

I - SEMESTER

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Interior Design Studio -I			
Course Code	2BBI101	CIE Marks	50
Teaching Hours/Week (L:T:S:P:SL)	42:0:84:0:54	SEE Marks	50
Total Hours of Pedagogy	180	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	06

Course overview:

1. Interior Design Studio - I is the primary studio course of Semester I, introducing students to interior design as a discipline - its scope, typologies, and relationship to allied fields.
2. Through a series of studio exercises and one integrated project, students engage with the foundational elements and principles of interior space, acquire the language of interior drawing, and develop spatial literacy from the ground up.
3. This course runs concurrently and is directly integrated with Building Sciences for Interior Design, which provides the technical and scientific foundation that feeds into studio work.

Course objectives:

1. To introduce interior design as a discipline - its scope, typologies, and relationship to architecture and allied fields.
2. To develop understanding of the foundational elements that define and organize interior space.
3. To complete a studio project integrating spatial concept, function, human scale, and built conditions.

Teaching Learning Process

1. Studio sessions combine lectures, visual presentations, and hands-on drawing exercises
2. Site visits to a local retail or hospitality space - cafe, boutique, or showroom for structured observation and sketching.
3. Screening of documentaries and films on spatial experience and the work of notable designers, Indian and international.
4. Scale model-making and material exploration as part of studio exercises.

Outline:

A. The Discipline and the Interior Environment (8 hours)

- An introduction to interior design - its definition, scope, and the range of project types it encompasses: residential, commercial, hospitality, retail, and institutional.
- The relationship between interior design, architecture, and interior decoration - their overlaps, distinctions, and collaborative practice.
- Design communication through drawings, models, material boards, and presentations.
- The human experience of space comfort, scale, enclosure, movement, and emotional response to interior environments.

B. Elements of Interior Space (12 hours)

- The foundational vocabulary of interior space is studied through observation, drawing, and analysis. Space as positive and negative volume, enclosure, and boundary.
- Line as an architectural element - vertical, horizontal, diagonal - expressed through structure, furniture, and finish. Form - geometric and organic - as seen in furniture, columns, and built-in elements.
- The three planes - floor, wall, and ceiling - and how material, level, and surface changes define spatial character.
- Light and color studied observationally natural and artificial light, and color as a spatial element.

C. Scale, Drawing and Spatial Communication (12 hours)

- Understanding the human body as the primary reference for interior design - body dimensions, reach envelopes, clearance zones, and ergonomic standards for corridors, doors, counters, and seating - and proxemics as a framework for spatial zoning.
- These principles are applied directly through interior drawing: the floor plan using standard symbols for walls, doors, windows, furniture, and stairs drawn to scale; the interior section revealing heights, ceiling form, wall treatments, and spatial relationships; interior elevations showing the wall face, openings, surfaces, and built-in elements; and freehand perspective sketching as a tool for communicating spatial ideas.

D. Studio Project (94 hours)

- The brief is a small-scale interior such as - a display booth, retail kiosk, lounge, other spatial briefs within residential, hospitality, institutional, or exhibition contexts. Or similar taken from observation and research all the way to a complete set of interior drawings and a final presentation.
- *Recommended area of 200-400sqft.*

Integrating Building Science for Interior Designers (BSID)

- The outcome of the Project to be supported and enhanced using the knowledge and principles acquired under Building Science for Designers. Assignments to be focused on incorporating aspects such as lighting, ventilation, thermal comfort, and material performance into the design, along with the generation of relevant technical drawings and details for presentation.
- Building Sciences is woven directly into the project: the shell is read for its structure, planning constraints, and daylighting before design begins.
- Layout, clearances, and furniture placement are grounded in anthropometric and proxemic principles. Material, surface, and light are treated as design decisions across all three planes. The project closes with a field measured drawing - documenting a real interior space and producing an as-built set with a brief building science analysis.

Course outcome:

CO1: Identify the scope of interior design and recognise the foundational elements that define interior space.

CO2: Read and annotate an architectural drawing set accurately using correct conventions of scale, line weight, dimensioning, and notation.

CO3: Apply basic principles of daylighting, structural awareness, and anthropometrics to evaluate and inform interior design decisions.

CO4: Ability to construct basic interior drawings - plans, sections, and elevations - using appropriate conventions.

CO5: Design a spatial proposal for a small-scale interior typology integrating function, human scale, built conditions, and spatial organisation.

Assessment Details (both CIE and SEE)

The Professional Core Course, which is Project, based/ Assignment based/Viva based course.

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%.

The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% of the sum total of the CIE and SEE taken together.

CIE marks will be for the Design portfolio presentations/viva/ seminar/models.

Methods suggested:

1. Studio discussions, Reviews, Time problems, Seminar or micro project, Quiz, report writing etc.
2. The teacher must decide the topic for the Design and Seminars, if any, in the beginning only. The teacher must announce the methods of CIE for the subject in advance in writing.

SEE marks will be viva based assessed by internal examiner and external examiner appointed by the University.

Note: Examiners will be from academia / industry experts. Evaluation patterns will be based on Design portfolio presentations/seminars/models.

Suggested Learning Resources:

Books

- Ching, F.D.K. & Binggeli, C. (2012). Interior Design Illustrated. Wiley. [Primary reference — keep in studio]
- Pile, J. (2003). Interior Design. Prentice Hall.
- Norman, D. (1988). The Design of Everyday Things. MIT Press.
- Pile, J. (1997). Color in Interior Design. McGraw-Hill. [Introductory reference — detailed study in Sem II]
- Pallasmaa, J. (1996). The Eyes of the Skin. Wiley. [Recommended reading — foundational for the discipline]
- Sully, A. (2012). Interior Design: Theory and Process. Bloomsbury.
- Potter, N. (2002). What is a Designer: Things, Places, Messages. Princeton Architectural Press.

Web links and Video Lectures (e-Resources):

- Design Museum London - <https://designmuseum.org/>
- ArchDaily Interiors - <https://www.archdaily.com/tag/interior-design>
- Architectural Digest India - <https://www.architecturaldigest.in/>
- Dezeen Interiors - <https://www.dezeen.com/interiors/>
- NDTV Design Files (YouTube) - interior design case studies, Indian context

Skill Development Activities Suggested

- Site visit to a local retail or hospitality interior - cafe, boutique, or showroom — for structured observation and sketching.
- Documentary screening on the work of notable designers - Sheila Sri Prakash, Charles and Ray Eames, Kelly Wearstler, B.V. Doshi followed by group discussion.
- Field measured drawing exercise: independently documenting a real accessible interior and producing a hand-measured floor plan, section, and reflected ceiling plan.

I - SEMESTER

ART AND DESIGN FUNDAMENTALS - I			
Course Code	2BBI102	CIE Marks	50
Teaching Hours/Week (L:T:S:P: SL)	28:0:56:0:36	SEE Marks	50
Total Hours of Pedagogy	120	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	04

Course Overview:

1. Introduces core principles of art and design through observational drawing and visual composition.
2. Explores key visual elements — point, line, shape, colour, texture, and form.
3. Builds creative thinking and hand skills while developing an understanding of balance, proportion, rhythm, and layout for effective design compositions.

Course objectives:

1. To develop observational drawing skills and an understanding of design elements (point, line, plane, form, colour, texture) in two-dimensional composition.
2. To study colour theory and visual relationships within composition.
3. To understand and apply principles of balance, proportion, rhythm, harmony, and contrast — along with composition techniques and layout systems — in creative visual work.

Teaching Learning Process:

1. Studio-based practical sessions with demonstrations of drawing, rendering, and visualization techniques.
2. Hands-on design explorations, composition studies, and creative exercises.
3. Individual and collaborative assignments with case studies in art, architecture, and interior design.

4. Peer discussions, design critiques, and presentations for collaborative learning.
5. Continuous assessment through studio work, sketchbooks, assignments, and presentations.
Module-1
Exposure to various elements and principles of art and design in 2D (12 hours) • Observational drawing of simple objects • Points, lines, planes and their effects • Colours, pattern & texture — achromatic, monochromatic, polychromatic • Solidity, depth, volume; positive & negative shape • Value gradation and greyscale matching • Freehand sketching
Module-2
Principles of Aesthetics & Interior Composition in Design (12 hours) • Unity, balance, proportion, scale • Solidity, depth, volume; positive & negative shape — structure, surface, texture • Composition examples using elements & principles • Rendering technique exercises • Illustration and its application with historical buildings
Module-3
Principles of Colour Theory and Explorations (12 hours) • Colour psychology and its application in interior spaces • Colour wheel — hue, saturation, harmony, swatch • High/low value and high/low chroma • Colour harmonies: monochromatic, analogous, dyad, triad, tetrad, complementary, split-complementary, achromatic, polychromatic • Interior spaces through colour schemes
Module-4
Visual Relationships — Balance, Proportion, Order, Symmetry, Rhythm (20hours) • Scale and proportion of objects, forms, elements, colour, texture, harmony and contrast • Visual contrast, colour, rhythm and pattern in design • Cropping, hierarchy and direction in single images & complex compositions
Module-5
Composition Techniques and Layout Systems (24hours) • Advanced composition strategies: grids, layouts, symmetry, asymmetry • Application of systems to organize visual elements within a frame • Development of structured, creative compositions using design principles
Course outcome: At the end of the course, the student will be able to: CO1: Develop fundamental 2D design skills through observational drawing, freehand sketching, and exploration of design elements and principles. CO2: Apply the principles of aesthetics and interior composition to create balanced and visually effective design compositions. CO3: Understand colour theory, colour psychology, and colour harmonies for appropriate application in interior spaces. CO4: Analyze visual relationships of balance, proportion, symmetry, rhythm, hierarchy, and contrast in design compositions. CO5: Create structured and innovative visual compositions using advanced layout systems, grids, and design principles.

Assessment Details (both CIE and SEE)

The Professional Core Course, which is Project, based/ Assignment based/Viva based course.

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%.

The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% of the sum total of the CIE and SEE taken together.

CIE marks will be for the Design portfolio presentations/viva/ seminar/models.

Methods suggested:

1. Studio discussions, Reviews, Time problems, Seminar or micro project, Quiz, report writing etc.
2. The teacher must decide the topic for the Design and Seminars, if any, in the beginning only. The teacher must announce the methods of CIE for the subject in advance in writing.

SEE marks will be viva based assessed by internal examiner and external examiner appointed by the University.

Note: Examiners will be from academia / industry experts. Evaluation patterns will be based on Design portfolio presentations/seminars/models.

Suggested Learning Resources:**Books**

- Gail Greet Hannah, Elements of Design, Princeton Architectural Press, 2002
- Lauer, David; Design Basics, Wadsworth Publishing, 1999
- W. Wong; Principles of Two-Dimensional Design, John Wiley and Sons, 1972
- J. Bowers; Introduction to Two-Dimensional Design: Understanding Form and Function, John Wiley & Sons, 1999
- L. Hotzschue; Understanding Colour, VNR, 1995
- Itten, Johannes; The Art of Colour: The Subjective Experience and Objective Rationale of Colour, Wiley Publications, 1997
- Proctor, R.M.; The principles of pattern, Dover Publications, 1990 - Elam, Kimberly;
- Geometry of Design: Studies in Proportion and Composition, Princeton Architectural Press, 2001
- Donald Norman, 'Design of Everyday Things', Basic Books; 2 edition (5 November 2013)
- John Berger, 'Ways of Seeing' 1972, Penguin, UK
- Arthur Llewellyn Basham, 'The Wonder That Was India', Picador; Indian edition, 2004
- Christopher Alexander, "The Timeless way of Building" , Oxford University Press (1979)

Web links and Video Lectures (e-Resources):

- <https://ndl.iitkgp.ac.in> <https://www.researchgate.net/publication/339016810>
- Pedagogy_for_Basic_Design_Studio_in_Learning_Architecture_A_Qualitative_Exploration.
- https://www.shs-conferences.org/articles/shsconf/pdf/2016/04/shsconf_erpa2016_01053.pdf
- <https://www.youtube.com/watch?v=s9KU6azBYZE>
- https://www.classcentral.com/course/youtube-introduction-principles-of-design-438024?utm_source
- https://www.classcentral.com/course/youtube-colour-theory-fundamentals-127605?utm_source
- <https://ask.video/course/design-principles-and-elements>

Skill Development Activities Suggested

- Workshop on Observational Drawing and Colour Composition Workshop.
- Site Visits to observe artworks to understand composition, colour, and visual elements
- Seminar on Application of Design Elements and Principles in Visual Composition.

I - SEMESTER**IMAGE REPRESENTATION, TRANSFORMATIONS AND FUNDAMENTALS OF AI- I**

Course Code	2BBI103	CIE Marks	50
Teaching Hours/Week (L:T:S:P: SL)	28:0:56:0:36	SEE Marks	50
Total Hours of Pedagogy	120	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	04
Course Overview:			
1. Image Representation, Transformations and Fundamentals of AI - I (IRT-I) is a studio-based course designed for first-semester interior design students. 2. It lays the visual and technical groundwork for professional design communication by building drawing skills from the ground up beginning with simple observational sketches and progressing all the way to digitally rendered interior compositions.			
Course objectives:			
1. To develop accurate observational drawing skills using a range of hand drawing techniques. 2. To construct 1-point and 2-point perspective drawings of interior spaces and furniture. 3. To introduce and use digital image-making software as a bridge from hand drawing to digital workflow.			
Teaching Learning Process:			
1. Supervised drawing sessions with real-time feedback to develop observation, proportion, and representation skills. 2. Observation exercises: Drawing from nature and live/visual references to understand form, movement, and scale. 3. Demonstrations: Faculty-led sessions explaining perspective principles and construction techniques. 4. Guided tonal drawing exercises with real-time feedback to understand light, shade, and shadow on 3D forms. 5. Introduction to digital tools, workflows, and differences between raster and vector platforms using relevant softwares.			
Module-1			
Observational Drawing & Object Representation: (14 hours)			
• Study of objects from the immediate environment • Drawing techniques: outline, contour, gesture, line quality variation • Understanding scale and proportion - the object relative to the human figure • Study of size, shape, texture and colour as design elements of a single object • Comparative scale drawings: small objects vs large furniture vs room elements			
Module-2			
Nature, Human Figure & Interior Elements : (14 hours)			
• Representation of natural forms: organic forms, natural textures, and patterns observed in nature. • Human figure drawing: gesture, proportion, and posture; using the figure as a reference for scale. • Sketching figures in seated, standing and reclining positions relevant to interior scenes • Elements for interior presentations: human figures, plants and interior accessories used to enhance spatial context and scale. • Figure-and-object compositions: placing the human figure within an object study			
Module-3			
Perspective Drawing - Principles, 1-Point & 2-Point: (18 hours)			
• Principles: picture plane, station point, eye level, horizon line, vanishing points, cone of vision. • One-point perspective: interior room views, corridors, hallways, interior layouts.			

• Two-point perspective: built forms, furnitures , cabinets and joinery details. • Freehand perspective sketching of interior spaces with furniture in place. • Varying eye level: normal view, bird's-eye, worm's-eye for interior communication.
Module-4
Light, Shadow & Tonal Studies on 3D Form: (18 hours) • Understanding light sources and their effect on 3D geometric and organic forms. • Value scale: creating a tonal range from light to dark in pencil and pen. • Shade vs shadow: distinguishing shade (on the object) from cast shadow (on surfaces). • Tonal studies of furniture, geometric solids in interior lighting conditions. • Grid-based drawing and analytical representation of form with tone.
Module-5
Introduction to Digital Image-Making Tools: (20 hours) • Overview of the digital image-making ecosystem: raster vs vector tools. • Digital tracing of hand-drawn perspective sketches - bridging analogue to digital. • Basic colour fills and tone overlays on digitally traced interior drawings. • File formats, resolution and exporting for portfolio presentation.
Course outcome CO1: Identify and apply observational drawing techniques to represent objects with accuracy in scale, proportion, and line quality. CO2: Draw natural forms, human figures, and interior accessories and compose them within spatial contexts. CO3: Acquire the ability to construct one-point and two-point perspective drawings of interior spaces, furniture, and built elements. CO4: Analyse light and shadow on three-dimensional forms and produce tonal studies in pencil and pen. CO5: Demonstrate the ability to use basic digital image-making tools to trace, colour, and export interior drawings for presentation.
Assessment Details (both CIE and SEE) The Professional Core Course, which is Project, based/ Assignment based/Viva based course. The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% of the sum total of the CIE and SEE taken together. CIE marks will be for the Design portfolio presentations/viva/ seminar/models. Methods suggested: 1. Studio discussions, Reviews, Time problems, Seminar or micro project, Quiz, report writing etc. 2. The teacher must decide the topic for the Design and Seminars, if any, in the beginning only. The teacher must announce the methods of CIE for the subject in advance in writing. SEE marks will be viva based assessed by internal examiner and external examiner appointed by the University. Note: Examiners will be from academia / industry experts. Evaluation patterns will be based on Design portfolio presentations/seminars/models.
Suggested Learning Resources: Books • Edwards, Betty — New Drawing on the Right Side of the Brain. Tarcher, 2002.

- Wang, T.C. — Pencil Sketching. John Wiley & Sons, 1997.
- Pogany, Willy — The Art of Drawing. Madison Books, 1996.
- Dalley, Terence (ed.) — The Complete Guide to Illustration & Design. Phaidon, Oxford, 1980.
- Kasprin, R. — Design Media: Techniques for Watercolour, Pen & Ink, Pastel and Coloured Markers. John Wiley & Sons, 1999.

Web links and Video Lectures (e-Resources):

- <https://www.youtube.com/watch?v=gz6hefmviEg> — Drawing fundamentals (observational drawing)
- <https://www.drawawesome.com/> — Structured drawing practice resource
- <https://www.youtube.com/watch?v=IpOIUIUbk14> — Perspective drawing tutorial (1-point & 2-point)

Skill Development Activities Suggested

- Studio exercises: Each module includes progressive exercises from simple sketches to composed interior studies.
- Interior site visit: Students sketch from a real accessible interior space (café, home, library).
- Object-to-room progression: Students begin drawing individual objects and build up to placing them in a perspectival interior space.
- Digital exploration lab session (Module 5): Guided software demonstration followed by independent tracing exercises.

I SEMESTER

DESIGN AND HUMAN EVOLUTION - I			
Course Code	2BBI104	CIE Marks	50
Teaching Hours/Week (L:T:S:P: SL)	42:0:0:0:48	SEE Marks	50
Total Hours of Pedagogy	90	Total Marks	100
Type of Examination (SEE)	Theory	Exam Hours	3
		Credits	03
Course Overview: 1. This course introduces students to the origins and evolution of designed interior space -from the earliest human shelters to the end of the ancient world. 2. It establishes a historically informed, critically aware foundation for interior design practice by examining how spatial intelligence, material culture, craft, and decorative systems emerged across prehistoric and ancient civilizations worldwide, with sustained attention to the Indian interior tradition from the Indus Valley to the early medieval period.			
Course Objectives: 1. Trace the spatial and cultural logic of early human shelter 2. Analyze how ancient material and structural discoveries transformed interior spatial possibilities across the ancient world. 3. Examine the ancient decorative systems as spatial communication and as the foundation of all subsequent ornamental practice.			

Teaching Learning Process (General Instructions):

1. Lectures supported by curated visual presentations: high-resolution documentation of ancient interior environments, site photography, measured drawings, and reconstruction diagrams.
2. Sketch-based studio exercises: students produce analytical hand-drawings of spatial plans, sections, and decorative details from each civilisation studied.
3. Visual analysis assignments: students read and annotate significant ancient interior environments using a structured framework -spatial organisation, threshold, material, light, and ornament.

Module 1**Origins of the Designed Interior (8hours)**

Cave to shelter; the hearth as first interior; Egyptian palatial and tomb interiors; Greek domestic and civic space; Roman atrium, bath, and basilica; spatial hierarchy, threshold, and the concept of enclosure.

- Lascaux -the interior as ritual space
- Egyptian domestic + funerary interiors; column, hypostyle hall
- Greek oikos; Doric, Ionic, Corinthian orders, and interior application
- Roman domus -atrium, impluvium, tablinum; mosaic, fresco
- Pompeii and Herculaneum as primary interior evidence
- Elements: spatial zoning, privacy gradient, light, threshold

Module 2**Material and Structural Origins of Interior Space (8hours)**

Stone masonry, fired brick, timber joinery, and the mud-brick interior; structural logic of the arch, vault, and dome; how construction method directly determines interior possibility; materials as evidence of civilization.

- Mudbrick and rammed earth -Mesopotamian and Egyptian interior
- Stone masonry -load-bearing wall and interior constraint
- Greek trabeation vs Roman arch: spatial consequence for interiors
- The Pantheon -concrete dome and oculus; interior as cosmological instrument
- Colour and surface, fresco, mosaic, tile as interior material culture

Module 3**Ancient Decorative Systems and the Origins of Ornament (8hours)**

Definitions: art, craft, and ornament as distinct interior practices; prehistoric cave marking; Egyptian hieroglyph and decorative programme; Greek orders as applied ornament; Roman fresco systems and mosaic grammar; the decorated surface as spatial communication.

- Cave art at Lascaux, Altamira -mark-making as spatial inhabitation.
- Egyptian wall programme -hieroglyphic, figurative, and symbolic systems
- Greek orders -Doric, Ionic, Corinthian as ornamental grammar
- Roman fresco: the four Pompeian styles; illusionistic space as decoration
- Mosaic: from floor to wall; glass tesserae and Byzantine pictorial space

Module 4**Ancient and Classical Asian Interiors (8hours)**

Chinese Han and Tang dynasty palace and courtyard interiors; early Hindu temple interior spatial logic (garbhagriha, mandapa, pradakshina); Buddhist cave interiors -Ajanta, Dunhuang; Japanese Yayoi and Asuka period; the tatami module and spatial economy.

- Chinese courtyard house (siheyuan) -spatial hierarchy and orientation
- Han dynasty: lacquer, silk, and the designed interior object
- Hindu temple interior: threshold, darkness, sanctum, and sacred geometry
- Ajanta caves: rock-cut interior, mural painting, and procession space
- Early Buddhist interior: stupa, chaitya hall, vihara spatial logic
- Japanese: post-and-beam timber, shoji screen, modular tatami

Module 5
Ancient Indian Interior -Climate, Cosmos, and Craft + Case Study (10hours) Indus Valley planned settlements and courtyard interiors; Vastu Shastra as spatial cosmology; rock-cut interior traditions -Ellora, Ajanta, Mahabalipuram; early stepwell as engineered interior landscape; regional craft as interior material -terracotta, stone inlay, textile. Key Topics: • Mohenjo-daro -the planned courtyard house; drainage and civic interior • Vastu Shastra -orientation, spatial hierarchy, and mandala planning • Ajanta and Ellora -the rock-cut interior as total spatial artwork • Rani ki Vav (Patan) -stepwell as multi-level interior public space • Regional craft: Karnataka stone, Tamil Nadu bronze, Rajasthani textile • Case Study: Rani ki Vav, Patan -reading a historic Indian interior through design process
Course Outcomes At the end of the course, the student will be able to: CO1: Trace the evolution of interior space from prehistoric shelter to the ancient built environment. CO2: Analyse how material and structural innovations -transformed interior spatial possibilities in the ancient world. CO3: Identify, describe, and compare the decorative systems of ancient civilizations -as instruments of spatial communication and cultural identity. CO4: Evaluate and articulate the spatial logic, material culture, and interior environments of ancient Asian civilisations. CO5: Apply design process thinking to read a significant ancient Indian interior.
Assessment Details (both CIE and SEE) The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% in the sum total of the CIE and SEE taken together. CIE: Two-Unit Tests. Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for the subject.
Suggested Learning Resources Books • John Pile and Judith Gura, A History of Interior Design, 4th edition, Laurence King Publishing, 2014. • Mario Praz, An Illustrated History of Interior Decoration: From Pompeii to Art Nouveau, Thames, and Hudson, 1982. • Francis D.K. Ching and Corky Binggeli, Interior Design Illustrated, 3rd edition, Wiley, 2012. • Gay Robins, Art of Ancient Egypt, Thames & Hudson, 2008. • Pierre Amiet, Art of the Ancient Near East, Harry N. Abrams, 1980. • Cooper and Dawson, Traditional Buildings of India, Thames, and Hudson, 1998. • Charles Correa, A Place in the Shade, Penguin India, 2012.
Web Links and Video Lectures (e-Resources) • https://ndl.iitkgp.ac.in -National Digital Library of India • https://www.vam.ac.uk -V&A Museum: interiors, decorative arts, and design history • https://artsandculture.google.com -Google Arts & Culture: virtual museum tours and ancient interior archives • https://www.thebritishmuseum.org -British Museum: Egypt, Greece, Rome collections • https://whc.unesco.org -UNESCO World Heritage: Ajanta Caves, Rani ki Vav, and other ancient Indian sites • https://www.eamesoffice.com -Eames Office: design process methodology reference

Skill Development Activities Suggested

- Guest lecture from a practising interior designer, architect, or design historian on the spatial intelligence of ancient Indian interiors and their relevance to contemporary practice.
- Site visit to a significant heritage interior -a temple, stepwell, rock-cut monument, or museum with ancient decorative arts collection -with measured sketch and spatial analysis documentation.
- Sketch workshop: hand-drawing the plan and section of one ancient interior from each major civilisation studied -Egyptian, Greek/Roman, Hindu temple, and Indian vernacular.
- Visual analysis assignment: students select one ancient interior photograph and produce a structured written and drawn analysis covering spatial organisation, material, light, threshold, and ornament.

I SEMESTER

BUILDING SCIENCES FOR INTERIOR DESIGN			
Course Code	2BBI105	CIE Marks	50
Teaching Hours/Week (L:T:S:P:SL)	14:0:56:0:20	SEE Marks	50
Total Hours of Pedagogy	90	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	03
Course Overview:			
1. Building Sciences for Interior Design develops the structural and technical literacy that an interior designer needs to work responsibly within a built shell. Students learn to identify structural systems, read architectural drawings, analyse daylighting conditions, apply anthropometric principles, and document real spaces through field measured drawing. 2. It is a direct prerequisite for Interior Materials and Applications - I (2BBI204, Semester II). This subject is an IPCC course integrated with Interior Design Studio - I (2BBI101). Modules 1–3 build the technical foundation; Modules 4 and 5 are directly integrated with the concurrent IDS-I studio project and field exercises.			
Course Objectives:			
1. To introduce primary structural systems and develop the ability to identify how structural decisions shape interior planning. 2. To develop skills in reading and annotating architectural drawings - plan, section, elevation, and reflected ceiling plan. 3. To build foundational knowledge of building materials - masonry, concrete, and timber - as encountered in existing buildings. 4. To apply principles of solar geometry and daylighting to analyse interior light conditions. 5. To use anthropometric and proxemic frameworks to evaluate the human scale of interior spaces. 6. To independently measure and document a real interior space through field measured drawing.			
Teaching Learning Process (General Instructions):			
1. Demonstration-led studio sessions; all learning applied directly to the IDS-I project. 2. Lectures using building photographs, construction drawings, and material samples. 3. Lectures with visual presentations and case studies. 4. Peer review and faculty discussions on reframing constraints as design opportunities. 5. On-site faculty guidance for the first hour; students work independently thereafter. Post-visit studio sessions for drawing production and analysis			
Module 1			
The Built Shell (12hours)			
Structural Systems			
● Load-bearing versus framed (RCC) construction - planning implications for the interior designer. ● Structural grid, column locations, bay widths, and ceiling depths in RCC framed buildings.			

• Floor-to-floor height, structural depth, and the difference between structural and finish floor level. • Identifying structural walls versus partition walls in a building. Masonry and Construction Methods • Brick - types (country, modular, fly ash, AAC), properties, and bonding patterns (English bond, Flemish bond). • Stone - types (granite, marble, slate, sandstone), quarrying, and use as finish and structural material. • Concrete Masonry Units - hollow/solid blocks, AAC blocks, stabilised mud blocks, glass blocks. • Mortar, plaster, and screeding - substrates beneath every interior finish. • Construction joints and expansion joints - occurrence and implications for interior detailing. Timber in Construction • Natural timber - hardwood vs softwood, grain, seasoning, moisture behavior, and preservation. • Basic door and window types - frames, shutters, and joinery as encountered in existing buildings.
Module 2
Reading the Envelope: Architectural Drawing Conventions (12hours)
• The four drawing types - plan, section, elevation, and reflected ceiling plan - and what each communicates. • Drawing conventions: scale selection, line weight hierarchy, dimensioning standards, material hatching, and notation. • Reading an existing architectural drawing set - extracting room dimensions, ceiling heights, openings, and service locations. • Drawing symbols: doors, windows, stairs, sanitary fittings, and furniture in plan. • Reading a section for spatial volumes, ceiling profiles, and wall thicknesses. • The reflected ceiling plan - purpose and importance in interior design practice.
Module 3
Light and Scale (12hours) Daylighting and Solar Geometry • Illuminance, lux, and daylighting adequacy for interior spaces. • Solar geometry - sun path, altitude and azimuth angles, and orientation-based daylighting analysis. • Daylight factor and window-to-wall ratio - depth of daylight penetration. • Glare - causes, consequences, and mitigation through shading and surface reflectance. • Solar heat gain coefficient (SHGC) - definition and thermal comfort implications. • Surface reflectance, texture, and finish as performance variables affecting light behaviour. Human Scale, Anthropometrics, and Proxemics • Key body dimensions, reach envelopes, and clearance zones relevant to interior planning. • Ergonomic standards - corridor widths, door clearances, counter heights, stair dimensions, shelf depths. • NBC 2016 provisions relevant to interior dimensions and accessibility. • Spatial perception - how ceiling height, proportion, and volume affect occupant experience. • Proxemics (Edward T. Hall) - intimate, personal, social, and public zones, and their design implications.
Module 4:
Spatial Analysis: Integration with IDS-I (16 hours) • Students apply the technical frameworks of Modules 1–3 to analyse the IDS-I project shell before design begins. • Systematic shell analysis - structural system, drawing type cross-referencing, daylighting conditions, anthropometric evaluation. • The three planes (floor, wall, ceiling) as surfaces with performance properties - light reflectance, thermal behaviour. • Surface finish categories as performance variables - introduced conceptually; material specification belongs to MA-I onwards.

- Translating building science analysis into design parameters - structural constraints, daylight zones, ergonomic compliance, proxemic zoning.

Module 5

Field Measured Drawing: Integration with IDS-I (18hours)

- Constitutes the culminating exercise of both BSID and the IDS-I studio semester.
- Professional workflow of measured drawing - instruments, field notation, and systematic documentation approach.
- Measurement strategy - establishing datum lines, measuring structural elements first, recording openings, ceiling heights, and services.
- Dimensioning strategy - whole to part, cross-checking, recording anomalies.
- Production of a complete as-built drawing set - floor plan, section, and reflected ceiling plan at appropriate scale.
- Building science analysis of the documented space - structural system, daylighting adequacy, anthropometric observations, proxemic note.

Course Outcomes

At the end of the course, the student will be able to:

CO1: Identify structural systems in a building shell and explain how structural decisions determine interior planning freedom.

CO2: Read and annotate an architectural drawing set accurately - plan, section, elevation, and reflected ceiling plan - using correct conventions.

CO3: Demonstrate foundational knowledge of masonry, concrete, and timber as building materials encountered in existing interiors.

CO4: Apply solar geometry and daylighting principles to analyse interior light conditions and use anthropometric and proxemic frameworks to evaluate human scale.

CO5: Independently measure and document a real interior space, producing an as-built drawing set with an integrated building science analysis.

Assessment Details (both CIE and SEE)

The Professional Core Course, which is Project, based/ Assignment based/Viva based course.

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%.

The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% in the sum total of the CIE and SEE taken together.

CIE marks will be for the Design portfolio presentations/viva/ seminar/models.

Methods suggested:

1. Studio discussions, Reviews, Time problems, Seminar or micro project, Quiz, report writing etc.
2. The teacher must decide the topic for the Design and Seminars, if any, in the beginning only. The teacher must announce the methods of CIE for the subject in advance in writing.

SEE marks will be viva based assessed by internal examiner and external examiner appointed by the University.

Note: Examiners will be from academia / industry experts. Evaluation patterns will be based on Design portfolio presentations/seminars/models.

Suggested Learning Resources

Books

- Francis D.K. Ching and Cassandra Adams, Building Construction Illustrated, 5th ed., Wiley, 2014
- Mark DeKay and G.Z. Brown, Sun, Wind and Light, 3rd ed., Wiley, 2014
- Julius Panero and Martin Zelnik, Human Dimension, and Interior Space, Watson-Guptill, 1979
- Edward T. Hall, The Hidden Dimension, Anchor Books, 1966
- Roy Chudley, Construction Technology, 3rd ed., Longman, 1999

- National Building Code of India (NBC 2016), Bureau of Indian Standards

Web Links and Video Lectures (e-Resources)

- <https://nptel.ac.in> - Building Science and Technology, IIT Kharagpur / IIT Roorkee
- <https://ndl.iitkgp.ac.in> - National Digital Library of India
- <https://www.designingbuildings.co.uk>

Skill Development Activities Suggested

- Campus building observation walk - identify and sketch five structural components with annotations.
- Hands-on material handling session - brick, AAC block, stone, and timber samples in studio.
- Construction site visit - observe structural systems and masonry work in progress.
- Field measured drawing site visit (Module 5).
- Case study analysis - built interiors where building science constraints shaped design outcomes.
- Guest lecture by a practising architect or structural engineer.

I SEMESTER

Communication & Writing in English			
Course Code	2BBI106/ 2BAT106	Cie Marks	50
Teaching Hours/Week (L:T:S:P: SL)	14:0:0:0:0	See Marks	-
Total Hours of Pedagogy	PP	Total Marks	50
Type of Examination (SEE)	PP	Exam Hours	-
		Credits	PP

I SEMESTER

(Samskrutika / Balake) Kannada			
Course Code	2BBI106/ 2BAT106	Cie Marks	50
Teaching Hours/Week (L:T:S:P:SL)	14:0:0:0:0	See Marks	—
Total Hours of Pedagogy	PP	Total Marks	50
Type of Examination (SEE)	PP	Exam Hours	-
		Credits	PP

II SEMESTER

C. Studio Project (90 hours)

The Monofunctional Interior (such as studio apartment, duplex, or independent house, holiday home) Recommended area of **800-1000 sqft**

Each residential typology is explored through a client-specific design approach, where the spatial, material, and ergonomic decisions are driven by the identity, lifestyle, and needs of a defined user. The project develops spatial organisation, material and colour coordination, lighting strategy, and ergonomic resolution in an integrated way.

Material knowledge from the concurrent Interior Materials and Applications subject directly informs finish and surface decisions within the project. The project is resolved through plans, sections, elevations, a reflected ceiling plan, material and colour boards, and a final presentation.

Course outcome:

At the end of the course, the student will be able to:

CO1: Analyse residential interiors in terms of spatial organisation, material character, and light quality.

CO2: Apply ergonomic and anthropometric principles to kitchen, bathroom, bedroom, and living areas.

CO3: Develop a coordinated colour and material palette for a residential interior.

CO4: Design a residential interior integrating spatial, material, lighting, and ergonomic considerations for a client-specific brief.

CO5: Communicate a resolved residential interior through plans, sections, elevations, material boards, and client narrative.

Assessment Details (both CIE and SEE)

The Professional Core Course, which is Project, based/ Assignment based/Viva based course.

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%.

The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% in the sum total of the CIE and SEE taken together.

CIE marks will be for the Design portfolio presentations/viva/ seminar/models.

Methods suggested:

1. Studio discussions, Reviews, Time problems, Seminar or micro project, Quiz, report writing etc.

2. The teacher must decide the topic for the Design and Seminars, if any, in the beginning only. The teacher must announce the methods of CIE for the subject in advance in writing.

SEE marks will be viva based assessed by internal examiner and external examiner appointed by the University.

Note: Examiners will be from academia / industry experts. Evaluation patterns will be based on Design portfolio presentations/seminars/models.

Suggested Learning Resources:

Books

- Pallasmaa, J. (1996). The Eyes of the Skin: Architecture and the Senses. Wiley.
- Bachelard, G. (1958). The Poetics of Space. Beacon Press.
- Ching, F.D.K. & Binggeli, C. (2012). Interior Design Illustrated. Wiley.
- Pile, J. (2003). Interior Design. Prentice Hall.
- Sully, A. (2012). Interior Design: Theory and Process. Bloomsbury.
- Karlen, M. & Fleming, R. (2016). Space Planning Basics. Wiley.
- Neufert, E. Architects' Data (latest edition). Wiley-Blackwell.
- National Building Code of India (NBC) — relevant sections on residential spaces and accessibility.

Web links and Video Lectures (e-Resources):

- ArchDaily — www.archdaily.com
- Dezeen — www.dezeen.com
- Architectural Digest India — www.architecturaldigest.in
- NDTV Design Files / India Design ID

Skill Development Activities Suggested

1. Case study analysis of residential interiors through drawings and visual documentation.
2. Development of colour, material, and finish palettes for interior spaces.
3. Ergonomic analysis and furniture layout exercises.

II - SEMESTER

ART AND DESIGN FUNDAMENTALS - II			
Course Code	2BBI202	CIE Marks	50
Teaching Hours/Week (L:T:S:P: SL)	28:0:56:0:36	SEE Marks	50
Total Hours of Pedagogy	120	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	04
Course Overview: 1. This course introduces the relationship between art and interior design, emphasizing the role of art in shaping visual culture, spatial aesthetics, and human experiences. 2. It develops an understanding of design elements, principles, colour, human proportions, anthropometry, and ergonomics as essential foundations for interior design. 3. The course further explores the integration of art and diverse art forms into interior spaces, enabling students to create functional, expressive, and visually engaging interior environments.			
Course Objectives: 1. To develop an understanding of the meaning, functions, and cultural significance of art, and its relationship with interior design and other visual art forms. 2. To acquire knowledge of design elements, principles, human proportions, anthropometry, and ergonomics for creating functional and aesthetically appropriate interior spaces. 3. To enhance creative thinking, visual analysis, and the application of art and design principles in the conceptualization and design of interior environments.			
Teaching Learning Process: 1. Interactive lectures supported by visual presentations, case studies, and demonstrations of artworks and interior design projects. 2. Studio-based exercises involving sketching, colour studies, composition, anthropometric analysis, and design explorations. 3. Learning through discussions, presentations, museum/gallery visits, case studies, and documentation to relate art principles with interior design applications.			
Module-1			
Definition and Role of Art in Society (16hours) • Meaning and types of art • Fine arts, performing arts, commercial arts, industrial arts, folk arts • Contemporary forms — abstract, visual, spatial, temporal, pop art • Role of art in social, cultural, and historical contexts			
Module-2			

Visual Composition and Design Fundamentals (16hours) ● Elements: line, shape, form, colour, texture, space ● Principles: balance, proportion, rhythm, harmony, contrast, unity ● Gestalt theory and colour perception ● Psychological impact of colour in design communication
Module-3
Interior Design and Other Art Forms (16hours) ● Relationship between interior design and painting/sculpture ● Influence of art forms on spatial design and aesthetics ● Integrating artistic elements into interiors ● Interdisciplinary approach to design
Module-4
Human Body as a Guide for Interior Design (16hours) ● Human proportions, anthropometry, and ergonomics ● Applying body dimensions to functional, comfortable spaces ● Relationship between human dimensions, furniture and layouts.
Module-5
Exploration of Art as a Design Feature (20hours) ● Selection, placement, and integration of art in interior spaces ● Art as a focal point balanced with design principles in 3D compositions ● Case studies of notable interiors — art defining character and identity.
Course outcome: CO1: Understand the meaning, types, and societal role of art, and its relevance to interior design and other visual art forms. CO2: Demonstrate the application of design elements, principles, Gestalt theory, and colour psychology in creating effective visual compositions. CO3: Analyze the relationship between interior design and various art forms, and evaluate their influence on spatial aesthetics and user experience. CO4: Apply principles of human proportions, anthropometry, and ergonomics in designing functional and user-centred interior spaces. CO5: Integrate artistic elements and design principles to create visually engaging, balanced, and meaningful interior environments.
Assessment Details (both CIE and SEE) The Professional Core Course, which is Project, based/ Assignment based/Viva based course. The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% in the sum total of the CIE and SEE taken together. CIE marks will be for the Design portfolio presentations/viva/ seminar/models. Methods suggested: 1. Studio discussions, Reviews, Time problems, Seminar or micro project, Quiz, report writing etc. 2. The teacher must decide the topic for the Design and Seminars, if any, in the beginning only. The teacher must announce the methods of CIE for the subject in advance in writing. SEE marks will be viva based assessed by internal examiner and external examiner appointed by the University. Note: Examiners will be from academia / industry experts. Evaluation patterns will be based on Design portfolio presentations/seminars/models

Suggested Learning Resources:**Books**

- Wucius, Wong. Principles of two Dimensional Design. Van Nostrand Reinhold 1972
- Hanks, A.David. Decorative Designs of Frank Lloyd Wright, Dover Publications, Inc. New York, 1999.
- Helper, E.Donald, Wallach, I.Paul. Architecture Drafting and Design, 3rd ed. McGraw-Hill Book Company, New York, 1977.
- Johannes Itten, The Art of color, John Wiley & Sons; Revised edition, 1997
- Jonathan Pore, Interior Color by Design, Volume 2: A design tool for Home owners, Designers and Architects, Rockport publishers, 2005.
- Ethel Rompilla, Color for Interior Design, Harry N. Abrams, 2005.
- Itten, Johannes. Design and Form: The basic course at the Bauhaus, Thames and Hudson Ltd., London 1997.

Web links and Video Lectures (e-Resources):

- <https://study.com/academy/lesson/video/bauhaus-color-theory.html>
- <https://edurev.in/v/222036/Fundamentals-of-Design>
- <https://www.classcentral.com/course/youtube-the-gestalt-principles-basics-for-beginners-160019>
- <https://www.classcentral.com/course/youtube-graphic-design-theory-104395>
- <https://www.udemy.com/course/design-principles>

Skill Development Activities Suggested

- Guest Lecture “Role of Art and Design Principles in Interior Spaces”,
- Workshop on “Visual Composition and Colour Application”,
- Site Visits to observe art galleries, museums, or designed interior spaces to understand the use of art, composition, materials, and spatial aesthetics, with documentation and analysis of visual elements and design principles.
- Seminar - Student-led seminar on topics such as “Art Movements and Their Influence on Interior Design” or “Ergonomics and Human-Centered Design”, encouraging research, critical thinking, and presentation skills.

II - SEMESTER

IMAGE REPRESENTATION, TRANSFORMATIONS AND FUNDAMENTALS OF AI – II			
Course Code	2BBI203	CIE Marks	50
Teaching Hours/Week (L:T:S:P: SL)	28:0:56:0:36	SEE Marks	50
Total Hours of Pedagogy	120	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	04
Course Overview: 1. Image Representation, Transformations and Fundamentals of AI – II (IRT-II) is a studio-based course that builds upon the knowledge and skills acquired in Image Representation, Transformations and Fundamentals of AI – I, which is a prerequisite for this course. 2. Building on foundational drawing and digital skills, the course advances into 3D projections, interior sectional representation, perspective drawing, material rendering, and culminates in the development of a presentation-quality digital interior portfolio.			
Course objectives: 1. To develop skills in visualizing and representing interior spaces through projections, sections, and perspective drawings.			

- To communicate interior materials, finishes, and design ideas using manual, digital, and AI-assisted visualization techniques. - To create presentation-quality interior design portfolios integrating drawings, renderings, and digital visual communication.
Teaching Learning Process: - Faculty-led demonstrations and interactive studio sessions on representation, visualization, and communication techniques. - Guided hands-on exercises using both manual and digital methods with continuous feedback. - Application-based learning through drawing, modelling, rendering, and presentation tasks. - Analysis of professional examples, case studies, and contemporary design practices.
Module-1
3D Projections: Isometric, Axonometric & Exploded Views (16hours) - Principles of isometric and axonometric projections - differences and applications - Isometric and Axonometric drawings of furniture pieces, cabinetry, storage units, room layouts and interior compositions. - Exploded views of furniture and interior elements. - Surface development of simple interior forms and components. - Introduction to soft and tensile interior elements such as canopies, drapery, and upholstered surfaces. - Introduction to paper and card model-making from developed surfaces.
Module-2
Interior Sections & Spatial Visualization (16hours) - Principles of sectional representation in interior design. - Longitudinal and cross-sections of simple interior spaces. - Relationship between plan, elevation, and section. - Sectional representation of walls, doors, windows, partitions, furniture, and staircases. - Application: drawing simple interior sections and visualizing interior spaces.
Module-3
Three-Point Perspective (16hours) - Three-point perspective: theory and construction for tall interior volumes and dramatic views - Bird's-eye and worm's-eye perspectives of multi-level or double-height interior spaces - Section-perspective drawings: combining a sectional cut with a perspective view of the interior. - Advanced freehand perspective, Perspective grids and underlay methods for efficient sketching. - Introduction to AI-assisted sketching tools: using AI perspective-assist features.
Module-4
Material Rendering & Visual Communication Techniques (16hours) - Principles of light, shade, tone, and texture in interior representation. - Rendering furniture, interior elements, and simple interior perspectives. - Material rendering techniques for common interior finishes such as timber, stone, tile, glass, metal, and fabrics using hand and digital media. - AI-assisted material exploration: generating material and finish references using AI image-generation tools.
Module-5

Digital Visualisation & Presentation Production (20hours)

- Importing hand-drawn base drawings; adding textures, lighting and material finishes digitally
- Compositing elements digitally: people, plants, furniture cut-outs onto perspective drawings
- Mood boards and concept boards: layout, typography, image hierarchy
- Preparing a multi-sheet digital interior presentation: plan, elevation, perspective, details
- Exporting and printing: resolution, bleed, formats (PDF, PNG, TIFF) for portfolio and submission
- AI-assisted visualisation and presentation: using tools to generate interior visualisations and assist in layout and presentation board composition.

Course Outcomes

CO1: Apply the principles of isometric, axonometric, and exploded projection drawings to represent interior elements and spaces.

CO2: Construct sectional drawings and interpret spatial relationships within interior environments.

CO3: Develop three-point, bird's-eye, worm's-eye, and section-perspective drawings to visualize interior spaces.

CO4: Render interior materials, finishes, and spatial qualities using manual, digital, and AI-assisted visualization techniques.

CO5: Produce presentation-quality digital interior boards integrating drawings, renderings, visualizations, and design communication elements.

Assessment Details (both CIE and SEE)

The Professional Core Course, which is Project, based/ Assignment based/Viva based course.

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%.

The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% in the sum total of the CIE and SEE taken together.

CIE marks will be for the Design portfolio presentations/viva/ seminar/models.

Methods suggested:

1. Studio discussions, Reviews, Time problems, Seminar or micro project, Quiz, report writing etc.
2. The teacher must decide the topic for the Design and Seminars, if any, in the beginning only. The teacher must announce the methods of CIE for the subject in advance in writing.

SEE marks will be viva based assessed by internal examiner and external examiner appointed by the University.

Note: Examiners will be from academia / industry experts. Evaluation patterns will be based on Design portfolio presentations/seminars/models

Suggested Learning Resources:**Books**

- Ching, Francis D.K. — Architectural Graphics. Van Nostrand Reinhold, 1985.
- Morris, I.H. — Geometrical Drawing for Art Students. Longmans, 1902.
- Gill, Robert W. — Rendering with Pen and Ink.
- Malik, Shankar — Perspective & Sciography. Allied Publishers, 1994.

Web links and Video Lectures (e-Resources):

- <https://ndl.iitkgp.ac.in> — National Digital Library: geometrical drawing, projections
- <https://www.youtube.com/watch?v=VIVfHNDu1ds> — Isometric and axonometric drawing
- <https://www.youtube.com/watch?v=lmrHPGFYIVg> — Sciography and shadow construction
- <https://www.youtube.com/watch?v=uAH9gsUZBEY> — Perspective drawing (advanced)
- <https://www.youtube.com/watch?v=bjhkxFDvD78> — Section through solids

Skill Development Activities Suggested

- Interior detail drawings: students apply section-of-solids and interpenetration skills directly to drawn interior architectural details (built-in shelving, staircases, skylights).
- Material sample + rendering pairing: students collect physical material samples and produce matching rendered swatches in both hand and digital media.
- Digital production lab (Module 5): supervised sessions building the final presentation board, with iterative faculty review.
- Peer critique: a full peer-review session at the end of Module 4 where students exchange and critique rendered drawings before the final digital module.

II SEMESTER

INTERIOR MATERIALS AND APPLICATIONS - I			
Course Code	2BBI204	Cie Marks	50
Teaching Hours/Week (L:T:S:P:SL)	14:0:56:0:20	See Marks	50
Total Hours of Pedagogy	90	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	3
Course Overview: 1. IMA-1 develops critical intelligence to evaluate, document, and specify interior materials. The course builds a structured framework for assessing any material across performance, aesthetic, and sustainability dimensions - and applies that framework to real studio design decisions. 2. BSID (2BBI105, Semester I) is a direct prerequisite. Students enter with structural reading, drawing skills, and daylighting awareness from BSID. 3. It is a direct prerequisite for Interior Materials and Applications - II (2BBI302, Semester III). 4. This subject is an IPCC course integrated with Interior Design Studio - II (2BBI201). Modules 1–3 build foundational material knowledge; Modules 4 and 5 are directly integrated with the concurrent IDS-II project.			
Course Objectives: 1. To develop a structured framework for evaluating any interior material across physical, mechanical, thermal, acoustic, and aesthetic dimensions. 2. To build foundational knowledge of masonry substrates, concrete, plaster, ceramics, and natural stone as encountered and specified in real projects. 3. To introduce the professional tools of material specification - product data sheets, sample boards, finish plans, and specification sheets. 4. To develop skills in material research through market surveys and supplier visits. 5. To apply material knowledge to studio design decisions, selecting and justifying materials based on performance, aesthetics, and context.			
Teaching Learning Process: 1. Demonstration-led studio sessions; all learning applied directly to the IDS-II studio project. 2. Lectures with physical material samples. Flipped classroom: student groups present one dimension of the framework each. 3. Lectures with construction detail visuals, physical samples and product catalogues. 4. Market Survey 1: tile showroom visit 2: paint experience centre 5. Hands-on studio evaluation using actual tile, stone, and coating samples against the Module 1 framework.			

6. Students develop and refine a material palette and sample board through peer review and faculty assessment. Students present material rationale verbally - practising professional communication of design decisions.

Module 1

The Five-Dimension Framework (14hours)

- Distinction between raw material, building material, and interior finish.
- Material selection as a design decision - not merely a procurement exercise.
- Physical and mechanical properties - hardness, density, compressive strength, abrasion resistance, and durability in residential vs. commercial contexts.
- Thermal properties - thermal mass, conductivity, and implications for floor and wall selection across climates.
- Acoustic properties - sound absorption vs. reflection, surface texture, and density; introduction to NRC (Noise Reduction Coefficient).
- Aesthetic properties - colour, texture, sheen, pattern, translucency, and interaction with natural and artificial light.
- Sustainability and lifecycle - embodied energy, local vs. imported sourcing, maintenance demands, and VOC content for indoor air quality.
- Reading a product data sheet - extracting specification-relevant information; introduction to IS 1708, IS 2553, IS 13630, and NBC 2016.

Module 2

Substrates and Base Materials (14hours)

Masonry and Concrete as Substrate

- Brick walls - bonding patterns (English, Flemish), surface condition, and plastering requirements.
- Stone walls - granite, marble, sandstone, slate - surface conditions and adhesion behaviour.
- Concrete block walls - solid, hollow, AAC - properties and plastering behaviour.
- Cast-in-place vs. precast concrete - surface conditions and finish adhesion implications.
- Construction and expansion joints as constraints on interior finishes.

Plaster, Screed, and Waterproofing

- Cement plaster, gypsum plaster, lime plaster - properties and finish quality.
- Sand-cement screed - thickness, flatness tolerance, and drying time as floor finish substrate.
- Waterproofing membranes for wet-area finishes - substrate preparation as the critical performance factor.

Staircases as Interior Elements

- Staircase types - dog-legged, open-well, spiral, helical - as encountered in interior projects.
- Stair geometry - riser, tread, nosing, handrail heights, and NBC 2016 compliance.
- Stair construction types (RCC waist slab, steel stringer, timber) and applicable finish materials.

Module 3

Ceramics, Natural Stone, and Basic Surface Coatings (14hours)

Ceramics and Tiles

- Manufacturing - ceramic vs. vitrified, relevance of the difference for interior applications.
- Key specifications - PEI rating, water absorption, slip resistance (R-rating), rectified vs. non-rectified edges.
- Mosaic tiles - glass, ceramic, and stone types.
- Tile formats, laying patterns (straight, offset, herringbone, diagonal), and their spatial effects.
- Grout types - cement vs. epoxy; fixing methods and adhesive types for different substrates.
- NBC 2016 accessibility provisions for slip resistance in public spaces.

Natural Stone

- Types - granite, marble, limestone, slate, sandstone, quartzite - properties and interior applications.

- Stone finishes - polished, honed, flamed, brushed - and selection criteria per zone (floor, wall, wet area).
- Vein matching and book matching in marble. Maintenance and sealing requirements.

Basic Surface Coatings

- Paint anatomy - base, pigment, vehicle, additives; types: emulsion, enamel, distemper.
- Layering system - primer, putty, undercoat, finish coat - and the purpose of each layer.
- Sheen levels - matte, eggshell, satin, semi-gloss, gloss - and light reflectance implications.
- VOC content and indoor air quality; textured coatings - sand texture, stucco, grit finish.
- Wood polishes - wax, oil, French polish, melamine, PU - properties and applications. Detailed timber science is covered in MA-II.

Module 4

Material Selection and Documentation (14hours)

- Material selection process - translating design intent into performance needs, aesthetic direction, budget range, and substrate constraints.
- Developing a material palette - coherence across the three planes (floor, wall, ceiling); use of contrast, texture, and colour temperature.
- Producing a material sample board - professional presentation standards: samples mounted to scale, labelled with product name, manufacturer, finish, and zone.
- The finish plan - floor plan annotated with material designations using a consistent key.
- Basic specification writing - material name, product reference, finish, fixing method, maintenance note.

Module 5

Finish Plan and Material Specification (14hours)

- Complete finish plan - IDS-II project floor plan, annotated with material designations across all zones, using a consistent key.
- Formal specification entries - minimum three materials, each specified to professional standard: product name, manufacturer reference, finish, substrate requirement, fixing method, maintenance.
- Material schedule - table listing every specified material: location, estimated quantity, cost range, and supplier.
- FF&E awareness - fixed materials (finishes) vs. furniture, fixtures, and equipment specified separately. Full FF&E scheduling is covered in MA-III (2BBI402, Semester IV).
- Sustainability review - identify low-VOC, locally sourced, or recycled content materials; note where sustainable alternatives could be considered.

Course Outcomes:

At the end of the course, the student will be able to:

CO1: Apply a five-dimension framework to evaluate any interior material and read a product data sheet to extract specification-relevant information.

CO2: Identify substrate conditions in a building shell and explain how masonry, concrete, plaster, and screed substrates determine feasible finishes and preparation requirements.

CO3: Demonstrate foundational knowledge of ceramics, natural stone, and basic surface coatings - manufacturing, key specifications, selection criteria, and fixing methods.

CO4: Produce a professional material sample board, an annotated finish plan, and a basic specification sheet for an interior design project.

CO5: Select and justify material choices for a studio design proposal, integrating performance criteria, aesthetic intent, substrate constraints, and sustainability considerations.

Assessment Details (both CIE and SEE)

The Professional Core Course, which is Project, based/ Assignment based/Viva based course.

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%.

The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% in the sum total of the CIE and SEE taken together.

CIE marks will be for the Design portfolio presentations/viva/ seminar/models.

Methods suggested:

1. Studio discussions, Reviews, Time problems, Seminar or micro project, Quiz, report writing etc.
2. The teacher must decide the topic for the Design and Seminars, if any, in the beginning only. The teacher must announce the methods of CIE for the subject in advance in writing.

SEE marks will be viva based assessed by internal examiner and external examiner appointed by the University.

Note: Examiners will be from academia / industry experts. Evaluation patterns will be based on Design portfolio presentations/seminars/models.

Suggested Learning Resources**Books**

- Francis D.K. Ching and Cassandra Adams, Building Construction Illustrated, 5th ed., Wiley, 2014
- Corky Binggeli, Interior Design: A Survey, Wiley - chapters on materials and finishes
- Graeme Brooker and Sally Stone, Basics Interior Design: Materials and Finishes, AVA Publishing
- Roy Chudley, Construction Technology, 3rd ed., Longman, 1999
- National Building Code of India (NBC 2016), Bureau of Indian Standards
- IS 2553 (Safety Glass), IS 1708 (Timber), IS 13630 (Ceramic Tiles) - Bureau of Indian Standards

Web Links and Video Lectures (e-Resources)

- <https://nptel.ac.in> - Building Materials and Construction, IIT lectures.
- <https://ndl.iitkgp.ac.in> - National Digital Library of India
- <https://www.archdaily.com/materials> - case studies with material callouts
- ArchDaily India, Architectural Digest India, Dezeen Interiors - case study research

Skill Development Activities Suggested

- Market Survey 1: Tile showroom visit - samples, PEI/R-ratings, price per sft, fixing methods.
- Market Survey 2: Paint experience centre visit - colour and texture mood board exercise.
- The Layer Plank exercise - hands-on paint layering in the studio.
- Hands-on material evaluation sessions using tile, stone, and coating samples.
- Guest lecture by a practising interior designer or material supplier on real-world specification.
- Field visit to an ongoing interior fit-out site - observe substrate conditions and material application.

II - SEMESTER

DESIGN AND HUMAN EVOLUTION - II			
Course Code	2BBI205	CIE Marks	50
Teaching Hours/Week (L:T:S:P:SL)	42:0:0:0:48	SEE Marks	50
Total Hours of Pedagogy	90	Total Marks	100
Type of Examination (SEE)	Theory	Exam Hours	3
		Credits	03

Course Overview: 1. This course examines the evolution of interior environments from the medieval period to the nineteenth century, tracing the transformation of sacred, domestic, palatial, and commercial interiors across Europe, Asia, and India. 2. Students explore how religion, politics, craft traditions, technological innovation, and cultural exchange shaped interior space, furniture, ornament, and material culture. 3. Through comparative historical analysis, case studies, and documentation, the course establishes a critical understanding of the development of interior design as a cultural, artistic, and functional discipline.
Course Objectives: 1. Trace the evolution of medieval, Renaissance, Islamic, Asian, and Indian interiors, examining their spatial organization, decorative traditions, and cultural significance. 2. Analyse the relationship between furniture, craft, materials, ornamentation, and architectural interiors across different historical periods and regions. 3. Evaluate historical interior environments through documentation, comparative analysis, and case studies to understand their relevance to contemporary interior design practice.
Teaching Learning Process: 1. Lectures supported by curated visual presentations, historical drawings, digital reconstructions, and documentary films. 2. Comparative analysis through sketches, measured drawings, timelines, and thematic mapping of historical interiors. 3. Case study discussions, museum/showroom documentation, heritage site analysis, and student presentations integrating historical research with contemporary design understanding.
Module-1
Sacred and Palatial Interiors of Medieval Europe Medieval European sacred interiors from the Early Christian period to the Gothic era. It examines the basilica as a devotional and communal space, the symbolic and spiritual interiors of Byzantine architecture such as Hagia Sophia, and the massive stone interiors of Romanesque cathedrals including Durham Cathedral and Speyer Cathedral. The module further studies Gothic interiors and the role of stained glass and verticality in spaces like Sainte-Chapelle, highlighting how light transformed the sacred interior into a spiritual experience. • Early Christian basilicas and devotional interiors • Hagia Sophia and Byzantine interior aesthetics • Romanesque churches: crypts, arches and masonry • Gothic interiors: ribbed vaults, stained glass and verticality • Sainte-Chapelle and evolution of medieval domestic interiors
Module-2
Renaissance to Rococo: Decoration, Luxury, and the Domestic Interior European interiors from the Renaissance to Rococo periods, focusing on classical proportion, Baroque drama, and Rococo elegance. It includes interiors such as the Palace of Versailles and the works of Gian Lorenzo Bernini, along with Rococo salons, pastel ornamentation, Neoclassical styles, and the development of early furniture forms. • Renaissance proportion and classical interior principles • Alberti and Palladio's contribution to interior design • Baroque interiors: Versailles and Bernini • Rococo salons, boudoirs and decorative arts • Neoclassical interiors and early furniture typologies
Module-3

Medieval to Industrial Craft and the Decorated Interior

Asian interior traditions, including Islamic palace interiors such as Topkapi Palace, Mughal interiors of Fatehpur Sikri and Agra Fort, Chinese Ming scholarly spaces, Japanese Shoin interiors, and the gallery spaces of Angkor Wat. The module highlights spatial organisation, craftsmanship, and cultural expression in Asian interiors.

- Islamic geometry, arabesque and Alhambra interiors
- Gothic stained glass and carved interiors
- Renaissance marquetry, inlay and cabinet making
- Industrial Revolution and mass-produced decorative arts
- William Morris, John Ruskin and the Arts & Crafts Movement

Module-4

Asian Interiors: Medieval and Mughal-Era

Islamic palace interiors such as Topkapi Palace reflect rich ornamentation, spatial hierarchy, and decorative detailing, while Mughal interiors in Fatehpur Sikri and Agra Fort showcase jali work, symmetry, and courtly planning. Chinese Ming scholarly interiors emphasise simplicity and balance, whereas Japanese Shoin interiors focus on modular planning and minimalism. The galleries of Angkor Wat highlight ceremonial movement and devotional spatial experience.

- Islamic palace interiors and Alhambra
- Mughal interiors: Fatehpur Sikri, Agra Fort, pietra dura and jali
- Chinese Ming scholarly interiors
- Japanese Shoin-zukuri, tokonoma and modular planning
- Angkor Wat galleries and Southeast Asian palace interiors

Module-5

Indian Vernacular Case Studies

Medieval to Colonial Indian Interior — Courts, Trade, and Transformation

Rajasthani havelis feature spatial elements such as chowk, jharokha, and zenana that reflect social hierarchy and climate-responsive design. Mughal interiors, including Sheesh Mahal, showcase mirror work and decorative richness, while Hoysala temple interiors are known for intricate narrative carvings and detailed surfaces. Colonial bungalows and Indo-Saracenic interiors combine Indian and European architectural influences in planning and decoration.

- Hoysala and Vijayanagara interiors
- Rajasthani haveli: jharokha, chowk, zenana and baithak
- Mughal interiors: Sheesh Mahal, pietra dura and mirror work
- Colonial bungalow and Indo-Saracenic interiors
- Case Study: Spatial analysis of a Rajasthani Haveli

Course Outcomes

At the end of the course, the student will be able to:

CO1: Explain the evolution of medieval, Renaissance, Islamic, Asian and Indian interior environments, identifying their cultural, spatial and historical characteristics.

CO2: Analyse the influence of religion, politics, craftsmanship, materials and decorative traditions on the development of historical interiors and furniture.

CO3: Compare Western, Asian and Indian interior styles by evaluating their planning principles, ornamentation, furniture, and material culture.

CO4: Evaluate historical furniture, decorative arts, and craft traditions in relation to manufacturing techniques, cultural identity and contemporary interior design.

CO5: Apply historical research methods through case studies, visual documentation, analytical drawings and presentations to interpret significant historical interior environments.

Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks and for the SEE minimum passing mark is 40% of the maximum marks. The student is declared as a pass in the course if he/she secures a minimum of 40% in the sum total of the CIE and SEE taken together. CIE: Two-Unit Tests. Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for the subject.

Suggested Learning Resources:**Books**

- Francis D.K. Ching and Corky Binggeli, Interior Design Illustrated, 4th Edition, Wiley, 2018.
- Penelope Hobhouse, The Story of Interior Design, DK Publishing, 2016.
- Judith Miller, Furniture: World Styles from Classical to Contemporary, DK Publishing, 2005.
- Owen Jones, The Grammar of Ornament, Princeton Architectural Press (Reprint Edition), 2002.
- Percy Brown, Indian Architecture (Islamic Period), D.B. Taraporevala Sons & Co.
- John Pile and Judith Gura, A History of Interior Design, 4th Edition, Laurence King Publishing, 2014.
- Mario Praz, An Illustrated History of Interior Decoration: From Pompeii to Art Nouveau, Thames & Hudson, 1982.

Web Links and Video Lectures (e-Resources)

- <https://ndl.iitkgp.ac.in> – National Digital Library of India
- <https://www.vam.ac.uk> – V&A Museum: Furniture, interiors, decorative arts, and design history
- <https://artsandculture.google.com> – Google Arts & Culture: Virtual museum tours and historic interiors
- <https://www.metmuseum.org> – The Metropolitan Museum of Art: Furniture and Decorative Arts Collection
- <https://whc.unesco.org> – UNESCO World Heritage Centre: Medieval, Mughal, and Historic World Heritage Sites
- <https://smarthistory.org> – Smarthistory: Medieval, Renaissance, Islamic, and Asian Art & Architecture

Skill Development Activities Suggested:

- Guest lecture by a practising interior designer, conservation architect, or design historian on the evolution of medieval, Renaissance, Mughal, and colonial interiors.
- Heritage documentation of a palace, haveli, fort, museum, or colonial building through measured sketches, photography, and spatial analysis.
- Comparative sketch workshop on historical furniture styles, interior ornamentation, and decorative elements from European, Asian, and Indian traditions.
- Case study presentation analysing a significant historical interior (e.g., Hagia Sophia, Versailles, Alhambra, Fatehpur Sikri, or a Rajasthani Haveli), focusing on spatial organization, furniture, materials, and decorative systems.

II SEMESTER

Indian Constitution			
Course Code	2BBI206/ 2BAT207	Cie Marks	50
Teaching Hours/Week (L:T:S:P: SL)	14:0:0:0	See Marks	–
Total Hours of Pedagogy	PP	Total Marks	50
Type of Examination (SEE)	PP	Exam Hours	-
		Credits	PP