Royal School of Design
(RSD)

Department of Interior Design

Learning Outcomes based Curriculum Framework (LOCF)

For Undergraduate Programme

B.I.D. (Bachelor in Interior Design)

2022 - 2023

Table of Contents

Preamble

Higher education plays an extremely important role in promoting humane development as well as social well-being in developing India as envisioned in the Constitution - a democratic, just, socially conscious, cultured, and humane nation upholding liberty, equality, fraternity, and justice for all. Higher education thus significantly contributes towards sustainable livelihoods and economic development of the nation.

An all-inclusive and multidisciplinary education would aim to develop all capacities of human being's intellectual, social, physical, emotional, moral and responsible in an integrated manner.
As India moves towards becoming a knowledge economy and society, more and more young Indians are likely to aspire for higher education that can reorient the young students in order to respond to the deplorable needs of today's society. This will also promote research in the branches of arts, sciences and relevant pedagogy which would help to build a just social order. In other words, the curriculum will be flexible, which will shape our students into representatives of social change, preparing them for concerted social action and thus paving the way to a greater movement which will bring about the desired liberation.

The new curriculum of Bachelor's in Interior Design under The Assam Royal Global University will be flexible, multi-disciplinary and holistic, promulgating crucial need of Space Design.

1. Introduction

The prime focus of the syllabus is to create a new and progressive aide for India's Higher Education System. The responsibility of higher education is to enable the development of the students into enlightened, socially conscious, skilled and intellectual human beings that can find and implement robust solutions to the pressing problems of the developing nation. Higher education must form the basis of acquiring knowledge, research and innovation thereby contributing to a growing economy. The purpose of quality higher education is, therefore, at far more reach in the creation of ideal opportunities for employment. It represents the key to more vibrant, aware, socially involved, co-operative communities that eventually culminates into a happier, cultured, productive, innovative, progressive, and prosperous nation.

This syllabus envisions a complete renovation and reactivation of the higher education system to overcome newer challenges and thereby deliver high-quality higher education, with equity and inclusion-- moving forward to a more multidisciplinary undergraduate education, liberal curriculum,

appropriate pedagogy, and student support for an enhanced student experience. A university shall fulfill as a multidisciplinary institution of higher learning that offers undergraduate and graduate programs, with high quality teaching, research, application and community engagement. Looking at these new concepts, the detailed syllabus of Bachelor's of Interior Design is being formulated.

2. Approach to Curriculum Planning

A curriculum for Interior Design Education evolves from the vision of the institution, its aspirations and its capability to deliver the knowledge. It defines the relationship between the teacher and the student of the institution. Curriculum for Interior Design also connects creativity and physical reality.

Interior Design is a profession which combines creativity, technical knowledge and business skills. Interior designers work with clients and other design professionals to develop, provide design solutions that are safe and functional, attractive and which meet the needs of the people using the space. Interior design is more than just aesthetics. It's about finding creative design solutions for interior environments while supporting the health, safety and well-being of occupants and enhancing their quality of life.

Interior design follow a systematic and coordinated methodology which includes research, analysis and integration of knowledge into the creative process. Interior design is a multi-faceted profession whereby the needs and resources of the clients are satisfied to create an interior space that fulfils the project goals.

Interior designers qualify through a rigorous process of education, experience and examination, Interior design community members are skilled at assisting clients realize their goals, creating built environments that are both functional and aesthetically attractive.

Interior designers must know how to plan a space and how to present that plan visually so that it can be communicated to the client. They must also know about the materials and products that will be used to create and furnish the space, and how texture, color, lighting and other factors combine and interact to make the space come together. In addition, interior designers must understand the structural requirements of their plans, the health and safety issues and building codes and many other technical aspects.

Bachelor of Interior Design, a Four-year degree program is designed to develop students' creativity, analytical skills, critical thinking and overall intellectual development. The program develops the skills and knowledge necessary for responsible professional in rapidly globalizing building and construction industry. During the four years, students are introduced to state the art technology on our well-equipped Computer Labs and workshops under the guidance of highly experienced faculty.

The course objectives also include a study of Indian and International contemporary society, its influences and evolving values, arts and crafts of different regions, resources in terms of materials & skills and ever-changing tools for thinking and expression. The course is of 4 years- 8 semesters with a duration (each semester) is of approx. 16 weeks. Students Internship is of 2 Months/8 weeks and is to be completed within a vacation period after 6th Semester.

2.1 Nature and extent of the B.I.D. (Bachelor of Interior Design)

Interior design is a multi-faceted discipline that involves a plethora of experiences brought together to orchestrate an end product that is functional and aesthetic in creating spaces. It focuses not merely building something practical but have geared to incorporate practicality coupled with safety and aesthetics for optimum impact.

It allows students to understand and incorporate ideas to create an overall experience and enhancing the quality of built spaces by better utilizing the available space more meaningfully culminating science, art, culture and heritage. This study will bring about the change in the thought process of the students and will gradually start impacting the thought process of society as a whole.

The key areas of study in Interior Design are:

I. Historical perspectives
II. Spatial Design
III. Functional Spaces
IV. Art and Culture
V. Sustainability
VI. Color theory and applications
VII. Light theory and applications
VIII. Data Analysis
IX. Social responsibility
X. Community building

To broaden the interest for interconnectedness between formerly separate disciplines one can choose from the list of Generic electives for example one can opt for economics, physics, chemistry or any other subject of interest offered by different departments and schools of the Assam Royal Global University as one of the GE papers. Skill enhancement Courses enable the student acquire the skill relevant to the main subject. Choices from Discipline Specific Electives provides the student with liberty of exploring his interests within the main subject. Communication English and Behavioral Science are compulsory papers for students of B.Des (Interior Design) enable them to be better communicator and develop better personality.

2.2 Aims of B.I.D (Bachelor of Interior Design)

The overall aim of B.I.D are:

- To encourage the students creativity through exploration of their thoughts, techniques, working methods and material palettes.
- To orient & equip the student with soft skills of Art, Graphics & photography.
- To develop the ability to learn how to “question, absorb and analyze” rather than following “conventional” practices and solutions.
- To learn basic architectural drawing with their knowledge through understanding of plans, elevation, sections, Orthographic projection & Axonometric projections.
- To make the students understand on how to use visual drawing and colour rendering techniques to create space and depth with drawings and representations of basic forms and spaces.

3. Graduate Attributes in Interior Design

Some of the Graduate Attributes in Interior Design are listed below:

G. A. 1. Disciplinary Knowledge: Ability of demonstrating comprehensive knowledge of interior design and its sub disciplines, and its applications to one or more disciplines.

G. A. 2. Critical thinking: Using critical thinking skills to analyze different components of a project or collaborate with other professionals that can help accomplish set goals. Since they may work on several projects at once, critical thinking can help prioritize or delegate tasks; ability to employ foundations of interior design, critical thinking in understanding the concepts following a systematic and coordinated methodology.

G. A. 3. Problem solving: Capacity to find creative design solutions that are safe, functional, attractive, and meet the needs of the people using the space. This can be achieved through combination of creativity and technical skills; ability to see potential design solutions in outdated, dysfunctional, and even empty spaces.

G. A. 4. Research-related skills: A sense of enquiry and capability for asking relevant/appropriate questions and problems; ability to define problems and draw conclusions; ability to speak the language i.e. to create designs with balance and harmony in mind, in order to boost a space's form and function; ability to oversee projects from inception to completion, and having effective project management skills that can help delegate and prioritize tasks. This can include managing budgets, arranging schedules and identifying risks for each project.

G. A. 5. Communications skills: Capability to express various concepts of interior design in effective and coherent manner using various examples and visualize through conceptual sketches; ability to present the complex and creative ideas in clear, precise and confident way; ability to explain the development of concepts and ideas in various stages of design process; ability to translate concepts into approval-worthy proposals; ability to have strong sense of vision to meet client's expectations ability to produce quick hand-drawn sketches for the initial stages to quickly demonstrate the ideas/thought process.

G. A. 6. Analytical reasoning: Ability to work in detail which can help with space measurements, drawing and design implementations; ability to analyze the results and apply them in proper way with a vision and meaning to create a built indoor environment which is both functional and aesthetically attractive.

G. A. 7. Information / Digital literacy: Ability to use various design tools/ software in design solving process; capacity to use computer-aided design (CAD), Sketch up, Photoshop etc. to produce visual representations of what needs to be done with a space.

G. A. 8. Self-directed learning: Potentiality to work independently and do in-depth study of various concepts of interior design; ability to search relevant resources and e- resources for self-learning and amplifying knowledge in interior design; ability to take on jobs that have vastly different requirements such as the characteristics of the space, the budget of the project and the taste of the client which can change for each design.

G. A. 9. Futuristic attitude: Ability to recognize and address latest design trends and styles; ability to understand the requirements for permits and the role of regular inspections throughout the design process. Staying up to date on state and federal building standards and building materials that can help maintain the integrity of the project. This includes complying with building codes and materials for the health and safety of the building's occupants.

G. A. 10. Lifelong learning: Ability to earn knowledge and skills through self-learning that helps in personal development as well as skill development to make them suitable for changing demands of work place. With lifelong learning, they can become aware of their own learning needs and will be able to decide how they want to reach knowledge. At the same time, they can understand the nature of knowledge instead of memorizing it.

4. Programme Learning Outcomes in B.I.D. (Bachelor in Interior Design)

4.1 Programme Outcomes:

PO1 : Knowledge in Interior Design : Graduate will gain through understanding of Interior Design as collated in the curriculum and developed the capability of its knowledge and it's subsequent disciplines, and its application to one or more disciplines.

PO2 : Critical Thinking : Graduate will gain research acumen and developed critical thinking to carry out research in the domain of Interior Design, analysing projects, collaborating with professionals and prioritize delegated task. Graduates will have the ability of critical thinking in employing foundations of interior design in a certain methodology.

PO3 : Problem Solving : Graduates will have the ability to find potential design solutions in either empty spaces or outdated and dysfunctional space, which meets all the criteria following the purpose of the user using the space, which is achieved through creative and technical skills.

PO4 : Research Related Skills : Graduate will gain the acumen of enquiry and capability of asking appropriate queries and issues, define them and draw inferences ; will have the ability to speak the terminologies required to boost a space's form and function; ability to supervise any turnkey projects from start to finish with the help of effective project management skills including managing budgets, arranging schedules and categorizing risks for each project.

PO5 : Communications skills: Graduate will have the capability to express their concept and their developments of interior design to the clients with the help of examples and sketches, complex and creative ideas in an effective, clear, precise and confident way. Graduate will be able

to translate their ideas into approval worthy proposals, meet client's expectation, produce quick hand drawn sketches to establish the process of the ideas pertaining to the projects.

PO6 : Analytical Reasoning : Graduates will gain the ability to measure a space and it's elements and produce the measurements in terms of drawing and design implementations, analyze the space and the measurements and apply them to build and create a functional and aesthetically attractive indoor environment.

PO7 : Information / Digital Literacy : Graduates will gain the digital and software knoeledge by using various design / software tools such as Computer Aided Design (CAD), Sketch Up, Photoshop that helps to produce visual representations of the ideas and the requirements of the clients and the projects in a space.

PO8 : Self Directed Learning : Graduate will have the ability to work independently and conduct in-depth research on different interior design concepts; the capacity to look for appropriate print and digital resources for self-learning and knowledge augmentation in interior design; the capacity to accept assignments with a wide range of requirements, such as the attributes of the space, the project budget pertaining to the client's preferences, which can vary for each design.

PO9 : Futuristic Attitude : Graduates will have the acumen to identify and address innovative architectural trends and styles, understanding of permit requirements and the significance of routine inspections during the design process. Graduates will have the ability of sustaining current with regional, national, and construction codes as well as building supplies that can help keep the project's durability, which involves adhering to building regulations and using materials that are safe and healthy for the occupants of the building.

PO10 : Lifelong learning: Graduates will have the ability to acquire knowledge and skills through self-learning, which aids in both personal growth and skill development to prepare one for ever-changing workplace demands They will be able to identify their own learning needs and choose how they wish to acquire knowledge owing to lifelong learning. In addition, rather than memorization, they will have the acumen to comprehend the nature of knowledge.

4.2 Programme Specific Outcomes :

PSO1 : Graduates will have the acumen and confidence in handling an interior design project entirely from start to finish i.e. from producing ideas to client till handing over the project to the client irrespective of any scope of the project.

PSO2 : Graduates will have the knowledge and ability of documenting and researching different materials used in designing the interior, assess them and have the ability to use them in projects pertaining to the requirements of the client.

PSO3 : Graduates will have the capability of proposing new and futuristic ideas and concepts into different spaces, irrespective of the shape and size of the space, pertaining to the requirements of the client.

PSO4 : Graduates will have the capacity to communicate, propose and deliver confidently with the clients at every stages of the project and will have the ability to direct the client into the right direction in decision making.

5. Teaching Learning Process

Teaching and learning in this programme involve classroom lectures, studio projects (design exercises), case studies, site visits, market surveys, workshops, seminars, conferences, computer lab and tutorials.

- The studio projects (design exercises) allow a closer interaction between the students and the teacher as each student gets individual /one on one attention.
- Case studies/ site visits allow students to get in-depth knowledge of the design projects assigned each semester.
- The tutorials allow students to get extra benefit of clearing their doubts and also to discuss their design projects.
- Written assignments (for theory subjects) and market survey reports (for studio/ practical subjects) submitted by students.
- Project-based learning (design projects).
- Group discussion among students regarding latest design trends and styles, building materials etc.
- Home assignments (sketches, different topics etc.).
- Class tests.
- Quizzes.
- PPT presentations, seminars, interactive sessions.
- Co-curricular activities etc.
- Exposure trips.

6. Programme Evaluation

6.1 The Programme structures and examinations shall normally be based on Semester System.

6.2 In addition to end term examinations, student shall be evaluated for his/her academic performance in a Programme through, presentations, analysis, assignments, submissions, report submissions, term papers, internship, thesis projects or any other mode as may be prescribed in the syllabi. The basic structure of each Programme shall be prescribed by the Board of Studies and approved by the Academic Council.

6.3 Each Programme shall have a number of credits assigned to it depending upon the academic load of the Programme which shall be assessed on the basis of weekly contact hours of lectures, tutorial, studio classes, practical classes etc. The credits for the internship period and individual thesis shall be as per the prescribed syllabi, approved by the Board of Studies.

6.4 Depending upon the nature of the programme, the components of internal assessment may vary. However, the following suggestive table indicates the distribution of marks for various components in a semester: -

	Component of Evaluation	**Marks**	**Frequency**	**Code**	**Weightage (%)**
A	**Continuous Evaluation**				
	Analysis/Class test	Combination of any three from (i) to (v) with 5 marks each	1-3	C	25%
	Home Assignment		1-3	H	
	Project		1	P	
	Seminar		1-2	S	
	Viva-Voce/Presentation		1-2	V	
	MSE	MSE shall be of 10 marks	1-3	Q/CT	
	Attendance	Attendance shall be of 5 marks	100%	A	5%
	Written Exam / Final Portfolio submission.		1	ESE	70%
	Thesis				**100%**

COURSE STRUCTURE AND SYLLABUS
DEPARTMENT OF INTERIOR DESIGN

Bachelor of Interior Design
Programme Structure

B.I.D Course Structure (with subject codes)
Course structure and credit summary

Sl. No.	**Courses**	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	**Total Credits**
1.	Core Papers	16	12	8	8	8	8	4	4	68
2.	SEC	NA	2	NA	2	NA	2	NA	NA	6
3.	VAC (Value added course)	NA	2	NA	2	2	2	NA	NA	8
4.	GE (General Elective) / Minor Compulsory Courses	7	5	6	6	NA	NA	NA	NA	24
5.	AECC	2	2	2	2	2	2	NA	NA	12
6.	DSE	NA	NA	4	4	8	12	4	NA	32
7.	Internship	NA	NA	4	NA	6	NA	NA	NA	10
8.	Minor Research	NA	NA	NA	NA	NA	NA	8	NA	8
9.	Major Research	NA	NA	NA	NA	NA	NA	NA	12	12
10.	Total Credits	25	23	24	24	26	26	16	16	180

1st Semester							
Core							
Sl. No.	**Subject Code**	**Names of subjects**	**L**	**T**	**P**	**C**	**TCP**
1	IDS082C111	Interior Design I	1	1	6(S)	8	8
2	IDS082C103	History and Theory of Interior Design I	2	0	0	2	2
3	IDS082C114	Design Rendering & Digital Representation Technique I (Art, Graphics, & Photography)	1	1	4	6	10
Ability Enhancement Compulsory Course (AECC)							
4	CEN982A101	Communicative English-I	1	0	0	1	1
5	BHS982A102	Behavioral Science-I	1	0	0	1	1
Ability Enhancement Elective Course (AEEC)							
5	NIL						
Minor Compulsory Courses (Offered by the department)							
6	IDS082M112	Elements of Design	1	1	2(S)	4	4
7	IDS082M115	Workshop I	1	0	2	3	5
Generic Elective							
8	NIL						
Total Credit:25							

2nd Semester							
Core							
Sl. No.	**Subject Code**	**Names of subjects**	**L**	**T**	**P**	**C**	**TCP**
1	IDS082C211	Interior Design II	0	0	8(S)	4	8
2	IDS082C212	Building Construction & Materials I	0	0	8(S)	4	8
3	IDS082C213	3-Dimensional Graphics	0	0	8(S)	4	8
Skill Enhancement Course (SEC)							
4	IDS082S211	Design Rendering & Digital Representation Technique II	0	0	4	2	4
Value Addition Course (VAC)							
5		VAC II (select one course from a basket of course)	2	0	0	2	2
Generic Elective (GE)							
6	IDS082G211	Workshop II	0	0	4	2	4
7	IDS082G212	GE -2 (Open)	0	1	4	3	5
Ability Enhancement Compulsory Course (AECC)							
8	CEN982A201	Communicative English-II	1	0	0	1	1
9	BHS982A202	Behavioral Science-II	1	0	0	1	1
Total Credit: 23							

3rd Semester							
Core							
Sl. No.	**Subject Code**	**Names of subjects**	**L**	**T**	**P**	**C**	**TCP**
1	IDS082C311	Interior Design III	0	0	8(S)	4	8
2	IDS082C312	Building Construction & Materials II	0	0	8(S)	4	8
Discipline Specific Elective (DSE) (Any one)							
3	IDS082D311/ IDS082D312	Furniture Design I / Measure Drawing	0	0	8(S)	4	8
Generic Elective (GE)							
4	IDS082G301	Ergonomics & Human behavior	3	0	0	3	3
5	IDS082G312	GE -2 (Open)	0	1	4	3	5
Ability Enhancement Compulsory Course (AECC)							
6	CEN982A301	Communicative English-III	1	0	0	1	1
7	BHS982A302	Behavioural Science-III	1	0	0	1	1
Internship							
8	IDS082C331	4 weeks internship (after 2nd semester)	0	0	8	4	8
Total Credit: 24							

4th Semester							
Core							
Sl. No.	**Subject Code**	**Names of subjects**	**L**	**T**	**P**	**C**	**TCP**
1	IDS082C411	Interior Design IV	0	0	8(S)	4	8
2	IDS082C412	Building Construction & Materials III	0	0	8(S)	4	8
Discipline Specific Elective (DSE) (Any one)							
3	IDS082D411/ IDS082D412	Furniture Design II / Vaastu in Interiors	0	0	8(S)	4	8
Skill Enhancement Course (SEC)							
4	IDS082S411	Computer Application	0	0	4	2	4
Value Addition Course (VAC)							
		VAC III (select one course from a basket of course)	1	0	2	2	3
Generic Elective (GE)							
5	IDS082G411	Model Making Workshop	1	0	2	3	3
6		GE -2 (Open)	0	1	4	3	5
Ability Enhancement Compulsory Course (AECC)							
7	CEN982A401	Communicative English-IV	1	0	0	1	1
8	BHS982A402	Behavioural Science-IV	1	0	0	1	1
Total Credit: 24							

5th Semester							
Core							
Sl. No.	**Subject Code**	**Names of subjects**	**L**	**T**	**P**	**C**	**TCP**
1	IDS082C511	Interior Design V	0	0	8(S)	4	8
2	IDS082C512	Building Construction & Materials IV	2	0	4(S)	4	6
Discipline Specific Elective (DSE) (Any one)							
3	IDS082D511	Building Services I	2	0	4	4	6
4	IDS082D512	Materials Documentation	0	0	8	4	8
Value Addition Course (VAC)							
5		VAC IV (select one course from a basket of course)	1	0	2	2	3
Ability Enhancement Compulsory Course (AECC)							
6	CEN982A501	Communicative English-V	1	0	0	1	1
7	BHS982A502	Behavioural Science-V	1	0	0	1	1
Internship							
8	IDS082C531	6 weeks internship (after 4th semester)	0	0	12	6	12
Total Credit: 26							

6th Semester							
Core							
Sl. No.	**Subject Code**	**Names of subjects**	**L**	**T**	**P**	**C**	**TCP**
1	IDS082C611	Interior Design VI	0	0	8(S)	4	8
2	IDS082C612	Working Drawing	0	0	8	4	8
Discipline Specific Elective (DSE) (Any one)							
3	IDS082D611	Building Services II	2	0	4	4	6
4	IDS082D602	Acoustics	3	1	0	4	4
5	IDS082D603	Project Management	3	1	0	4	4
Skill Enhancement Course (SEC)							
6	IDS082S611	Rendering and Post Production Software	0	0	4	2	4
Value Addition Course (VAC)							
7		VAC V (select one course from a basket of course)	1	0	2	2	3
Ability Enhancement Compulsory Course (AECC)							
8	CEN982A601	Communicative English-VI	1	0	0	1	1
9	BHS982A602	Behavioral Science-VI	1	0	0	1	1
Total Credit: 26							

7th Semester							
Core							
Sl. No.	**Subject Code**	**Names of subjects**	**L**	**T**	**P**	**C**	**TCP**
1	IDS082C711	Interior Design VII	0	0	8(S)	4	8
Discipline Specific Elective (DSE) (Any One)							
2	IDS082D701	Estimation, Costing & Tendering	3	1	0	4	4
3	IDS082D702	Illumination	3	1	0	4	4
Minor Research							
4	IDS082C712	Minor Project	0	0	16	8	16
Total Credit: 16							

8th Semester							
Core							
Sl. No.	**Subject Code**	**Names of subjects**	**L**	**T**	**P**	**C**	**TCP**
1	IDS082C801	Startup Ventures & Entrepreneurship	3	1	0	4	4
Major Research							
2	IDS082C822	Major Project	0	0	24	12	24
Total Credit: 16							

Legend: L: Lecture Class; T: Tutorial Class; P: Practical Class: C: Total Credits: S: Studio

SYLLABUS (1st SEMESTER)

Paper I/Subject Name: Interior Design I		**Subject Code: IDS082C111**
L-T-P-C: 1-1-6-8	**Credit Units: 8**	**Scheme of Evaluation: S**

Objectives: The objective of **Interior Design I (IDS132C111)** is to translate knowledge of design principles through enhancement of thought process into a workable design, apply basic design skills & anthropometric observations by actually getting involved with progressively difficult design problems.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: List the parameters of design anthropometrics and ergonomics, human activity, particulars of scale, materials etc.

CO2: Summarize the basic design understandings, human functions and their implications for space requirements and circulation of space.

CO3: Apply basic human functions and their implications for space requirements for a proper design.

CO4: Analyze of an existing space to identify issues, concerns & design potential.

Prerequisites:

- Basic Concept of Art

Detailed Syllabus:

Modules	Topics / Course content	Periods
I	**Study and Mapping:** Study the parameters of design anthropometrics and ergonomics, human activity & use of interior spaces & furniture. Remember the particulars of scale, anthropometry, material and activity etc. Present them through detailed measured drawings and sketches.	**48**
II	**Understanding Design of an Individual Space:** Basic design understandings, human functions and their implications for space requirements. Minimum and optimum areas for activities/ functions. Understanding user-group & user-profile. Movement and circulation diagrams.	**48**
III	**Re-Design of a Small-Scale Cafe:** Applying the concepts and study learned to re-design a cafe space. Applying basic human functions and their implications for space requirements and thus understanding the functions and feasibility for real world application.	**48**
IV	**Time Problem – Re-Design of a Small Retail Space :** Analysis of the existing space. Identify issues, concerns & design potential. Basic human functions and their implications for space requirements. Minimum and optimum areas for mono functions & furniture requirements. Movement and circulation diagrams.	**48**
Total		**192**

Text Books:

1. Time saver standards for building types; De Chiara, Joseph and Crosbie, Michael J.; 2nd Ed.; 2011; Tata McGraw Hill; New Delhi.
2. Neufert Architects Data by Ernst Neufert ; 4th Ed.; 2012; Wiley Blackwell; New Delhi

Reference Books:

1. Ramsay and Sleeper; Architectural graphic standard; 11th Ed.; 2008; John Wiley; New York
2. Paul Laseau, Graphic Thinking for Architects and Designers, John Wiley & Sons.
3. Trewin Copplestone, Arts in Society, Prentice Hall Inc.
4. H. Gardner, Art through Ages.

Reading Materials:

1. Journal of Interior Design, Volume47, Issue-4.
2. David Fair, Design Graphics, Hodder and Stoughton.

SYLLABUS (1st SEMESTER)

Paper I/Subject Name: History & Theory of Interior Design – I Subject Code: IDS082C103

L-T-P-C: 2-0-0-2 **Credit Units: 2** **Scheme of Evaluation: T**

Objectives: The objective of **History & Theory of Interior Design – I (IDS132C103)** is to provide the student of Interior Design knowledge on various developments in Interior design through ages.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Recall the fundamentals of design

CO2: Interpret the elements of early Egyptian, Mesopotamian & Greek period.

CO3: Apply various design theories.

CO4: Analyze the various history and social context of furniture from different eras.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Fundamentals of Design** Line, plane, volume, symmetry, rhythm, harmony etc.	**6**
II	**Positive & Normative Theory** Proxemics theory, privacy theory, assets & liabilities of group design etc. **Early Egyptian, Mesopotamian & Greek period** Characteristic & visual impact of furniture like Folding Furniture, Fitted furniture, Wooden furniture, Characteristic of Mesopotamian Furniture	**6**
III	Greek Furniture (Importance – Chairs, Klismos, Couches etc. **Roman Period& Middle Ages**	**6**
IV	(Chairs, stools, Couches & others) History and Social context Early Mediaeval, Romanesque, Gothic Furniture	**6**
	TOTAL	**24**

Text Books:

1. Interior design; Ahmed,A.Kasu; 1st Ed.; 2010; Ashish Book Centre; Mumbai. ISBN8178131862

2. History of Architecture, Sir Banister Fletcher, CBS Publishers & distributors, New Delhi

Reference Books:

1. Seetharaman, Premavathy; Interior Design & Decoration; 1st Ed.; 2009; CBS; New Delhi
2. Ching D.K; Architecture: Form, space & order; 1st Ed.; 2007; John Wiley; New York
3. Mary Gilliat Coyran, Interior Design Course, Octopus Ltd., London

Reading Materials:

1. Sherril Whiton, Interior Design & Decoration, Prentice Hall
2. Joseph De Chiara, McGraw Hill, Time Saver Standards for Interior Design, New York.

SYLLABUS (1st SEMESTER)

Paper IV /Subject Name: Design Rendering, Representation Technique I (Graphics, Art & Photography)		**Subject Code: IDS082C114**
L-T-P-C: 1-1-4-6	**Credit Units: 6**	**Scheme of Evaluation: P**

Objective: The objective of the course **Design Rendering, Representation Technique I (Graphics, Art & Photography) (IDS132S113)** is to orient and equip the students with soft skills of Graphics, Art & Photography.

Course Outcome:

On completion of this course, students will be able to

CO1: Define various materials and tools through visual learning

CO2: Outlining design and craft skill relationship and revel through appreciation of the profession

CO3: Utilizing basic knowledge of architectural drawing with understanding of plans, elevation, sections

CO4: Apply visual drawing and color rendering techniques to create space and depth with drawings and representations of basic forms and spaces

Prerequisite:

- Basic concepts of art.
- Basic knowledge of Drafting.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Orthographic Projections** Plan, Elevation, Section	**36**
II	**Isometric & Axonometric Projections** Preparation of views of basic figures	**36**
III	**Fundamentals of Photography & Photography styles** Use of camera, light exposure, depth of field, Monochrome, colours, landscape, portrait, Interior and Exterior photography, use of filter, zoom and lenses	**36**
IV	**Fundamentals of Art & Thematic Representation.** Sketching, Pencil rendering, sketching, water colouring, types of colors, colour wheel, colour Schemes and to prepare basic theme of single room using fundamental principles	**36**
	TOTAL	**144**

Text Books:

1. Bhatt, N.D and Panchal, V. M; (2008) Engineering drawing, 1st Ed. Charotar

Publishing House; Gujrat.

Reference Books:

1. Scott,R.G (2009); Design Fundamentals; 2nd Ed.; R.E. Kreiger; New York
2. Itten, Johannes (1970) Elements of colours; 1st Ed.; Chapman & Hall
3. Kelby, Scott (2013) Digital photography book; 1st Ed.; Peachpit Press; San Francisco
4. Doug Herman & David Jones (2016) Digital photography handbook: An illustrated step by stepguide; 5th Ed.;Quercus; London

Reading Materials:

1. James Curtis, Sense of Documentary Photography, Making Sense of Evidence series on History Matters: The U.S. Survey on the Web, located at http://historymatters.gmu.edu
2. Maria Bako, Different projecting methods in teaching spatial geometry. European Research in Mathematics Education.

SYLLABUS (1st SEMESTER)

Paper II/Subject Name: Elements of Design **Subject Code: IDS082C112**
L-T-P-C: 1-1-2-4 **Credit Units: 4** **Scheme of Evaluation: S**

Objectives: The objective of **Elements of Design (IDS132C112)** is to develop an understanding of elements of design in abstract and application of Principles of Design in order to create an aesthetically pleasing & creative design.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: List the basic design elements, build a design vocabulary and use it in compositions.

CO2: Compare Visual and tactile design elements and its impact on the mind of the viewer or a user.

CO3: Apply design principles such as ratio, proportion, scale, balance, harmony, unity, variety, rhythm, emphasis.

CO4: Analyze the design process to create a creative and stimulating form/space, using the basic strategic knowledge and tactics of; structure, line, form, space, lighting and shape.

Prerequisites: None

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Design Elements** Lines: properties and nature of lines along with usage SHAPE AND FORMS: organic/ geometric shapes and understanding their role w.r.t space (positive/negative)	**24**
II	**Texture and colour** Textures: tactile texture, visual texture and how they are implied Colour: HUE-SATURATION, VALUE, INTENSITY nature of Colour, implications	**24**
III	**Design principles** Balance (symmetrical/asymmetrical) Contrast (anomaly, emphasis, subordination) Rhythm/ repetition Proportion/scale Harmony and unity. Variety Radiation	**24**
IV	**Basics of Graphic Design** Graphic Design, logo design, tile border design, Wall mural	**24**
TOTAL		**96**

Text Books:

1. Principles of two dimensional design; Wong, Wucius; 1st Ed.; 1972; John Wiley; New York

Reference Books:

1. Ching,F.D.(1996). Architecture:Form,Space and Order. New york John wily and sons,Inc,196.
2. William Lidwell, Universal Principles of Design, Rockport publishers

Reading Materials:

1. Wong, Wucius; Principles of three dimensional design; 1st Ed.; 1977; Van Nostrand; New York
2. Christopher Alexander. A Pattern language: towns, buildings, construction. Oxford University Press, 1978.
3. https://youtu.be/01ZoynsM7Vw
4. https://youtu.be/eLZc-jGXQ8A

SYLLABUS (1st SEMESTER)

Paper II /Subject Name: Workshop I		**Subject Code: IDS082G111**
L-T-P-C: 1-0-2-3	**Credit Units: 3**	**Scheme of Evaluation: P**

Objective: The objective of the course **Workshop I (IDS132G111)** is to give an introduction to the basic principles governing structural systems.

Course Outcome:

On completion of this course, students will be able to

CO1: Define basic knowledge of working with structural materials

CO2: Interpret the techniques of planning, chiseling, pasting, fixing & welding to learn the use of hand tools.

CO3: Make use of practical usage of equipment's, processes and its application.

CO4: Discover skill in creating designs and making art objects

Prerequisite:

- Basic concepts of art and scales.

Detailed Syllabus:

Modules	Topics & Course Contents	Periods
I	**Installation (Part I) Carpentry (Timber)** Introduction to the carpentry tools, processes, joints and wood working machines. Preparation of various carpentry joints, fixing of plywood, blackboards, commercial boards etc. and their application in furniture.	**18**
II	**Installation (Part II)** Handling materials like POP, gypsum, Aluminium etc. Understanding nailing, screwing, riveting and their various conditions and types of applications. Hands on experience to come up with a product or installation	**18**
III	**Fabrication Installation** Introduction to welding equipment, processes and its applications Hands on experience to come up with a product or installation.	**18**
IV	**Masonry Installation** Installations with bricks and brick bats. Making of Geometrical forms on the ground.	**18**
	TOTAL	**72**

Text Books:

1. Mackay, W.B. (2005) Building construction. 1st Ed. Donheed, London.

Reference Books:

1. Chudley, R. (1987) Construction technology. 2nd Ed. ELBS; Harlow
2. Simmons H. L. (2007) Olin's Construction Principles, Materials and Methods, John Wiley and Sons.

Reading Materials:

1. Branco, J. M., & Thierry, D. (2015). Analysis and Strenghtening of Carpentry Joints. Construction and Building Materials , 34-47.

SYLLABUS (2nd SEMESTER)

Paper I/Subject Name: Interior Design II (Residential)		**Subject Code: IDS082C211**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective: The objective of the course **Interior Design II (IDS132C211)** is to translate knowledge of abstract design principles through enhancement of thought process into a workable design for a residence.

Course Outcome:

On completion of this course, students will be able to

CO1: Define adequate facilities for work, relaxation, comfort, privacy, aesthetics, and maintenance through design and proper choice of materials, services, fittings and fixtures in interiors of residences

CO2: Show design skills within the constraints of a given interior design project brief

CO3: Utilize the Design Studio to gain hands on experience and understand basic infrastructural requirements

CO4: Analyze critically a Residential space with a design eye and come up with strategic design solutions

Prerequisite:

- Basic concepts of design and drafting.

Detailed Syllabus:

Modules	Topics & Course Contents	Periods
I	**Designing of various activities in different rooms of a Residence** (Living room, Dining, Kitchen/Pantry, Bedroom, Balcony/ open areas & Toilets **Practical Design Layouts & Technical Drafting (**Detail Documented Case studies) – Complete Floor Layouts & Furniture Layouts using correct measuring, scale, drafting skills and symbols and study of factors influencing decisions related to furnishing of residential Interior Spaces Design sketches & drawings (Plan, Elevations, Sections & Perspectives), Anthropometry & Biomechanics, Observation and Notes & Presentation	**24**
II	**Factors to be Considered While Designing Interiors.** Establishment of areas for different units - function, furniture requirement & number of persons. Orientation, Grouping of user's area, Circulation between and within user's area, Light and Ventilation, Flexibility, Privacy, Roominess (spaciousness), Services, Aesthetics, Requirement for air conditioning & Cost	**24**

III	**Furniture requirements in the afore mentioned rooms** Design application of anthropometry Design of furniture and interiors according to consumer ergonomics and study of basic furniture dimensions based on anthropometries measurements. Application of Colour, Texture &. Pattern through Techniques of Rendering & Presentation.	**24**
IV	**Floor Layouts & Sectional Elevations of the Different Interior Spaces.** Detail layout plan(/tablet plan) of individual space/unit, with 4 sectional elevations and detailed specifications. Visual and oral presentation of complete project.	**24**
	TOTAL	**96**

Text Books:

1. De Chiara, Joseph and Crosbie, Michael J. (2011). Time saver standards for building types, 2nd Ed. Tata McGraw Hill, New Delhi.

Reference Books:

1. Neufert, Peter. (2012) Neufert's Architects' data, 4th Ed. John Wiley, New Delhi
2. Ramsay and Sleeper. (2008). Architectural graphic standard. 11th Ed. John Wiley, New York

Reading Materials:

1. Carlson, C. (2022, December 12). Dezeen's top 10 home interiors of 2022. Retrieved December 14, 2022, from dezeen: https://www.dezeen.com/2022/12/12/top-home-interiors-2022-review/
2. Nabil, S., & Kirk, D. (2021). Decoraction: a Catalogue for Interactive Home Decor of the Nearest-Future. Proceedings of the Fifteenth International Conference Tangible, Embedded, and Embodied Interaction (pp. 1-13). Salzburg: Association for Computing Machinery, New York.
3. Werner, C. M. (1987). Home Interiors: A Time and Place for Interpersonal Relationships. Environment and Behaviour .

SYLLABUS (2nd SEMESTER)

Paper II/Subject Name: Building Construction & Materials I **Subject Code: IDS082C212**

L-T-P-C: 2-0-4-4 **Credit Units: 4** **Scheme of Evaluation: S**

Objective: The objective of the course **Building Construction & Materials I (IDS132C211)** is to impart the fundamental concepts, technicalities of building construction and material and to apply the methods in the practical field.

Course Outcome:

On completion of this course, students will be able to

CO1: Relate concepts of building construction methods and techniques used in doors and windows.

CO2: Understand construction material used in building industry for different doors and windows.

CO3: Apply different techniques and material knowledge.

CO4: Analyze various techniques and ideas of doors and windows in the practical field.

Prerequisite:

- No prerequisites

Detailed Syllabus:

Modules	Topics & Course Contents	Periods
I.	**Doors and its fixtures** Types of wooden Doors, i.e., ledged, braced, battened, paneled, flush and glazed doors, study of joinery details.	24
II.	**Material: Timber** Quality of timber used in building, defects, seasoning and preservation of timber, types ; Natural, hard and softwood, uses of timber for aesthetic & structural purposes	24
III.	**Windows and its fixtures** Types of wooden glazed windows, Fixed, side and top hung pivoted, louvered, ventilators and Fanlights, study of joinery details.	24
IV	**Material: Commercial wood** Uses of commercial wood in building i.e., plywood, block boards, particleboards, veneers and Laminates and other types.	24
	TOTAL	96

Text Books:

1. W.B.Mackay;"Building Construction".

Reference Books:

1. "Construction Technology" by Chudley
2. "Construction of Building" by Barry.

Reading Materials:

1. https://mccoymart.com/post/types-of-doors-and-windows/

SYLLABUS (2nd SEMESTER)

Paper III /Subject Name: Three-Dimensional Graphics		**Subject Code: IDS082C213**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective: The objective of the course **Three-Dimensional Graphics (IDS132C213)** is to orient and familiarize the students towards the principles of Design thinking, Visualization and representation with drawing materials and equipment.

Course Outcome:

On completion of this course, students will be able to

CO1: Choose rendering techniques for representing 2D and 3D drawings

CO2: Demonstrate Sciography, Human figures and accessories in 2D and 3D drawings.

CO3: Apply Learning of measure drawing with basic knowledge and understanding of Isometric, Oblique, Axonometric projections

CO4: Take part in Practical orientation through exercises dealing with sections of solids, simple and complex.

Prerequisite:

- Basic concepts of Design Thinking and Drafting.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**One Point Perspective** Picture plane, Vanishing Point, Eye level, Station Point. Draw Objects	24
II	**Two Point Perspective** Picture plane, Vanishing Point, Eye level, Station Point. Draw Objects	24
III	**Sciography-1** Learning sociography of simple objects	24
IV	**Sciography-2** Sciography in Perspective	24
	TOTAL	96

Text Books:

1. Bhatt, N.D and Panchal, V. M. (2008). Engineering drawing, 1st Ed. Charotar Publishing House, Gujrat.

Reference Books:

1. John Montague, Willey, (1985), Basic Perspective Drawing, A Visual Approach, 6th Edition, John Willey and sons, Inc.
2. Francis D.K. Ching, (1998), Design Drawing, John Willey and sons, Inc.
3. Mulik, Shankar, (1994) A Text Book of perspective & Sciography, Allied Publishers Ltd., Mumbai.
4. Sherkey W, Morgan. (1950). Architectural Drawing: Perspective, Light and Shadow, Rendering, Mc Graw Hill.
5. Arthur L. Guptill, Watson. (1997). Rendering in Pen and Ink, Guptill Publications, New York.

Reading Materials:

1. Blankenbehler, B. (2015, October 19). Shadow In Perspective Drawing- Art Technique. Retrieved December 14, 2022, from Architecture Revived: https://architecturerevived.com/shadow-in-perspective-drawing-art-technique/
2. Crannell, A. (2010). Perspective drawings of reflective spheres. Journal of Mathematics and the Arts , 71-85.
3. Olkun, S. (2003). Making Connections: Improving Spatial Abilities with Engineering Drawing Activities. International Journal of Mathematics Teaching and Learning .
4. Wright, F. L., Samona, G., & Mayor, A. H. (1960). Drawings for a Living Architecture. Journal of the Society of Architectural Historians , 129-131.

SYLLABUS (2nd SEMESTER)

Paper I/Subject Name: Design Rendering & Digital Representation Technique II (AutoCAD & Photoshop) **Subject Code: IDS082S211**

L-T-P-C: 0-0-4-2 **Credit Units: 2** **Scheme of Evaluation: P**

Objectives: The objective of **Design Rendering & digital Representation Technique II (IDS132S211)** is to translate knowledge of abstract design principles through enhancement of thought process into a workable design and acquire knowledge of principles of Interior Design for residential spaces.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Relate Practical Design Layouts & Technical Drafting

CO2: Classify the Factors to be Considered While Designing Interiors.

CO3: Plan Furniture requirements in the interior spaces.

CO4: Analyze Floor Layouts & Sectional Elevations of the Different Interior Spaces.

Prerequisites: None

Detailed Syllabus:

Modules	Topics / Course content	Periods
I	**Designing of various activities in different rooms of a Residence** (Living room, Dining, Kitchen/Pantry, Bedroom(s), Balcony / open areas & Toilet(s). **Practical Design Layouts & Technical Drafting (**Detail Documented Case studies) **–** Complete Floor Layouts & Furniture Layouts using correct measuring, scale, drafting skills and symbols and study of factors influencing decisions related to furnishing of residential Interior spaces. Design sketches & drawings (Plan, Elevations, Sections & Perspectives), Anthropometry & Biomechanics, Observation and Notes & Presentation.	**12**
II	**Factors to be Considered While Designing Interiors.** Establishment of areas for different units - function, furniture requirement & number of persons. Orientation, Grouping of user's area, Circulation between and within user's area, Light and Ventilation, Flexibility, Privacy, Roominess (spaciousness), Services, Aesthetics, Requirement for air conditioning & Cost.	**12**
III	**Furniture requirements in the afore mentioned rooms** Design application of anthropometry. Design of furniture and interiors according to consumer ergonomics and study of basic furniture dimensions based on anthropometries measurements. Application of Colour, Texture &. Pattern through Techniques of Rendering & Presentation.	**12**
IV	**Floor Layouts &Sectional Elevations of the Different Interior Spaces.** Detail layout plan(/tablet plan) of individual space/unit, with 4 sectional elevations and detailed specifications. Visual and oral presentation of complete project.	**12**
Total		**48**

Text Books:

1. Kei Tomita: Principles and elements of visual design: A review of the literature on visual design of instructional materials; 2015; Kennesaw State University

Reference Books:

1. Kei Tomita: Principles and elements of visual design: A review of the literature on visual design of instructional materials; 2015; Kennesaw State University

Reading Material:

1. https://youtu.be/_kf7VEQzWqY
2. https://youtu.be/cmR9cfWJRUU
3. https://youtu.be/S-nHYzK-BVg

SYLLABUS (2ND SEMESTER)

Paper I/Subject Name: Workshop II		**Subject Code: IDS082G211**
L-T-P-C: 0-0-4-2	**Credit Units: 2**	**Scheme of Evaluation: P**

Objective: The objective of the course **Workshop II (IDS132M216)** is to translate knowledge of various techniques of treating a wall surface with hands on experience.

Course Outcome:

On completion of this course, students will be able to

CO1: How to design and create wall murals.

CO2: Illustrate various techniques of treating a wall surface, planning, chiseling, pasting, fixing & welding.

CO3: Utilize the application of hands-on tools.

CO4: Discover a final product based on the learning.

Prerequisite:

- Basic concepts of design and scale.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Wall mural (Part I)** Preparation of base/frame	12
II	**Wall mural (Part II)** Cutting, Joinery, application	12
III	**Wall mural (Part III)** Pasting/fixing/welding/Painting etc.	12
IV	**Wall mural (Part IV)** Fixing, Finishing and installation of the final product.	12
	TOTAL	**48**

Text Books:

1. Mckay, W.B (2005). Building Construction. Vol. I, Longman.

Reference Books:

1. Chudley R. (2008).Building Construction Handbook. British library cataloguing.

Reading Materials:

1. Mehta, M. Scarborough, W. and Armpriest, Diane. (2008). Building Construction: Principles, Materials and Systems. Pearson Prentic Hall.

SYLLABUS (2ND SEMESTER)

Paper II/Subject Name: GE 2 (Open) Colour Theory and It's Application		**Subject Code: IDS082G212**
L-T-P-C: 3-0-0-3	**Credit Units: 3**	**Scheme of Evaluation: P**

Objectives: To introduce students to the concept of application of colours and to understand the judicious use of colours in interior design.

Course Outcomes:

After successful completion of the course, student will be able to

- **CO1:** Show understanding of the evolution of color theory and learn color terminology/vocabulary and how to communicate/define color.
- **CO2:** Relate to the psychological effects of color.
- **CO3:** Identify various color systems and the ways they are applied today.
- **CO4:** Examine various occurrences and uses of color in nature, art, architecture, fashion/textiles, film, interior design, graphic design and photography.

Detailed Syllabus:

Modules	Topics / Course content	Periods
I	**Introduction to Color:** Understanding color, Properties of color ,What is color, Responses to color, Color terms etc	18
II	**Color principles:** Black and white, Neutral,Chromatic, Value, Hue. Color solid, complimentary hues. Color harmony & simultaneous contrast	18
III	**Color design:** Design with Value, Chroma and Hue gradations. Design with hue mixtures, complimentary hues & unrelated hues. Color expression	18
IV	**Project work** Problem Solving /application of theory/survey	18
Total		72

Text Books:

1. *Principles of Color Design:* Wong Wucius.; 2nd edition, John Wiley & Sons, Inc.

Reference Books:

1. *Color Matching Handbook,* Thunder Bay Press, California.

Reading Material:

1. Michael E. Doyle; *Color Drawing*; 3rd Edition, John Wiley & Sons, Inc.
2.

SYLLABUS (3rd SEMESTER)

Paper /Subject Name: Interior Design III (Office)		**Subject Code: IDS082C311**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective: The objective of the course **Interior Design III (IDS132C311)** is to critically analyse an office space with a design eye and come up with strategic design solutions

Course Outcome:

On completion of this course, students will be able to.

- **CO1:** Show design skills within the constraints of a given interior design project brief.
- **CO2:** Illustrate adequate facilities for work, relaxation, comfort, privacy, aesthetics, and maintenance through design.
- **CO3:** Organize design with the help of presentation drawings.
- **CO4:** Analyze proper materials, services, fittings and fixtures in a designed office interior space.

Prerequisite:

- Basic concepts of design and drafting.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Introduction & Measured drawing** Introduction of the design project. Measured drawing layout of the space for the proposed interior.	**24**
II.	**Design development 1 (Consulting Office for professional practitioner)** Planning for small office – office of architects, interior designers, lawyer, and auditor – individual layouts, modular units, playing with levels. Lighting and colour scheme-natural and artificial light.	**24**
III.	**Design Development 2 (Corporate Office)** Interior designing for multi-functional, multi-level planning, design and detailing of various, work spaces, interactions zones. Design of corporate Environments such as BPO, corporate office	**24**
IV	**Time problem (Shops)** Planning for retail activity – anthropometrics – Types of Shop layouts Modular units. Materials used in counters, shelves, Worktops, their comparative study.	

	Lighting & colour scheme – natural & artificial light.	**24**
	TOTAL	**96**

Text Books:

1. Leolie, Fiona. (2000). *Designs for 20th century Interiors*, 1st Ed. VH Publications, London.

Reference Books:

1. Diamonstein, Barbaralec. (1982). *Interior Design: The New Freedom*, 1st Ed. Rizzoli International Publications, New York.
2. Poore, Jonathan. (1994). *Interior Colour by Design*, 1st Ed. Rockport Publishers.
3. Sha, Rikuyo. (1987). *Worldwide Interiors*: International Federation of Interior Architects & Designers. Japan.

Reading Materials:

1. C.F.Reinhart. (2002). Effects of interior design on the daylight availability in open plan. *Conference Proceedings of the ACEEE Summer Study on Energy Efficient Buildings.* California: NRC Publications Archive.
2. Gou, Z., Lau, S.-Y. S., & Shen, J. (2012). Indoor Environmental Satisfaction in Two LEED Offices and its Implications in Green Interior Design. *Indoor and Built Environment* , 503-514.

SYLLABUS (3rd SEMESTER)

Paper II/Subject Name: Building Construction and Material II **Subject Code: IDS082C312**

L-T-P-C: 2-0-8-4 **Credit Units: 4** **Scheme of Evaluation: S**

Objective: The objective of **Building Construction and Material II** is to impart the fundamental concepts, technicalities of building construction and material and to apply the methods in the practicality of the field.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Remember concepts of building construction methods and techniques used in paneling and partitions.

CO2: Understand construction material used in building industry for different partitions and paneling.

CO3: Apply different techniques and material knowledge.

CO4: Analyze various aspects of partitions and paneling in the practical field.

Prerequisite:

- No prerequisites

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Partitions** Wooden Partition with glass fittings Partition with MDF board (CNC Designs) Partition finished with veneer, laminates and other new materials Glass partition. (Designs with joinery details)	**24**
II	**Panelling** Wall panelling- wood, ply with laminate and veneer, PVC board, MDF board, foam and other new materials related to the present market. (Designs with joinery and fixing details)	**24**
III	**Materials I** Plywood, Veneer, Laminate, MDF, Hard wood, Block Board, WPC board, HDF board.	**24**

IV	**Materials II** Glass, PVC Board	**24**
	TOTAL	**96**

Text Book:

1. 1.W.B.Mackay;"Building Construction".

Reference Books:

1. "Construction Technology" by Chudley
2. "Construction of Building" by Barry.

Reading Materials:

1. Circular and Flexible Indoor Partitioning—A Design Conceptualisation of Innovative Materials and Value Chains by Bob Geldermans, Martin Tenpierik, Peter Luscuere

2. Life cycle assessment of interior partition walls: Comparison between functionality requirements and best environmental performance by Yovanna Elena Valencia-BarbaaJosé, Manuel Gómez-SoberónbPersonEnvelopeMaría, Consolación Gómez-Soberónc María Neftalí Rojas-Valenciad.

3. https://www.slideshare.net/PanktiGajjar1/partitions-and-panelling

SYLLABUS (3rd SEMESTER)

Paper /Subject Name: Furniture Design I		**Subject Code: IDS082D311**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective:

The objective of the course **Furniture Design I (IDS132D311)** is to design furniture for different rooms/spaces of the residence designed in 2nd Semester.

Course Outcome:

On completion of this course, students will be able to

CO1: How to design and create furniture pieces for different residential spaces understanding its relation to human movements.

CO2: Demonstrate the multiple use of furniture for different residential spaces keeping the constraints of available space in consideration.

CO3: Develop principles that will help one to judge the design of furniture for different residential spaces in relation to their functionality and aesthetics.

CO4: Analyze the use of contextually appropriate materials, colour scheme, texture, joinery details to care & maintain the furniture for different residential spaces with various finishes.

Prerequisite:

- **Basic concepts of design thinking and technical drafting.**

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Introduction and History of Furniture Design** Definitions, Styles, Significance, Comparative analysis of different styles. Design Process: User profiling, Anthropometric study, Design development	**24**
II	**Living and Dining Room** Design furniture pieces for living and dining spaces	**24**
III	**Bedroom – Kids and Master** Design furniture for bedroom spaces	**24**
IV	**Thematic residential spaces** Barrier free, Transition spaces, Home office space, Hobby areas etc	**24**
	TOTAL	**96**

Text Book:

1. Shah Kavita ,Desai Nidhi, Patel Dr. Sarjoo ,Trivedi Khyati, Residential Space Designing, Authorspress, 2020.
2. Charlotte & Peter Fiell, *Modern Furniture Classics Since 1945,* Thames & Hudson
3. Darby Tom, *Making Fine Furniture*; Guild of Master Craftsman Publications.

Reference Books:

1. De Chiara Joseph &Callender John, *Time Saver Standards for Architectural Types & Interior Design & Space Planning*; McGraw Hill Book Co.
2. Gilliatt Mary, *The Decorating Book*; Michael Joseph

Reading Material:

1. Grandjean E, *Fitting the Task to the Man*; Taylor & Francis, London, 1988
2. Lawson Stuart, *FURNITURE DESIGN: An Introduction to Development, Materials, Manufacturing,* Laurence King Publishing, 2013.

SYLLABUS BID 3RD SEMESTER

Paper III /Subject Name: Measure Drawing		**Subject Code: IDS082D312**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective: The objective of the course **Measure Drawing (IDS132D312)** is to have knowledge about Practical orientation towards Interior Design of Offices by Measure Drawing and to study of Materials used for interior of offices.

Course Outcome:

On completion of this course, students will be able to

CO1: Relate the measurements of an interior of an office space in Live CaseStudy as well as Online and journal Study
CO2: Demonstrate with Technical layout, Drafting and Practical Drawing and Design skills
CO3: Apply knowledge about various Materials in the market.
CO4: Analyze about different Lights and Fixtures available in the market.

Prerequisite:

- Basic understanding and knowledge of Anthropometry.
- Basic understanding of Dimensions in different units.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I.	**Case Study** Online and journal study on office spaces.Live case study of any office spaces	**24**
II.	**Measure drawing** Complete measure drawing of the live case studyoffice space.	**24**
III.	**Material Study** Market survey of the various materials used in thelive case study.	**24**
IV.	**Lights and Fixtures** Market and online survey of the various lights andfixtures that can be used in the interior project of offices.	**24**
	TOTAL	**96**

Text Books:

1. Time-Saver Standards for Interior Design and Space Planning by Joseph DE Chiara, JuliusPanero and Martin Zelnik | Architectural Detailing.
2. Hands on Training.

Reference Books:

1. Building Construction Illustrated by Francis D.K. Ching | Architectural Detailing.
2. Architectural Detailing: Function, Constructability, Aesthetics by Edward Allen and PatrickRand.
3. Architectural Graphic Standards by the American Institute of Architects and Dennis J. Hall |Detailing Architecture.

Reading Materials:

1. Sketchbooks: Collected Measured Drawings and Architectural Sketches By Smith, GeorgeSaumarez.
2. Architectural Drawing Course by Mo Zell.
3. Representational Techniques for Architecture (Basics Architecture) by Lorraine Farrelly.
4. A Visual Dictionary of Architecture by Francis D.K. Ching.

SYLLABUS (BID 3RD SEMESTER)

Paper IV/Subject Name: Ergonomics & Human Behaviour		**Subject Code: IDS082G301**
L-T-P-C: 3-0-0-3	**Credit Units: 3**	**Scheme of Evaluation: T**

Objective:

The objective of the course **Ergonomics & Human Behaviour (IDS132G301)** is to design furniture and workspaces according to the human scale/ proportions and their ergonomic aspects promoting good health and posture.

Course Outcome:

On completion of this course, students will be able to –

CO1: Define basic human factors, anthropometrics and ergonomics in daily life.

CO2: Demonstrate an ability to understand the importance of human factors, human proportions in interior design.

CO3: Apply theories of proportion, ergonomic principals, and anthropometrical data of various activities for design development.

CO4: Examine interior work systems and relate other components of the built environment to interior design human factors.

Prerequisite:

- Basic concepts of human scale and proportion along with technical drafting.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Introduction to Ergonomics, associated Terminologies and its Relevance** Learning about human scale/ dimensions, anthropometry, understanding human proportions for various activities and its spatial aspects, human aid to lifestyle, environmental factors influencing human performance, physiology (work physiology) and stress.	**9**
II	**Human Physical Dimension, Human Body Structure and Function** Static and dynamic anthropometry, stand posture- erect, anthropometry landmark: sitting postures, anthropometry: squatting and cross legged postures. Posture and job relation, posture and body supportive devices, chair characteristics, vertical work surface, horizontal work surface, movement, work counter (standing & seating).	**9**
III	**Ergonomic Design of a Furniture** Designing of furniture based on user profile, need & activities, furniture dimensions and its relation to the spaces and human postures, human error and risk perception.	**9**
	Ergonomic Design of a Workspace/ Workstation	

IV	Designing of a particular space based on the user profile, need & activities, activity and behaviour based measurements, communication and cognitive aspects, information processing and perception, human error and risk perception.	**9**
	TOTAL	**36**

Text Books:

1. Elizabeth. D. Hutchinson; *Dimensions of Human Behaviour, Person and Environment*, Sage Publications, 2007.
2. Charlotte & Peter Fiell; *Modern Furniture Classics Since 1945*, Thames & Hudson
3. Alan Barnard & Jonathan Spence; *Encyclopedia of Social and Cultural Anthropology,* Routledge Edition 1, 2002

Reference Books:

1. De Chiara Joseph & Callender John; Time Saver Standards for Architectural Types & Interior Design & Space Planning; McGraw Hill Book Co.
2. *Time Saver Standards for Building Types*; De Chiara, Joseph and Crosbie, Michael J.*;* 2nd Ed. 2011; Tata McGraw Hill; New Delhi
3. Neufert, Peter; *Neufert's Architects' Data;* 4th Ed.; 2012; John Wiley; New Delhi

Reading Materials:

1. Linda L. Nussbaumer*; Human Factors in the Built Environment;* Bloomsbury Academic; January 2018, Edition 2
2. Grandjean E, *Fitting the Task to the Man*; Taylor & Francis, London, 1988

SYLLABUS (BID 3RD SEMESTER)

Paper V/Subject Name: GE 2 (Open) - Bamboo & Cane crafts of North-East India		**Subject Code: IDS082G312**
L-T-P-C: 3-0-0-3	**Credit Units: 3**	**Scheme of Evaluation: P**

Objectives: The objective of the course **Bamboo & Cane crafts of North-East India (IDS132G312)** is to expose students to different types of indigenous bamboo and cane crafts of North-east India.

Course Outcomes:

After successful completion of the course, student will be able to

- **CO1:** Understand the intricate structure and the subtle behaviour of the materials, Bamboo & Cane, as applied to the construction of numerous product categories.
- **CO2:** Understand how daily use products are an outcome of a complex interplay of culture & technology, as understood by the people of North-eastern region of India.
- **CO3:** Develop concept of different joineries & different weaving patterns of the material.
- **CO4:** Classify and observe local crafts surrounding us.

Prerequisite:

- Basic concepts of human scale and proportion along with technical drafting.
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Detailed Syllabus:

Modules	Topics / Course content	Periods
I	**The Region and the Materials:** Understanding the environment and people of North-east India, growth & distribution of the materials.	**18**
II	**The Craft: Architectural Elements** Fences, Gates, Bridges & Bullock Carts	**18**
III	**The Craft: Household Products** Colonial cane furniture & Native Furniture Baskets, Fish traps & Fish baskets, Rain Shields & headgear, fans & some miscellaneous products.	**18**
IV	**Project Work:** Documentation of Bamboo & Cane products around them/ Portfolio	**18**
Total		**72**

Text Books:

Reference Books:

1. *Traditional Wisdom- Bamboo & cane Crafts of North East India:* MP Ranjan, Nilam Iyer, Ghanshyam Pandya.; NID Ahmedabad

Reading Materials:

SYLLABUS (4TH SEMESTER)		
Paper I/Subject Name: Interior Design-IV (Commercial)		**Subject Code: IDS082C411**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objectives: The objective of **Interior Design (IDS132C411)** is to study and develop innovative design schemes for Hospitality industry.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Show innovative ideas for restaurant and hotel interiors. Knowledge of working drawings is also intended.

CO2: Illustrate creative and practical design skills for creating interior space

CO3: Identify the criteria for selection of appropriate material for different surfaces taking into consideration of ergonomic factors, aesthetics and cost

CO4: Analyze a space with a design eye and come up with strategic design solutions.

Prerequisites: None

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Introduction & Measured drawing** Introduction of the design project. Measured drawing layout of the space for the proposed interior. Basic needs: ergonomic consideration, psychological, aesthetic, occupational and professional development.	**24**
II	**Design development 1 – Branded Outlets** (Theme, Colour scheme, plan, section, elevation, perspectives) **Design Development:** Development of visual design idea through the exploration of layouts, concepts and interior plans **Planning considerations**: functions, orientation, circulation, grouping, light, ventilation, privacy, climatic and ergonomic factors, aesthetics & cost.	**24**
III	**Design Development 2 - Departmental stores** **(**Theme, Colour scheme, plan, section, elevation, perspectives) Services - electrical, lighting, water supply, drainage, air conditioning Materials & finishes (wood, glass, plastic, metals, acoustical boards, floor covering, panelling materials, false ceiling material) and Furniture details.	**24**
IV	**Time problem** As per requirement of the concerned teacher.	**24**

TOTAL	96

Text Books:

1. D*esigns for 20th century Interiors*,Leolie, Fiona*;* 1st Ed.; 2000; VH Publications; London.

Reference Books:

1. Diamonstein, Barbaralec. (1982). *Interior Design: The New Freedom*, 1st Ed. Rizzoli International Publications, New York.
2. Poore, Jonathan. (1994). *Interior Colour by Design*, 1st Ed. Rockport Publishers.
3. Sha, Rikuyo. (1987). *Worldwide Interiors*: International Federation of Interior Architects & Designers. Japan.

Reading Materials:

1. Diamonstein, Barbaralec; Interior Design: The New Freedom; 1st Ed.; 1982; Rizzoli International Publications; New York.

SYLLABUS (4thSEMESTER)

Paper II/Subject Name: Building Construction & Materials III **Subject Code: IDS082C412**
L-T-P-C: 2-0-4-4 **Credit Units: 4** **Scheme of Evaluation: S**

Objectives: The objective of the subject is to introduce students to the technicalities of building construction and material and to acquaint with various methods of construction.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Tell the parameters of design and techniques of construction.

CO2: Summarize the basic design understandings and understand the practicality of design execution.

CO3: Apply basic RCC and related construction illustrations for a proper design.

CO4: Analyze the different types of structural construct and differentiate the minute details of the same efficiently.

Prerequisites:

- Basic drafting skills.

Detailed Syllabus: (Theory Part)

Modules	Topics / Course content	Periods
I	**Introduction to RCC (Basics)** Study the foundation, columns, beams, slab- types and sizes. Also study the basics architectural layout of a building for the RCC part.	24
II	**Understanding Staircase and its type** Understanding the requirements of staircase. Types of staircases, construction methods of masonry staircase, timber staircase, RCC staircase, steel staircase, study of fire escape staircase.	24
III	**Applying Railing and grill design** Applying design and joinery details of railing and grill (steel, glass and other materials).	24
IV	**Steel: Material** Analyse properties, architectural and interior design uses of mild steel and stainless steel and carry out a market survey.	24
Total		**96**

Text Books:

1. "*Building Construction*". W.B.Mackay

Reference Books:

1. Chudley, "*Construction Technology*"
2. "*Building Construction*". Sushil Kumar

Reading Material:

1. "*Construction of Building*"by Barry

SYLLABUS (4th SEMESTER)		
Paper III/Subject Name: Furniture Design II		**Subject Code: IDS082D411**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective:

The objective of the course **Furniture Design II (IDS132D411)** is to design furniture for different rooms/spaces of the office/corporate workspace designed in 3rd Semester.

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Course Outcome:

On completion of this course, students will be able to

CO1: Name furniture pieces for different office/corporate workspaces understanding its relation to human movements.

CO2: Demonstrate the multiple use of furniture in office/corporate workspaces keeping the constraints of available space in consideration and for multiple stakeholders involved.

CO3: Develop principles that will help in creating modular design of furniture for office/corporate workspace and one to judge the design of furniture in relation to their functionality and aesthetics.

CO4: Analyze the use of contextually appropriate materials, colour scheme, and texture, joinery details to care & maintain the furniture designed specifically for office /corporate workspaces with various finishes.

Prerequisite:

- **Basic concepts of design thinking and technical drafting.**

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Reception Area:** To design furniture of the reception area of the office Ergonomic Furniture Design Creation – Visual design ideas and sketches Design development through drawings, sketches, models showing visual exploration	**24**
II	**Work Station Module:** To design furniture of the work station module. Wooden Joinery & Carpentry, the different types of joineries used in making furniture, Furniture Detailing, Detailed drawing of different types of furniture with their joineries.	**24**
III	**Executive Cabin:** To detail out the executive cabin.	**24**
IV	**Conference / Board Room:** To detail out the executive cabin. Market Survey of Furniture Materials, Furniture Finishes & Furnishings Basic Materials used for Furniture, Types of wood, processed wood (block	**24**

	boards, laminates, veneers, particle board), metals, cane & other wicker materials, plastics, fibre glass. Finishes Used on Furniture- Varnish, polish, lacquer, melamine, paints, staining.	
	TOTAL	**96**

Text Book:

1. Garth Graves, Woodworker's Guide to Furniture Design (Pod Edition), F&W Publications Inc.
2. Fournir, Modern Office Furniture & Interior, Fournir, 2013.

Reference Books:

1. Charlotte & Peter Fiell, *Modern Furniture Classics Since 1945,* Thames & Hudson
2. De Chiara Joseph &Callender John, *Time Saver Standards for Architectural Types & Interior Design & Space Planning*; McGraw Hill Book Co.

Reading Materials:

1. Grandjean E, *Fitting the Task to the Man*; Taylor & Francis, London, 1988
2. Darby Tom, *Making Fine Furniture*; Guild of Master Craftsman Publications

SYLLABUS (4th SEMESTER)

Paper III/Subject Name: Vaastu in Interiors		**Subject Code: IDS082D412**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective:

The objective of the course **Vaastu in Interiors (IDS132D412)** is to familiarize students with various Vaastu Principles and its application in the field of Interior Design.

Course outcome:

On completion of this course, students will be able to:

CO1: Recall various concepts of Vaastu Shastra and its relation to human beings.

CO2: Illustrate various philosophies, principles of Vaastu and its importance in practical field.

CO3: Apply various principles of Vaastu in residential, commercial buildings etc.

CO4: Take part in detailed planning of a Residence with respect to vaastu principles.

Prerequisite: NIL

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Introduction to Vaastu Shastra** Overview of Vaastu Shastra, Vaastu Purusha Mandala, Cosmic Directions, Design concepts, Experiences of Space and Form, Cardinal and Ordinal Directions, Vaastu and its relation to Human Beings.	**24**
II	**Philosophies, Practices, and Principles of Vaastu** Understanding various Philosophies, Practices and Principles of Vaastu and its importance in Practical Aspects , Discussions and Analysis of Vaastu Principles, Positive and Negative Effects, etc.	**24**
III	**Application of Vaastu Principles** Vaastu for Residential Buildings, Apartments, Commercial Buildings, etc., Understanding importance of colour, lighting, material aspects and its effects, Deviation of Degrees, Direction of Roads, Location of Bedrooms, Kitchen, Puja Room, Living Room, Toilets etc., Closed corners, Raised Spaces etc.	**24**
IV	**Layout Planning** Detailed Interior Layout Plan of Residential & Commercial Buildings by applying Vaastu Principles.	**24**

TOTAL	**96**

Text Books:

1. Harry N. Abrams (1 October 2007), ISBN-13: 978-1584796398,. *Space Matters: Use the Wisdom of Vastu to Create a Healthy Home. 11 Top Designers Show You How.*
2. Sokolova, O. (2017). *Your Happy House: Illustrated Vastu Shastra for Everyone.*
3. Ananth, S. (1998). *The Penguin Guide Book to Vaastu.* Penguin Group.
4. Bansal, A. K. (2002). *Vastu: How to Create a Harmonious Home Through Ancient Indian Design.*

Reference Books:

1. Dass, S. S. (2013). *The Miracles of Vaastu Shastra* .
2. Pandit, S. (2004). Golden *Rules Of Vastu Shastra - Remedies And Solutions* . Ubs Publishers' Distributors (P) Ltd.

Reading Materials:

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1. Manjul Publishing House Pvt. Ltd. (1 March 2002),, *Vaastu Niwas*, ISBN-13: 978-8186775127

SYLLABUS (4th SEMESTER)

Paper IV/Subject Name: Computer Application (SketchUp)		**Subject Code: IDS082S411**
L-T-P-C: 0-0-4-2	**Credit Units: 2**	**Scheme of Evaluation: P**

Objectives: The objective of **Computer Application (IDS132S411)** to develop skills in the Software SketchUp and provide basic and advanced 3D models.

Course Outcomes:

After successful completion of the course, student will be able to

- **CO1:** Show computational skills for the production of 3D models.
- **CO2:** Relate drawing aids and equipment along with learning to computerize design drawings.
- **CO3:** Model an object or space and represent it graphically and digitally.
- **CO4:** Examine how digital design software is used in the industry for the production of 3D models.

Detailed Syllabus:

Modules	Topics / Course content	Periods
I	**Interface:** Introduction to the interface, Digital drawings tools, drawing lines and shapes, modifying lines and shapes, drawing with accuracy and speed tools and commands.	12
II	**Drawing and Modifying:** Drawing and Modifying objects, properties, Units, dimensions, lines and pen weight. Blocks, group, extrude etc.	12
III	**Introduction to Commands:** Basic drawing commands, editing commands, scaling, setting dimensioning variables etc.	12
IV	**Presentation and Render :** Analysis of a space to represent it as a final 3D model with renders or walkthrough.	12
Total		**48**

Text Books:

1. SketchUp For Dummies by Bill Fane.
2. SketchUp to LayOut by Matt Donley

Reference Books:

3. SketchUp for Interior Design by L Cline

Reading Material:

1. SketchUp for Builders by John G. Brock.

Syllabus (4TH Semester)

Paper II/Subject Name: GE 1- Model Making Workshop **Code: IDS082G411**

L-T-P-C: 1-0-2-3 **Credit Units: 3** **Scheme of Evaluation: P**

Objective: The objective of **Model Making Workshop (IDS132G411)** is to impart the fundamental concepts, technicalities of creating 3D scaled models and to apply the methods in the practicality of the field.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Remember concepts of 'Semi detailed' and 'Detailed' model making techniques.
CO2: Understand various materials to create scaled models.
CO3: Apply different techniques and material knowledge.
CO4: Analyze various aspects of model making in the practical field.

Prerequisite:

- NIL

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Composition** To design an innovative product, this needs to be functional and based on its usage. The product should be a part of the design.	**18**
II	**Furniture** Model of the furniture designed during last semester subject Ergonomics and Human behavior.	**18**
III	**Model I- Exploration of 3 dimensional interior design creative visual design ideas:** Detailed model of the Living Room of the earlier designed Residence.	**18**
IV	**Model II-Exploration of materials and techniques:** Detailed model of the office space designed in III semester. Model Making Techniques Selection of materials Colour Textures Styles	**18**
	TOTAL	**72**

Text Book:

1. Designing with Models: A Studio Guide to Making and Using Architectural Design Models by Criss B. Mills

Reference Books:

1. Interior Design and Identity (Studies in Design and Material Culture) by Susie McKellar (Editor), Penny Sparke (Editor), Kim Latham (Contributor)

Reading Material:

1. http://thirtybyforty.com/blog/architectural-model-making-tips
2. https://youtu.be/rGRIAIVEMzs
3. https://youtu.be/Kfj2-A5rJoQ

SYLLABUS (5th SEMESTER)

Paper /Subject Name: Interior Design V (5 Star Hotel)		**Subject Code: IDS082C511**
L-T-P-C: 0-0-8-4	**Credit Units: 04**	**Scheme of Evaluation: S**

Objective: The objective of the course **Interior Design V (IDS132C511)** is to translate knowledge of abstract design principles through enhancement of thought process into a workable design for a 5 star hotel.

Course Outcome:

On completion of this course, students will be able to

CO1: Define adequate facilities for work, relaxation, comfort, privacy, aesthetics, and maintenance through design and proper choice of materials, services, fittings and fixtures in interiors of 5 star hotels.

CO2: Summarize design skills and requirements within the constraints of a given interior design project brief.

CO3: Make use of the Design Studio to gain hands on experience and understand basic infrastructural requirements

CO4: Analyze the space with a design eye and come up with strategic design solutions.

Prerequisite:

- Basic concepts of design and drafting.

Detailed Syllabus:

Modules	Topics & Course Contents	Periods
I	**Designing of various activities in different rooms of a 5 Star Hotel** **Practical Design Layouts & Technical Drafting (**Detail Documented Case studies) **–** Complete Floor Layouts & Furniture Layouts using correct measuring, scale, drafting skills and symbols and study of factors influencing decisions related to furnishing of Interior Spaces Design sketches & drawings (Plan, Elevations, Sections & Perspectives), Anthropometry & Biomechanics, Observation and Notes & Presentation	24
II	**Factors to be Considered While Designing Interiors.** Establishment of areas for different units - function, furniture requirement & number of persons. Orientation, Grouping of user's area, Circulation between and within user's area, Light and Ventilation, Flexibility, Privacy, Roominess	24

	(spaciousness), Services, Aesthetics, Requirement for air conditioning & Cost.	
III	**Furniture requirements in the afore mentioned rooms** Design application of anthropometry Design of furniture and interiors according to consumer ergonomics and study of basic furniture dimensions based on anthropometries measurements. Application of Colour, Texture &. Pattern through Techniques of Rendering & Presentation.	24
IV	**Floor Layouts & Sectional Elevations of the Different Interior Spaces.** Detail layout plan(/tablet plan) of individual space/unit, with 4 sectional elevations and detailed specifications. Visual and oral presentation of complete project.	24
	TOTAL	96

Text Books:

1. De Chiara, Joseph and Crosbie, Michael J. (2011). Time saver standards for building types, 2nd Ed. *Tata McGraw Hill*, New Delhi.

Reference Books:

1. Neufert, Peter. (2012) Neufert's architects' data, 4th Ed. *John Wiley, New Delhi*
2. Ramsay and Sleeper. (2008). Architectural graphic standard. 11th Ed. *John Wiley, New York*

Reading Materials:

1. Carlson, C. (2022, December 12). *Dezeen's top 10 home interiors of 2022*. Retrieved December 14, 2022, from dezeen: https://www.dezeen.com/2022/12/12/top-home-interiors-2022-review/
2. Nabil, S., & Kirk, D. (2021). Decoraction: a Catalogue for Interactive Home Decor of the Nearest-Future. *Proceedings of the Fifteenth International Conference Tangible, Embedded, and Embodied Interaction* (pp. 1-13). Salzburg: Association for Computing Machinery, New York.
3. Werner, C. M. (1987). Home Interiors: A Time and Place for Interpersonal Relationships. *Environment and Behaviour* .

SYLLABUS (5th SEMESTER)

Paper III/Subject Name: Building Construction and Materials IV		**Subject Code: IDS082C512**
L-T-P-C: 2-0-4-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective: The objective of **Building Construction and Materials IV** is to impart the fundamental concepts, technicalities of creating 3D scaled models and to apply the methods in the practicality of the field.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Remember concepts of building construction methods and techniques used in Doors, Windows, advanced partitions and Ceilings.
CO2: Understand construction material used in building industry for pest controlling treatments and water proofing
CO3: Apply different techniques and material knowledge.
CO4: Analyze various aspects of MS and aluminum doors windows, partitions and ceiling in the practical field.

Prerequisite:

- No prerequisites

Detailed Syllabus: (Theory Part)

Modules	Topics (if applicable) & Course Contents	Periods
I	**Mild Steel & Aluminium – Doors & Windows** Introduction to M.S. & Aluminium Sections M.S. & Aluminium Doors & fixing details M.S. Casement Window with Z- Sections & Aluminium Window with anodized & powder- coated Sections	24
II	**Advance Partition Systems** Introduction to Advance Partition Systems Sliding Folding Partition in Metal & Glass Thermal/ Acoustical Partition & Panelling in Metal Frame finished with various materials	24

III	**Suspended Ceiling Systems** Introduction to Suspended Ceiling Systems Gypsum Board Ceiling &Modular Ceiling Systems in various materials	24
IV	**Materials** Anti-Termite treatment of Masonry Walls & Woodwork (pre-construction) Water-proofing & Weather-proofing materials (chemical admixture & surface application) Pest Control Treatment, Fire-fighting & Thermal Insulation	24
TOTAL		96

Text Books:

1. *"Building Construction"* by W. B. Mackay.
2. *"Engineering materials",* S.C Rangwala – Charotar publishing, Anand 1982
3. *"Building construction"*, W.B. Mckay, VOL 1-4 , Longmans, u.k 1981

Reference Books:

1. Chudley *"Construction Technology"*
2. Barry *"Construction of Building"* Barry
3. Donald Watson *"Time Saver Standards – Architectural Design Data*"

Reference Books:

1. Joseph De Chiara "*Time Saver Standards – Interior Design & Space Planning"*
2. E. Allen "*Time Saver Standards – Architectural Detailing*"

SYLLABUS (5TH SEMESTER)

Paper III/Subject Name: Building Services I **Subject Code: IDS082D511**

L-T-P-C: 2-0-4-4 **Credit Units: 4** **Scheme of Evaluation: TP**

Objectives: The objective of Building Services II is to develop the knowledge and skills required for understanding the water supply and sanitation services in buildings and their integration with architectural design.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Relate the technical knowledge regarding water supply and sanitation system in a building. .

CO2: Demonstrate the principles and best practices for Solid waste management in residential unit.

CO3: Apply the principles of sanitation, Introduction to various sanitary pipes, joints, fittings and fixtures, their function, placement and constructional details.

CO4: Inference the knowledge into sheet work.

Prerequisites: None

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Water Supply**: Introduction to water supply, Assessment of water requirements, Sources of supply, collection& method of supply. Catchment areas, reservoirs, recharge of ground water (methods) and their location. Roof top rain water harvesting. Recovery of used water. Physical, Chemical and biological examination of water, Water treatment.	24
II	**Water Management**: Water pipes– materials (GI, PVC, CPVC/ UPVC pipes, introduction to Copper plumbing, Pipe Accessories, Storage tanks, Pumps, Pipes – laying and jointing. Supply for a neighbourhood and town. Rain water Harvesting, Recharging, Recycling and reuse, application in planning, water supply distribution systems (Urban& rural). Sheet work on water supply, overhead water tank and calculations based on present semester design.	24
III	**Sanitation:** Principles of sanitation, Introduction to various sanitary pipes, joints, fittings and fixtures, their function, placement and constructional details. Study of internal & external drainage system of buildings including small residences, apartments, etc. Single stack system, one pipe and two pipe systems, testing of house drains, Gradients used in laying drains, Self-cleaning and non-scoring velocities for drain pipes	24

	Study of Traps, Inspection chambers, Manholes, Septic tanks, Soak pits, Plumbing layout in residential, high raised building.	
IV	**Solid waste, management:** Refuse collection, disposal, Incinerator, Composting, Vermi composting, Sanitary Land filling, Trenching etc. Sheet work on septic tank, soak pit, inspection chamber and calculations based on present semester design.	24
	TOTAL	96

Text Book:

1. *Sanitary Engineering – (Vol I and II);*Deshpande, R. S.; 1 st Ed; Unique Book Cooperation
   Water Supply and Sanitary Engineering; Birdii, G.S; 1st Ed.; 1980; Standard Publishers Distributors

Reference Book:

1. Shah, Charanjit S; *Water Supply and Sanitary Engineering;*
2. Rangwala, S.C; *Water Supply and Sanitary Engineering;* 1st Ed.; 2005; Charotar Publishing House;
3. Fair, G.M, Geyer, J.C. and Okin, D; *Water and Waste water engineering Volume II*; 1st Ed.; 1968; John Wiley & Sons; New York.
4. CPHEEO; *Manual on sewerage and sewerage treatment;* 1st Ed.; 1980; Ministry of works and housing; New Delhi.
5. *Relevant IS Codes of India*

Reference Material:

1. *Renewable energy, basics and technology, supplement volume on integrated energy systems*

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SYLLABUS BID (5th SEMESTER)

Paper /Subject Name: DSE-II -- Material Documentation		Subject Code: IDS082D512
L-T-P-C: 0-0-8-4	Credit Units: 4	Scheme of Evaluation: PP

Objective: The objective of the course **DSE-II -- Material Documentation (IDS132D516)** are:

1. To understand the various components of interior spaces and familiarize the students of Interior Design on materials and construction methodology.

Course Outcome:

On completion of this course, students will be able to

CO1: Define knowledge and technicality about different aspects of Flooring, flooring materials used in interior spaces, and implementation/construction of flooring in interior spaces and establish the know-how of various materials & techniques are used for treatments & proofing the Interiors of any built-space.

CO2: Demonstrate technicality about different aspects and types of Ceilings, suspended ceiling materials used in interior spaces, and implementation/construction of suspended ceilings in interior spaces and establish the know-how of various materials, techniques, components and check list used for selection & fire - proofing the ceilings of Interiors of any built-space.

CO3: Select various External Finishes in the market such as Glazing materials and assembles, coatings and sealants along with waterproofing materials.

CO4: Distinguish about different internal Finishes in the market such as coatings, their types and uses and selection checklist.

Prerequisite:

- Basic understanding and knowledge of Building Materials.
- Basic knowledge of local materials in the market.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Flooring** Introduction: Type, properties, Sizes, Uses& Limitations Flooring cementitious, Burnt Clay, Mortars, Grouts - Materials uses property Adhesives - Materials uses property Resilient and Wooden flooring - Use, Properties, Types, Construction, Selection Checklist	24

II	**Ceilings** Introduction: Type, properties, Sizes,Uses& Limitations Assembly type & Membrane types (Gypsum Boards, Plasters) Suspended ceiling - Exposed grid, concealed grid Sound absorbing components Ceiling selection check list Fire resistant rating of ceilings	24
III	**External Finish- Insulation, Waterproofing/Dam proofing, Exterior wall, Curtain wall, Interior Partition system, Wall facings, Glass/plastics, Windows, Coatings, Sealants** Introduction: Type, Materials, properties, Sizes, Uses & Limitations Glazing Material- Solar optical properties Glazing assembles- General Consideration	24
IV	**Internal Finish** Coatings Introduction: Field applied - Type, Materials, properties, Sizes, Uses& Limitations Interior - General purpose, Types & Uses (Selection check list) Substrate/Primers - Effect on coating (Selection checklist)	24
	TOTAL	96

Text Books:

1. *"Building Construction"* by W.B.Mackay
2. "*Time Saver Standards for Building Materials &Systems"*Watson Donald

Reference Books:

1. Chudley*"Construction Technology"*
2. Barry*"Construction of Building"* Barry

Reading Materials:

1. Interior Design Magazine
2. ELLE Decor
3. Architonic
4. Architectural Digest
5. Better Homes and Gardens
6. California Home and Design
7. Dwell

8. House Beautiful
9. House & Home
10. Interior Design
11. Southern Living
12. Style at Home
13. This Old House
14. Traditional Home
15. Vogue Living
16. World of Interiors

SYLLABUS (6th SEMESTER)

Paper I/Subject Name: Interior Design VI (Auditorium/ Theatre)		**Subject Code: IDS082C611**
L-T-P-C: 0-0-8-4	**Credit Units: 4**	**Scheme of Evaluation: S**

Objective: The objective of Interior Design VI is to study and develop innovative schemes for auditorium, seminar halls, lecture halls etc. and also to give them exposure to design standards in auditoriums & similar public spaces and understanding of visual and acoustic parameters.

Course Outcome:

On completion of this course, students will be able to

- **CO1:** Define visually and will be proficient at analytical thinking, conceptualization and the problem-inquiry, solution cycle.
- **CO2:** Summarize and discuss the interior environment in the context of the exterior.
- **CO3:** Develop the design with the importance of presentation drawings.
- **CO4:** Analyze a sense of aesthetics and fundamental understanding of vision & sound and use a variety of drawing media to effectively communicate design solutions.

Prerequisite:

- Basic concepts of design and thinking.

Detailed Syllabus:

Modules	Topics & Course Contents	Periods
I	Introduction to design fundamentals and measured drawings. Introduction of design project. Comprehension of spatial units. Use of design principles, anthropometry and ergonomics. Fundamentals of acoustics and use of materials. Measured drawing layout of the space for the proposed interior.	24
II	**Design Development of Secondary Spaces (foyer, lobby, green room, projection room etc.)** Theme Schematic & Conceptual Drawings, Textures and materials Furniture Colour scheme Final drawings (plan, section, elevation, views)	24
III	**Design development of the main Auditorium** Theme Schematic & Conceptual Drawings	24

	Colour scheme Specification materials used. Final drawings (plan, section, elevation, views)	
IV	**Time problem** As per the requirement of the concerned teacher	24
TOTAL		96

Text Books:

1. *Designs for 20th century Interiors*,Leolie, Fiona*;* 1st Ed.; 2000; VH Publications; London.

Reference Books:

1. Diamonstein, Barbaralec; *Interior Design: The New Freedom;* 1st Ed.; 1982; Rizzoli International Publications; New York.

Reading Materials:

1. Werner, C. M. (1987). Home Interiors: A Time and Place for Interpersonal Relationships. *Environment and Behaviour* .

SYLLABUS (6TH SEMESTER)

Paper II/Subject Name: Working Drawing **Subject Code: IDS082C612**
L-T-P/s-C: 0-0-8-4 **Credit Units: 4** **Scheme of Evaluation: P**

Objectives: The objective of Working Drawing is to enable the students to learn the techniques of preparing drawing which are used for construction of buildings

Course Outcomes:
After successful completion of the course, student will be able to

CO1: Relate the technical details to the drawings such that it can be implemented by the workers in the site

CO2: Compare the sense of technical base for the execution of the designer's ideas.

CO3: Develop understanding of how to make technical drawings explaining to the workmen how execute the design in actual.

CO4: Inference the technical knowledge into presentation drawings.

Prerequisites: None

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I.	**Drawing Sheets- I**: Drafting and preparing sheets for unit plans / detail plans of earlier design subject- presentation plan, detailed floor plans, sectional elevations, electrical drawings, service drawings, furniture layout.	24
II.	**Drawing Sheets- II**: Drafting and preparing sheets for kitchen- presentation plan, detailed plans, service drawings, tile layout, other fixture details, sectional elevation.	24
III.	**Drawing Sheets- III**: Drafting and preparing sheets for toilet- presentation plan, detailed plans, service drawings, tile layout, other fixture details, sectional elevation. Understanding of services about how water supply, sanitation and electricity runs in the building and the site.	24
IV.	**Drawing Sheets-IV**: Drafting and preparing sheets for door and window- detailed plans, sections, elevations and fixture details. Drafting and preparing sheets for furniture design- detailed plans, sections, elevations and fixture details.	24
	TOTAL	96

Text Book: NA

Reference Book: NA
Reference Material: Hands on practice

SYLLABUS (6TH SEMESTER)

Paper III/Subject Name: Building Services II		**Subject Code: IDS082D611**
L-T-P-C: 2-0-4-4	**Credit Units: 4**	**Scheme of Evaluation: TP**

Objective: The objective of **Building Services II** is to impart the fundamental concepts, technicalities of building services and to apply the methods in the practicality of the field.

Course Outcomes:
After successful completion of the course, student will be able to:

CO1: Remember concepts of design, installation, operation and monitoring of the electrical services, lifts and escalators in residential and commercial buildings.
CO2: Understand installation techniques of electrical services, lifts and escalators used in building industry.
CO3: Apply different techniques and technical knowledge.
CO4: Analyze various aspects of operations and monitoring in the practical field.

Prerequisite:
- No prerequisites

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Electrical system and fittings, (lighting materials and fixtures)** Basics of electricity – Single/Three phase supply. Types and sizes of all electrical fittings: wires, conduits (aluminum metallic, non-metallic), casing, capping, Bus way, Bus bar, lighting track, fans, Tube-light fittings, Lamp fittings, Chandeliers, etc. Power handling, equipment, roses, holders, switches, sockets, switchboards, MCB, ELCB, distribution board, mains, fuse, meter, circuit breaker etc. Earthing for safety – types of earthing. Electrical wiring systems in domestic and commercial buildings. Selection of cable/wire sizes; potential sources of fire hazards and precautions. Installation of Electronic and Communication systems,	24
	Electrical layout in buildings Basic planning and layout of installations within a building complex. Main and distribution	

II	boards – Transformers – switch gears – substations – space requirement. Emergency supply-standby (Generators, invertors) & UPS. A specific design problem on this aspect.	24
III	**Elevator (Lifts)** Brief history, Types of Elevators and sizes like traction, Hydraulic etc., Double-decker, Sky lobby, lift lobby, lift interiors etc. Definition and components, elevating a building: i.e., location in building, serving floors, grouping, size, shape of passenger car, door arrangement etc. Brief introduction to Service requirements: Quality of service, quantity of service, time, passenger handling capacity, space and physical requirements, machine room spaces.	24
IV	**Escalators** Escalators- Definition, Application, Location and arrangement in building. Space requirement.	24
	TOTAL	96

Text Books:

1. Philips, Derek; *Lighting in Architectural Design;* 1st Ed.; 1964; McGraw Hill; New York.
2. Hopkenson, R.G. & Kay, J.D.; *The lighting of Buildings;* 1st Ed.; 1969; Faber & Faber; London.

Reference Books:

1. *National Building Code.*
2. *Electrical systems.*
3. Handbook of building Engineers in metric systems; 1968; New Delhi
4. Ambrose, E.P.; *Electric Heating;* 1st Ed,; 1968; John Wiley& Sons; New York.

Reading Materials:

1. *National Building Code*
2. Elevators, Escalators, Moving Walkways – Manufactures catalogues.

SYLLABUS (6th SEMESTER)

Paper IV/Subject Name: Acoustics		**Subject Code: IDS082D602**
L-T-P-C: 3-1-0-4	**Credit Units: 4**	**Scheme of Evaluation: T**

Objective: To develop the knowledge and skills required for understanding acoustics in building and its integration with Interior design.

Course Outcome:

On completion of this course, students will be able to

CO1: List Acoustical design requirements for different enclosed spaces e.g. halls, theatres, classrooms etc.

CO2: Relate Acoustics with Architecture and the behavior of sound in an enclosed space.

CO3: Apply the use of various material and its applications.

CO4: Analyze the sense of aesthetics and fundamental understanding of vision & sound

Prerequisite:

- Basic concepts of design and thinking.

Detailed Syllabus:

Modules	Topics & Course Contents	Periods
I	**Introduction to acoustics** What is Sound. Basic terminologies - frequency, pitch, tone, sound pressure, sound intensity and decibel scale, loudness, threshold of audibility, and pain, masking, sound and distance inverse square law.	12
II	**Behaviour of sound in enclosed spaces** Reflection of sound, Refraction of sound. Transmission of sound, diffraction of sound, nature of reflection from plane, convex and concave surfaces, Absorption of sound, sound absorption coefficient, reverberation, reverberation time calculation.	12
III	**Acoustical design and Materials** Acoustical design requirements for halls used for speech, drama and music, general purpose halls used for both speech and music.cinema, theatre, open air theatre. Study of auditorium designed and acoustically treated.. Sound absorbents, porous materials, panel or membrane absorbers, Absorption coefficients of indigenous acoustical materials.	12

IV	**Introduction to environmental noise and noise control** Noise and its classification, outdoor and indoor, noise, airborne noise and structure borne, impact noise, community and industrial noise. Means of noise control and sound insulations	12
	TOTAL	48

Text Books:

1. *"Architectural Acoustics"* by David Egan.
2. *"Acoustic Design for the Home Studio"* by Mitch Gallagher

Reference Books:

1. Leslie L Doelle *"Environmental Acoustics*".
2. Knudson, Vern "*Acoustical Designing in Architecture* "

Reading Materials:

1. Prich, Peter. "*Acoustics: Noise and Building*"

SYLLABUS (6th SEMESTER)

Paper V/Subject Name: Project Management		**Subject Code: IDS082D603**
L-T-P-C: 3-1-0-4	**Credit Units: 4**	**Scheme of Evaluation: T**

Objective: The objective of the course **Project Management (IDS132G605)** is to expose the students to the currently prevalent techniques in the planning, programming and management of a project**.**

Course Outcome:
On completion of this course, students will be able to:

CO1: Relate the knowledge of fundamentals of project management with the help of graphical guidelines of networks and events, which will greatly enhance the professional ability of an Interior Designer.
CO2: Relate the knowledge of the methodology of executing a Project with the concepts of planning, scheduling and controlling which will greatly enhance the professional ability of an Interior Designer.
CO3: Develop the knowledge of Project Monitoring which will enhance in assessing the costs and risks of projects.
CO4: Categorize about different Project Contracts, types and documents and the management and also have the knowledge about Tenders and tendering documents.

Prerequisite:
- Basic understanding and knowledge of Design and construction process of a Project
- Basic knowledge of mathematical calculations.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Introduction, Elements of Network & Fundamentals of Project Management** Need of Project planning, scheduling & management. Method of planning & programming. Role of Stakeholders in projects Work breakdown structure, Life cycle of a project. Event, activity, dummy, network rules, graphical guidelines for network, numbering of events. Qualities of an ideal organization	12
II	**Project Planning and Scheduling** Project initiation, planning and scheduling phases	12

	Use of management techniques- Bar Chart, Mile stone Chart CPM network analysis &PERT time analysis, time computation & network analysis.	
III	**Project Monitoring, Time reduction and Optimization** Project cost, Indirect project cost, Direct project cost, Slope of the direct cost curve. Project Cost Analysis; Risk Analysis Tools for monitoring and control Project closing; Pre-termination of project Project completion audit	12
IV	**Contract Management and Tendering Process.** Contractual Approach; Contract types and documents Pre-Contract stage; Post Contract Stage Contract Management Tender document, e-Tendering, FIDIC etc.	12
	TOTAL	48

Text Books:

1. Gopalakrishnan P., Rama Moorthy V.E., (2014), "*Textbook of Project Management*", Trinity Press

Reference Books:

1. Punmia B.C., Khandelwal K.K., (2013), "*Project Planning and Control with PERT and CPM*", Laxmi Publications (P) Ltd.
2. Jerome D.Wiest and Ferdinand K.Levy, *A Management Guide to PERT, CPM*, prentice Hall of India Pub, Ltd., New Delhi, 1982
3. 2. R.A. Burgess and G.White, *Building production and project Management*, The construction press, London, 1975

Reading Materials:

1. Scrum: The Art of Doing Twice the Work in Half the Time by Jeff Sutherland and J.J. Sutherland
2. A Guide to the Project Management Body of Knowledge by Project Management Institute
3. Project Management for The Unofficial Project Manager by Kory Kogon, Suzette Blakemore, & James Wood
4. Fundamentals of Project Management by Joseph Heagney
5. Making Things Happen: Mastering Project Management by Scott Berkun
6. Rescue the Problem Project: A Complete Guide to Identifying, Preventing, and Recovering from Project Failure by Todd Williams.

SYLLABUS (6th SEMESTER)

Paper /Subject Name: Rendering and Post Production Software **Subject Code: IDS082S611**

L-T-P-C: 0-0-4-2 **Credit Units: 2** **Scheme of Evaluation: P**

Objective: The objective of the course **Rendering and Post Production Software** is to equip the students with skills required in using computer as a digital media for design and preparation of 3D images of Interior drawings and structures**.**

Course Outcome:

On completion of this course, students will be able to

CO1: Define Graphic tools to understand the elements of a building.

CO2: Outline the application of technology and construction as part of the design process.

CO3: Apply graphic representation via computing tools / methods.

CO4: Examine how digital design software is used in the industry for the production of accurate and detailed interior and architectural drawings.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**A. REVISION OF GOOGLE SKETCHUP AND INTRODUCTION TO LUMION:** General overview of Lumion. **B. WORKING WITH LUMION:** Why to use Lumion and what final quality we can get with this application? Will help identify and correct some common mistakes, preventing problems with Lumion. How to clean and use CAD drawings to start realistic modelling	12
II	**PREPARING THE SCENE:** Preparing the 3d model/collide files to make export ready, importing the model, and organizing scene in Lumion using layers and additional menus.	12
III	**A. BUILDING THE ENVIRONMENT:** Adding detail to the scene and learn how to sculpt the landscape and change the Weather and start populating the scene with the numerous models that is available with Lumion. **B. CREATING MATERIALS:** how to use and tweak more than 500 ready-to-use materials that Lumion has. Where to find textures and how to prepare them to be used along with Lumion materials.	12
IV	**A. PREPARING THE RENDER:** What composition is and how to make the scene more appealing, and how to use the Photo and Video modes to export a 2D element. **B. POST PRODUCTION:** How to give a special touch to the output from Lumion. Using Photoshop.	12

	48

Text Books:

1. Ciro Cardoso,"*Getting Started with Lumion 3D",* Pact Publishing.

Reference Books:

1. User manual & tutorials of Google Sketch Up software.
2. User manual & tutorials of Lumion software

Reading Materials:

1. Ciro Cardoso, Lumion 3D Best Practices: Explore the best practices to build architectural visualizations, Pact Publishing.

SYLLABUS (7th SEMESTER)

Paper /Subject Name: Interior Design VII (Health Care) **Subject Code: IDS082C711**

L-T-P-C: 0-0-8-4 **Credit Units: 04** **Scheme of Evaluation: S**

Objective: The objective of the course **Interior Design VII (IDS132C711)** is to develop the skills for designing healthcare spaces and environments.

Course Outcome:

On completion of this course, students will be able to

CO1: Define design skills within the constraints of a given interior design project brief.

CO2: Explain the design along with the importance of presentation drawings.

CO3: Organize adequate facilities for healthcare, care givers, work, relaxation, comfort, privacy, aesthetics, and maintenance through design

CO4: Categorize proper materials, services, fittings and fixtures in a designed healthcare interior space.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	Introduction of Design Fundamentals & Measured drawing • Introduction of the design project • Comprehension of spatial units • Use of design principles, anthropometry & ergonomics • Fundamentals of Universal Design, acoustics, lighting schemes, colour concepts & use of materials. • Measured drawing layout of the space for the proposed interior.	24
II	Design Development of Spaces (Foyer, lobby, waiting areas, OPD, Rooms, Services etc.) • Theme • Schematic & Conceptual Drawings, • Colour scheme • Signages • Final Drawings (plan, section, elevation, views)	24
III	Design Development w.r.t lighting and furniture arrangements of ICU's and OT's. • Theme • Schematic & Conceptual Drawings • Colour scheme • Specification of materials used • Specific requirements. • Final Drawings (plan, section, elevation, views)	24
IV	Time problem	24

	• As per the requirement of the concerned teacher	
TOTAL		96

Text Books:

1. Diamonstein, Barbaralec (1982)*; Interior Design: The New Freedom*, 1st Ed.; Rizzoli International Publications; New York

Reference Books:

1. Diamonstein, Barbaralec (1982); *Interior Design: The New Freedom;* 1st Ed.; Rizzoli International Publications; New York.
2. Poore, Jonathan (1994); *Interior Colour by Design;* 1st Ed.; Rockport Publishers;
3. Sha, Rikuyo (1987); *Worldwide Interiors: International Federation of Interior Architects & Designers;* Japan.

Reading Materials:

1. Ulrich RS (1991). Effects of interior design on wellness: theory and recent scientific research. Journal of Health Care Interior Design: Proceedings from the Symposium on Health Care Interior Design. Symposium on Health Care Interior Design. PMID: 10123973.
2. Phares, E. G. (2011). The State of Evidence-Based Design in Healthcare Interior Design Practice: A Study of Perceptions, Use, and Motivation. Retrieved from http://purl.flvc.org/fsu/fd/FSU_migr_etd-0292

SYLLABUS (7th SEMESTER)

Paper II/Subject Name: Estimation, Costing & Tendering **Subject Code: IDS082C701**

L-T-P-C: 3-1-0-4 **Credit Units: 04** **Scheme of Evaluation: T**

Objectives: The objective of **Estimation, Costing & Tendering (IDS132C703)** is to develop the necessary skills for estimation and writing specifications for various types of building interiors, development and tendering work with finding out the costs for projects.

Course Outcomes:

After successful completion of the course, student will be able to

- **CO1:** Define various terminologies related to estimation.
- **CO2:** Illustrate an understanding on the methods to be used for performing an estimation based on learning's.
- **CO3:** Apply various methods of estimation to find the cost of projects.
- **CO4:** Dissect the process of tendering and bidding based on proper estimation.

Detailed Syllabus:

Modules	Topics / Course content	Periods
I	**Introduction:** 1. Importance of Estimation, Costing and Tendering. 2. Types of measurements, modes of measurements: methods of taking out quantities, preparation of schedule or bill of quantities. 3. Study of local SR rates, market rates, and measurement book (MB), Abstract Sheet, RA bill. Interim and final certificate.	12
II	**Approximate and Detailed Estimation:** 1. Load bearing and RCC framed structure cost by using PWD rates to find approximate estimate. 2. Load bearing and RCC framed structure cost using measurement book, abstract sheet, PWD rates to find detailed estimation.	12
III	**Rate Analysis:** 1. Rate analysis of various items of work: preparation of various items of work in the interior works. 2. Detailed rate analysis of Interior items as per current market rates for information only. 3. Percentage of various materials used in building interior items like Plywood, Putty, Tiles, Metal, Laminates, Paints, etc.	12
IV	**Tendering:** 1. Types of Tender documents, Particulars of Tender Document. 2. Tender Floating Process, Technical bid and price bid. 3. Scrutiny of tender document.	12
Total		**48**

Text Books:

1. "Estimating and Costing" by S K Dutta.
2. "Estimating" by SC Rangwala.

Reference Books:

1. Neufert, Peter; Neufert’s architects' data; 4th Ed.; 2012; John Wiley; New Delhi

Reading Material:

1. PWD / CPWD rates as per applicable year.

SYLLABUS (7th SEMESTER)

Paper II/Subject Name: Illumination **Subject Code: IDS082C702**

L-T-P-C: 3-1-0-4 **Credit Units: 04** **Scheme of Evaluation: T**

Objectives: The objective of **Illumination (IDS132C702)** is to develop insight into the factors to be considered while planning the lighting of a space, to learn to evaluate the illumination available at task in relation to different activities and plan appropriate lighting in different spaces, and know the effect of light and colour together on interior spaces.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Define various terminologies related to lighting and illumination.
CO2: Illustrate an understanding on the methods quantity and quality of illumination.
CO3: Apply various methods of lighting types and luminance in various projects.
CO4: Analyze the types of lighting fixtures for indoors and outdoors spaces and areas.

Detailed Syllabus:

Modules	Topics / Course content	Periods
I	**Introduction to Lighting in Interior** • The household activities with special reference to light requirement • Cultural and social aspects of lighting • Physiology of vision • Lighting sources: natural lighting and artificial lighting (traditional to modern) Light measurements and units of measurement of lighting	12
II	**Quantity & Quality of Illumination** **Quantity of Illumination** • Factors affecting the quantity of illumination in a room: room proportion, colour, texture and cleanliness of room surface, lamp lumen, lamp lumen depreciation • Competition of room index, coefficient of utilization, maintenance factor of luminance • Planning lighting installation for a given interior space • Evaluation of illumination at task/work place against the recommended requirements of illumination for various activities (ISI & IES recommendations) **Quality of Illumination** • Colour rendition • Spatial distribution of light: direct, indirect, diffused • Glare: illuminance contrast, illuminance uniformity	12
III	**Types of Lighting** • Local & general lighting • Applied lighting • Architectural lighting • Recessed lighting • Luminous walls & ceilings **Luminance & Lighting**	12

	Controls type, selection, care, maintenance and economic use, lamp holders, lighting switches, motion sensors.	
IV	**Lighting for Outdoor Living & Gardens** Types of lighting fixtures in Outdoor living areas, Pathways, Gardens.	12
Total		**48**

Text Books:

1. Philips, Derek; *Lighting in Architectural Design;* 1st Ed.; 1964; McGraw Hill; New York.
2. Hopkenson, R.G. & Kay, J.D.; *The lighting of Buildings;* 1st Ed.; 1969; Faber & Faber; London.

Reference Books:

1. *National Building Code.*
2. *Electrical systems.*
3. Handbook of building Engineers in metric systems; 1968; New Delhi
4. Ambrose, E.P.; *Electric Heating;* 1st Ed,; 1968; John Wiley& Sons; New York.

Reference Materials:

1. Daylighting and Integrated Lighting Design / Christopher Meek, Kevin van den Wymelenberg
2. Effective Daylighting with High-Performance Facades: Emerging Design Practices / Kyle Konis, Stephen Selkowitz
3. Light and Color in the Outdoors / Marcel Minnaert

SYLLABUS (7th SEMESTER)

Paper III/Subject Name: Minor Project		**Subject Code: IDS082C712**
L-T-P-C: 0-0-16-8	**Credit Units: 08**	**Scheme of Evaluation: P**

Objective:

The objective of the course **Minor Project (IDS132C712)** is to integrate the learning of the current semester which will establish the research component that leads to thesis in next semester.

Course Outcome:

On completion of this course, students will be able to –

CO1: Define research area, with a formulated aim, objections, scope, and limitations of the study.

CO2: Demonstrate basic research principles and research methods, report writing skills and dissertation writing.

CO3: Apply strong theoretical foundation, clarity of thought to orient the study to structured research.

CO4: Examine this research and use the same for pre-design study, amounting to literature review and relevant case studies for next semester.

Prerequisite:

- Basic concepts of critical understanding, logical reasoning, and structured writing.

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	**Introduction to the course and discussion on the objectives:** Discussion of research methods, understanding the applicability of various techniques of design-oriented research. Learning from examples, case studies and group presentations.	48
II	**Identification of Research area and gap:** •Identify the broad study area for thesis based on literature review and case study, and its oral and visual presentation, interpretation drawings, visual presentation techniques with infographics. • Literature review and identification of research area and stating the research question. • Presentation on-Selection of topic, reason for selection, justification, synopsis.	48
III	**Developing a structural framework:** •Discussion on the methodology, the types of data collection namely primary and secondary. • Site/ case studies to be conducted, literature case study and documentation, review of case study; its significance and conclusion. Formulation of probable study/ research outcomes etc.	48
IV	**Content development, Data processing and Research outcome:**	48

	Detailed study and finalization of research parameters, comparative study/ field study/qualitative data collection/ questionnaire survey. Live case study/survey/ direct observation etc; and documentation, review of case study, usefulness of case study to the selected topic; conclusion from case study. •Report writing, identifying live/ hypothetical Thesis scopes within the study area and exercise on synopsis writing based on the same research area. Presentation on the actual topic based on conclusions from case studies and research; preparation of report based on research conducted under various heads.	
TOTAL		192

Text Books:

1. Borden, I. and Ray, K.R.; *The Dissertation: An Architecture student's handbook*, Oxford : Architectural Press, 2006.

Reference Books:

1. Anderson, J. and Poole, M; *Thesis and Assignment Writing*; Brisbane: John Wiley, 1998
2. Fink, A.; *Conducting research literature reviews: from Paper to the Internet*; Thousand Oaks : Sage, 1998

Reading Materials:

1. Borden, I. and Ray, K.R.*; The Dissertation: An Architecture student's handbook;* Oxford : Architectural Press 2006, Edition 2
2. Muray, R., *Writing for Academic Journals*; Berkshire: Maidenhead, Open University Press, 2005

SYLLABUS (8th SEMESTER)

Paper /Subject Name: Startup, Ventures & Entrepreneurship Subject Code: IDS082C801

L-T-P-C: 3-1-0-4 Credit Units: 4 Scheme of Evaluation: T

Objective:

The objective of the course **Start Up Ventures and Entrepreneurship (IDS132C801)** is to inculcate entrepreneurship and encourage innovative thinking for start-ups.
It also aims to promote self-employment and encourage creative thinking to start one's own business.

Course Outcome:

On completion of this course, students will be able to

CO1: Define entrepreneurship and start-up ventures and terms related with it.
CO2: Demonstrate the possibilities of being self-dependent and aiding in the economic growth of the country.
CO3: Develop understanding of market and govt. policies promoting entrepreneurship.
CO4: Discover organizational relations and their impact on building start-ups and entrepreneurship setups.

Prerequisite:

- **No prerequisite.**

Detailed Syllabus:

Modules	Topics (if applicable) & Course Contents	Periods
I	Pre-requisites for Start-ups and Entrepreneurship Motivation Germination of ideas and Utility of an Idea. Study of Socio-political trends Trends in Start-ups Market Research Land, Labour Capital and Organization.	**12**
II	Marketability Consumer Base Revenue Model SWOT Analysis	**12**
III	Forward and backward linkages, Packaging Pricing and Branding Selection of technology Production Setup Organizational Hierarchy Good Manufacturing Practices	**12**
IV	Government rules and Regulations in E-Commerce portals, Bank Syndication, Project report preparation, Certification and Accounts.	**12**

TOTAL	48

Text Books:

1. *Disciplined Entrepreneurship*, Bill Aulet, Willey

Reference Books:

1. Jessica Livingston ; *Founders at Work: Stories of Startups' Early Days ; 2009*
2. Start With Why : Simon Sinek – Founder of The Optimism Company
3. Business Growth and Management Books : eff Hoffman – Co-Founder and ex-CEO of Priceline, David Finkel – CEO of Maui Mastermind

Reading Materials:

1. (PDF) Fundamentals of Entrepreneurship Development (researchgate.net)

SYLLABUS (8th SEMESTER)

Paper /Subject Name: Major Project		**Subject Code: IDS082C822**
L-T-P-C: 0-0-24-12	**Credit Units: 12**	**Scheme of Evaluation: S**

Objective: The objective of the course **Major Project (IDS132C822)** is to translate knowledge of abstract design principles through enhancement of thought process into a workable design and showcasing that for a final complete project.

Course Outcome:

On completion of this course, students will be able to

CO1: Define adequate facilities for work, relaxation, comfort, privacy, aesthetics, and maintenance through design and proper choice of materials, services, fittings and fixtures in interiors.

CO2: Develop design skills within the constraints of a given interior design project and showcase its complete design language to completion

CO3: Utilize the time to showcase hands on experience and understanding of basic infrastructural requirements

CO4: Analyze critically with a design eye and come up with strategic design solutions

Prerequisite:

- Proper concepts of design and drafting.
- Proper knowledge and understanding of Interior Design.

Detailed Syllabus:

Modules	Topics & Course Contents	Periods
I	**Synopsis, Case Study, Site Analysis and Area Programming:** • Synopsis - Brief introduction of the proposed thesis / project. • Literature study and Case Studies - Live & literature, to form a basis for their own design. • Site Analysis - Record and evaluate information on the site and its surroundings, and to use this evaluation in the design response. Area Analysis and Programme - Comparative statement of the various available design standards, areas provided in the various case studies and the area requirements, so that the area requirements for the various functions / spaces for the proposed project can be finalized.	72
II	**Schematic Design:** • Generate ideas on thebasis of the studies (case studies / literature studies / area analysis) conducted so far in the form of conceptual drawings, sketches and models. Basic concept explaining the principal ideas / thought process for the project in terms of planning / built form / massing of different components, leading	72

	to the design, through sketches / 3D images / block models etc	
III	**Design Detailing:** • The schematic drawings presented in the previous module needs to be detailed out as per the comments/ suggestions received from the guides and the reviewers. The detailed drawings as per the final area programme with due consideration to structural and service requirements of the project needs to be prepared.	72
IV	**Design Finalization:** • Pre-Final Design - Final drawings, views, models, etc. incorporating the comments received in the previous reviews. Final Thesis Submission – Submission of all the submittals (drawings, views, models, report, etc.) complete in all respects as per the comments and suggestions received from thesis guide and various review members.	72
	TOTAL	288

Text Books:

1. De Chiara, Joseph and Crosbie, Michael J. (2011). Time saver standards for building types, 2nd Ed. *Tata McGraw Hill*, New Delhi.
2. As per requirement or suggested by guide.

Reference Books:

1. Neufert, Peter. (2012) Neufert's architects' data, 4th Ed. *John Wiley, New Delhi*
2. Ramsay and Sleeper. (2008). Architectural graphic standard. 11th Ed. *John Wiley, New York*
3. As per requirement or suggested by guide.

Reference Materials:

1. Carlson, C. (2022, December 12). Dezeen's top 10 home interiors of 2022. Retrieved December 14, 2022, from dezeen: https://www.dezeen.com/2022/12/12/top-home-interiors-2022-review/
2. Nabil, S., & Kirk, D. (2021). Decoraction: a Catalogue for Interactive Home Decor of the Nearest-Future. *Proceedings of the Fifteenth International Conference Tangible, Embedded, and Embodied Interaction* (pp. 1-13). Salzburg: Association for Computing Machinery, New York.
3. Werner, C. M. (1987). Home Interiors: A Time and Place for Interpersonal Relationships. *Environment and Behaviour* .