



ROYAL GLOBAL UNIVERSITY  
— GUWAHATI —

## **ROYAL SCHOOL OF DESIGN (RSD)**

### **DEPARTMENT OF INTERIOR DESIGN**

#### **COURSE STRUCTURE & SYLLABUS (BASED ON NATIONAL EDUCATION POLICY 2020)**

#### **FOR B.I.D. (BACHELOR IN INTERIOR DESIGN) (4 YEARS SINGLE MAJOR)**

**W.E.F AY - 2025 – 26**

<b>1st Semester Major (Core)</b>				
<b>Sl. No.</b>	<b>Subject Code</b>	<b>Names of subjects</b>	<b>Level</b>	<b>C</b>
1	IDS082M111	Design Thinking	100	3
2	IDS082M112	Free Hand Drawing & Geometrical Constructions	100	3
<b>Minor</b>				
3	IDS082N111	Elements and Principles of Design	100	3
<b>Interdisciplinary</b>				
4	--	Introduction to Indian Knowledge System - I	100	3
<b>Ability Enhancement Course (AEC)</b>				
5	AEC982A101	Communicative English and Behavioral Science-I	100	2
<b>Skill Enhancement Course (SEC)</b>				
6	IDS082S111	Carpentry Workshop	100	3
<b>Value Addition Course (VAC)</b>				
7	--	VAC – I (to be chosen from a basket of courses)	100	3
<b>SWAYAM COURSE</b>				
8		INTERIOR DESIGN by Prof. Smriti Saraswat, IIT Roorkee (8 weeks)	100	3
<b>Total Credit: 20</b>				

<b>2nd Semester Major (Core)</b>				
<b>Sl. No.</b>	<b>Subject Code</b>	<b>Names of subjects</b>	<b>Level</b>	<b>C</b>
1	IDS082M211	Basic Design (Elements of Design, Anthropometry, Ergonomics)	100	3
2	IDS082M212	Three-Dimensional Graphics	100	3
<b>Minor</b>				
3	IDS082N211	Colour Theory and Application	100	3
<b>Interdisciplinary</b>				
4	--	Introduction to Indian Knowledge System – II	100	3
<b>Ability Enhancement Course (AEC)</b>				
5	AEC982A201	Communicative English and Behavioral Science-II	100	2
<b>Skill Enhancement Course (SEC)</b>				
6	IDS082S211	Computer Application -I	100	3
<b>Value Addition Course (VAC)</b>				
7	--	VAC I (select one course from a basket of course)	100	3
<b>Total Credit: 20</b>				

<b>3rd Semester</b>				
<b>Major (Core)</b>				
<b>Sl. No.</b>	<b>Subject Code</b>	<b>Names of subjects</b>	<b>Level</b>	<b>C</b>
1	IDS082M311	Interior Design – I	200	4
2	IDS082M312	Interior Materials & Construction Techniques - I	200	4
<b>Minor</b>				
3	IDS082N311	History & Theory of Interior Design	200	4
<b>Interdisciplinary</b>				
4	IDS082I311	Basket Course	200	3
<b>Ability Enhancement Course (AEC)</b>				
5	AEC982A301	Communicative English and Behavioral Science-III	200	2
<b>Skill Enhancement Course (SEC)</b>				
6	IDS082S311	Computer Application -II	200	3
<b>Total Credit: 20</b>				

<b>4th Semester</b>				
<b>Major (Core)</b>				
<b>Sl. No.</b>	<b>Subject Code</b>	<b>Names of subjects</b>	<b>Level</b>	<b>C</b>
1	IDS082M411	Interior Design – II	200	4
2	IDS082M412	Interior Materials & Construction Techniques – II with Material Specification	200	4
3	IDS082M443	Furnishing, finishing and fittings	200	4
<b>Minor</b>				
4	IDS082N411	Interior Design Representation Techniques	200	3
5	IDS082N412	Material Documentation & Specification	200	3
<b>Ability Enhancement Course (AEC)</b>				
6	AEC982A401	Communicative English and Behavioral Science-IV	200	2
<b>Total Credit: 20</b>				

<b>5th Semester</b>				
<b>Major (Core)</b>				
<b>Sl. No.</b>	<b>Subject Code</b>	<b>Names of subjects</b>	<b>Level</b>	<b>C</b>
1	IDS082M511	Interior Design – III	300	4
2	IDS082M512	Interior Materials & Construction Techniques – III with Material Specification	300	4
3	IDS082M543	Building Services - I	300	4
<b>Minor</b>				
4	IDS082N511	Interior Landscape	300	4
<b>Summer Internship (SI)</b>				
5	IDS082M521	Internship	300	4
<b>Total Credit: 20</b>				

<b>6th Semester</b>				
<b>Major (Core)</b>				
<b>Sl. No.</b>	<b>Subject Code</b>	<b>Names of subjects</b>	<b>Level</b>	<b>C</b>
1	IDS082M611	Interior Design – IV	300	4
2	IDS082M612	Interior Materials & Construction Techniques - IV	300	4
3	IDS082M643	Building Services - II	300	4
4	IDS082M614	Working Drawing - I	300	4
<b>Minor</b>				
5	IDS082N641	Vastu in Interior Design	300	4
<b>Total Credit: 20</b>				

<b>7th Semester</b>				
<b>Major (Core)</b>				
<b>Sl. No.</b>	<b>Subject Code</b>	<b>Names of subjects</b>	<b>Level</b>	<b>C</b>
1	IDS082M711	Interior Design – V	400	4
2	IDS082M702	Research Methodology	400	4
3	IDS082M703	Project Management and Estimation Costing	400	4
4	IDS082M714	Working Drawing - II	400	4
<b>Minor</b>				
5	IDS082N715	Furnishing, finishing and fittings	400	4
<b>Total Credit: 20</b>				

<b>8th Semester</b>				
<b>Major (Core)</b>				
<b>Sl. No.</b>	<b>Subject Code</b>	<b>Names of subjects</b>	<b>Level</b>	<b>C</b>
1	IDS082M841	Advanced Services	400	4
<b>Research Methodology</b>				
2	IDS082N812	Dissertation/Pre-Thesis	400	4
<b>Research Project</b>				
4	IDS082M813	Thesis / Major Project	400	12
		OR		
5		Indoor Landscape : Role of changing Indoor environment.		4
6		Color and Materials : Role of changing Indoor environment.		4
7		Affordable Interior Grandeur : Complete Solution of one Project		4
<b>Total Credit: 20</b>				

1 <sup>st</sup> Semester		
<b>Paper 1 Major Course</b>	<b>Design Thinking</b> <b>L-T-P-C : 1-0-4-3 Credits : 3</b> <b>Scheme of Evaluation : Practicum/Jury</b>	<b>Subject Code:</b> IDS082M111 <b>Level : 100</b>

**Objective:** The objective of the course **Design Thinking (IDS082M111)** is to develop cognitive, strategic and practical thinking and ideation processes by which design concepts are developed.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Remember the use of abducted and productive reasoning	BT1
2	Understand the principles, theories and models of design thinking	BT2
3	Apply and adopt solution focus strategies.	BT3
4	Analyze and resolve design problems in creative ways.	BT4

**Prerequisite:**

- No Prerequisites

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Theory)	<b>Introduction to Design Thinking</b> What is Design? What is Design thinking? Design Thinking models	6	15
II (Studio)	<b>Basic Elements of Design</b> Simplicity, Unity, Proportion, Emphasis, Rhythm, Balance Glossary of technical words, natural structures and intuitive understanding their behavior	6	15
III (Theory)	<b>Thinking Techniques</b> Principles in generative, convergent, lateral, interactive, check lists, analysis and synthesis simulation, and implementations of intentions.	5	15
IV (Studio)	<b>Design tools</b> Mind mapping, Empathy mapping, Brain storming, Positive techniques for creativity, Creative pause, Focus, Challenge, alternatives, concepts, sensitizing techniques, group or individual techniques. Simple design exercises.	5	15

		TOTAL	82

**Notional Credit Hours for the course:** 30 x 3 = 90

<b>Total Credits in the Paper</b>	<b>Lecture/Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
3	22 hours	60 hours	8 hours
			Poster making, Group Work, Debates, Discussions and Presentations

**Text Books:**

1. Nigel Cross (2011); Design Thinking: Understanding How Designers Think and Work, 1<sup>st</sup> Ed.

**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

**Reading Materials:**

1. Brown. T. (2008) Design Thinking Thoughts: Definitions of Design Thinking retrieved from <https://designthinking.ideo.com/?p=49>
2. Kolko, J. (2015, Sep) The Evolution of Design Thinking. Harvard Business Review
3. Liedtka, J. et al (2013) Solving Problems with Design Thinking: Ten Stories of What Works. Columbia University Press
4. Osborn, A. (1953/2001) Applied Imagination: Principles and Procedures of Creative Problem Solving. Creative Education Foundation Press.
5. Liedtka, J. (2018, Sept-Oct) Why Design Thinking Works, Harvard Business Review

1 <sup>st</sup> Semester		
<b>Paper 2 Major Course</b>	<b>Free Hand Drawing &amp; Geometrical Construction</b> <b>L-T-P-C: 1-0-4-3 Credits: 3</b> <b>Scheme of Evaluation : Studio/Jury</b>	<b>Subject Code:</b> IDSS082M112 <b>Level : 100</b>

**Objective:** The objective of the course **Free hand drawing and Geometrical Construction (IDSS082M112)** is to examine the various components of drawing: line, value, texture, composition, and spatial dynamics. Students learn the most important techniques used in the basics of freehand drawing (such as pencils, pens, colored pencils). The development of the student's ability in selecting assets forming and the right color and sensation.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	How to draft technical drawings.	BT1
2	Translate visuals on to drawings.	BT2
3	Utilizing basic knowledge of architectural drawing with understanding of plans, elevation, sections.	BT3
4	Apply visual drawing techniques to create space and depth.	BT3

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Studio)	<b>Basics of Drafting:</b> Use of drawing tools and materials. Understanding design element and visual perception. Forms analyzed through spatial elements like points, line, curves plane and volume.	6	15
II (Studio)	<b>Fonts</b> Developing writing style of alphabets and numbers for drawings <b>Scale</b> Engineering scale and Graphical scale	6	15
III (Studio)	<b>Orthographic Projections</b> Plan, Elevation, Section	5	15
IV (Studio)	<b>Isometric &amp; Axonometric Projections</b> Preparation of views of basic figures	5	15
<b>TOTAL</b>		<b>82</b>	

**Notional Credit Hours for the course: 30 x 3 = 90**

<b>Total Credits in the Paper</b>	<b>Lecture/Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
3	22 hours	60 hours	8 hours
			True Scale representations, Measure drawing, Exposure to different mediums (Charcoal, Acrylic etc.)

**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

**Reading Materials:**

1. Maria Bako, Different projecting methods in teaching spatial geometry. European Research in Mathematics Education.

1 <sup>st</sup> Semester		
<b>Paper 6 SEC</b>	<b>Carpentry Workshop L-T-P-C: 1-0-4-3 Credits: 3 Scheme of Evaluation : Studio/Jury</b>	<b>Subject Code: IDS082S111 Level : 100</b>

**Objective:** The objective of the course **Carpentry Workshop (IDS082S111)** is to give an introduction to the basic principles governing structural systems.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define basic knowledge of working with structural materials	BT1
2	Interpret the techniques of planning, chiselling, pasting, fixing and welding to learn the use of hand tools.	BT2
3	Make use of practical usage of equipment's, processes and its application.	BT3
4	Discover skill in creating designs and making art objects	BT4

**Prerequisite:**

- Basic concepts of art and scales.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Practical)	<b>Installation (Part I) Carpentry (Timber):</b> 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 of furniture.	6	15
II (Practical)	<b>Installation (Part II)</b> Handling materials like POP. Gypsum. Aluminium etc. Understanding nailing. Screwing, riveting and their various conditions and types of applications.	6	15
III (Practical)	<b>Fabrication Installation</b> Introduction to welding equipment, processes and its applications. Hands on experience to come up with a product or installation.	5	15

IV (Practical)	<b>Masonry Installation</b> Installations with bricks and brick bats. Making of geometrical forms on the ground.	5	15
TOTAL		<b>82</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
3	22 hours	60 hours	8 hours
			Hands on assessment, Tool handling, Field Visit and Working with craftsmen.

**Text Books:**

1. Mackay, W.B. (2005) Building construction. 1<sup>st</sup> Ed. Donhead, 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 Strengthening of Carpentry Joints. Construction and Building Materials , 34-47.

2 <sup>nd</sup> Semester		
<b>Paper 1 Major</b>	<b>Basic Design</b> (Principles of Design, Anthropometry & Ergonomics) <b>L-T-P-C : 1-0-2-3 Credits : 3</b> <b>Scheme of Evaluation : Studio/Jury</b>	<b>Subject Code:</b> IDS082M211 <b>Level : 100</b>

**Objective:**

The objective of the course Basic Design (Principles of Design, Anthropometry & Ergonomics) (IDS082M211) is to develop a design sense and apply the basic design acumen, anthropometric observations in the visualization/ composition of spaces.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define design principles, basic human factors, anthropometrics, and ergonomics.	BT1
2	Demonstrate an ability to understand the importance of human factors, human proportions in designing functional spaces.	BT2
3	Apply principles of design, ergonomic aspects, and anthropometrical data of various activities for design development.	BT3
4	Examine interior work systems with respect to design elements, principles, and human factors.	BT4

**Prerequisite:**

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

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Studio)	Design Principles <ul style="list-style-type: none"> <li>• Lines: properties and nature of lines along with usage</li> <li>• Shape &amp; Forms: organic/ geometric shapes and understanding their role w.r.t space (positive/negative)</li> <li>• Textures: tactile texture, visual texture and how they are implied</li> <li>• Colour: Hue-Saturation, Value, Intensity, Nature of Colour, and implications, colour schemes</li> <li>• Principles of Design: Balance (symmetrical/asymmetrical), Contrast (anomaly, emphasis, subordination, Rhythm/ repetition, Proportion/scale, Harmony and unity, Variety, Radiation</li> </ul>	6	15

II (Theory)	Introduction to Anthropometry, 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.	6	15
III (Theory)	Human Physical Dimension, Human Body Structure and Function <ul style="list-style-type: none"> <li>• Static and dynamic anthropometry, stand posture- erect, anthropometry landmark: sitting postures, anthropometry: squatting and cross legged postures.</li> <li>• Posture and activity relation, posture and body supportive devices, chair characteristics, vertical surface, horizontal surface, movement, work counter (standing &amp; seating).</li> </ul>	5	15
IV (Studio)	Application through Design: <ul style="list-style-type: none"> <li>• Application of principles of design in: Room arrangement, Interior display and Furniture, Carpets.</li> <li>• Application of Ergonomics in Residential spaces.</li> </ul>	5	15
TOTAL		82	

**Notional Credit Hours for the course:** 30 x 3 = 90

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
3	22 hours	60 hours	8 hours
			Measured Drawing Group work/ presentation Ergonomics Model & Report Making

**Text Book:**

1. Elizabeth. D. Hutchinson; *Dimensions of Human Behaviour, Person and Environment*, Sage Publications, 2007.
2. Francis D.K. Ching, *Form, Space and Order*; John Wiley and Son, 2014
3. Charlotte & Peter Fiell; *Modern Furniture Classics Since 1945*, Thames & Hudson
4. 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.; 2<sup>nd</sup> Ed. 2011; Tata McGraw Hill; New Delhi
3. Neufert, Peter; *Neufert's Architects' Data*; 4<sup>th</sup> Ed.; 2012; John Wiley; New Delhi
4. Gerald F. Brommer; *Elements and Principles of Design: Student Guide with Activities*, 2004

**Study Material:**

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

2 <sup>nd</sup> Semester		
<b>Paper 2 Major Course</b>	<b>Three-Dimensional Graphics L-T-P-C: 1-0-2-3 Credits: 3 Scheme of Evaluation : Studio/Jury</b>	<b>Subject Code: IDS082M212 Level : 100</b>

**Objective:** The objective of the course **Three-Dimensional Graphics (IDS082M212)** is to orient and familiarize the students towards the principles of Design thinking, Visualization and representation with drawing materials and equipment.

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Choose rendering techniques for representing 2D and 3D drawings.	BT1
2	Demonstrate sciography, Human figures and accessories in 2D and 3D drawings.	BT2
3	Apply Learning of measure drawing with basic knowledge and understanding of Isometric, Oblique, Axonometric projections	BT3
4	Analyze 3D visualization based on perspective and sciography.	BT4

**Prerequisite:**

- Basic concepts of Design Thinking and Drafting.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Studio)	<b>One Point Perspective</b> Picture plane, Vanishing Point, Eye level, Station Point. Draw Objects	6	15
II (Studio)	<b>Two Point Perspective</b> Picture plane, Vanishing Point, Eye level, Station Point. Draw Objects	6	15
III (Studio)	<b>Sciography-1</b> Learning sociography of simple objects	5	15

IV (Studio)	<b>Sciography-2</b> Sciography in Perspective	5	15
	TOTAL	82	

**Notional Credit Hours for the course:** 30 x 3 = 90

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
3	22 hours	60 hours	8 hours
			True Scale representations, Measure drawing, Exposure to different mediums (Charcoal, Acrylic etc.)

**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:**

- 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/>
- Branco, J. M., & Thierry, D. (2015). Analysis and Strenghtening of Carpentry Joints. *Construction and Building Materials*, 34-47.
- 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.
- 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/](https://www.dezeen.com/2022/12/12/top-home-interiors-2022-review/)
- Crannell, A. (2010). Perspective drawings of reflective spheres. *Journal of Mathematics and the Arts*, 71-85.
- 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.
- 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.
- Olkun, S. (2003). Making Connections: Improving Spatial Abilities with Engineering Drawing Activities. *International Journal of Mathematics Teaching and Learning*.

- Werner, C. M. (1987). Home Interiors: A Time and Place for Interpersonal Relationships. *Environment and Behaviour*.
- Wright, F. L., Samona, G., & Mayor, A. H. (1960). Drawings for a Living Architecture. *Journal of the Society of Architectural Historians*, 129-131.

2 <sup>nd</sup> Semester		
<b>Paper 6 SEC</b>	<b>Computer Application I L-T-P-C: 1-0-2-3 Credits: 3 Scheme of Evaluation: Practicum/Jury</b>	<b>Subject Code: IDS082S211 Level : 100</b>

**Objective:** The objective of the course **Computer Application – I (IDS082S211)** is to familiarize students with basic usages of computer applications and orient students to the digital tools in the field of Interior Design.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Relate to the applications of computers in interior design.	BT1
2	Illustrate the usage of applications of computers in interior design.	BT2
3	Identify where to use software interior design.	BT3
4	Discover the methods of digital representation in interior design.	BT4

**Prerequisite:**

- Basic knowledge of computer.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Practical)	<b>Microsoft Word</b> Uses of MS Word in Interior Design: A. Creating a report of given interior design project : 1. Creation of cover page. 2. Writing an efficient report: contents of a technical interior design report. 3. Formatting a report: spell check, line spacing, proper use of fonts, formatting of text, use of rulers, borders, use of multilevel list, alignment and justification of text. 4. Inserting images, writing captions for images and formatting images. 5. Tables: creating tables in word, importing tables from excel, formatting of tables, text direction. 6. Creating pictorial graphs using tables. 7. Making the report print ready and printing.	6	15
II	<b>Microsoft Excel</b>	6	15

(Practical)	<p>Uses of MS Excel in Interior Design.</p> <p>A. Creating a format for Estimation and Costing in Ms Excel for given interior design project:</p> <ol style="list-style-type: none"> <li>1. Creating a table for cost estimation: identifying requirements of a comprehensive cost estimation table and using them for our project.</li> <li>2. Formatting an MS Excel table: Inserting rows and columns, modifying sizes of rows and columns, wrap text function, merge and center function, borders, color coding a table.</li> <li>3. Using formulae and filtering data in Ms Excel for Estimation and Costing.</li> <li>4. Making the report print ready and presentation of a table: Use of appropriate fonts, font sizes, use of color coding in MS Excel tables.</li> <li>5. Printing the sheet.</li> </ol>		
III (Practical)	<p><b>Microsoft Power point</b></p> <p>Uses of MS Power Point in Interior Design.</p> <ol style="list-style-type: none"> <li>1. Creating a presentation on a given interior design project: one presentation for client and one presentation for technical team (company).</li> <li>2. Creating a presentation: creating a cover page, contents of a presentation, visual communication of work through presentation, using fonts and font size, inserting images, delivering a presentation.</li> <li>3. Familiarization of power point interface, using templates, use of gridlines, using effects, slideshow, etc.</li> </ol>	5	15
IV (Practical)	<p><b>Project</b></p> <p>Students to be asked to create a report, an estimate format in excel sheet and a PowerPoint presentation on a given interior design project.</p>	5	15
<b>TOTAL</b>			<b>82</b>

**Notional Credit Hours for the course:** 30 x 3 = 90

<b>Total Credits in the Paper</b>	<b>Lecture/ Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
3	22 hours	60 hours	8 hours
			Group Work Presentation/ Report Making Office Visits

**Text Books:**

1. Microsoft office for windows by Sagman.
2. Introduction to computers with MS Office 2007, Leon, TMH Publications.

**Reference Books:**

1. Office 365 All-in-One For Dummies
2. Essential Office 365 Second Edition

**Reference Materials:**

3 <sup>rd</sup> Semester		
<b>Paper 1 Major</b>	<b>Interior Design I</b> <b>L-T-P-C: 1-0-6-4</b> <b>Credits: 4</b> <b>Scheme of Evaluation: Theory + Studio</b>	<b>Subject Code:</b> IDS082M311 <b>Level : 200</b>

**Objective:** The objective of **Interior Design I (IDS082M311)** 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.

After successful completion of the course, student will be able to -		
Sl. No.	Course Outcome	Blooms Taxonomy Level
1	Define the characteristics of designing elements and understanding the visual impacts w.r.t furniture's used during civilizations	BT1
2	Outline the basic design understandings, human functions and their implications for space requirements and circulation of space. Also, involve the parameters of design anthropometrics and ergonomics, human activity, particulars of scale, materials etc.	BT2
3	Utilize basic human functions and their implications for space requirements for a proper design.	BT3
4	Analyse an existing space to identify issues, concerns & design potential.	BT4

**Prerequisite:**

- Basic Concept of Art

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Theory)	<b>History of Interior Design:</b> Study the characteristics of designing elements and understanding the visual impacts w.r.t furniture's used during early Egyptian, Mesopotamian, Greek period, roman period, middle ages, early medieval, Romanesque, gothic period.	15	5

	Example: Folding furniture, fitted furniture, wooden furniture, klismos, couches.		
II (Theory)	<p><b>Introduction to interior design problem</b>  <b>Study and Mapping:</b>  Study the parameters of design anthropometrics and ergonomics, human activity &amp; use of interior spaces &amp; furniture. Remember the particulars of scale, anthropometry, material and activity etc. Present them through detailed measured drawings and sketches.</p> <p><b>Understanding Design of an Individual Space:</b>  Basic design understandings, human functions and their implications for space requirements. Minimum and optimum areas for activities/ functions. Understanding user-group &amp; user-profile. Movement and circulation diagrams.</p>	10	30
III (Studio)	<p><b>Design of Components of a Residence:</b>  Applying the concepts and study learned to designing components of a residence, Eg: Kitchen, Bathroom, Bedrooms.</p> <p>Applying basic human functions and their implications for space requirements and thus understanding the functions and feasibility for real world application.</p>	10	30
IV (Studio)	<p><b>Time Problem – Related to main project: (Timeline – 2-3 days)</b>  Analysis of the existing space. Identify issues, concerns &amp; design potential. Basic human functions and their implications for space requirements. Minimum and optimum areas for mono functions &amp; furniture requirements. Movement and circulation diagrams.</p>	15	5
TOTAL		120	

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture / Tutorial	Studio / Practical	Experiential Learning
4	35 hours	70 hours	15 hours
			(Time from the Lecture Hours to be used for Presentation, Case study and site visit)

**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
3. Interior design; Ahmed,A.Kasu; 1st Ed.; 2010; Ashish Book Centre; Mumbai. ISBN8178131862
4. History of Architecture, Sir Banister Fletcher, CBS Publishers & distributors, New Delhi

**Reference Books:**

1. Ramsay and Sleeper; Architectural graphic standard; 11<sup>th</sup> Ed.; 2008; John Wiley; New York
2. Paul Laseau, Graphic Thinking for Architects and Designers, John Wiley & Sons.

3. Trewin Coplestone, Arts in Society, Prentice Hall Inc.
4. H. Gardner, Art through Ages.
5. Seetharaman, Premavathy; Interior Design & Decoration; 1st Ed.; 2009; CBS; New Delhi
6. Ching D.K; Architecture: Form, space & order; 1st Ed.; 2007; John Wiley; New York
7. Mary Gilliat Coyran, Interior Design Course, Octopus Ltd., London

**Reference Materials:**

1. Journal of Interior Design, Volume47, Issue-4.
2. David Fair, Design Graphics, Hodder and Stoughton.
3. Sherril Whiton, Interior Design & Decoration, Prentice Hall

<b>3<sup>rd</sup> Semester</b>		
<b>Paper 2 Major</b>	<b>Interior Materials and Construction Techniques-I L-T-P-C: 1-0-6-4      Credits: 4 Scheme of Evaluation : Theory + Studio</b>	<b>Subject Code: IDS082M312 Level : 200</b>

**Objective:** The objective of the course **Interior Materials and Construction Techniques –I (IDS082M312)** is to orient and equip the students with materials and products applied in Interior spaces with relevant construction technology.

After successful completion of the course, student will be able to -		
Sl. No.	Course Outcome	Blooms Taxonomy Level
1	Define the basic principles of Brick and Stone masonry.	BT1
2	Outline the properties, characteristics, strength, manufacture, processing and application of glass materials.	BT2
3	Utilize basic knowledge of building elements, their function and behavior under various conditions.	BT3
4	Analyze various aspects of Paint and Color scheme in the practical field.	BT4

**Prerequisite:**

- No prerequisites.

**Detailed Syllabus:**

<i>Modules</i>	<i>Topics (if applicable) &amp; Course Contents</i>	<i>Periods/ Hours</i>	
		<i>L</i>	<i>P</i>
I (Theory)	<b>Material: Glass</b> Composition and fabrication of glass, classification, types of glass- wired glass, fiber glass, rock wool, laminated glass, glass concrete blocks - their properties and uses in buildings. Commercial forms available – their physical and behavioral properties, tools and technology of its application in built forms. Material and workmanship, specifications, joinery details of Glass.	15	5
II (Studio)	<b>Composite masonry (Bricks, Stones, Fly Ash, AAC Blocks)</b> Types of masonry, walls and bonds, buttresses, arches, lintels and coping. Stone types and uses, stone fabrication and	10	30

	installation		
III (Studio)	<b>Arches</b> Types of Arches, materials, Design and construction.	10	30
IV (Theory)	<b>Paints, Coatings and Wall coverings</b> Characteristics of Paint Materials, coatings, grades, gloss level, Primers, Selection, specification, execution and inspection of the job, Dry Wall, Wall covering materials, installation, protection and Maintenance	15	5
TOTAL		120	

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture / Tutorial	Studio / Practical	Experiential Learning
4	35 hours	70 hours	15 hours
			(Time from the Lecture Hours to be used for Presentation and Market Survey)

**Text Books:**

3. Building construction; Mackay, W.B. ; 1st Ed.; 2005; Donheed; London.
4. Rangwala, "Building Materials".

**Reference Books:**

2. Bindra, S.P. and Arora, S.P. Building Construction: Planning Techniques and Methods of Construction, 19 ed. Dhanpat Rai Pub., New Delhi, 2000.
3. Moxley, R. Mitchell's Elementary Building Construction, Technical Press Ltd.
4. Francis D. Ching, Building Construction Illustrated, Wiley Publishers, 2008.
5. Lisa Godsey, Interior Design Materials and Specifications, Bloomsbury, 2017
6. Chudley, R; Construction technology; 2<sup>nd</sup> Ed.; 1987; ELBS; Harlow
7. Barry, R; Construction of building; 4<sup>th</sup> Ed.; 1999; East West Press; New Delhi.

**Reference Materials:**

1. Choice of Decorative Paints: Recommendation of Interior Designer and Dealers in <https://www.cceol.com/search/article-detail?id=193586>
2. The Influence of Building Structure on Human Perception in Interior Spaces in <https://eprints.tiu.edu.iq/852/>

3rd Semester		
<b>Paper 3 Minor</b>	<b>History &amp; Theory of Interior Design</b> L-T-P-C: 2-0-4-4 Credits: 4 Scheme of Evaluation : Theory+Practical	<b>Subject Code:</b> IDS082N311 <b>Level : 200</b>

**Objective:** The objective of the course **History & Theory of Interior Design (IDS082N311)** is to provide the student of Interior Design knowledge on various developments in Interior design through ages.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Recall the fundamentals of design	BT1
2	Interpret the elements of early Egyptian, Mesopotamian & Greek period.	BT2
3	Apply various design theories.	BT3
4	Analyse the various history and social context of furniture from different eras.	BT4

**Prerequisite:**

- Basic knowledge of computer.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Practical)	<b>Fundamentals of Design</b> Line, plane, volume, symmetry, rhythm, harmony etc.	8	12
II (Theory)	<b>Positive &amp; Normative Theory</b> Proxemics theory, privacy theory, assets & liabilities of group design etc.  <b>Early Egyptian, Mesopotamian &amp; Greek period</b> Characteristic & visual impact of furniture like Folding Furniture, Fitted furniture, Wooden furniture, Characteristic of Mesopotamian Furniture	8	12
III (Theory)	Greek Furniture (Importance – Chairs, Klismos, Couches etc.) <b>Roman Period&amp; Middle Ages</b>	8	12

IV (Practical)	(Chairs, stools, Couches & others) History and Social context Early Mediaeval, Romanesque, Gothic Furniture	8	12
TOTAL		<b>96</b>	

**Notional Credit Hours for the course:** 30 x 4 = 120

<b>Total Credits in the Paper</b>	<b>Lecture/ Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
4	32 hours	48 hours	24 hours
			Group Work Presentation/ Report Making Office Visits

**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.

3 <sup>rd</sup> Semester		
<b>Paper 6 SEC</b>	<b>Computer Application II</b> <b>L-T-P-C: 1-0-4-3 Credits: 3</b> <b>Scheme of Evaluation : Practicum/Jury</b>	<b>Subject Code:</b> IDS082S311 <b>Level : 100</b>

**Objective:** The objective of the course **Computer Application – II (IDS082S311)** is to familiarize students with basic usages of computer applications in making drawings and orient students to the digital tools in the field of Interior Design.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Show the applications of computers in interior design.	BT1
2	Illustrate the usage of applications of computers in interior design.	BT2
3	Experiment with where to use software interior design.	BT3
4	Inference the methods of digital representation in interior design.	BT4

**Prerequisite:**

- Basic knowledge of computer.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Practical)	Introduction to basics of AutoCAD: 1. Familiarization with AutoCAD interface. 2. Setting up drawing: standard units. 3. Introduction to drawing properties tab. 4. Setting up layers. 5. Create and Save AutoCAD drawing files 6. Define Positions using the Basic Entry methods.	6	15
II (Practical)	Learning to creating basic drawings in AutoCAD. Introduction to use of various commands used for drawing creation: LINE, PLINE, REC, CIRCLE, ARC, OSNAP, etc. Introduction to use of various commands used for drawing modification:	6	15

	MOVE, COPY, TRIM, DIVIDE, OFFSET, CHAMFER, EXPLODE, ERASE, etc.  Creation of a composition using basic geometrical shapes in AutoCAD.		
III	Drawing of plan, section and elevation of a small residence in AutoCAD. i. Drawing of walls using LINE, PLINE, SPLINE, etc. ii. Creation of door and window using TRIM, CIRCLE, etc. iii. Creation of floor tiles using HATCH. iv. Creation of labels using MTEXT. v. Adding dimension using DIMENSION, DIMSTYLE. vi. Drawing and adding furniture using BLOCK, IMPORT.	5	15
IV	Learning to print (plot) a drawing in AutoCAD:  Page layout for printing and Viewport. Introduction to page setup manager. Setting required paper size and printer (plotter) for printing (A1, A2, A3). Setting Viewport margins and assigning plot area. Setting Plot scale, plot style table and paper orientation.	5	15
TOTAL			82

**Notional Credit Hours for the course:** 30 x 3 = 90

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
3	22 hours	60 hours	8 hours
			Group Work Presentation/ Report Making Office Visits

**Text Books:**

1. *Up and Running with AutoCAD 2015: 2D & 3D Drawing and Modelling*, Gindis, E; 1<sup>st</sup> Ed.; 2014; Elsevier; London.

**Reference Books:**

1. Seidler, D. R.; *Digital Drawing for Designers: A Visual Guide to AutoCAD 2012*; 1<sup>st</sup> Ed.; 2007; Fairchild Publications; London.
2. Moss, Elise; *Autodesk AutoCAD Architecture 2016 Fundamentals*; 1<sup>st</sup> Ed.; 2011; SDC Publications; London.
3. Omura, George & Benton, Brian C; *Mastering AutoCAD 2016 and AutoCAD LT 2016*; 1<sup>st</sup> Ed.; 2017; John Wiley & Sons; London.

4 <sup>th</sup> Semester		
<b>Paper 1 Major</b>	<b>Interior Design II</b> <b>L-T-P-C: 0-0-8-4</b> Credits: 4 Scheme of Evaluation: Studio/External	<b>Subject Code:</b> IDS082M411 <b>Level: 200</b>

**Objective:** The objective of the course **Interior Design II (IDS082M411)** is to familiarize students with Interior Design of a Residence and present the visualized output in 3d format making use of computer applications (Sketchup).

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	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.	BT1
2	Demonstrate critical thinking while designing a residential space and come up with strategic design solutions.	BT2
3	Utilize the Design Studio to gain hands on experience and understand basic infrastructural requirements	BT3
4	Discover the methods of 3d digital representation in interior design of a residence.	BT4

**Prerequisite:**

- Basic Knowledge of designing a residence along with drafting and digital presentation techniques.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Studio)	1. Designing of various activities in different rooms of a Residence and factors to be considered while designing. (Living room, Dining, Kitchen/Pantry, Bedroom(s), Balcony /open areas & Toilet(s). 2. Establishment of areas for different units based on function, furniture requirement & number of persons. 3. 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 Complete	6	26
II (Studio)	1. Floor Layouts, Sectional Elevations, and Furniture Layout of the Different Interior Spaces. Detail layout plan (/tablet plan) of individual space/unit, with 4 sectional elevations and detailed specifications.	6	26

	2. Design and detailing of furniture and interiors according to consumer ergonomics Application of Colour, Texture &. Pattern through Techniques of Rendering & Presentation. Visual and oral presentation of complete project		
III (Studio)	Introduction to and Familiarization with Sketchup: 1.Interface and basic commands: Introduction to the interface, setting up a drawing template, familiarization with large tool set, scenes, importing .dwg files, saving files, installing extensions, etc. 2. Drawing and Modifying: Drawing and Modifying objects line, rectangle, circle, arc, object properties, Units, dimensions, lines, and pen weight. Blocks, group, extrude, rotate, add texture, etc. 3.Presentation and Render: Learning analysis of a space to represent it as a final 3D model with renders or walkthrough.	12	20
IV (Studio)	Project: Students to be asked to create a 3D model of the residence in Sketchup and Render the output in software.	12	20
	TOTAL		128

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
4	36	92	8 hours
			Group Work Presentation/ Report Making Office Visits

**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. SketchUp For Dummies by Bill Fane.
3. SketchUp to LayOut by Matt Donley.

**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. SketchUp for Interior Design by L Cline

**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 .
4. SketchUp for Builders by John G. Brock.

4 <sup>th</sup> Semester		
<b>Paper 2 Major</b>	<b>Interior Materials and Construction Techniques-II with Material Specification L-T-P-C: 1-0-3-4      Credits: 4 Scheme of Evaluation : Theory + Studio</b>	<b>Subject Code: IDS082M412 Level : 200</b>

**Objective:** The objective of the course **Interior Materials and Construction Techniques –II with Material Specification (IDS082M412)** is to orient and equip the students with materials and products applied in Interior spaces with relevant construction technology.

After successful completion of the course, student will be able to -		
Sl. No.	Course Outcome	Blooms Taxonomy Level
1	Define the basic principles of doors, windows, flooring etc.	BT1
2	Outlining the properties, characteristics, strength, manufacture, processing and application of different flooring techniques and materials.	BT2
3	Utilizing basic knowledge of building elements, basically the function and behavior of different types of doors and windows under various conditions.	BT3
4	Analyze various aspects of materials and techniques of each component in the practical field.	BT4

**Prerequisite:**

- No prerequisites.

**Detailed Syllabus:**

<i>Modules</i>	<i>Topics (if applicable) &amp; Course Contents</i>	<i>Periods/ Hours</i>	
		<i>L</i>	<i>P</i>
I (Theory)	<p><b>Timber</b>  <b>Material Study:</b> Quality of timber used in building, defects, seasoning and preservation of timber, types ; Natural, hard and softwood, uses of timber for aesthetic &amp; structural purposes.  <b>Material Use:</b> Products commonly made of wood, fabrication, finishing processes, protection and maintenance, parts and accessories. Uses of commercial wood in building i.e., plywood, block boards, particleboards, veneers, laminates, MDF, Hard wood, Block Board, WPC board, HDF board and other types.</p>	15	5
II (Studio)	<p><b>Doors</b>  <b>Construction and its fixtures:</b> Types of wooden Doors, i.e., ledged, braced, battened, paneled, flush and glazed doors, study of joinery details.</p>	10	30

III (Studio)	<b>Windows</b> <b>Construction and its fixtures:</b> Types of wooden glazed windows, Fixed, side and top hung pivoted, louvered, ventilators and fanlights, study of joinery details.	10	30
IV (Theory)	<b>Flooring</b> <b>Introduction:</b> General Information. . Flooring techniques, slope difference in flooring, drop slab, tile difference, etc. Type, properties, Sizes, Uses& Limitations. Resilient and Wooden flooring - Use, Properties, Types, Construction, Selection Checklist. <b>Flooring materials:</b> Different types of flooring materials namely tiles, stone, wood, linoleum, cork, vinyl, rubber, cementitious, Burnt Clay, IPS (Indian Patent Stone Flooring) and terrazzo flooring. Mortars, and Grouts. To study materials uses property. Study of Adhesives: uses and property.	15	5
TOTAL		120	

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture / Tutorial	Studio / Practical	Experiential Learning
4	35 hours	70 hours	15 hours
			(Time from the Lecture Hours to be used for Presentation and Market Survey)

**Text Books:**

1. Building construction; Mackay, W.B. ; 1st Ed.; 2005; Donheed; London.
2. Rangwala, "Building Materials".

**Reference Books:**

1. Bindra, S.P. and Arora, S.P. Building Construction: Planning Techniques and Methods of Construction, 19 ed. Dhanpat Rai Pub., New Delhi, 2000.
2. Moxley, R. Mitchell"s Elementary Building Construction, Technical Press Ltd.
3. Francis D. Ching, Building Construction Illustrated, Wiley Publishers, 2008.
4. Lisa Godsey, Interior Design Materials and Specifications, Bloomsbury, 2017
5. Chudley, R; Construction technology; 2<sup>nd</sup> Ed.; 1987; ELBS; Harlow
6. Barry, R; Construction of building; 4<sup>th</sup> Ed.; 1999; East West Press; New Delhi.

**Reference Materials:**

1. Black and Decker, The Complete Guide to Flooring: Design, Planning and Installation for All Types of Flooring, Creative Publishing International, 2003.

The Influence of Building Structure on Human Perception in Interior Spaces in <https://eprints.tiu.edu.iq/852/>

4 <sup>th</sup> Semester		
<b>Paper 3 Major</b>	<b>Furnishing, finishing and fittings L-T-P-C: 2-0-2-4 Credits: 4 Scheme of Evaluation: Theory + Practical</b>	<b>Subject Code: IDS082M443 Level: 200</b>

**Objective:** The objective of the course **Furnishing, finishing and fittings (IDS082M413)** is to design and implement furnishings and finishes and fittings according to the various spaces promoting aesthetical and functional interior design.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define basic knowledge of furnishings and finishes and fittings	BT1
2	Demonstrate an ability to understand the importance of furnishings and finishes and fittings in interior design.	BT2
3	Apply theories of furnishings and finishes and fittings of various spaces for design development.	BT3
4	Examine interior furnishings, finishes and fittings and relate them to design an aesthetical and functional interior.	BT4

**Prerequisite:**

- Basic concepts of color, texture and materials.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Theory)	Wall - different types of wall treatments distemper, emulsion paint, plastic paints textured paint wall paper, tiles cladding, murals and paintings, wains coating (paneling of wall on the lower part of wall to protect from any kind of damage) dado work, wall painting, acoustic wall.	15	5
II (Theory)	Flooring - cement polish floor, terrazzo flooring, tiles stone, carpet & rugs, mats/jute, woolen, synthetic, straw, vinyl flooring, parqueted /ceiling.	5	15
III (Practical)	Curtains - curtains of different styles, draperies, sheer curtains, blinds, festoons, curtain materials. Upholstery - cotton, synthetic, velvet, brocade, leather synthetic wool, silk, acrylic, polyester – nylon. Cushion- chair cushion, throw pillows, bench cushions, feather cushion, bolster.	5	15

IV (Practical)	Fittings - hinges, handle, magnets, ball catchers, handles, profile, brackets, hydraulic channels, sliding channels, locks, latches, door knocker, door studs. Lights & lightings- need of light, types of lights, the role of proper lighting.	5	25
TOTAL		<b>90</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

<b>Total Credits in the Paper</b>	<b>Lecture/ Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
3	22 hours	60 hours	8 hours
			Presentation/ Report Making Site Visits

**Text Books:**

1. Designer Lesley Taylor, Series of books of interior design, Series of four books
2. Home lighting ideas, Writer Richard Wiles, Series of four books
3. Jocasta Innes, Published by Ebury Press, National Magazine House, London

**Reference Books:**

1. The Designer's Guide to Surfaces and Finishes, Radford, Penny

**Reference Materials:**

1. [Interior Design Materials: Important Types Of Materials And Finishes | The Design Gesture](#)
2. [Natural Interior Design: How To Add Nature Into Your Homes | The Design Gesture](#)

4 <sup>th</sup> Semester		
<b>Paper 4 Minor</b>	<b>Interior Design Representation Techniques</b> <b>L-T-P-C: 1-0-2-3      Credits: 3</b> <b>Scheme of Evaluation : Practical</b>	<b>Subject Code: IDS082N411</b>  <b>Level : 200</b>

**Objective:** The objective of the course **Interior Design Representation Techniques (IDS082N411)** is to examine the various components of drawing: line, value, texture, composition, and spatial dynamics. Students learn the basics of freehand drawing and get familiarized towards the principles of Design thinking, Visualization and representation with drawing materials and basic equipment.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	How to use basic tools effectively like pencil, pen, etc.	BT1
2	Translate visuals on to drawings.	BT2
3	Utilizing basic knowledge of visualization with understanding of plans, elevation, sections.	BT3
4	Apply visual drawing techniques to create space and depth.	BT3

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I	<b>Basics of Free hand drawing:</b> Use of drawing tools and materials. Understanding design element and visual perception Forms analyzed through spatial elements like points, line, curves plane and volume.	5	15
II	<b>Fonts</b> Developing writing style of alphabets and numbers for drawings <b>Scale</b> Engineering scale and Graphical scale	5	15
III	<b>Orthographic Projections</b> Plan, Elevation, Section	5	15
IV	<b>Perspective Projections</b> Picture Plane, Vanishing Point, Eye Level, Station Point, Draw simple objects	5	15
<b>TOTAL</b>		<b>80</b>	

**Notional Credit Hours for the course: 30 x 3 = 90**

<b>Total Credits in the Paper</b>	<b>Lecture/Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
3	22 hours	60 hours	8 hours
			True Scale representations, Measure drawing, Exposure to using simple tools.

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

**Reading Materials:**

1. Maria Bako, Different projecting methods in teaching spatial geometry. European Research in Mathematics Education.

4 <sup>th</sup> Semester		
<b>Paper 5 Minor</b>	<b>Material Documentation &amp; Specification L-T-P-C: 1-0-2-3 Credits: 3 Scheme of Evaluation : Practical</b>	<b>Subject Code: IDS082N412 Level : 200</b>

**Objective:** The objective of the course **MINOR- Material Documentation & Specification (IDS082N411)** is to understand the various components of interior spaces and familiarize the students of Interior Design on materials, their specifications and construction methodology.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define knowledge and technicality about different aspects of Flooring, flooring materials used in interior spaces, and implementation/construction of flooring in interior spaces.	BT1
2	Demonstrate technicality about different aspects and types of Ceilings.	BT2
3	Select various External Finishes in the market such as Glazing materials and assembles, coatings and sealants along with waterproofing materials.	BT3
4	Distinguish about different internal Finishes in the market such as coatings, their types and uses and selection checklist.	BT4

**Prerequisite:**

- Basic knowledge of Interior Materials.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I	<b>Flooring</b>  Introduction: Type, properties, specifications, Sizes, Uses & Limitations Adhesives - Materials uses property Resilient and Wooden flooring - Use, Properties, Types, Construction	5	15
II	<b>Ceilings</b>  Introduction: Type, properties, specifications, Sizes, Uses & Limitations Assembly type & Membrane types (Gypsum Boards, Plasters) Suspended ceiling Sound absorbing components	5	15

III	<b>External Finish- Insulation, Waterproofing/Dam proofing, Exterior wall, Curtain wall, Interior Partition system, Wall facings, Glass/plastics, Windows, Coatings, Sealants</b>  Introduction:  Type, Materials, specifications, properties, Sizes, Uses & Limitations Glazing Material- Solar optical properties	5	15
IV	<b>Internal Finish</b>  Coatings Introduction: Field applied - Type, Materials, specifications, properties, Sizes, Uses & Limitations	5	15
<b>TOTAL</b>		<b>80</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

<b>Total Credits in the Paper</b>	<b>Lecture/ Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
3	22 hours	60 hours	8 hours
			Group Work Presentation/ Report Making Office Visits

**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

**Reference/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*

5 <sup>th</sup> Semester		
<b>Paper 1</b>	<b>Interior Design III</b> <b>L-T-P-C: 0-0-8-4</b> <b>Credits: 4</b> <b>Scheme of Evaluation: Studio/External</b>	<b>Subject Code:</b> <b>IDS082C511</b> <b>Level: 300</b>

**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.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define the fundamentals of 5 star hotel interior design.	BT1
2	Summarize design skills and requirements within the constraints of a given interior design project brief.	BT2
3	Make use of the Design Studio to gain hands on experience and understand basic infrastructural requirements	BT3
4	Analyze the space with a design eye and come up with strategic interior design solutions.	BT4

**Prerequisite:**

- Basic concepts of interior design and drafting.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Studio)	<b>Field Visit</b> <ul style="list-style-type: none"> <li>• Case Study- Five-Star Hotel</li> <li>• Students will conduct a field visit to observe hotel operations and design.</li> <li>• Report on the Visit</li> <li>• Documentation with photographs and observations.</li> <li>• Comparative Analysis</li> </ul>	6	26
II (Studio)	<b>Introduction to Hotels</b> <ul style="list-style-type: none"> <li>• What are Hotels?</li> <li>• Definition and purpose of hotels.</li> <li>• Categories of Hotels.</li> </ul>	6	26

III (Studio)	<b>Design Development - 1</b> <ul style="list-style-type: none"> <li>• Hotel Plan- A floor plan provided for students to work from.</li> <li>• Floor Plan with Furniture Layout</li> <li>• Students will create detailed layouts incorporating furniture arrangements.</li> <li>• Final Drawings (plan, section, elevation, views)</li> </ul>	12	20
IV (Studio)	<b>Design Development – 2 Banquet, Bar and Swimming Pool</b> <ul style="list-style-type: none"> <li>• Case Study and material survey</li> <li>• Final Drawings (plan, section, elevation, views)</li> </ul>	12	20
<b>TOTAL</b>		<b>128</b>	

**Notional Credit Hours for the course:** 30 x 4 = 120

<b>Total Credits in the Paper</b>	<b>Lecture/ Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
4	36	92	8 hours
			Group Work Presentation/ Report Making Site Visits

**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* .

5 <sup>th</sup> Semester		
<b>Paper 2 Major</b>	<b>Interior Materials with Construction Techniques III with Material Specification</b> L-T-P-C: 1-0-6-4 Credits: 4 Scheme of Evaluation: Theory + Studio	<b>Subject Code: IDS082M512 Level: 300</b>

**Objective.** The objective of the course **Interior Materials and Construction Techniques-III** is to orient and equip the students with materials and products applied in Interior spaces with relevant construction technology

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define the basic working of Partitions and materials.	BT1
2	Classify the different types Ceiling Systems and materials.	BT2
3	Utilize the properties, characteristics, strength, manufacture, and application of Finishes.	BT3
4	Analyze various aspects of Paneling in the practical field.	BT4

- **Prerequisite:**  
No prerequisites.

### **Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Studio)	<b>Partition</b> Wooden Partition with glass fittings Partition with MDF board (CNC Designs) Partition finish with veneers,laminates and other new materials	10	30
II (Theory)	<b>Ceiling Systems</b> Introduction to Suspended Ceiling Systems Gypsum Board Ceiling &Modular Ceiling Systems in various materials	15	5
III (Theory)	<b>Finishes (Interiors and Exteriors)</b> Terrazos, Composites, Concrete, Laminated Materials- Fabrication, Curing, Finishing (Texture, Pigment, Sealant), Installation, Maintenance	15	5
IV (Studio)	<b>Panelling</b> 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)	10	30
TOTAL		120	

**Notional Credit Hours for the course:** 30 x 4= 120

<b>Total Credits in the Paper</b>	<b>Lecture/Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
4	35 hours	70 hours	15 hours
			Model Making, Group Work, Discussions and Presentations, Site Visits.

**Text Books:**

1. W.B.Mackay;“Building Construction”.

**Reference Books:**

1. Bindra, S.P. and Arora, S.P. Building Construction: Planning Techniques and Methods of Construction, 19 ed. Dhanpat Rai Pub., New Delhi, 2000.
2. Moxley, R. Mitchell’s Elementary Building Construction, Technical Press Ltd.
3. Francis D. Ching, **Building Construction Illustrated**, Wiley publishers, 2008.
4. Lisa Godsey, Interior Design Materials and Specifications, Bloomsbury, 2017

**Reading Materials:**

1. Bustillo Revuelta, M. (2021). Terrazzo. In: Construction Materials. Springer Textbooks in Earth Sciences, Geography and Environment. Springer, Cham.

5 <sup>th</sup> Semester		
<b>Paper 3 Major</b>	<b>Building Services I</b> <b>L-T-P-C: 2-0-4-4</b> <b>Credits: 3</b> <b>Scheme of Evaluation: Theory + Practical</b>	<b>Subject Code:</b> IDS082M543 <b>Level: 300</b>

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

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Relate the technical knowledge regarding water supply and sanitation system in a building.	BT1
2	Demonstrate the principles and best practices for Solid waste management in residential unit.	BT2
3	Apply the principles of sanitation, Introduction to various sanitary pipes, joints, fittings and fixtures, their function, placement and constructional details.	BT3
4	Inference the knowledge into sheet work.	BT4

**Prerequisite:**

- Basic idea of water sources, supplies, pipes, etc.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Theory)	<b>Water Supply:</b> 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.	15	5
II (Practical)	<b>Water Management:</b> 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.	5	15
III (Theory)	<b>Sanitation:</b> 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. Study of Traps, Inspection chambers, Manholes, Septic tanks, Soak pits, Plumbing layout in residential, high raised building.	15	5

IV (Practical)	<b>Solid waste, management:</b> 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.	5	15
TOTAL		<b>80</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

Total Credits in the Paper	Lecture/Tutorial	Studio/Practical	Experiential Learning
3	22 hours	60 hours	8 hours
			Presentation/ Report Making Site Visits

**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*; 1<sup>st</sup> Ed.; 2005; Charotar Publishing House;
3. Fair, G.M, Geyer, J.C. and Okin, D; *Water and Waste water engineering Volume II*; 1<sup>st</sup> Ed.; 1968; John Wiley & Sons; New York.
4. CPHEEO; *Manual on sewerage and sewerage treatment*; 1<sup>st</sup> 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*

5 <sup>th</sup> Semester		
<b>Paper 1 Minor</b>	<b>Interior Landscape</b> <b>L-T-P-C : 1-0-4-3 Credits : 4</b> <b>Scheme of Evaluation : Practicum/Jury</b>	<b>Subject Code:</b> <b>IDS082N511</b> <b>Level : 300</b>

**Objective:** The objective of the course **Interior Landscape (IDS082N511)** is to understand its dynamics and components; and to develop basic skills to deal with interior landscape design projects.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Remember the use of abducted and productive reasoning	BT1
2	Understand the principles, theories and models of design thinking	BT2
3	Apply and adopt solution focus strategies.	BT3
4	Analyze and resolve design problems in creative ways.	BT4

**Prerequisite:**

- No Prerequisites

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Practical)	<b>I Introduction to Interior Landscape</b> <ul style="list-style-type: none"> <li>• Introduction to Interior Landscape, definitions &amp; related terminologies.</li> <li>( <i>Natural, Man-made, Rural, Urban</i>)</li> <li>• Types of Natural Elements (<i>Stones, Rocks, Pebbles, Water Forms, Indoor plants and Vegetation</i>) and their visual characteristics (<i>form, colour, texture, foliage</i>).</li> <li>• Man-Made Elements, co-existence of man-made and natural features, case-studies.</li> </ul>	5	10
II	<b>Scales and Typologies of Interior Landscape Proposals (Residential &amp; Commercial Forms).</b> <ul style="list-style-type: none"> <li>• Landscape design principles (<i>based on its natural &amp; made-made elements</i>)</li> <li>• Layout and Components, Indoor/ Outdoor linkage to spaces.</li> <li>• Landscape design parameters (functional) for Interior spaces, landscape services (<i>water supply, drainage, lighting etc.</i>)in Interiors.</li> </ul>	5	15
III	<b>Design with Plants</b> <ul style="list-style-type: none"> <li>• Indoor Plants&amp; their functions(<i>literature study</i>)</li> <li>• Field identification &amp; documentation of common Indian Trees, Shrubs used in Interiors.</li> </ul> Basics of Planting Design &preparation of Planting Manual.	5	10
IV	<b>Design Studio</b> <ul style="list-style-type: none"> <li>• Prepare design brief as per functional requirements, user needs of any Residential or Commercial Interiors.</li> <li>• Proposal and Detail Drawings.</li> </ul>	5	25
TOTAL		<b>80</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
3	22 hours	60 hours	8 hours
			Poster making, Group Work, Debates, Discussions and Presentations

**Text Books:**

1. *Landscape Architecture: Simmonds J.O.; 5 edition (1 March 2013), McGraw-Hill Education.*
2. *Interior Gardens – Designing and Constructing Green Spaces in Private and Public Buildings: HaikeFalkenberg (2010)*
3. *Planting Design: Theodore D.Walker, VNR Publications New York.*
4. *Introduction to Landscape Architecture: Laurie Michael, 2nd Revised edition (1 February 1986), Elsevier Science Ltd.*

**Reference Books:**

1. KrishenPradip; *Jungle Trees of Central India*; Penguin Random House India Pvt. Ltd, 2013.
2. Grant W. Reid; *Landscape Graphics*; Whitney Library of Design, Watson Guptill Publications, New York, 2002.
3. Cedric Crocker, *All About Landscaping*, Ortho Books.
4. Faulkner R & Faulkner S, *Inside Today's Home*, New York, Holt Rinehart & Winston Inc., 1960
5. Nelson Hammer; *Interior Landscape Design*; McGraw-Hill,New York, 1991.

6. Charles W Harris and Nicholas T. Dine; *Time Saver Standards for Landscape Architecture*; 2<sup>nd</sup> Edition, Mcgraw – Hill, International Edition, Arch. Series, 1988.

6 <sup>th</sup> Semester		
<b>Paper 1 Major</b>	<b>Interior Design IV</b> <b>L-T-P-C: 0-0-8-4</b> <b>Credits: 4</b> <b>Scheme of Evaluation: Studio/External</b>	<b>Subject Code:</b> IDS082M611 <b>Level: 200</b>

**Objective:** The objective of the course **Interior Design III (IDS082M611)** is to familiarize students with Interior Design of a Retail Space and present the visualized output in 3d format making use of computer applications (Auto CAD, Sketchup, Adobe Photoshop).

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define the fundamentals of retail interior design.	BT1
2	Develop the ability to create customer-focused, brand-aligned retail environments.	BT2
3	Utilize the Design Studio to Be proficient in integrating technology and sustainability into retail design.	BT3
4	Discover methods to present and justify design solutions effectively.	BT4

**Prerequisite:**

- Basic Knowledge of designing a retail space along with drafting and digital presentation techniques.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Theory)	<b>Fundamentals of Retail Design</b> <ul style="list-style-type: none"> <li>• Introduction to retail spaces and their evolution.</li> <li>• Types of retail formats (boutiques, department stores, kiosks, pop-ups).</li> <li>• Key principles: spatial planning, customer flow, and zoning.</li> <li>• Case study: Analysis of a successful retail space.</li> </ul>	6	26
II (Theory)	<b>Branding, Aesthetics, and Visual Merchandising</b> <ul style="list-style-type: none"> <li>• Role of branding in retail interiors.</li> <li>• Use of lighting, color, and materials to reflect brand identity.</li> <li>• Basics of visual merchandising: Display strategies and psychology.</li> <li>• Hands-on activity: Create a concept board for a retail brand.</li> </ul>	6	26

III (Studio)	<b>Technology and Sustainability in Retail Design</b> <ul style="list-style-type: none"> <li>Integrating smart technologies (AR, VR, IoT) for an enhanced customer experience.</li> <li>E-commerce influence on physical store design.</li> <li>Sustainable design practices in retail spaces: Materials and energy efficiency.</li> <li>Group activity: Brainstorm innovative sustainable retail concepts.</li> </ul>	12	20
IV (Studio)	<b>Project Development and Presentation</b> Designing a retail space for a hypothetical brand from the following options: Garment, Leather, Perfume, Jewelry, Kids store, Kitchen and garden equipment, Books, Decorative items, Beauty parlor, Furnishing <ul style="list-style-type: none"> <li>Concept, layout, and branding.</li> <li>Studio-style design sessions with peer feedback.</li> <li>Final project presentation and critique.</li> </ul>	12	20
<b>TOTAL</b>		<b>128</b>	

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
4	36	92	8 hours
			Group Work Presentation/ Report Making Site Visits

**Text Books:**

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

**Reference Books:**

- Neufert, Peter. (2012) Neufert's Architects' data, 4th Ed. John Wiley, New Delhi
- Ramsay and Sleeper. (2008). Architectural graphic standard. 11th Ed. John Wiley, New York.
- SketchUp for Interior Design by L Cline

**Reading Materials:**

- "Retail Design" by Otto Riewoldt
- "The New Rules of Retail: Competing in the World's Toughest Marketplace" by Robin Lewis and Michael Dart
- "Designing Commercial Interiors" by Christine M. Piotrowski and Elizabeth A. Rogers
- "Detail in Contemporary Retail Design" by Drew Plunkett and Olga Reid
- "Visual Merchandising and Display" by Martin M. Pegler
- "Retail Spaces: Small Stores" by Martin M. Pegler
- "Sustainable Retail Design" by Jerry Yudelson and Ulf Meyer

### **Supplementary Resources:**

- Journals: *Journal of Interior Design, Retail Design International.*
- Websites: *Retail Design Institute, Dezeen Retail.*
- Case studies: Analysis of renowned retail spaces like Apple Store, Uniqlo, and Muji.

6 <sup>th</sup> Semester		
<b>Paper 2 Major</b>	<b>Interior Materials and Construction Techniques - IV</b> <b>L-T-P-C: 1-0-4-3 Credits: 3</b> <b>Scheme of Evaluation: Practicum/Jury</b>	<b>Subject Code:</b> <b>IDS082M612</b> <b>Level: 300</b>

**Objective:** The objective of the course **Interior Materials and Construction Techniques - IV** (IDS082M612) is to introduce students to the technicalities of building construction and material and to acquaint with various methods of construction.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	State basic RCC and related construction illustrations for a proper design.	BT1
2	Summarize the basic design understandings and understand the practicality of design execution.	BT2
3	Apply the different types of structural construct and differentiate the minute details of the same efficiently.	BT3
4	Analyze various aspects of MS and aluminum doors windows, partitions and ceiling in the practical field	BT4

**Prerequisite:**

- Basic drafting skills.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Studio)	<b>Introduction to RCC (Basics)</b> Study the foundation, columns, beams, slab- types and sizes. Also study the basics architectural layout of a building for the RCC part.	6	30
II (Studio)	<b>Understanding Staircase and its type, Application of various Railing and grill design</b>  Understanding the requirements of staircase. Types of staircases, construction methods of masonry staircase, timber staircase, RCC staircase, steel staircase, study of fire escape staircase. Applying design and joinery details of railing and grill (steel, glass and other materials).	6	30
III (Theory)	<b>Steel</b> Analyse properties, architectural and interior design uses of mild steel and stainless steel and carry out a market survey.	22	6
IV (Theory)	<b>Prevention and Cure</b> Anti-Termite treatment of Masonry Walls & Woodwork (pre-construction) Water-proofing & Weather-proofing materials (chemical admixture & surface application), Pest Control Treatment, Fire fighting and Thermal Insulation.	22	6
		<b>128</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

<b>Total Credits in the Paper</b>	<b>Lecture/ Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
4	56 hours	72 hours	8 hours
			Model making, Group Work, Discussions and Presentations

**Text Books:**

1. *“Building Construction”*. W.B.Mackay
2. *“Engineering materials”*, S.C Rangwala – Charotar publishing, Anand 1982

**Reference Books:**

1. Chudley, *“Construction Technology”*
2. *“Building Construction”*. Sushil Kumar
3. Barry *“Construction of Building”* Barry
4. Donald Watson *“Time Saver Standards – Architectural Design Data”*

**Reading Materials:**

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

6 <sup>th</sup> Semester		
<b>Paper 3 Major</b>	<b>Building Services II</b> <b>L-T-P-C: 2-0-4-4</b> <b>Credits: 3</b> <b>Scheme of Evaluation: Theory + Practical</b>	<b>Subject Code:</b> IDS082M643 <b>Level: 300</b>

**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.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Remember concepts of design, installation, operation and monitoring of the electrical services, lifts and escalators in residential and commercial buildings.	BT1
2	Understand installation techniques of electrical services, lifts and escalators used in building industry.	BT2
3	Apply different techniques and technical knowledge.	BT3
4	Analyze various aspects of operations and monitoring in the practical field.	BT4

**Prerequisite:**

- Basic idea of electrical fittings, fixtures, lighting types etc.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Theory)	<b>Electrical system and fittings, (lighting materials and fixtures)</b> 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,		
II (Practical)	<b>Electrical layout in buildings</b> Basic planning and layout of installations within a building complex. Main and distribution boards – Transformers – switch gears – substations – space requirement. Emergency supply-standby (Generators, invertors) & UPS. A specific design problem on this aspect.	5	15
III (Theory)	<b>Elevator (Lifts)</b> 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	15	5

	of service, time, passenger handling capacity, space and physical requirements, machine room spaces.		
IV (Practical)	<b>Escalators</b> Escalators- Definition, Application, Location and arrangement in building. Space requirement.	5	15
TOTAL		<b>80</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

Total Credits in the Paper	Lecture/Tutorial	Studio/Practical	Experiential Learning
3	22 hours	60 hours	8 hours
			Presentation/ Report Making Site Visits

**Text Books:**

1. Philips, Derek; *Lighting in Architectural Design*; 1<sup>st</sup> Ed.; 1964; McGraw Hill; New York.
2. Hopkenson, R.G. & Kay, J.D.; *The lighting of Buildings*; 1<sup>st</sup> 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*; 1<sup>st</sup> Ed.; 1968; John Wiley & Sons; New York.

**Reading Materials:**

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

6 <sup>th</sup> Semester		
<b>Paper 4 Major</b>	<b>Working Drawing - I</b> <b>L-T-P-C : 1-0-4-3 Credits : 3</b> <b>Scheme of Evaluation : Practicum/Jury</b>	<b>Subject Code:</b> IDS082M614 <b>Level : 300</b>

**Objective:** The objective of the course **Working Drawing - I (IDS082M614)** is to enable the students to learn the techniques of preparing detailed drawings which are used for execution works for construction of buildings.

**Course Outcome:**

After successful completion of the course, student will be able to		
S. No.	Course Outcome	Blooms Taxonomy Level
1	Show how detailed drawings for construction works are done.	BT1
2	Demonstrate the working principles and theories related	BT2
3	Apply and adopt the working style done on-site.	BT3
4	Analyze and resolve design problems in creative ways.	BT4

**Prerequisite:**

- Interior Design drawings of Semester III, IV or V.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Practical)	<b>Preliminary drawings for project plans</b> 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.	2	18
II (Practical)	<b>Detailed drawings for kitchen</b> Drafting and preparing sheets for kitchen- presentation plan, detailed plans, service drawings, tile layout, other fixture details, sectional elevation.	2	18
III (Practical)	<b>Detailed drawings for services</b> 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 run in the building and the site.	2	18
IV (Practical)	<b>Detailed drawings for architectural fixtures</b> 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.	2	18
	TOTAL	<b>80</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

<b>Total Credits in the Paper</b>	<b>Lecture/Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
3	8 hours	72 hours	10 hours
			Site visit, Market survey, Conduct rate analysis.

**Text Books:**

8. Ching, F. D. (2020). *Building construction illustrated*. John Wiley & Sons.
9. Bizley, G. (2010). *Architecture in detail II*. Routledge.

**Reference Books:**

3. Allen, E., & Rand, P. (2016). *Architectural detailing: function, constructibility, aesthetics*. John Wiley & Sons.
4. Hall, D. J., & Giglio, N. M. (2016). *Architectural Graphic Standards*. John Wiley & Sons.

**Reading Materials:**

6. De Chiara, J., Panero, J., & Zelnik, M. (2001). *Time-saver standards for interior design and space planning*. McGraw-Hill.
7. Calloway, S., & Powers, A. (1991). *The elements of style: an encyclopedia of domestic architectural detail*. (No Title).
8. McLeod, V. (2010). *Detail in contemporary timber architecture*. (No Title).
9. Emmitt, S. (2023). *Barry's advanced construction of buildings*. John Wiley & Sons.
10. Silver, P., Silver, P., & McLean, W. (2013). *Introduction to Architectural Technology Second Edition*. Hachette UK.

6 <sup>th</sup> Semester		
<b>Minor Course</b>	<b>Vastu In Interior Design</b> <b>L-T-P-C : 1-0-4-3 Credits : 3</b> <b>Scheme of Evaluation : Practicum/Jury</b>	<b>Subject Code:</b> <b>IDS082N641</b> <b>Level : 100</b>

**Objective:** The objective of the course **Vastu in Interior Design (IDS082N641)** is to develop cognitive, strategic and practical thinking and ideation processes by which vastu concepts are developed.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Remember the use of abducted and productive reasoning	BT1
2	Understand the principles, theories and models of design thinking	BT2
3	Apply and adopt solution focus strategies.	BT3
4	Analyze and resolve design problems in creative ways.	BT4

**Prerequisite:**

- No Prerequisites

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I	<b>Introduction to Vaastu Shastra</b> 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.	6	4
II	<b>Philosophies, Practices, and Principles of Vaastu</b> 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.	5	10
III	<b>Application of Vaastu Principles</b> 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.	5	20
IV (Studio)	<b>Layout Planning</b> Detailed Interior Layout Plan of Residential & Commercial Buildings by applying Vaastu Principles.	6	24
	<b>TOTAL</b>	<b>80</b>	

**Notional Credit Hours for the course:** 30 x 3 = 90

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
3	22 hours	60 hours	8 hours
			Poster making, Group Work,

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

7 <sup>th</sup> Semester		
<b>Paper 1 Major</b>	<b>Interior Design V</b> <b>L-T-P-C: 0-0-8-4</b> <b>Credits: 4</b> <b>Scheme of Evaluation: Studio/External</b>	<b>Subject Code:</b> IDS082M711 <b>Level: 400</b>

**Objective:** The objective of the course **Interior Design III (IDS082M611)** is to familiarize students with basics of designing for health care spaces and environments and to develop skills required for the same on both large- and small-scale spaces with an emphasis on planning and designing compatible spaces for health care services.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define the fundamentals of health care interior design.	BT1
2	Develop the ability to create a space with a design eye and come up with strategic design solutions	BT2
3	Utilize the Design Studio to Be proficient in integrating technology and sustainability into health care design with adequate facilities for work, relaxation, comfort, privacy, aesthetics, and maintenance through design and proper choice of materials, services, fittings and fixtures in a designed interior space.	BT3
4	Discover methods to present and justify design solutions effectively.	BT4

**Prerequisite:**

- Basic Knowledge of spaces of health care buildings along with drafting and digital presentation techniques.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I	<b>Introduction of Design Fundamentals &amp; Measured drawing</b> <ul style="list-style-type: none"> <li>• Introduction of the design project</li> <li>• Comprehension of spatial units</li> <li>• Use of design principles, anthropometry &amp; ergonomics</li> <li>• Fundamentals of Universal Design, acoustics, lighting schemes, colour concepts &amp; use of materials.</li> </ul> Measured drawing layout of the space for the proposed interior.	6	26
II	<b>Design Development of Spaces (Foyer, lobby, waiting areas, OPD, Rooms, Services etc.)</b> <ul style="list-style-type: none"> <li>• Theme</li> <li>• Schematic &amp; Conceptual Drawings,</li> <li>• Colour scheme</li> <li>• Signages</li> <li>• Final Drawings (plan, section, elevation, views)</li> </ul>	6	26

III	<b>Design Development w.r.t lighting and furniture arrangements of ICU's and OT's.</b> <ul style="list-style-type: none"> <li>• Theme</li> <li>• Schematic &amp; Conceptual Drawings</li> <li>• Colour scheme</li> <li>• Specification of materials used</li> <li>• Specific requirements.</li> <li>• Final Drawings (plan, section, elevation, views)</li> </ul>	12	20
IV	<b>Time problem</b>  <b>Final detailed drawings and Portfolio submission</b> <ul style="list-style-type: none"> <li>• As per the requirement of the concerned Teacher</li> </ul>	12	20
<b>TOTAL</b>		<b>128</b>	

**Notional Credit Hours for the course:** 30 x 4 = 120

<b>Total Credits in the Paper</b>	<b>Lecture/ Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
4	36	92	8 hours
			Group Work Presentation/ Report Making Site Visits

**Text Book:**

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

**Reference Books:**

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

**Reading Materials:**

7 <sup>th</sup> Semester		
<b>Paper 3 Major</b>	<b>Research Methodology</b> <b>L-T-P-C: 4-0-0-4 Credits: 4</b> <b>Scheme of Evaluation: Theory</b>	<b>Subject Code:</b> IDS082M703 <b>Level: 400</b>

Objective: The objective of the course **Research Methodology (IDS082M702)** is to introduce the students to the field of academic research and enable them to establish a strong research foundation grounded in both theory and practice. And, to infuse logical reasoning to achieve clarity of thought and also to orient the students to structured research in a focused manner. The process of study shall enable students to conduct in depth analysis and objective research on a topic of their interest. Students may be encouraged to select the topic which may eventually culminate in the Interior Design Thesis.

Course Outcome:

After successful completion of the course, students will be able to		
S. No.	Course Outcome	Blooms Taxonomy Level
1	Define key research concepts, including types of research, approaches, and distinctions between design studio, dissertation, and thesis with respect to interior design.	BT1
2	Demonstrate the knowledge of different components of research proposal and appropriate research tools and techniques for data collection and analysis.	BT2
3	Organize literature review and case studies effectively to identify research gaps.	BT3
4	Analyze and apply different data interpretation techniques to effectively report research findings using structured formats and prepare comprehensive design-based research documents.	BT4

Detailed Syllabus:

Modules	Course content	Periods
I	Introduction to Research in Architecture: <ul style="list-style-type: none"> <li>Meaning of research, Types of research, Different Approaches to Research (Quantitative, Qualitative, Quasi)</li> <li>Difference between design studio, dissertation and design thesis.</li> <li>Formulation of Research Proposal: Aims, Objectives, Methodology, Scope and Limitations</li> <li>Difference between research question and hypothesis</li> </ul>	04
II	Tools and Methods: <ul style="list-style-type: none"> <li>Selection of Research Topic, Research Database Search, Bibliometric Analysis, Literature Review and Case studies</li> <li>Scientific methods of research with special emphasis on design research methods</li> <li>Design enquiry, Visual observations, Primary and secondary data</li> <li>Data Collection and Survey techniques, Sampling, Questionnaire types</li> <li>Data analysis techniques, Visual interpretation of data</li> </ul>	04
III	Presentation Techniques: <ul style="list-style-type: none"> <li>Formats for presentation of data, case studies and analysis.</li> </ul>	04

	<ul style="list-style-type: none"> <li>• Formats for presentation of thesis design- media appropriate in the interior design profession such as two-dimensional drawing, physical models, and three-dimensional computer models.</li> </ul>	
IV	<p>Report Writing/ Paper Writing:</p> <ul style="list-style-type: none"> <li>• Techniques in report/paper writing</li> <li>• Checklist for Journal Paper Writing vs. Thesis Report Writing</li> <li>• Synopsis and abstract formulation.</li> <li>• Presentations of relevant contextual information, interpretation of the data collected and design; reporting the design development from concept to design solution, explaining the relation of the design to existing knowledge on the topic in the form of coherently written matter.</li> <li>• Introduction to plagiarism: Citation, Referencing, Bibliography using Online Referencing tools, annexure etc.</li> </ul>	04
TOTAL		16

Text Books:

1. Booth, Wayne C., Colomb, Gregory G. and Williams, Joseph M. (2003), "*The Craft of Research*", Second Edition. Publishers: The University of Chicago Press, Chicago.
2. Vaux, D.E., & Wang, D. (Eds.). (2020). *Research Methods for Interior Design: Applying Interiority* (1st ed.). Routledge. <https://doi.org/10.4324/9780429029325>

Reference Books:

1. Sommer, Robert & Sommer, Barbara (2002), "A Practical Guide to Behavioural Research: Tools and Techniques". New York: The Oxford University Press.
2. Creswell, John W. (2003), "*Research Design: Qualitative, Quantitative, and Mixed Method Approaches*". 2nd Edition. Thousand Oaks, CA: Sage Publications.
3. Borden, I. and Ray, K. R. (2006), "*The Dissertation: An Architecture Student's Handbook*. Second Edition. Oxford: Architectural Press.
4. Anderson, J. and Poole, M. (1998), "*Thesis and Assignment Writing*". Brisbane: John Wiley

Course Outcomes: The students will learn

- To have a comprehensive knowledge on the tools and methods of research and provide a way to frame the journal articles and reports in a proper way.
- To present their research and contents in a professional way. They will also secure skills required to collect, assimilate and synthesize data relevant to handling a research topic and design thesis project independently.
- To be prepared with the inevitable component of research that precedes any design.

7 <sup>th</sup> Semester		
<b>Paper 3 Major</b>	<b>Project Management and Estimation, Costing</b> <b>L-T-P-C: 4-0-0-4 Credits: 4</b> <b>Scheme of Evaluation: Theory</b>	<b>Subject Code:</b> IDS082M703 <b>Level: 400</b>

**Objective:** The objective of the course **Project Management and Estimation, Costing (IDS082M703)** is to equip students with essential skills in project planning, execution, and management, along with accurate estimation, costing, and tendering. Students will learn industry-standard scheduling, budgeting, resource allocation, and risk assessment techniques. They will also develop the ability to prepare detailed cost estimates, specifications, and tender documents for construction and interior projects, ensuring efficient execution and financial planning. to enable the students to learn the techniques of preparing detailed drawings which are used for execution works for the construction of buildings.

**Course Outcome:**

After successful completion of the course, students will be able to		
S. No.	Course Outcome	Blooms Taxonomy Level
1	Define the project management fundamentals, including project management stages to enhance professional competency in interior design.	BT1
2	Demonstrate the knowledge of Project Monitoring which will enhance in assessing the costs and risks of projects.	BT2
3	Organize and define the estimation terminologies and explain the methods for accurate estimation.	BT3
4	Analyze and apply the estimation methods to determine project costs and study the tendering and bidding process	BT4

**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/ Hours	
		L	P
I (Theory)	<b>Fundamentals of Project Management, Project Management Stages</b> Need for Project planning, scheduling & management. Method of planning & programming. Role of Stakeholders in projects Work breakdown structure, Life cycle of a project. Qualities of an ideal organization Project initiation, planning and scheduling phases Use of management techniques- Bar Chart, Mile stone Chart CPM network analysis & PERT time analysis, time computation &	28	0

	network analysis.		
II (Theory)	<b>Project Monitoring, Time reduction and Optimization</b> 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	28	0
III (Theory)	<b>Introduction to Estimation, Approximate and Detailed Estimation</b> Importance of Estimation, Costing and Tendering. Types of measurements, modes of measurements: methods of taking out quantities, preparation of schedule or bill of quantities. Load bearing and RCC framed structure cost using measurement book, abstract sheet, PWD rates to find detailed estimation.	28	0
IV (Theory)	<b>Rate Analysis, Contract Management and Tendering</b> Rate analysis of various items of work: preparation of various items of work in the interior works. Detailed rate analysis of Interior items as per current market rates for information only. Percentage of various materials used in building interior items like Plywood, Putty, Tiles, Metal, Laminates, Paints, etc. Technical bid and price bid. Contract types and documents Pre-Contract stage; Post Contract Stage, Types of Tender documents, e-Tendering, FIDIC	28	0
	TOTAL	<b>112</b>	

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture/Tutorial	Studio/Practical	Experiential Learning
4	112 hours	0 hours	8 hours
			Site visit, Market survey, Conduct rate analysis.

**Text Books:**

1. Gopalakrishnan P., Rama Moorthy V.E., (2014), “*Textbook of Project Management*”, Trinity Press
2. “Estimating and Costing” by S K Dutta.
3. “Estimating” by SC Rangwala.

**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.
7. PWD / CPWD rates as per applicable year.

7 <sup>th</sup> Semester		
<b>Paper 4 Major</b>	<b>Working Drawing - II L-T-P-C: 1-0-3-4 Credits: 4 Scheme of Evaluation : Practical</b>	<b>Subject Code: IDS082M714 Level : 400</b>

**Objective:** The objective of **Working Drawing - II** (IDS082M714) is to equip students with the skills to produce construction-ready drawings that facilitate the building process.

After successful completion of the course, student will be able to -		
Sl. No.	Course Outcome	Blooms Taxonomy Level
1	Define the technical details of a project through precise and accurate drawings that facilitate effective implementation by workers on site.	BT1
2	Demonstrate the technical base required for the execution of the designer's ideas, ensuring a seamless translation from concept to reality.	BT2
3	Select and create technical drawings that effectively communicate design intent to workmen, enabling accurate execution and realization of the design.	BT3
4	Distinguish the technical knowledge through precise and informative presentation drawings that effectively communicate design intent and details..	BT4

**Prerequisite:**

- Interior Design drawings of Semesters III, IV, V & VI. Well-versed in Working Drawing - I from 6<sup>th</sup> Semester.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I	<b>Detail Drawing of Residential/ Apartment</b> To produce detailed drawings of a previously designed residence/apartment, focusing on the design and layout of interior elements like bed and bedhead, wardrobe, cabinet shelves and showcase. Dimensions and specifications of each element along with material specifications and finishes.	4	24
II	<b>Detail Drawing of Commercial Spaces</b> To produce detailed drawings of various commercial spaces, focusing on the design and layout of interior elements, furniture, and equipment. Office, bookstores, commercial buildings, Workstations, Executive cabins, Conference rooms. Dimensions and specifications of each space,	4	24

	Design and layout of furniture, fixtures, and equipment (FF&E).		
III	<b>Detail Drawing of Hotel Spaces</b> To produce detailed drawings of Reception Area, Reception Table, and Lobby Furniture Design, focusing on dimensions, materials, and design considerations to create functional and aesthetically pleasing hotel spaces.	4	24
IV	<b>Detail Drawing of Amenity Spaces</b> To produce detailed drawings of various amenity spaces, focusing on the design and layout of interior elements, furniture, and equipment. Conference Room Board Room Common Room Dimensions and specifications of each space Design and layout of furniture, fixtures, and equipment (FF&E). Incorporation of audio-visual and technological requirements.	4	24
	TOTAL		<b>112</b>

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture/Tutorial	Studio/Practical	Experiential Learning
4	16 hours	96 hours	8 hours
			Site visit, Market survey, Conduct rate analysis.

**Text Books:**

1. Ching, F. D. (2020). *Building construction illustrated*. John Wiley & Sons.
2. Bizley, G. (2010). *Architecture in detail II*. Routledge.

**Reference Books:**

1. Allen, E., & Rand, P. (2016). *Architectural detailing: function, constructability, aesthetics*. John Wiley & Sons.
2. Hall, D. J., & Giglio, N. M. (2016). *Architectural Graphic Standards*. John Wiley & Sons.

**Reading Materials:**

1. De Chiara, J., Panero, J., & Zelnik, M. (2001). *Time-saver standards for interior design and space planning*. McGraw-Hill.
2. Calloway, S., & Powers, A. (1991). *The elements of style: an encyclopaedia of domestic architectural detail*. (No Title).
3. McLeod, V. (2010). *Detail in contemporary timber architecture*. (No Title).
4. Emmitt, S. (2023). *Barry's advanced construction of buildings*. John Wiley & Sons.
5. Silver, P., Silver, P., & McLean, W. (2013). *Introduction to Architectural Technology Second Edition*. Hachette UK.

7 <sup>th</sup> Semester		
<b>Paper 5 Minor</b>	<b>Furnishing, finishing and fittings L-T-P-C: 1-0-3-4 Credits: 4 Scheme of Evaluation: Practicum/Jury</b>	<b>Subject Code: IDS082N715 Level: 400</b>

**Objective:** The objective of the course **Furnishing, finishing and fittings (IDS082M413)** is to design and implement furnishings and finishes and fittings according to the various spaces promoting aesthetical and functional interior design.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define basic knowledge of furnishings and finishes and fittings	BT1
2	Demonstrate an ability to understand the importance of furnishings and finishes and fittings in interior design.	BT2
3	Apply theories of furnishings and finishes and fittings of various spaces for design development.	BT3
4	Examine interior furnishings, finishes and fittings and relate them to design an aesthetical and functional interior.	BT4

**Prerequisite:**

- Basic concepts of color, texture and materials.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I (Practical)	Wall - different types of wall treatments distemper, emulsion paint, plastic paints textured paint wall paper, tiles cladding, murals and paintings, wains coating (paneling of wall on the lower part of wall to protect from any kind of damage) dado work, wall painting, acoustic wall.	15	5
II (Practical)	Flooring - cement polish floor, terrazzo flooring, tiles stone, carpet & rags, mats/jute, woolen, synthetic, straw, vinyl flooring, parqueted /ceiling.	5	15
III (Practical)	Curtains - curtains of different styles, draperies, sheer curtains, blinds, festoons, curtain materials. Upholstery - cotton, synthetic, velvet, brocade, leather synthetic wool, silk, acrylic, polyester – nylon. Cushion- chair cushion, throw pillows, bench cushions, feather cushion, bolster.	5	15
IV (Practical)	Fittings - hinges, handle, magnets, ball catchers, handles, profile, brackets, hydraulic channels, sliding channels, locks, latches, door knocker, door studs.	5	25

	Lights & lightings- need of light, types of lights, the role of proper lighting.		
		TOTAL	<b>90</b>

**Notional Credit Hours for the course:** 30 x 3 = 90

<b>Total Credits in the Paper</b>	<b>Lecture/Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
4	22 hours	60 hours	8 hours
			Presentation/ Report Making Site Visits

**Text Books:**

4. Designer Lesley Taylor, Series of books of interior design, Series of four books
5. Home lighting ideas, Writer Richard Wiles, Series of four books
6. Jocasta Innes, Published by Ebury Press, National Magazine House, London

**Reference Books:**

2. The Designer's Guide to Surfaces and Finishes, Radford, Penny

**Reference Materials:**

3. [Interior Design Materials: Important Types Of Materials And Finishes | The Design Gesture](#)
4. [Natural Interior Design: How To Add Nature Into Your Homes | The Design Gesture](#)

8 <sup>th</sup> Semester		
<b>Paper 1 Major</b>	<b>Advanced Building Services L-T-P-C: 2-0-2-4 Credits: 4 Scheme of Evaluation : Theory + Practical</b>	<b>Subject Code: IDS082M841 Level : 400</b>

**Objective:** The objective of the subject is to provide a comprehensive understanding of various building services, including HVAC, fire safety and building acoustics.

**Course Outcome:**

After successful completion of the course, student will be able to		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Develop a concrete understanding of the fundamentals of building services.	BT1
2	Interpret the techniques of planning and executing various building services related to MEP.	BT2
3	Demonstrate the ability to practically incorporate MEP services in interior design projects.	BT3
4	Apply knowledge of MEP and energy-efficient systems to design sustainable interior spaces.	BT4

**Prerequisite:**

- Basic idea about building construction.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
I	<b>Heating, Ventilation, and Air Conditioning (HVAC) Systems</b> - Principles of HVAC systems and thermal comfort in buildings. - Types of heating and cooling systems: centralised vs. decentralised systems. - Components: chillers, cooling towers, air handling units, ducts, diffusers, and vents. - Ventilation strategies: natural, mechanical, and hybrid ventilation. - Energy-efficient HVAC design and sustainable cooling technologies. - HVAC load calculations and system integration in building design.  -Placement of HVAC units in interior spaces. - Indoor air quality (IAQ) and its impact on occupant health and performance, Ventilation	10	10

	strategies for indoor air quality.		
II	<b>Fire Safety and Prevention</b> - Fire safety codes, regulations, and building evacuation strategies. - Fire load, and principles of fire dynamics in buildings. - Fire detection and suppression systems: smoke detectors, sprinklers, hydrants, and alarms. - Fire-resistant materials and passive fire protection techniques. - Case studies on fire incidents and lessons in design improvements. - Design with material selection and compartmentalized strategies	10	10
III	<b>Fundamentals of Building Acoustics</b> - Basics of sound: frequency, wavelength, and decibel levels. - Sound propagation in buildings and its impact on occupant comfort. - Noise sources and mitigation techniques in residential and commercial spaces. - Impact of urban noise pollution on indoor environments and mitigation strategies. - Standards and regulations for noise control in built environments.	10	10
IV	<b>Advanced Building Acoustics and Soundproofing</b> - Room acoustics: reverberation time, sound absorption, and diffusion. - Acoustic design considerations for auditoriums, theatres, and conference rooms. - Soundproofing techniques: insulation, damping, and decoupling methods. - Acoustic properties of materials and their role in sound insulation. - Acoustic design principles in practice (studio project)	10	10
	<b>TOTAL</b>		<b>80</b>

**Notional Credit Hours for the course: 30 x 4 = 120**

<b>Total Credits in the Paper</b>	<b>Lecture/Tutorial</b>	<b>Studio/Practical</b>	<b>Experiential Learning</b>
4	35 hours	40 hours	5 hours
			Field Visits, Documentary Screening

**Text Book:**

1. *“Interior Design Illustrated”*, Ch’ing, Francis D K, Binggeli, Cork, Wiley Publications, New Jersey, 2004
2. *“Architectural Acoustics”* by David Egan.
3. *“Acoustic Design for the Home Studio”* by Mitch Gallagher

**Reference Books:**

1. Willim, J. McG. (1971). *Mechanical & Electrical Equipment for Buildings*
2. Roy J Dosat, *‘Principles of Refrigeration*
3. Manohar Prasad, *“Air Conditioning and Refrigeration Data Hand Book’*
4. Don Kundwar, *“Refrigeration and Air-Conditioning*
5. National Building Code.
6. Handbook of building Engineers in metric systems; 1968; New Delhi
7. National Building Code.
8. Leslie L Doelle *“Environmental Acoustics”*.
9. Knudson, Vern *“Acoustical Designing in Architecture “*
10. Prich, Peter. *“Acoustics: Noise and Building”*

8 <sup>th</sup> Semester		
<b>Paper 2 Major</b>	<b>Dissertation/Pre-Thesis</b> <b>L-T-P-C: 1-0-3-4 Credits: 4</b> <b>Scheme of Evaluation: Practicum/Jury</b>	<b>Subject Code:</b> IDS082N812 <b>Level: 400</b>

**Objective:** The objective of the course **Furnishing, finishing and fittings (IDS082M413)** is to design and implement furnishings and finishes and fittings according to the various spaces promoting aesthetical and functional interior design.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define basic knowledge of research	BT1
2	Demonstrate an ability to integrate the learning of the previous semesters with the aim of establishing the research component that leads to thesis in the final semester.	BT2
3	Apply theories and conduct in-depth analysis and objective research on a topic of their interest	BT3
4	Examine this research as an opportunity for pre-design study, amounting to literature review and relevant case studies.	BT4

**Prerequisite:**

- Basic concepts of color, texture and materials.

**Detailed Syllabus:**

Modules	Topics (if applicable) & Course Contents	Periods/ Hours	
		L	P
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.	3	25
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 info-graphics. • Literature review and identification of research area and stating the research question. • Presentation on-Selection of topic, reason for selection, justification, synopsis	3	25
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.	3	25

IV	<p>Content development, Data processing and Research outcome :</p> <ul style="list-style-type: none"> <li>•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.</li> <li>•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.</li> </ul> <p><b>Remarks:</b></p> <p>The finalised subject area must be researched through readings; learn description, analysis and synthesis of readings; citation of authors in their writing; and plan a study and write a paper based on literature review.</p> <p>The students may be encouraged to select the topic which may eventually culminate in the Interior Design Thesis of the final semester. Standard referencing conventions and technical writing norms must be adhered to. The submission of written paper or the presentation must be approximately 3500 words.</p>	3	25
<b>TOTAL</b>		<b>112</b>	

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
4	12 hours	100 hours	8 hours
			Presentation/ Report Making Site Visits

Text Book:

5. *The Dissertation: An Architecture student's handbook*, Borden, I. and Ray, K.R. (2006). 2<sup>nd</sup> Ed. Oxford : Architectural Press.

Reference Books:

1. Anderson, J. and Poole, M. (1998). *Thesis and Assignment Writing*. Brisbane: John Wiley.
2. Fink, A. (1998). *Conducting research literature reviews: from Paper to the Internet*. Thousand Oaks : Sage.
3. Borden, I. and Ray, K.R. (2006). *The Dissertation: An Architecture student's handbook*, 2<sup>nd</sup> Ed. Oxford : Architectural Press.
4. Muray, R. (2005). *Writing for Academic Journals*. Berkshire: Maidenhead, Open University Press.

8 <sup>th</sup> Semester		
<b>Paper 3 Major</b>	<b>Thesis / Major Project</b> <b>L-T-P-C: 0-0-24-12 Credits: 4</b> <b>Scheme of Evaluation: Studio/External</b>	<b>Subject Code:</b> <b>IDS082M813</b> <b>Level: 400</b>

**Objective:** The objective of the course **Thesis / Major Project (IDS082M813)** 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.

After successful completion of the course, student will be able to -		
S.No.	Course Outcome	Blooms Taxonomy Level
1	Define adequate facilities for work, relaxation, comfort, privacy, aesthetics, and maintenance through design and proper choice of materials, services, fittings and fixtures in interiors.	BT1
2	Develop design skills within the constraints of a given interior design project and showcase its complete design language to completion	BT2
3	Utilize the time to showcase hands on experience and understanding of basic infrastructural requirements	BT3
4	Analyze critically with a design eye and come up with strategic design solutions	BT4

**Prerequisite:**

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

**Detailed Syllabus:**

**Detailed Syllabus:**

Modules	Topics & Course Contents	Periods
I	<b>Synopsis, Case Study, Site Analysis and Area Programming:</b> <ul style="list-style-type: none"> <li>•Synopsis - Brief introduction of the proposed thesis / project.</li> <li>•Literature study and Case Studies - Live &amp; literature, to form a basis for their own design.</li> <li>•Site Analysis - Record and evaluate information on the site and its surroundings, and to use this evaluation in the design response.</li> </ul> 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	<b>Schematic Design:</b> <ul style="list-style-type: none"> <li>•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.</li> </ul> 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	<p><b>Design Detailing:</b></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>The detailed drawings as per the final area programme with due consideration to structural and service requirements of the project needs to be prepared.</p>	72
IV	<p><b>Design Finalization:</b></p> <ul style="list-style-type: none"> <li>• Pre-Final Design - Final drawings, views, models, etc. incorporating the comments received in the previous reviews.</li> </ul> <p>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.</p>	72
<b>TOTAL</b>		288

**Notional Credit Hours for the course:** 30 x 4 = 120

Total Credits in the Paper	Lecture/ Tutorial	Studio/Practical	Experiential Learning
12	0	280	8 hours
			Group Work Presentation/ Report Making Site Visits

**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* .