure - Store planning exercise - Store planning concepts: decompressed zone ; arena principle; power Wall; traffic; aisle.

UNIT V - DESIGN ACTIVITIES
To design a retail space for any brand / product, using the above and produce presentation sheets containing concepts, study, design sketches, layouts, furniture layout and details of of spaces for groups with specific needs, 3D Rendering or physical model.

Note: Interaction with an expert talk and the students is mandatory.

TOTAL: 30 PERIODS

REFERENCES

1. Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Second Edition. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
2. De Korte, E. M., Spiekman, M., Hoes-van Oeffelen, L., van der Zande, B., Vissenberg, G., Huiskes, G., & Kuijt-Evers, L. F. (2015). Personal environmental control: effects of pre-set conditions for heating and lighting on personal settings, task performance and comfort experience. Building and Environment, 86, 166-176.
3. Janani M. Effect of merchandise activity and consumer purchase behavior: case study in ShirinAsal Co. [Master‟s Thesis].Tehran: Alzahra University; Unpublished 2006.
4. Bhalla, S. &Anuraag, S. 2010. Visual merchandising. New Delhi: McGraw Hill.
5. Mathew, R. 2008. Apparel Merchandising. New Delhi: Book Enclave.

24IDT801	PROFESSIONAL PRACTICE								SEMESTER-VIII
Marks	Internal	40	External			60	Total	100	Exam Hours	3
Instruction Hours/Week		L	2	T	0	P/S	0		Credits	2

COURSE OBJECTIVES:

- To develop understanding of the duties and liabilities of an Interior designer
- To obtain knowledge of bye-laws that relate to the building & the environment in the Indiancontext.
- To learn and understand the Professional ethics and practice.
- To understand the code of conduct for interior Designers.
- To understand and undertake duties of an interior designer.
- To enable students to be ready for the professional world as practicing interior designers.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the professional standards	Understand
CO2	Understand the tender documents and contract	Apply and evaluate
CO3	Understand and abide the duties of an interior designer	Apply and evaluate
CO4	Understand and execute the code of conduct for an interior designer.	Apply and evaluate
CO5	Tender for Government projects and be able to estimate thecost of the same. Ability to conduct various valuation for interior projects	Apply and evaluate

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1					**L**	**M**	**S**
CO2				**L**		**M**	**S**
CO3						**M**	**S**
CO4				**L**		**M**	**S**
CO5					**L**	**M**	**S**

S-Strong; M-Medium; L-Low

COURSE CONTENT:

UNIT I - ROLE OF INTERIOR DESIGNER

Role of Interior Designer in society: Interior Design Profession as compared to other professions. Difference between profession and business. IIID and other organizations related to interior design profession.

Interior Designers approach to works, ways of getting works: types of works, works partly executed by other Interior Designers.: Various precautions to be taken before taking up the work, conditions of engagement between interior Designer and client: commencement of work.

UNIT II - PORFESSIONAL PRACTICEAND COMPETITIONS

Issues of professional practice: Professional behavior, Ethics, Types of clients, Contracts, Tenders, Arbitration etc. as defined in terms of Interior Design field and current day context. Career opportunities, styles of interior design practice, relationship between client and professional, type of fees, process of fees negotiations, billing methods, tax liabilities, contracts – types of contracts – item rate, labour, lump sum, cost plus percentage etc. -

Open and closed competitions - appointment of assessors - duties of assessors - instructions to participants - rejection of entries - award of premium

UNIT III - DUTIES

Interior Designer's duties: drawings to be prepared: Interior Designer's relation with other parties connected with works such as client, contractor, sub-contractors, consultants and authorities.

UNIT IV - CODES OF CONDUCT

IIID Code of professional conduct: scale of charges: units and mode of measurements, clerk of work and his duties, inspection of work, certificate of payment to contractor, bill of quantities, schedule of rates, tenders, public, limited and negotiated tender documents and allied formalities.
Preliminary knowledge of Consumer protection Act and other related acts on Interior Designers.

UNIT V - CODES OF CORRESPONDENCE

Types of offices for interior design practice: staff structure, filing of records, correspondence and drawings,maintenance of accounts, presentations in meetings, recording minutes of meeting.
Note: a report to be prepared by each student after visiting an interior designer's office.
Knowledge of role of consultants and coordination between different consultants on a big project.Codes of fire safety, lighting, ventilation, electrical layout and barrier free environment

TOTAL: 30 PERIODS

REFERENCES

1. Indian Institute of Architects. H.B. Professional Practice, The Architects pub. Bombay. 2017
2. Namavati. H. Roshan. Professional Practice. 8th ed, Lakshani Book Depot, Bombay, 2001.
3. Christine .M. Piotrowski , Professional practice for Interior Designers, 3rd edition, Wiley and sons,2001.
4. Cindy Coleman, Interior Design Handbook practice, Mc Graw Hill professional, ist ed, 2001
5. Ronald Vetch, Professional practice for Interior Designers, Peguis Publishers, Limited, 2087.

24IDS821	DESIGN THESIS							SEMESTER-VIII
Marks	Internal	320	External			480	Total	800	Exam Hours	3
Instruction Hours/Week		L	1	T	0	P/S	28	Credits		16

COURSE OBJECTIVE:

- To ensure consolidation and application of the knowledge gained in preceding years of theprogramme in the context of a design project of the student's choice.
- To enable addressing of specific projects through key, identified issues inherent in the project orto enable development of thought processes in specific areas/aspects into a project.
- To facilitate development of ability to complete and handle projects independently as a precursor to professional life.
- To encompass the capacities to handle large scale projects and to be able to choose the scale ofthe project based on the knowledge acquired.
- To be given a chance to research the area that is of the student's choice and to analyze the dataand to be able to produce sensible design parameters based on the analysis.
- To be introduced to the professional practice nuances with respect to the design field.

COURSE OUTCOME:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Master the skills, knowledge and expertise in the domain of interior design	Understand , evaluate
CO2	Analyze the project size based on the parameters asserted by the futuristic clients.	Apply and create
CO3	Design in relationship to the surroundings and also have a pragmatic and vernacular approach to the design chosen.	Apply and create
CO4	Handle complex design problems	Apply and create
CO5	Master the professional method of design and detailing.	Knowledge Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	S			L	M		L
CO2	S	M	L	L	M	L	L
CO3	S		L		M	L	S
CO4				L	M	L	S
CO5			L		M		S

S-Strong; M-Medium; L-Low

COURSE CONTENT:

Each student is expected to prepare a design thesis based on the preliminary work undertaken in the Interiordesign studio under an approved guide.

Thesis should reflect the knowledge gained from all the courses undertaken by the student in all the previoussemesters.

The particulars of the schedule, content, presentation, format etc. is to be decided by the department fromtime to time and shall be strictly followed.

At the end of the semester each student is expected to submit all original drawings prepared as per the department specifications. Three copies of the report in the specified format should be submitted to thedepartment after the approval of the respective guides.

The department shall schedule the viva voce at its convenience only after the receipt of the thesis by the student. The performance sheet submitted by the guide and thesis committee should be the basis for allowing the student to appear for the final viva voce.

The end exam is to be conducted by a jury comprising of an external examiner. One internal examiner andhead of the department or his nominee

TOTAL: 435 PERIODS