III – SEMESTER

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INTERIOR DESIGN STUDIO -III			
Course Code	**22BI301**	CIE Marks	50
Teaching Hours/Week (L:T:P:S)	3 :0:0:6	SEE Marks	50
Total Hours of Pedagogy/Week	9	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	06

Course overview

1. Understanding Commercial Interior Environments: The course introduces students to the design of commercial interiors such as offices, retail stores, and showrooms, emphasizing spatial planning, user behavior, ergonomics, circulation, and the creation of efficient and functional environments.
2. Branding and Spatial Identity: Students will explore the concept of brand identity and learn how branding can be translated into physical space through the strategic use of layout, materials, colors, lighting, graphics, and visual merchandising to create meaningful and memorable user experiences.
3. Integrated Design Development: Through design projects and technical studies, students will develop comprehensive commercial interior solutions by integrating building services, material selections, sustainability considerations, and detailed design representation from concept development to final presentation.

Course objectives

1. To Develop an understanding of commercial interior design principles by exploring the planning and design of workplaces, retail environments, and showrooms, with emphasis on functionality, user experience, brand identity, and spatial efficiency.
2. To Apply design strategies and technical considerations related to space planning, circulation, material selection, building services, accessibility, safety regulations, and service integration within commercial interior projects.
3. To Cultivate a comprehensive design process through research, analysis, concept development, and detailed representation, enabling the translation of design concepts into practical and professionally resolved interior solutions.

Teaching Learning Process

The course will follow an application-oriented and studio-based learning approach

1. **Studio Exercises**
   Faculty-led design exercises to explore spatial organization, circulation, and commercial design principles.
2. **Lectures and Seminars**
   Lectures on commercial interior typologies, branding strategies, building services, and material selection.
3. **Case Studies & Site Visits**
   Analysis of existing office and retail interiors to understand planning strategies and design approaches.
4. **Workshops and Demonstrations**
   Sessions on material applications, lighting design, and presentation techniques.
5. **Design Reviews and Critiques**
   Regular studio reviews to guide the design process and develop critical thinking.

Outline

Mode of study

The studio will introduce students to the design of commercial interior environments through a series of explorations, studies, and design exercises. Emphasis will be placed on the integration of spatial planning, brand identity, user experience, and technical coordination.

A. Understanding Commercial Interiors

- Introduction to commercial interior typologies: such as
  a. Offices
  b. Retail stores
  c. Showrooms
- Understanding user behavior and spatial requirements.
- Functional zoning and circulation planning.
- Ergonomics and spatial standards in commercial interiors.

B. Space Planning and User Experience

- Principles of space planning in workplaces and retail environments.
- Zoning of spaces based on function and hierarchy.
- Circulation patterns, accessibility, and spatial efficiency.
- Workplace planning concepts such as collaborative spaces, private zones, and flexible layouts.

C. Brand Integration and Spatial Identity

- Understanding brand identity and its translation into interior space.
- Retail design strategies and visual merchandising.
- Use of color, lighting, graphics, and materials in reinforcing brand character.
- Designing immersive customer experiences.

D. Building Services

- Introduction to services in commercial interiors:
  a. Lighting systems
  b. Electrical
- Integration of services with interior design.

E. Materials and Finishes

Selection of appropriate materials for commercial spaces

- Durability, maintenance, and sustainability considerations.
- Flooring, wall finishes, ceilings, and furniture materials.
- Innovative materials and finishes for retail and office interiors.

F. Design Project

The studio will include:

- One minor project focusing on spatial planning or retail display.
- One major design project involving the design of a commercial interior

The project will include stages such as:

- Context and user analysis
- Concept development and spatial planning
- Design development
- Details
- Integration of services and materials
- Final presentation drawings and models

Mode of Study

The studio will be conducted through a combination of experience, exploration, and design tasks

A. Experience

Students will observe and document commercial interiors through:

- Site visits
- Photographic documentation
- Sketching and spatial analysis

B. Exploration

Students will explore design ideas through:

- Concept diagrams
- Layout planning exercises
- Material and lighting studies
- Retail display experiments

C. Design Tasks

The studio will include **minor and major design projects**, through which students will apply the principles explored during the studio.

The design tasks will involve:

- Context and user analysis
- Concept development and spatial planning
- Functional zoning and circulation
- Brand identity and user experience
- Material, furniture, lighting, and finish selection
- Integration of basic building services
- Design development and detailing
- Final presentation drawings, models, and visualisations

The studio will therefore progress from **observation and exploration to the development of minor and major commercial interior design projects**, with increasing emphasis on design development, technical coordination, and final presentation.

Course outcomes:

CO1: Analyze commercial interior typologies (offices, retail, showrooms) by understanding user behavior, spatial requirements, and functional relationships.

CO2:Develop space planning strategies by applying principles of zoning, circulation, ergonomics, and accessibility to efficient and user-centric commercial interiors.

CO3:Translate brand identity into spatial design by integrating elements such as color, materials, lighting, graphics, and visual merchandising to enhance user experience.

CO4:Apply knowledge of materials, finishes, and building services (lighting, electrical systems) to design technically coordinated, durable, and sustainable interior environments.

CO5:Produce comprehensive commercial interior design proposals through research, concept development, detailed drawings, and presentation models, addressing real-world constraints and design standards. comprehensive commercial interior design proposals through research, concept development, detailed drawings, and presentation models, addressing real-world constraints and design standards.

Assessment Details (both CIE and SEE) for IPCC/PCC

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 – Interior Design Illustrated
- John F. Pile – Interior Design
- Rosemary Kilmer & W. Otie Kilmer – Designing Interiors
- Julius Panero & Martin Zelnik – Human Dimension and Interior Space
- Christine Piotrowski – Professional Practice for Interior Designers
- Brian Miller – Retail Design
- Julius Panero – Time Saver Standards for Interior Design

Web links and Video Lectures (e-Resources):

- https://www.archdaily.com/
- https://www.dezeen.com/interiors/
- https://www.interiorzine.com/

Skill Development Activities Suggested

1. Space Planning and Layout Development Workshop
   - Functional zoning and adjacency planning
   - User circulation and accessibility
   - Ergonomic requirements
   - Efficient space utilization

2. Material, Lighting, and Brand Experience Design Exercise

Students will create a concept board and interior vignette for a selected commercial brand, integrating:

- Brand identity and visual language
- Material and finish selection
- Lighting strategies
- Customer/user experience considerations

III - SEMESTER

Interior Materials and Applications - II			
Course Code	**22BI302**	CIE Marks	50
Teaching Hours/Week (L:T:P:S)	2:0:0:4	SEE Marks	50
Total Hours of Pedagogy/Week	6	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	04

Course overview:

1. Interior materials and Applications will equip the students with the understanding of the types and applications of materials used in Interior Design. It will focus on Timber, Veneers, Laminates; Glass and finishes (wall and floor).
2. Interior Materials and Applications - II is a direct sequel of Interior Materials and Applications - I and a prerequisite for Interior Materials and Applications - III.
3. The subject integrates into concurrent design studio subjects of 3rd semester i.e., Interior Design Studio - III and AI Integrated Digital Modelling -I.

Course objectives:

1. To build a deep understanding of materials - timber, laminates, veneers, glass, and metals - as used specifically in interiors.
2. To develop the ability to select and specify appropriate materials for spaces based on durability, brand identity, aesthetics, footfall intensity.
3. To familiarize students with material properties, finishes, and application techniques for floors, walls, and furniture components, enabling informed design decisions in studio projects.

Teaching Learning Process

1. Lectures , Hands-on material exploration ,Market Survey, Field visits, Guest lectures.
2. Project-based assignments requiring students to create material boards and specification sheets for the Interior design studio proposals.
3. Flipped Classroom (debates, group discussions).
4. Using Digital tools and AI for modelling and representation of studio interventions.

Module-1

Timber, Veneers, and Laminates for Interiors :

- Classification of timber - hardwood and softwood; structural vs. decorative uses in interiors.
- Engineered wood products: plywood, MDF, particle board, and block board - applications such as workstation panels, display fixtures, and cabinetry and so on.
- Veneers – Types, Applications.
- High-Pressure Laminates (HPL), acrylic laminates, and wood-finish laminates - grades, surface textures, and brand colour customization relevant to interior design. Durability and maintenance considerations for high-footfall environments.

Module-2

Applications for Glass and Metals in Interior Design:

- Types of glass: float, tempered, laminated, frosted, back-painted, acid etched and wired glass.
- Frameless glass partition systems: acoustics, privacy, and spatial flexibility.
- Display glass uses and limitations.
- Mirror glass: applications and spatial expansion of small areas.
- Type of Glass for branding, wayfinding, and decorative screens. Specification and fixing details: sealants, channels.
- Metal finishes relevant to brand identity: polished, brushed, satin, PVD-coated, powder-coated, and patinated surfaces.

- Ferrous and non-ferrous metals commonly used in interiors: mild steel (MS), stainless steel (SS), aluminum, brass, bronze, and copper.

Module-3

Interior Finishes for Walls and Floors

Floor Finishes

- Flooring materials for spaces: vitrified tiles, natural stone (marble, granite, slate), polished concrete, epoxy flooring, carpet tiles, and raised access flooring systems. Selection based on footfall intensity, slip resistance, and maintenance - aligned to NBC and accessibility norms.
- Engineered wood and parquet flooring, Luxury Vinyl Tile (LVT) and Vinyl Plank Flooring
- Carpet and carpet tiles.
- Outdoor/landscape flooring.

Wall Finishes

- Wall finishes: paints (emulsion, texture), wallcoverings (vinyl, fabric-backed), wall panels (3D MDF, gypsum, stone cladding).
- Textured plasters (Venetian, micro-cement, lime wash), decorative paints, and specialty coatings.
- Stone and tile cladding on walls: mosaic tiles (glass, stone, ceramic)
- Feature wall designing for reception areas, brand walls and accent zones.

Module-4

Integrating Interior Materials and Applications to the concurrent Interior Design Studio-III

Identifying and exploring the optimum material for the design proposition based on the understanding of material type and application. Integrated studio aiming at holistic understanding of material detailing and application.

Module-5

Integrating Interior Materials and Applications to AI Integrated Digital Modelling -I

The outcome of Module -4 to be digitalized using the knowledge and skill acquired under AI Integrated Digital Modelling-I course. Assignments to be focused on generation of detailed views for design presentations.

Course outcome

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

CO1: Understand the classification and applications of timber, engineered wood products, veneers, and laminates used in interior spaces.

CO2: Identify different types of glass and evaluate their applications, specifications, and fixing methods.

CO3: Recognize the properties, finishes, and applications of ferrous and non-ferrous metals used in interior design.

CO4: Prepare professional material boards and formal specification sheets for projects.

CO5: Design digital models and views for interior spaces.

Assessment Details (both CIE and SEE) for IPCC/PCC

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

- Brooker, G. & Stone, S. - Basics Interior Design: Materials and Finishes, AVA Publishing
- Binggeli, C. - Interior Design: A Survey, Wiley (chapters on materials and finishes)
- Yatzer, R. - Material World: Innovative Structures and Finishes for Interiors, Frame Publishers
- IS Codes: IS 2553 (Safety Glass), IS 1708 (Timber), IS 383 (Aggregates) - Bureau of Indian Standards

Web links and Video Lectures (e-Resources):

- Archdaily Materials - www.archdaily.com/materials (case studies of interiors with material callouts)
- Material ConneXion (online library) - www.materialconnexion.com
- YouTube: Interior Design with Tim Delliquanti, Ambiance India showroom tours, and IIA (Indian Institute of Architects) material lectures
- NPTEL Course: Building Materials and Construction (IIT lectures) - nptel.ac.in

Skill Development Activities Suggested

- Material Board: Compile a material board - including actual samples of timber/laminate, glass type, metal finish, floor tile, and wall paint with product codes, cost range, and supplier details.
- Showroom / Material Library Visit: Visit a tile showroom, laminate studio, or glass supplier; document material ranges with photographs and prepare an observation report noting applicability.
- Material Specification Sheet: Write a formal specification for three materials chosen for a Studio project.

III - SEMESTER

Furniture Design and Detailing			
Course Code	**22BI303**	CIE Marks	50
Teaching Hours/Week (L:T:P:S)	0:0:0:4	SEE Marks	50
Total Hours of Pedagogy/Week	4	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	02

Course Overview:

1. Understand the historical evolution, cultural context, function, ergonomics, and aesthetics of furniture design.
2. Develop knowledge of materials, construction, joinery, detailing, fabrication, and furniture design principles.
3. Explore residential and commercial furniture systems through model making, documentation, industry visits, and practical exposure.

Course Objectives:

1. To Understand the evolution, styles, and principles of furniture design in relation to culture, function, and ergonomics.
2. To design residential and commercial furniture systems by applying appropriate materials, construction techniques, joinery, and detailing.
3. To develop practical skills in furniture prototyping, documentation, and model making through studio exercises and industry exposure.

Course Outcome

CO1: Explain the evolution of furniture design, historical styles, and the influence of culture, anthropology, ergonomics, and universal design principles on furniture development.

CO2: Apply the principles of furniture design, anthropometry, ergonomics, and material selection to develop functional and aesthetically appropriate furniture concepts.

CO3: Design and develop furniture prototypes by preparing technical drawings, construction details, joinery, and scaled models using appropriate materials and fabrication techniques.

CO4: Analyze residential and commercial furniture systems, including modular kitchens, wardrobes, display furniture, manufacturing processes, installation methods, and finishing techniques.

CO5: Integrate furniture design with interior design projects by documenting industry practices and presenting comprehensive furniture design solutions through technical documentation and professional portfolios.

Teaching Learning Process:

1. Interactive lectures and visual presentations.
2. Demonstrations of furniture construction, materials, and joinery techniques.
3. Studio-based design exercises and model making.
4. Case studies and documentation of furniture systems.
5. Industry visits and expert interactions.
6. Self-study, assignments, and group discussions.

Outline:

A. Evolution of Furniture and Anthropometry

- Evolution of furniture design from prehistoric to contemporary periods, including the essence of

style and major historical influences.

- Relationship between furniture, culture, anthropology, and interior design, highlighting the evolution of design across different periods.
- Anthropometric and ergonomic principles and their application in furniture design and user comfort.
- Handcrafted and factory-made furniture: comparative study of materials, manufacturing processes, construction techniques, and characteristics.
- Documentation and analysis of contemporary furniture systems through showroom visits (e.g., IKEA) and case studies.

B. Furniture Prototype: Design and Detailing

- Anthropometric and ergonomic considerations in furniture design.
- Principles of furniture design and prototype development.
- Design development of a single furniture piece through drawings and models.
- Construction systems, joinery techniques, and furniture detailing.
- Material selection, fabrication methods, finishes, and presentation of furniture prototypes.

C. Modular Furniture Systems and Manufacturing

- Design and planning of residential furniture systems, including modular kitchens, wardrobes, and closet systems.
- Materials and components used in modular furniture design.
- Furniture detailing, fabrication methods, joinery, and assembly techniques.
- Manufacturing processes, installation methods, and finishing techniques for modular furniture.
- Factory visit and documentation of furniture production, assembly, and installation processes.

D. Commercial Furniture Applications and Industry Integration

- Design of retail furniture, display systems, and commercial interior applications.
- Integration of furniture design concepts with the Design Studio project.
- Case studies of commercial furniture, merchandising, and interior display systems.
- Industry visits and professional interactions to understand contemporary furniture practices.
- Documentation, technical detailing, presentation, and portfolio development of furniture design projects.

Assessment Details (both CIE and SEE) for IPCC/PCC

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

1. Furniture Design and Construction for the Interior Designer, Christopher Natale (Author)
2. Furniture Design is a comprehensive academic book by Polish researcher Jerzy Smardzewski, published by Springer in 2015.
3. Blakemore, R. G. (2005). History of interior design and furniture: From ancient Egypt to nineteenth-century Europe. Hoboken, NJ: Wiley.
4. Human Factors in Engineering and Design is a foundational textbook in ergonomics and human factors engineering, authored by Ernest J. McCormick
5. Architects' Data is a reference book on architectural design standards written by German architect Ernst Neufert. The Design of Everyday Things is a seminal book on user-centered design by cognitive scientist and usability engineer Don Norman.
6. Robbie. G. Blakemore, History of Interior Design and Furniture: From Ancient Egypt to NineteenthCentury Europe, Wiley publishers, 2005.
7. Jim Postell, Furniture Design, Wiley publishers, 2007.
8. Joseph Aronson, The Encyclopedia of Furniture: Third Edition ,1961
9. Bradley Quinn, Mid-Century Modern: Interiors, Furniture, Design Details, Conran Octopus Interiors, 2006.
10. Postell, J. (2007). Furniture design. Hoboken, NJ: Wiley.
11. Quinn, B. (2006). Mid-century modern: Interiors, furniture, design details. London, England: Conran Octopus
12. Edward Lucie-Smith , Furniture: A Concise History (World of Art) , Thames and Hudson, 1985
13. John.F. Pile, Interior Design, 2nd edition, illustrated, H.N.Abrams, 1995.

Web links and Video Lectures (e-Resources):

- https://www.youtube.com/watch?v=T4mFYGQ9NVo
- https://www.youtube.com/watch?v=x99HG6uI2XU
- https://www.youtube.com/watch?v=br1wNlz1jUc
- https://www.youtube.com/watch?v=rhU9A9wheEE

Skill Development Activities Suggested

- Guest lecture on furniture design, human anthropometry, and ergonomics.
- Workshop on furniture design detailing, joinery and finishes
- Site visit at Furniture Showrooms & Experience Centers, Furniture Manufacturing Units / Workshops, Office Spaces, Educational Institutions etc.

III – SEMESTER

INTERIOR SERVICES 1 (Electrical Layout, Lighting Design and Interior Plumbing)			
Course Code	**22BI304**	CIE Marks	50
Teaching Hours/Week (L:T:P:S)	2:0:0:0	SEE Marks	50
Total Hours of Pedagogy	2	Total Marks	100
Type of Examination (SEE)	Theory	Exam Hours	3
		Credits	2

Course Overview:

1. Understand plumbing and electrical services, including water supply, drainage, fixtures, point planning, conduit routing, and documentation.
2. Explore lighting design principles, fixture types, layered lighting, and reflected ceiling plan preparation.
3. Apply building services to commercial interiors through coordinated plumbing, electrical, lighting, and services drawings.

Course objectives:

1. To introduce interior plumbing systems at a level relevant to interior designers for effective space planning, wet area coordination, and sanitary fixture layout in commercial projects.
2. To develop an understanding of electrical services in interior spaces, enabling informed coordination with electrical consultants.
3. To build competency in lighting design principles and the ability to create layered lighting schemes suited to commercial interiors.
4. To enable students to prepare and integrate basic services drawings as part of interior design documentation for commercial projects.

Teaching Learning Process (General Instructions)

1. Lectures using annotated plumbing layout drawings and sectional diagrams showing pipe routing within floors and walls.
2. Classroom exercises on identifying and marking wet zone boundaries on a given floor plan.
3. Review of NBC 2016 Part 9 provisions for sanitary fixture spacing and accessible washroom design.
4. Case study discussions on washroom design in commercial interiors focusing on layout efficiency and plumbing coordination.
5. Studio-linked exercise: locating and dimensioning washroom/pantry plumbing zones on the commercial project floor plan.

Module-1

Plumbing for Interior Designers

- Fundamentals of plumbing systems in interior spaces including water supply, drainage, and venting. Sanitary fixtures, standard dimensions, and layout considerations for interior applications.
- Basic understanding of pipe materials and routing methods within walls, floors, and ceilings.
- Hot water systems and their spatial requirements. Coordination of plumbing services in relation to interior planning.

Module-2

Electrical Systems – Components and Space Planning

- Types of electrical points and their functional requirements in interior spaces.
- Basic electrical distribution systems and their influence on space planning.
- Conduit routing within interior elements and integrate with finishes.
- Essential electrical safety considerations and standard practices in interior design.

Module-3

Electrical Systems – Drawings and Documentation

- Standard symbols and conventions used in electrical drawings.
- Preparation of electrical layout plans for interior projects.
- Understanding electrical diagrams and schedules. Coordination of electrical services with other building systems

Module-4

Lighting Design

- Properties of light include intensity, color, and quality in interior environments.
- Types of lighting fixtures and their applications.
- Principles of layered lighting in interior design.
- Preparation of basic lighting layouts and reflected ceiling plans.

Module-5

Studio Activity – Services Documentation for a Commercial Space

- Preparation of electrical layout drawings for interior spaces.
- Development of reflected ceiling plans indicating lighting systems.
- Basic plumbing layout for wet areas.

Lighting concept development and service coordination within interior design proposals.

Activity Deliverables:

Electrical Layout Plan, Reflected Ceiling Plan, Interior Plumbing Layout, Lighting Concept Note, Services Coordination Check Sheet.

Course outcome

CO1: Understand interior plumbing systems, coordinate wet zone layouts, and apply NBC 2016 provisions for sanitary fixture placement in commercial interiors.

CO2: Interpret electrical layout plans and identify the key components of an electrical installation in a commercial interior.

CO3: Demonstrate interior services drawings including a lighting layout plan and Reflected Ceiling Plan.

CO4: Develop layered lighting schemes with appropriate fixture selection, color temperature, and lux levels for commercial interior spaces.

CO5: Create comprehensive drawings for electrical systems, lighting design, and interior plumbing in interior spaces.

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

- Karlen, M., & Benya, J. R. (2017). Lighting Design Basics (3rd ed.). Wiley.
- Grondzik, W. T., & Kwok, A. G. (2014). Mechanical and Electrical Equipment for Buildings. Wiley.
- Ching, F. D. K., & Binggeli, C. (2012). Interior Design Illustrated (3rd ed.). Wiley.
- Lechner, N. (2014). Heating, Cooling, Lighting: Sustainable Design Methods for Architects (4th ed.). Wiley.
- National Building Code of India 2016, Part 8: Building Services (BIS, New Delhi).

Web links and Video Lectures (e-Resources): • NPTEL – Building Services: https://nptel.ac.in • DIALux Evo – Free lighting design tool and tutorials: https://www.dial.de/en/dialux/ • Bureau of Energy Efficiency (BEE) – Efficient lighting and HVAC: https://beeindia.gov.in • Philips Lighting / Signify – Interior lighting application guides: https://www.signify.com
Skill Development Activities Suggested • Lighting mood board: a curated board for a given commercial space showing fixture types, CCT palette, and lighting layer strategy. • RCP exercise: a hand-drafted or CAD Reflected Ceiling Plan for an assigned floor plan integrating lights, diffusers, and detectors. • Site observation: documentation of all visible services elements in a commercial interior — light fittings, diffusers, switchboards, and detectors. • Fixture catalogue: compilation of 15 lighting fixtures with product images, technical specifications, and suggested application contexts.

III SEMESTER

AI INTEGRATED DIGITAL MODELLING - I			
Course Code	**22BI305**	CIE Marks	50
Teaching Hours/Week (L:T:P:S)	1:0:0:4	SEE Marks	50
Total Hours of Pedagogy	5	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	3

Course Overview:

1. Develop **foundational digital skills** for interior design through 2D drafting and 3D modelling.
2. Build proficiency in **real-time rendering and AI-assisted design ideation** through a progressive learning approach.
3. Integrate digital tools with **Interior Design Studio – III**, preparing students for advanced digital modelling in Semester IV.

Course Objectives:

1. To develop foundational competency in 2D CAD drafting for interior design - floor plans, layers, dimensions, and drawing output.
2. To build 3D spatial modelling skills - interior volumes, materials, camera views, and component management.
3. To produce real-time rendered interior visualisations with controlled lighting, material mapping, and camera composition.
4. To introduce AI image generation as a design ideation tool - spatial referencing, material exploration, and mood board production.
5. To integrate all digital outputs into a complete project portfolio for the IDS-III commercial interior project.

Teaching Learning Process (General Instructions):

1. Demonstration-led studio sessions with immediate hands-on application.
2. Students apply each tool directly to their IDS-III project.
3. Progressive portfolio development through weekly digital submissions and faculty reviews.

Module 1

2D CAD Drafting – Fundamentals: Interface and workspace setup; units and coordinate systems; primary drawing and editing commands; layer creation and line weight assignment; dimensioning and annotation standards; reusable drawing elements - doors, windows, furniture, sanitary fittings; hatch patterns for floor finishes and wall materials; layouts and viewports for print and PDF output; production of a complete dimensioned and annotated interior floor plan of the IDS-III project shell.

Module 2

3D Interior Modelling: Interface and navigation; drawing tools and push-pull operations; importing a 2D CAD plan as base reference; building walls, openings, ceiling, and floor levels from plan; modelling interior elements - furniture, partitions, counters, display fixtures; sourcing and adapting components from online libraries; applying materials and custom textures; camera scene setup and management; section planes for interior section cuts; basic sun and shadow simulation.

Module 3

Real-Time Rendering and Visualisation: Linking the rendering engine to the 3D model; artificial lighting - point, spot, and area lights; intensity and colour temperature; natural light - sun position, time of day, sky settings; material properties - albedo, roughness, reflectance, emissive surfaces; camera settings - field of view, exposure, depth of field, white balance; still image and panoramic output; resolving common rendering problems.

Module 4

AI Tools for Design Ideation - Integration with IDS-III: AI image generation as a professional design tool; prompt engineering for interior design - spatial mood, material palette, lighting quality, typology reference; generating commercial spatial precedents - office, retail, showroom; brand identity visualisation; material and finish ideation across the three planes; concept mood board production - AI images combined with real precedents and material swatches; critical use of AI - limitations, copyright, and attribution.

Module 5

Integrated Digital Portfolio - Integration with IDS-III: Portfolio structure and content sequencing - cover, concept, 2D drawing sheet, 3D views, rendered images, material board, AI mood board; page layout - consistent grid, font, and colour scheme; drawing sheet standards - title block, north point, scale bar, legend; annotation and material callouts on floor plan; PDF compilation and digital submission format; viva preparation - verbal presentation of digital design decisions.

Course Outcome

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

CO1: Produce a complete, dimensioned, and annotated 2D interior floor plan using CAD drafting tools, applying correct layer organisation, drawing conventions, and output settings.

CO2: Build a 3D interior model from a 2D plan reference, with materials applied, camera scenes set up, and interior elements appropriately sourced and placed.

CO3: Generate real-time rendered interior visualisations with controlled lighting, material mapping, and camera composition.

CO4: Use AI image generation tools to produce typology references, brand identity explorations, and concept mood boards for the IDS-III commercial interior project.

CO5: Assemble a complete digital project portfolio - 2D drawings, 3D models, rendered views, and AI mood boards - structured and presented for SEE Viva Voce.

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 Corky Binggeli, Interior Design Illustrated, 3rd ed., Wiley, 2012. Francis D.K. Ching and James Eckler, Introduction to Architecture, Wiley, 2013. **Web Links and e-Resources** https://nptel.ac.in - CAD for Engineers and Architects. https://www.archdaily.com - interior project references. official learning platforms and documentation for all tools used in the course.
Skill Development Activities Suggested Weekly 2D CAD drawing exercises (Weeks 1-3); 3D modelling challenge - model one furnished room independently, peer reviewed; render critique session - 4 views reviewed for light, material, and composition; AI prompt workshop - personal prompt library developed for interior design; mid-semester and end-semester portfolio desk reviews.

III - SEMESTER

Contemporary Interior Design			
Course Code	**22BI306**	CIE Marks	50
Teaching Hours/Week (L:T:P:S)	2:0:0:0	SEE Marks	50
Total Hours of Pedagogy	2	Total Marks	100
Type of Examination (SEE)	Theory	Exam Hours	3
		Credits	2

Course overview

1. Understand the evolution of world interior design movements, from Arts & Crafts and Modernism to Postmodernism and contemporary design.
2. Explore Asian and Indian interior design traditions, focusing on cultural identity, modern interpretations, craft, climate, and spatial values.
3. Develop critical understanding of sustainable materials, contemporary craft, colour, biophilic design, and innovative interior practices through case studies.

Course objectives

1. To trace the evolution of world interior design from the Arts & Crafts movement through High Modernism, Postmodernism, and contemporary sustainable practice.
2. To examine the development of Asian interior design traditions in the modern and contemporary period, including regional and diasporic design voices.
3. To study the trajectory of Indian interior design from post-independence modernism to contemporary sustainable and craft-led practice through select case studies.

Teaching Learning Process

1. Lectures to be supplemented with visual documentation (images, films, site visits) of the interiors and movements discussed in each module.
2. Students to be encouraged to relate historical interior movements to contemporary design practice through classroom discussion and comparative analysis.
3. Case studies to be introduced through student presentations, seminars, or group discussion wherever specified in the module.

Module-1

Modernism and its Interior Philosophies (World/Western Interiors)

Era: Arts & Crafts → High Modernism, 1880 to1960.

Arts & Crafts as a critique of the industrial interior; Art Nouveau's organic total interior; Bauhaus ideology and the integration of art and craft; the International Style, the open plan, and ornament-free space; mid-century domesticity.

Key topics: Morris and Mackintosh's handmade interior; Horta, Guimard, and Gaudí's organic interior as total artwork; Bauhaus Dessau under Gropius, Breuer, and Mies with tubular steel and the open plan; Adolf Loos's 'ornament and crime' and the white interior as ideology; Le Corbusier's Villa Savoye and Unité and the application of the five points to interiors; Eileen Gray and Alvar Aalto's furniture as interior architecture.

Module-2

Post-War and Late 20th-Century Interior Movements (Materials & Space)

Era: Mid-century → Postmodern, 1945 to 2000.

The Eames era and mid-century material experiment; Art Deco's luxury interior language; Postmodernism's return of ornament and symbolism; Deconstructivism's spatial fragmentation; Minimalism and Scandinavian human-centric design.

Key topics: Art Deco and the Chrysler Building interiors - chrome, mirror, and geometric luxury; Charles and Ray Eames's material experiment and domestic total design; Postmodernism through Venturi and Graves - complexity, contradiction, and kitsch; Deconstructivism through Gehry and Hadid - fragmented interior spatial experience; Minimalism through Pawson and Scandinavian design through Aalto and the Nordic residential tradition.
Module-3
Contemporary Material Culture and Sustainable Design Thinking (Art, Craft & Ornament) Era: Late 20th century → Present, 1980 to present. The return of craft in contemporary interiors; biophilic design principles; sustainable and circular material thinking; digital fabrication and parametric interior elements; colour theory and psychology in contemporary interior practice. Key topics: Biophilic design and Kellert's fourteen patterns of nature in the interior; circular economy and material lifecycle in interior specification; Munsell and NCS colour systems and colour psychology in spatial design; digital fabrication through CNC, 3D printing, and parametric surfaces; the contemporary craft revival through Studio Mumbai, Neri&Hu, and local material practices.
Module-4
Contemporary Asian and Diasporic Interior Design (Asian Interiors) Era: Modern → Contemporary, 1900 to present. Japanese Metabolism and post-war spatial minimalism; Chinese contemporary interior culture; the emergence of Asian design voices including Kengo Kuma, Neri & Hu, and Bijoy Jain; the reinterpretation of traditional Asian spatial values in contemporary global practice; Southeast Asian tropical modernism. Key topics: Tadao Ando's use of concrete and light for meditative interior space; Kengo Kuma's material dissolve and reinterpretation of tradition through a contemporary lens; Neri & Hu (Shanghai) and memory, narrative, and hybrid interior identity; Bijoy Jain and Studio Mumbai's craft, climate, and material honesty; tropical modernism through Geoffrey Bawa and climate-responsive Southeast Asian interiors; Korean and Chinese contemporary spatial minimalism as a practice of wabi-sabi.
Module-5
Contemporary Indian Interior — Between Tradition and Modernity (Indian Vernacular + Case Studies) Era: Post-independence → Present, 1947 to present. Correa, Doshi, and Baker on climate, social equity, and spatial dignity; Chandigarh and Ahmedabad as modernist interior laboratories; the contemporary Indian interior through Studio Mumbai and Abin Chaudhuri; sustainable and craft-led practice; eco-resort and green commercial typologies in India. Key topics: Charles Correa's tube house and climate-responsive section with indoor-outdoor integration; B.V. Doshi's Aranya and Amdavad ni Gufa as spatial democracy and community interior; Laurie Baker's brickwork jali, compressed cost, and human-scale spatial detail; Jawahar Kala Kendra and Correa's mandala plan as interior organisation; Studio Mumbai's craft, site, and contemporary vernacular interior; CGH Earth and the ITC Green Centre as sustainable hospitality and commercial interiors. Case study: Aranya Community Housing OR Jawahar Kala Kendra - a full design-process reading.

Course outcome

CO1: Analyse the key philosophies and movements of world interior design from the Arts & Crafts period to High Modernism.

CO2: Evaluate post-war and late twentieth-century interior movements and their influence on contemporary practice.

CO3:Apply principles of sustainable and craft-based material thinking to contemporary interior design problems.

CO4:Compare contemporary Asian interior design voices and their reinterpretation of traditional spatial values.

CO5:Critically examine the development of contemporary Indian interior design through representative case studies.

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 & Judith Gura - A History of Interior Design
- Karla J. Nielson & David A. Taylor - Interiors: An Introduction
- Jonathan M. Woodham - Twentieth Century Design
- Charles Correa - Housing and Urbanisation
- William J. R. Curtis - Balkrishna Doshi: An Architecture for India

Web links and Video Lectures (e-Resources):

- ArchDaily — contemporary and Asian interior case studies (archdaily.com)
- Divisare — curated contemporary interior architecture (divisare.com)
- NPTEL lecture series on the History of Interior Design / Architecture
- Studio Mumbai and Vastushilpa Foundation project archives

Skill Development Activities Suggested

- Prepare an illustrated timeline chart of world interior design movements from 1880 to the present.
- Prepare documentation or a physical/digital model of a selected case-study interior.

III - SEMESTER

SAMSKRUTIKA KANNADA			
Course Code	**22BI307**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1 Hrs (1:0:0:0)	SEE Marks	50
Total Hours of Pedagogy	15Hrs (15 Weeks)	Total Marks	100
Credits	01	Exam Hours	1 Hour

Course objectives

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ ಪಠ್ಯದ ಕಲಿಕೆಯ ಉದ್ದೇಶಗಳು:

1. ವೃತ್ತಿಪರ ಪದವಿ ವಿದ್ಯಾರ್ಥಿಗಳಾಗಿರುವುದರಿಂದ ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ಕನ್ನಡದ ಸಂಸ್ಕೃತಿಯ ಪರಿಚಯ ಮಾಡಿಕೊಡುವುದು.
2. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಪ್ರಧಾನ ಭಾಗವಾದ ಆಧುನಿಕ ಪೂರ್ವ ಮತ್ತು ಆಧುನಿಕ ಕಾವ್ಯಗಳನ್ನು ಸಾಂಕೇತಿಕವಾಗಿ ಪರಿಚಯಿಸಿ ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ ಸಾಹಿತ್ಯ ಮತ್ತು ಸಂಸ್ಕೃತಿಯ ಬಗ್ಗೆ ಅರಿವು ಹಾಗೂ ಆಸಕ್ತಿಯನ್ನು ಮೂಡಿಸುವುದು.
3. ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಗಳ ಪರಿಚಯವನ್ನು ಹಾಗೂ ಅವರುಗಳ ಸಾಧಿಸಿದ ವಿಷಯಗಳನ್ನು ಪರಿಚಯಿಸುವುದು.
4. ಕನ್ನಡ ಶಬ್ದಸಂಪತ್ತಿನ ಪರಿಚಯ ಮತ್ತು ಕನ್ನಡ ಭಾಷೆಯ ಬಳಕೆ ಹಾಗೂ ಕನ್ನಡದಲ್ಲಿ ಪತ್ರ ವ್ಯವಹಾರವನ್ನು ತಿಳಿಸಿಕೊಡುವುದು.

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವ್ಯವಸ್ಥೆ (Teaching-Learning Process - General Instructions) :

These are sample Strategies, which teacher can use to accelerate the attainment of the course outcomes.

1. ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡವನ್ನು ಬೋಧಿಸಲು ತರಗತಿಯಲ್ಲಿ ಶಿಕ್ಷಕರು ಪ್ರಸ್ತುತ ಪುಸ್ತಕ ಆಧಾರಿಸಿ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನವನ್ನು ಅನುಸರಿಸುವುದು. ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ತಯಾರಿಸಲು ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಪ್ರೇರೇಪಿಸುವುದು ಮತ್ತು ತರಗತಿಯಲ್ಲಿ ಅವುಗಳನ್ನು ಚರ್ಚಿಸಲು ಅವಕಾಶ ಮಾಡಿಕೊಡುವುದು.
2. ಇತ್ತೀಚಿನ ತಂತ್ರಜ್ಞಾನದ ಅನುಕೂಲಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು - ಅಂದರೆ ಕವಿ-ಕಾವ್ಯ ಪರಿಚಯದಲ್ಲಿ ಕವಿಗಳ ಚಿತ್ರಣ ಮತ್ತು ಲೇಖನಗಳು ಮತ್ತು ಕಥೆ ಕಾವ್ಯಗಳ ಮೂಲ ಅಂಶಗಳಿಗೆ ಸಂಬಂಧಪಟ್ಟ ಧ್ವನಿ ಚಿತ್ರಗಳು, ಸಂಭಾಷಣೆಗಳು, ಈಗಾಗಲೇ ಇತರ ವಿಮರ್ಶಕರು ಬರೆದಿರುವ ವಿಮರ್ಶಾತ್ಮಕ ವಿಷಯಗಳನ್ನು ಟಿವಿಟಿ, ಡಿಜಿಟಲ್ ಮಾಧ್ಯಮಗಳ ಮುಖಾಂತರ ವಿಶ್ಲೇಷಿಸುವುದು.
3. ನವೀನ ಮಾದರಿಯ ಸಾಹಿತ್ಯ ಬೋಧನೆಗೆ ಸಂಬಂಧಪಟ್ಟ ವಿಧಾನಗಳನ್ನು ಶಿಕ್ಷಕರು ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಅನುಕೂಲವಾಗುವ ರೀತಿಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳಬಹುದು.

Teaching-Learning Process (General Instructions)

These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ ಪಠ್ಯದ ಕಲಿಕೆಯ ಉದ್ದೇಶಗಳು:

1. ವೃತ್ತಿಪರ ಪದವಿ ವಿದ್ಯಾರ್ಥಿಗಳಾಗಿರುವುದರಿಂದ ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ಕನ್ನಡದ ಸಂಸ್ಕೃತಿಯ ಪರಿಚಯ ಮಾಡಿಕೊಡುವುದು.
2. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಪ್ರಧಾನ ಭಾಗವಾದ ಆಧುನಿಕ ಪೂರ್ವ ಮತ್ತು ಆಧುನಿಕ ಕಾವ್ಯಗಳನ್ನು ಸಾಂಕೇತಿಕವಾಗಿ ಪರಿಚಯಿಸಿ ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ ಸಾಹಿತ್ಯ ಮತ್ತು ಸಂಸ್ಕೃತಿಯ ಬಗ್ಗೆ ಅರಿವು ಹಾಗೂ ಆಸಕ್ತಿಯನ್ನು ಮೂಡಿಸುವುದು.
3. ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಗಳ ಪರಿಚಯವನ್ನು ಹಾಗೂ ಅವರುಗಳ ಸಾಧಿಸಿದ ವಿಷಯಗಳನ್ನು ಪರಿಚಯಿಸುವುದು.
4. ಕನ್ನಡ ಶಬ್ದಸಂಪತ್ತಿನ ಪರಿಚಯ ಮತ್ತು ಕನ್ನಡ ಭಾಷೆಯ ಬಳಕೆ ಹಾಗೂ ಕನ್ನಡದಲ್ಲಿ ಪತ್ರ ವ್ಯವಹಾರವನ್ನು ತಿಳಿಸಿಕೊಡುವುದು.

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವ್ಯವಸ್ಥೆ (Teaching-Learning Process - General Instructions) :

These are sample Strategies, which teacher can use to accelerate the attainment of the course outcomes.

1. ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡವನ್ನು ಬೋಧಿಸಲು ತರಗತಿಯಲ್ಲಿ ಶಿಕ್ಷಕರು ಪ್ರಸ್ತುತ ಪುಸ್ತಕ ಆಧಾರಿಸಿ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನವನ್ನು ಅನುಸರಿಸುವುದು. ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ತಯಾರಿಸಲು ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಪ್ರೇರೇಪಿಸುವುದು ಮತ್ತು ತರಗತಿಯಲ್ಲಿ ಅವುಗಳನ್ನು ಚರ್ಚಿಸಲು ಅವಕಾಶ ಮಾಡಿಕೊಡುವುದು.
2. ಇತ್ತೀಚಿನ ತಂತ್ರಜ್ಞಾನದ ಅನುಕೂಲಗಳನ್ನು ಬಳಸಿಕೊಳ್ಳುವುದು - ಅಂದರೆ ಕವಿ-ಕಾವ್ಯ ಪರಿಚಯದಲ್ಲಿ ಕವಿಗಳ ಚಿತ್ರಣ ಮತ್ತು ಲೇಖನಗಳು ಮತ್ತು ಕಥೆ ಕಾವ್ಯಗಳ ಮೂಲ ಅಂಶಗಳಿಗೆ ಸಂಬಂಧಪಟ್ಟ ಧ್ವನಿ ಚಿತ್ರಗಳು, ಸಂಭಾಷಣೆಗಳು, ಈಗಾಗಲೇ ಇತರ ವಿಮರ್ಶಕರು ಬರೆದಿರುವ ವಿಮರ್ಶಾತ್ಮಕ ವಿಷಯಗಳನ್ನು ಟಿಪಿಟಿ, ಡಿಜಿಟಲ್ ಮಾಧ್ಯಮಗಳ ಮುಖಾಂತರ ವಿಶ್ಲೇಷಿಸುವುದು.
3. ನವೀನ ಮಾದರಿಯ ಸಾಹಿತ್ಯ ಬೋಧನೆಗೆ ಸಂಬಂಧಪಟ್ಟ ವಿಧಾನಗಳನ್ನು ಶಿಕ್ಷಕರು ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಅನುಕೂಲವಾಗುವ ರೀತಿಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳಬಹುದು.

Module-1

ಘಟಕ -1 ಲೇಖನಗಳು

1. ಕರ್ನಾಟಕ ಸಂಸ್ಕೃತಿ - ಹಂಪ ನಾಗರಾಜಯ್ಯ
2. ಕರ್ನಾಟಕದ ಏಕೀಕರಣ : ಒಂದು ಅಪೂರ್ವ ಚರಿತ್ರೆ - ಜಿ. ವೆಂಕಟಸುಬ್ಬಯ್ಯ
3. ಆಡಳಿತ ಭಾಷೆಯಾಗಿ ಕನ್ನಡ - ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ ಮತ್ತು ಪ್ರೋ. ವಿ. ಕೇಶವಮೂರ್ತಿ

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-2

ಘಟಕ -2 ಆಧುನಿಕ ಪೂರ್ವದ ಕಾವ್ಯ ಭಾಗ

1. ವಚನಗಳು : ಬಸವಣ್ಣ, ಅಕ್ಕಮಹಾದೇವಿ, ಅಲ್ಲಮಪ್ರಭು, ಆಯ್ದಕ್ಕಿ ಮಾರಯ್ಯ, ಜೇಡರದಾಸಿಮಯ್ಯ, ಆಯ್ದಕ್ಕಿ ಲಕ್ಕಮ್ಮ.
2. ಕೀರ್ತನೆಗಳು : ಅದರಿಂದೇನು ಫಲ ಇದರಿಂದೇನು ಫಲ - ಪುರಂದರದಾಸರು
   ತಲ್ಲಣಿಸದಿರು ಕಂಡ್ಯ ತಾಳು ಮನವೇ - ಕನಕದಾಸರು
3. ತತ್ವಪದಗಳು : ಸಾವಿರ ಕೊಡಗಳ ಸುಟ್ಟು - ಶಿಶುನಾಳ ಶರೀಫ

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-3

ಘಟಕ -3 ಆಧುನಿಕ ಕಾವ್ಯಭಾಗ

1. ಡಿವಿಜಿ ರವರ ಮಂಕುತಿಮ್ಮನ ಕಗ್ಗದಿಂದ ಅಯ್ದ ಕೆಲವು ಭಾಗಗಳು
2. ಕುರುಡು ಕಾಂಚಾಣ : ದಾ.ರಾ. ಬೇಂದ್ರೆ
3. ಹೊಸಬಾಳಿನ ಗೀತೆ : ಕುವೆಂಪು

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-4

ಘಟಕ -4 ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಗಳ ಪರಿಚಯ

1. ಡಾ. ಸರ್. ಎಂ. ವಿಶ್ವೇಶ್ವರಯ್ಯ : ವ್ಯಕ್ತಿ ಮತ್ತು ಐತಿಹ್ಯ - ಎ ಎನ್ ಮೂರ್ತಿರಾವ್
2. ಕರಕುಶಲ ಕಲೆಗಳು ಮತ್ತು ಪರಂಪರೆಯ ವಿಜ್ಞಾನ : ಕರೀಗೌಡ ಬೀಚನಹಳ್ಳಿ

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-5

ಘಟಕ -5 ಕಥೆ ಮತ್ತು ಪ್ರವಾಸ ಕಥನ

1. ಯುಗಾದಿ : ವಸುಧೇಂದ್ರ
2. ಮೆಗಾನೆ ಎಂಬ ಗಿರಿಜನ ಪರ್ವತ : ಹಿ.ಚಿ. ಬೋರಲಿಂಗಯ್ಯ

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

III - SEMESTER

BALAKE KANNADA			
Course Code	**22BI307**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1Hr (1:0:0:0)	SEE Marks	50
Total Hours of Pedagogy	15Hrs (15 Weeks)	Total Marks	100
Credits	01	Exam Hours	1 Hour

Course objectives:

ಬಳಕೆ ಕನ್ನಡ ಪಠ್ಯದ ಕಲಿಕೆಯ ಉದ್ದೇಶಗಳು (Course Learning Objectives):

- To Create the awareness regarding the necessity of learning local language for comfortable and healthy life.
- To enable learners to Listen and understand the Kannada language properly.
- To speak, read and write Kannada language as per requirement.
- To train the learners for correct and polite conservation.

Teaching-Learning Process (General Instructions)

These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.

Module-1

1. Introduction, Necessity of learning a local language. Methods to learn the Kannada language.
2. Easy learning of a Kannada Language: A few tips. Hints for correct and polite conservation, Listening and Speaking Activities
3. Key to Transcription.
4. ವೈಯಕ್ತಿಕ, ಸ್ವಾಮ್ಯಸೂಚಕ/ಸಂಬಂಧಿತ ಸರ್ವನಾಮಗಳು ಮತ್ತು ಪ್ರಶ್ನಾರ್ಥಕ ಪದಗಳು - **Personal Pronouns, Possessive Forms, Interrogative words**

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-2

1. ನಾಮಪದಗಳ ಸಂಬಂಧಾರ್ಥಕ ರೂಪಗಳು, ಸಂದೇಹಾಸ್ಪದ ಪ್ರಶ್ನೆಗಳು ಮತ್ತು ಸಂಬಂಧವಾಚಕ ನಾಮಪದಗಳು - **Possessive forms of nouns, dubitive question and Relative nouns**
2. ಗುಣ, ಪರಿಮಾಣ ಮತ್ತು ವರ್ಣಬದ್ಧ ವಿಶೇಷಣಗಳು, ಸಂಖ್ಯಾವಾಚಕಗಳು **Qualitative, Quantitative and Colour Adjectives, Numerals**
3. ಕಾರಕ ರೂಪಗಳು ಮತ್ತು ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯಗಳು – ಸಪ್ತಮಿ ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯ – (ಆ, ಅದು, ಅವು, ಅಲ್ಲಿ) **Predictive Forms, Locative Case**

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-3

1. ಚತುರ್ಥಿ ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯದ ಬಳಕೆ ಮತ್ತು ಸಂಖ್ಯಾವಾಚಕಗಳು – **Dative Cases, and Numerals**
4. ಸಂಖ್ಯಾಗುಣವಾಚಕಗಳು ಮತ್ತು ಬಹುವಚನ ನಾಮರೂಪಗಳು – **Ordinal numerals and Plural markers**
5. ನ್ಯೂನ / ನಿಷೇಧಾರ್ಥಕ ಕ್ರಿಯಾಪದಗಳು ಮತ್ತು ವರ್ಣ ಗುಣವಾಚಕಗಳು

Defective / Negative Verbs and Colour Adjectives

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-4

1 ಅಪ್ಪಣೆ / ಒಪ್ಪಿಗೆ, ನಿರ್ದೇಶನ, ಪ್ರೋತ್ಸಾಹ ಮತು ಒತ್ತಾಯ ಅರ್ಥರೂಪ ಪದಗಳು ಮತ್ತು ವಾಕ್ಯಗಳು

Permission, Commands, encouraging and Urging words (Imperative words and sentences)

2. ಸಾಮಾನ್ಯ ಸಂಭಾಷಣೆಗಳಲ್ಲಿ ದ್ವಿತೀಯ ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯಗಳು ಮತ್ತು ಸಂಭವನೀಯ ಪ್ರಕಾರಗಳು

Accusative Cases and Potential Forms used in General Communication

3. "ಇರು ಮತ್ತು ಇರಲ್ಲ" ಸಹಾಯಕ ಕ್ರಿಯಾಪದಗಳು, ಸಂಭಾವ್ಯಸೂಚಕ ಮತ್ತು ನಿಷೇಧಾರ್ಥಕ ಕ್ರಿಯಾ ಪದಗಳು - Helping Verbs "iru and iralla", Corresponding Future and Negation Verbs
6. ಹೋಲಿಕೆ (ತರತಮ), ಸಂಬಂಧ ಸೂಚಕ ಮತ್ತು ವಸ್ತು ಸೂಚಕ ಪ್ರತ್ಯಯಗಳು ಮತ್ತು ನಿಷೇಧಾರ್ಥಕ ಪದಗಳ ಬಳಕೆ- Comparitive, Relationship, Identification and Negation Words

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

Module-5

1. ಕಾಲ ಮತ್ತು ಸಮಯದ ಹಾಗೂ ಕ್ರಿಯಾಪದಗಳ ವಿವಿಧ ಪ್ರಕಾರಗಳು - ifferent types of forms of Tense, Time and Verbs
2. ದ್, -ತ್, - ತು, - ಇತು, - ಅಗಿ, - ಅಲ್ಲ, - ಗ್, -ಕ್, ಇದೆ, ಕ್ರಿಯಾ ಪ್ರತ್ಯಯಗಳೊಂದಿಗೆ ಭೂತ, ಭವಿಷ್ಯತ್ ಮತ್ತು ವರ್ತಮಾನ ಕಾಲ ವಾಕ್ಯ ರಚನೆ - Formation of Past, Future and Present Tense Sentences with Verb Forms
3. **Kannada Vocabulary List :** ಸಂಭಾಷಣೆಯಲ್ಲಿ ದಿನೋಪಯೋಗಿ ಕನ್ನಡ ಪದಗಳು - **Kannada Words in Conversation**

ಬೋಧನೆ ಮತ್ತು ಕಲಿಕಾ ವಿಧಾನ	ಪುಸ್ತಕ ಆಧಾರಿತ ಬ್ಲಾಕ್ ಬೋರ್ಡ್ ವಿಧಾನ, ಪ್ರಮುಖ ಅಂಶಗಳ ಚಾರ್ಟ್ ಗಳನ್ನು ಬಳಸುವುದು, ಪಿಪಿಟಿ ಮತ್ತು ದೃಶ್ಯ ಮಾಧ್ಯಮದ ವಿಡಿಯೋಗಳನ್ನು ಬಳಸುವುದು, ವಿದ್ಯಾರ್ಥಿಗಳೊಂದಿಗೆ ಚಟುವಟಿಕೆಗಳ ಮುಖಾಂತರ ಚರ್ಚಿಸುವುದು.

III - SEMESTER

SOCIAL CONNECT & RESPONSIBILITY			
Course Code	**22BI308**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1Hr. (1:0:0:0)	SEE Marks	50
Total Hours of Pedagogy	15 Hrs. (15 Weeks)	Total Marks	100
Credits	01	Exam Hours	1 Hour

Course overview

1. Develop social and civic responsibility by engaging with communities and understanding their needs, culture, and challenges.
2. Gain practical exposure through tree plantation, heritage walks, crafts, organic farming, waste management, and water conservation activities.
3. Build teamwork, leadership, communication, and problem-solving skills through community-based and socially relevant activities.

Course objectives

1. Provide a formal platform for students to communicate and connect to the surrounding.
2. Create a responsible connection with the society.
3. Understand the community in general in which they work.
4. Identify the needs and problems of the community and involve them in problem –solving. 5. Develop among themselves a sense of social & civic responsibility & utilize their knowledge in finding practical solutions to individual and community problems.
5. Develop competence required for group-living and sharing of responsibilities & gain skills in mobilizing community participation to acquire leadership qualities and democratic attitudes.

Teaching-Learning Process

These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.

1. In addition to the traditional lecture method, different types of innovative teaching methods may be adopted so that the activities will develop students' theoretical and applied social and cultural skills.
2. State the need for activities and its present relevance in the society and provide real-life examples.
3. Support and guide the students for self-planned activities.
4. You will also be responsible for assigning homework, grading assignments and quizzes, and documenting students' progress in real activities in the field.
5. Encourage the students for group work to improve their creative and analytical skills

Module-1

Plantation and adoption of a tree

Plantation of a tree that will be adopted for four years by a group of students. (ONE STUDENT ONE TREE) They will also make an excerpt either as a documentary or a photo blog describing the plant's origin, its usage in daily life, its appearance in folklore and literature.

Module-2

Heritage walk and crafts corner

Heritage tour, knowing the history and culture of the city, connecting to people around through their history, knowing the city and its craftsman, photo blog and documentary on evolution and practice of various craft forms.

Module-3

Organic farming and waste management

Usefulness of organic farming, wet waste management in neighboring villages, and implementation in the campus.

Module-4
Water conservation Knowing the present practices in the surrounding villages and implementation in the campus, documentary or photo blog presenting the current practices.
Module-5
Food walk City's culinary practices, food lore, and indigenous materials of the region used in cooking
Course outcome CO1: Communicate and connect effectively with the surrounding community. CO2: Develop a responsible understanding and connection with society. CO3: Identify community needs and problems and participate in finding practical solutions. CO4: Develop social and civic responsibility through active community engagement. CO5: Demonstrate teamwork, leadership, responsibility-sharing, and community participation skills.
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: 1. Nick Wates – Community Architecture 2. Cynthia E. Smith – Design with the Other 90%: Cities 3. William H. Whyte – The Social Life of Small Urban Spaces 4. Christopher Alexander, Sara Ishikawa & Murray Silverstein – A Pattern Language 5. Kevin Lynch – The Image of the City 6. Nitin Singhania – Indian Art and Culture
Web links and Video Lectures (e-Resources) • https://unitedwaynca.org/blog/social-responsibility-norm-guide/ • https://www.slideshare.net/slideshow/social-connect-and-responsibility-1-pptx/270245018
Activity Based Learning (Suggested Activities in Class)/ Practical Based learning. Jamming session, open mic, and poetry: Platform to connect to others. Share thestories with others. Share the experience of Social Connect. Exhibit the talent likeplaying instruments, singing, one-act play, art-painting, and fine art.

IV - SEMESTER

IV – SEMESTER

INTERIOR DESIGN STUDIO -IV			
Course Code	**22BI401**	CIE Marks	100
Teaching Hours/Week (L:T:P:S)	3:0:0:6	SEE Marks	100
Total Hours of Pedagogy	9	Total Marks	200
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	06

Course overview

1. Focuses on decoding a hospitality brand's core values and translating its identity into cohesive, immersive physical spaces through spatial volume, color palettes, and sensory touchpoints.
2. Spatial Planning challenges students to map seamless user journeys and resolve complex layouts by balancing the public-private divide, integrating wellness and guest areas, and ensuring efficient service.

Course objectives

1. To define the brand and user persona.
2. To create immersive hospitality environments that balances emotive storytelling with logical spatial flow.
3. To create spaces which are multifunction/ multi level for a diverse user groups and design meaningful hospitality spaces by enhancing user experience and translating brand identity into cohesive design solutions

Outline

The studio will introduce students to the design of hospitality interiors through a series of studies, explorations, and design exercises. Emphasis will be placed on brand ethos, spatial experience, user journey, sensory design, and the relationship between public and private spaces.

A. Understanding Hospitality Interiors

- Introduction to hospitality interior typologies.
- Understanding hospitality brands, users, and spatial requirements.
- Study of user behaviour and guest experience.
- Functional zoning and spatial hierarchy.
- Public, semi-public, private, and support spaces.

B. Brand Ethos & Spatial Identity

- Understanding and decoding brand ethos.
- Translating brand values into spatial language.
- Use of colour, materials, lighting, and form.
- Spatial storytelling and creation of distinctive identities.
- Relationship between brand identity and user experience.

C. User Experience & Spatial Journey

- Understanding the user journey within hospitality environments.
- Arrival, transition, interaction, and private experiences.
- Circulation and connectivity between different zones.
- Creating seamless and meaningful spatial experiences.
- Sensory touchpoints and atmospheric design.

D. Materials, Lighting & Sensory Design

- Selection and application of materials and finishes.
- Colour palettes and material expression.
- Lighting as a tool for creating mood and atmosphere.
- Sensory qualities of hospitality spaces.
- Integration of furniture, finishes, and lighting with the overall design concept.

E. Spatial Planning & Technical Integration

- Space planning and functional relationships.
- Public–private spatial relationships.
- Service and staff circulation.

- Basic integration of lighting, electrical, and MEP services.
- Accessibility, safety, and functional considerations.

F. Design Projects

The studio will include:

- One embedded minor project exploring brand decoding and sensory-driven spatial design.
- One major hospitality design project focusing on spatial planning, user experience, brand identity, and the public–private divide.

The projects will progress through stages such as:

- Brand and user analysis
- Concept development
- Spatial planning
- Design development
- Material and lighting studies
- Technical integration
- Detailing
- Final presentation

Mode of Study

A. Experience

- Lectures, discussions, and visual presentations on hospitality interiors.
- Case studies and site visits to understand user behaviour, spatial planning, and experience.
- Observation and documentation through sketches, photographs, and diagrams.
- Exposure to materials, lighting, furniture, and services.

B. Exploration

- Brand decoding and understanding brand values and spatial identity.
- Exploration of colour, materials, form, lighting, and sensory elements.
- User-journey, zoning, circulation, and public–private relationship studies.
- Concept development through mood boards, sketches, models, and critiques.

C. Design Tasks

The design tasks will involve:

- **Minor Project:** Brand decoding and sensory-driven spatial design.
- **Major Project:** Hospitality interior design focusing on spatial planning, user experience, brand identity, and public–private relationships.
- Brand and user analysis, concept development, zoning, and circulation studies.
- Material, colour, lighting, furniture, and sensory studies.
- Basic technical integration, detailing, model-making, and final presentation.

Course outcome

CO1: To analyze the core values, visual identity, and ethos of a hospitality sector

CO2: To create a seamless user journey that balances ergonomic requirements with emotive storytelling

CO3: To develop spatial layouts to effectively manage the "Public-Private Divide"

CO4: To integrate functional spaces with aesthetic and sensory quality in a hospitality framework

CO5: To express a brand's ideology through material, lighting, and sensory nodes, demonstrating the ability to create immersive 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

- "Hotel and Restaurant Design by Darpan Dean & Gaurav Kashyap
- "Taste and Place: The Design Hotels Book by Gestalten and Design Hotels
- “Boutique Hotels with Architect-Driven Designs" by Sunil Bhandarkar
- "Time-Saver Standards for Interior Design and Space Planning"
- "Neufert Architects' Data"

Web links and Video Lectures (e-Resources)

- https://www.itchotels.com/in/en
- https://www.postcardresorts.com/

Skill Development Activities Suggested

- Journey mapping to enhance the knowledge on shifting emotional feelings of users in space.
- Creating a mood board for the material to understand the user's psychological behavior and sensory impact of materials on the quality space.

IV - SEMESTER

Interior Materials and Applications - III			
Course Code	**22BI402**	CIE Marks	50
Teaching Hours/Week (L:T:P:S)	2:0:0:4	SEE Marks	50
Total Hours of Pedagogy	6	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	04

Course overview:

1. Interior materials and Applications will equip the students with the understanding of the types and applications of materials used in Interior Design. It will focus on Fabrics, Upholstery, Soft Furnishings, Ceiling and Lighting Systems, Bathroom/Wet Area Material and Sustainability and FF&E Schedules .
2. Interior Materials and Applications - III is a direct sequel of Interior Materials and Applications - II and a prerequisite for the higher semester Interior Design Studios.
3. The subject integrates into concurrent design studio subjects of 4rd semester i.e., Interior Design Studio - IV and AI Integrated Digital Modelling - II.

Course objectives:

1. To build a comprehensive understanding of soft furnishing materials.
2. To equip students to select and specify ceiling systems, acoustic treatment materials, and lighting-responsive finishes appropriate for varied zones.
3. To introduce sustainable and biophilic material strategies.

Teaching Learning Process

1. Lectures with visual case studies highlighting material choices and their role in ambiance creation and brand identity.
2. Field visits/ case study for on-site material observation and documentation across zones.
3. Integrated assignments where material palettes, finish plans, and partial FF&E schedules are developed in parallel with ongoing Studio projects.

Module-1

Fabrics, Upholstery, and Soft Furnishings:

- Textile fibre classification: natural (cotton, linen, silk, wool, jute) and synthetic (polyester, nylon, acrylic, viscose) properties, textures, and suitability for varied environments.
- Performance ratings for fabrics: abrasion resistance (Martindale rub count), stain resistance, fire retardancy (FR ratings), and anti-microbial finishing.
- Drapery and curtain fabrics: blackout linings, sheers, and thermal fabrics.
- Brand identity through textiles: using signature fabrics, patterns.

Module-2

Ceiling and Lighting Systems:

- Ceiling systems: gypsum board (GRG/GRC) for sculpted and coved ceilings, metal tile and stretch ceilings, open/exposed industrial ceilings.
- Service-integrated ceiling design: coordinating materials with concealed HVAC, fire sprinklers, and lighting
- Lighting and material interaction: how surface reflectance, sheen, and texture respond to warm vs. cool lighting; material selection to enhance ambiance in dining rooms, bars, resort lobbies, and spa areas.
- Acoustic ceiling materials: mineral fibre tiles, perforated timber baffles, felt panels, and metal mesh for noise control in open-plan spaces.

Module-3

Bathroom/Wet Area Materials :

- Bathroom materials: waterproofing systems and substrate preparation; porcelain, stone, and mosaic tiles for floors and wet walls; glass shower enclosures; sanitary ware finishes (chrome, brushed gold, matte black); anti-fog mirror systems.
- Joinery materials for bathroom vanity units and hotel room furniture: moisture-resistant MDF, marine ply, and laminate grades.
- Spa and wellness area materials: natural stone, timber decking, reed/bamboo panels, and water-feature materials for a sensory, restorative environment connecting to the user experience.

Module-4

Sustainability and FF&E Schedules:

- Sustainable material strategies: bamboo, reclaimed wood, recycled glass mosaic, compressed earth blocks, and locally sourced stone. LEED/IGBC criteria: low-VOC finishes, recycled content materials, FSC-certified timber, and regional sourcing.
- FF&E (Furniture, Fixtures & Equipment) schedule preparation: understanding the structure of an FF&E document, categorising items by character of interior spaces and specifying materials, finishes, and quantities.

Module-5

Integrating Interior Materials and Applications to the concurrent Interior Design Studio-III and AI Integrated Digital Modelling - II.

- Identifying and exploring the optimum material and details applicable for the design proposition based on the understanding of the subject. Integrated studio aiming at holistic understanding of material detailing and application.
- The outcome to be digitalized using the knowledge and skill acquired under the AI Integrated Digital Modelling-II course. Assignments to be focussed on generation of detailed views for design presentations.

Course outcome

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

CO1: Understand the classification, properties, and performance characteristics of textile fibers and fabrics used in upholstery, drapery, and soft furnishings for interior environments.

CO2: Develop knowledge of different ceiling and lighting systems and their integration with building services such as HVAC, lighting, and fire safety systems.

CO3: Identify and select appropriate materials and finishes for bathrooms, wet areas, and spa environments, considering durability, moisture resistance, and user experience.

CO4: Evaluate sustainable material strategies and prepare FF&E schedules by specifying materials, finishes, quantities, and sustainability considerations for interior projects.

CO5: Prepare professional material boards and formal specification sheets for projects.

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

- Rutes, W., Penner, R. & Adams, L. — Hotel Design, Planning and Development, W.W. Norton (chapters on materials, finishes, and FF&E)
- Sherrill Whiton, S. & Abercrombie, S. — Interior Design and Decoration, Pearson (textiles, floor coverings, and window treatment chapters)
- Thompson, J. — Specifying Interiors: A Guide to Construction and FF&E for Residential and Commercial Interiors Projects, Wiley
- Binggeli, C. — Building Systems for Interior Designers, Wiley (ceiling systems, lighting, and HVAC integration chapters)

Web links and Video Lectures (e-Resources):

- Hospitality Design Magazine -www.hospitalitydesign.com (project case studies with material and FF&E callouts for hotels, resorts, and restaurants)
- Dezeen Interiors -www.dezeen.com/interiors (boutique hotel and restaurant interiors with material and finish references)
- YouTube: Kravet Fabric & Décor tutorials, Porcelanosa hospitality tile applications, NDTV Design Files - Indian hospitality interiors, and Knoll Textiles performance fabric series
- IGBC Resource Portal - www.igbc.in (green building material certification and sustainable sourcing guidelines for hospitality projects)

Skill Development Activities Suggested

- Material Mood Board: Create a zone-wise material palette including fabric swatches, carpet sample, ceiling treatment, wall finish, and sanitary ware finish.
- Site Visit: Visit an interior space as in the studio project ; document material use across all zones with photographs and prepare a material observation report.

IV - SEMESTER

INTERIOR WORKING DRAWING-1			
Course Code	**22BI403**	CIE Marks	100
Teaching Hours/Week (L:T:P:S)	2:0:0:4	SEE Marks	---
Total Hours of Pedagogy	6	Total Marks	100
Type of Examination (SEE)	-	Exam Hours	---
		Credits	4

Course Overview:

1. Technical Drafting & CAD Documentation: Introduces the principles and standards of interior working drawings, focusing on technical drafting, CAD documentation, and execution-oriented detailing.
2. Comprehensive Interior Drawing Sets: Develops skills in preparing layouts, reflected ceiling plans, sectional elevations, service coordination, and plumbing drawings for professional execution.
3. Furniture, Joinery & Construction Detailing: Covers detailed drawings of furniture, partitions, and joinery, along with material specifications and construction details through studio exercises and case studies.

Course objectives:

1. To introduce students to the fundamentals and application of working drawings in interior design covering conventional drafting standards, CAD techniques and Interior working drawing detailing using drafting skills.
2. To develop representation methods, emphasizing spatial detailing, dimensioning, furniture layouts, reflected ceiling plans, joinery basics, and execution-oriented drawings.
3. To equip students to translate interior design proposals into clear and accurate technical drawings suitable for site implementation.

Teaching Learning Process (General Instructions)

1. Concept Introduction & Demonstration
   Introduce interior working drawings, drafting standards, CAD tools, and plumbing fundamentals through lectures, visual presentations, and industry-based examples.
2. Studio-Based Practice
   Train students in drawing conventions, layouts, sectional elevations, ceiling plans, plumbing drawings, and detailed interior drawings through guided exercises, studio work, and computer lab sessions.
3. Application of Design Detailing
   Guide students in developing furniture layouts, partitions, toilet layouts, joinery details, material specifications, and construction drawings for effective execution.
4. Review, Error Checking & Discussion
   Engage students in identifying drawing errors, coordinating services with interior elements, and improving drawing quality through discussions, critiques, and mentor feedback.
5. Detailing Demonstration through Case Studies & Construction Analysis-
   Engage students in analysing professional interior working drawings, furniture details, partition systems, joinery methods, and material junctions through case studies, precedent analysis, and measured drawing documentation exercises.
6. Reviews
   Discussions & technical critiques, periodic reviews, pin-ups and portfolio evaluations to help students refine drawing presentation, detailing standards, coordination accuracy, and professional documentation quality suitable for site execution.

Module-1

Fundamentals of working drawings Introduction

Overview of Working Drawings; reading, error checking. Drafting Conventions: Representation of materials, graphic symbols, line type conventions, grid lines, lettering, color codes, paper sizes, title blocks, office practices, standardization of details.

Module-2
CAD Fundamentals for Interior working drawings Introduction to CAD interface, workspace, and navigation, Template setup and sheet configuration, Layers creation, Blocks, reusable components, and library development, Plot settings, scales, and output preparation, Hatching and material indication in CAD, Text styles, annotation, and dimensioning tools, Error checking, file organisation, and coordination workflows
Module-3
Interior Working Drawings and Spatial Detailing Preparation of Interior working drawings and details for the Design project of the semester. Detailed layout integrating furniture, partitions and openings. Reflected ceiling plan and detailing of levels and edge elements (transitions). Specifications and annotations to facilitate setting out on site (marking). Exploration of spatial volumes through sectional elevations.
Module-4
Services Layout & Plumbing Integration Services Layout & Plumbing Integration Planning and integration of toilet layouts and plumbing systems, covering fixture layout, basic water supply, and drainage system, using standard plumbing drawing conventions. Incorporate services into interior working drawings, ensuring coordination with spatial layouts. Preparation of detailed toilet drawings and plumbing layouts suitable for execution.
Module-5
Detailing of Interior Elements Furniture detailing: geometry, construction, joinery, and material specification, Partition systems: types by height, paneling, and framework; fixing details, Planter and custom millwork detailing, Material and finish schedules: specifying finishes, edge treatments, and hardware, Joinery drawings: section-through details for cabinetry, shelving, and counters, Compiling a complete detail sheet set suitable for site execution.
Course outcome CO1: Apply standard drafting conventions—symbols, line types, lettering, and annotation—to produce accurate and professional interior working drawings. CO2: Use CAD tools/drafting softwares and workflows to produce coordinated interior documentation including layers, blocks, templates, and plot-ready drawing sets. CO3: Develop complete interior working drawing sets incorporating spatial plans, RCPs, and sectional elevations suitable for site execution. CO4: Integrate plumbing layouts into interior working drawings following standard drawing conventions and service coordination practices. CO5: Create fabrication-ready detail drawings for furniture, partitions, and joinery, with material, finish, and construction specifications.
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

- Architectural detailing In Contract Interiors, by Wendy W. Staebler. Whitney Library of Design Publication ; 1988
- Interior Detailing: In Contract Works, Jimmy F. Doctor. Oro Editions 2018
- The Wood Worker's Guide to Furniture Design, Garth Graves. Pupular WoodWorking Books ; 1997
- Modern Furniture 150 Years of Design, Fremdkorper, Tandem Verlag Gmbh ; 2009
- Furniture for interior design, Sam Booth and Others. Laurence King Publishing Ltd., ; 2014
- Sketching & drawing : techniques for product and furniture designers, Ferrer, Ricard. Spain Parramon Paidotribo World Rights 2014
- The interior plan : concepts and exercises / Roberto J. Rengel, University of Wisconsin--Madison. Rengel, Roberto.

Web links and Video Lectures (e-Resources):

- How to Create a Floor Plan for Interior Designers — YouTube
- Architectural Working Drawing Checklist — YouTube
- Design Drawing vs. Technical Drawing — YouTube (Playlist)
- AutoCAD for Interior Design — Lynda.com / LinkedIn Learning
- National Building Code of India — BIS (for plumbing and services reference)

Skill Development Activities Suggested

- Guest Lecture: Practicing interior designer or architect on professional working drawing standards and site coordination
- Industry Visit / Site Walk: Visit to an interior fit-out project under construction to observe drawing implementation.
- Workshop on Furniture Detailing: Hands-on detailing exercise with joinery, material specifications, and finish schedules
- Drafting Time-problem: Timed CAD exercise to build speed and accuracy in producing standard interior drawing types

IV – SEMESTER

INTERIOR SERVICES 2 – HVAC, Acoustics, Fire Safety and Automation			
Course Code	22BI404	CIE Marks	50
Teaching Hours/Week (L:T:P:S)	3:0:0:0	SEE Marks	50
Total Hours of Pedagogy/Week	3	Total Marks	100
Type of Examination (SEE)	Theory	Exam Hours	3
		Credits	3

Course Overview:

1. HVAC & Building Services Integration: Introduces HVAC systems and their components, focusing on their integration with ceiling layouts, spatial planning, and interior design requirements.
2. Acoustics & Fire Safety: Covers acoustic principles, material selection, fire protection systems, and egress planning to create safe and comfortable hospitality environments.
3. Smart & Safe Interior Design: Explores building automation, sensors, and integrated control systems, culminating in a coordinated hospitality studio project with acoustic, fire safety, evacuation, and automation documentation.

Course objectives:

1. To introduce HVAC systems at a level relevant to interior designers for effective space planning and ceiling coordination.
2. To develop an understanding of acoustic principles and their application in designing comfortable sound environments in hospitality interiors.
3. To build awareness of fire safety regulations, material flammability, and fire protection systems as they relate to interior design decision-making.
4. To introduce building automation and smart interior technologies relevant to contemporary hospitality design, including guest room management and integrated controls.
5. To enable students to prepare services drawings incorporating acoustic treatment, fire safety elements, and automation layouts as part of hospitality interior documentation.

Teaching Learning Process (General Instructions)

1. Lectures & Classroom Exercises: Concepts are introduced through lectures, practical exercises, and discussions.
2. Visual & Case-Based Learning: Drawings, product catalogues, and real project case studies support understanding of services and applications.
3. Studio Integration & Peer Review: Students apply concepts to their hospitality design project through service coordination exercises and peer reviews to improve documentation quality.

Module-1

HVAC in Interior Design

Fundamentals of HVAC systems in interior environments, including commonly used system types such as split units, fan coil units, VRF/VRV systems, and centralized systems. Identification of HVAC components including diffusers, grilles, and control devices, and their integration within interior spaces. Coordination of HVAC systems with ceiling design, duct routing, and spatial planning. Ventilation requirements for different interior zones and their representation in interior layouts.

Module-2

Acoustics in Interior Design

Principles of sound in interior environments including loudness, frequency, and reverberation. Influence of surface materials on acoustic performance in hospitality spaces. Selection and application of acoustic materials for different interior functions. Basic strategies for sound insulation and noise control between spaces. Representation of acoustic requirements and material specifications in interior drawings.

Module-3
Fire Safety in Interior Design Fire safety principles related to interior design, including material flammability and fire performance standards. Passive fire protection systems such as fire-rated walls, doors, and partitions. Means of egress including exit requirements, travel distance, and occupancy considerations. Active fire protection systems including detectors, sprinklers, and extinguishers. Integration of fire safety elements and basic documentation in interior layouts.
Module-4
Smart Interiors and Building Automation Basic concepts of building automation systems and their role in interior environments. Integration of lighting, HVAC, and security systems through automated controls. Introduction to smart technologies including sensors, control panels, and guest room management systems. Coordination of automation systems within interior layouts while maintaining design integration.
Module-5
Studio Activity – Services Documentation for a Hospitality Space Application of HVAC, acoustics, fire safety, and automation systems in interior design documentation. Preparation of acoustic treatment layouts, fire safety plans, and evacuation drawings. Representation of automation systems and control elements in interior proposals. Coordination of multiple services within a comprehensive interior design framework.
Course outcome CO1: Analyze different HVAC system types and integrate HVAC components into interior ceiling plans and spatial design decisions. CO2: Evaluate and select appropriate acoustic materials and surface treatments to achieve desired sound environments in hospitality spaces. CO3: Apply fire safety requirements and incorporate them into interior layouts, material specifications, and documentation in compliance with NBC 2016 standards. CO4: Identify and specify suitable building automation systems and smart interior technologies for contemporary hospitality projects. CO5: Demonstrate collaboration and communication skills through the development of coordinated interior layout and ceiling drawings that integrate HVAC, acoustic, fire safety, and automation services.
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** • Mehta, M., Johnson, J., & Rocafort, J. (2013). Architectural Acoustics Illustrated. Wiley. • Grondzik, W. T., & Kwok, A. G. (2014). Mechanical and Electrical Equipment for Buildings. Wiley. • Sinopoli, J. M. (2010). Smart Building Systems for Architects, Owners and Builders. Butterworth-Heinemann. • Ching, F. D. K., & Binggeli, C. (2012). Interior Design Illustrated (3rd ed.). Wiley.

• National Building Code of India 2016, Part 4: Fire and Life Safety (BIS, New Delhi).
Web links and Video Lectures (e-Resources): • NPTEL – Architectural Acoustics: https://nptel.ac.in • NFPA – Fire safety standards and free resources: https://www.nfpa.org • KNX Association – Smart building automation basics: https://www.knx.org • Armstrong Ceiling Solutions – Acoustic ceiling product guides: https://www.armstrongceilings.com
Skill Development Activities Suggested • Acoustic material board: a curated board of acoustic finishes for hotel lobby, restaurant, and guest room with NRC values annotated. • Fire egress exercise: marking exit routes, extinguisher positions, and detector locations on a given hospitality floor plan. • GRMS concept diagram: a sketch of a guest room automation concept showing lighting scenes, curtain control, climate zones, and in-room control panel position. • Site visit documentation: observation and recording of fire safety elements and smart technology in an accessible hotel or hospitality venue.

IV SEMESTER

AI INTEGRATED DIGITAL MODELLING - II			
Course Code	**22BI405**	Cie Marks	50
Teaching Hours/Week (L:T:P:S)	1:0:0:4	See Marks	50
Total Hours of Pedagogy	5	Total Marks	100
Type of Examination (SEE)	Viva Voce	Exam Hours	-
		Credits	3

Course Overview

AI Integrated Digital Modelling 2 advances the digital workflow established in AI Integrated Digital Modelling 1 (2BBI305, Semester III). Students move from foundational digital literacy to professional-level production - advanced 2D working drawings, complex multi-level 3D modelling, image post-processing and presentation compositing, and a sophisticated AI workflow for luxury hospitality design. AI Integrated Digital Modelling 1 is a direct prerequisite; this course builds on those foundations without re-teaching them. This subject is an IPCC course integrated with Interior Design Studio - IV (2BBI401).

Course Objective

To develop advanced 2D CAD skills for professional working drawings - sections, elevations, reflected ceiling plans, and coordinated drawing sets. To build complex multi-level and multi-zone 3D modelling skills with sophisticated lighting setups for hospitality interiors. To develop image post-processing and presentation compositing skills - colour grading renders and producing client-ready graphic boards. To apply a sophisticated AI design workflow - brand decoding, spatial mood generation, user journey narrative, and AI-assisted material selection - to the IDS-IV hospitality project. To assemble a complete professional digital portfolio for IDS-IV presented at SEE Viva Voce.

Teaching Learning Process

Demonstration-led studio sessions; all learning applied directly to the IDS-IV hospitality project. Builds on the digital toolkit from DM-I without re-introducing foundational tools. Portfolio assembled progressively across the semester. Weekly outputs submitted digitally and reviewed by faculty.

Module 1

Advanced 2D CAD - Working Drawing Production: Sections - interior cross-sections; wall build-up, ceiling heights, floor levels, structural elements; interior elevations - joinery details, finish callouts, dimension standards; reflected ceiling plan - ceiling grid, light fixture layout, diffuser positions, ceiling finish zones; furniture layout plan - dimensioned plan with clearance zones; drawing coordination - cross-referencing plan, section, elevation, and RCP with consistent gridlines and reference marks; external references for large multi-zone projects; sheet sets and advanced layer management; production of a coordinated working drawing set for the IDS-IV hospitality project.

Module 2

Advanced 3D Modelling - Complex and Multi-Level Spaces: Multi-level modelling - floor-to-floor connections, staircases, mezzanines, double-height volumes; complex geometry - curved walls, vaulted ceilings, arched openings; advanced component management - nested components, custom components for bespoke hospitality elements; semi-outdoor and landscape zones; large model performance management; walk-through animation and section animation scene setup; advanced rendering - accent lighting, wall wash, cove lighting, and atmospheric lighting for hospitality; modelling the minor project (25 sqm signature installation) as a separate detailed file.

Module 3

Image Post-Processing and Presentation Compositing: Image editing interface - layers, panels, and workspace; selection and masking tools; adjustment layers - brightness, contrast, curves, colour balance, hue,

saturation; importing rendered images; colour grading - consistent mood across multiple views; adding entourage - people, plants, accessories; sky replacement for exterior and semi-outdoor views; material enhancement - texture strengthening and surface reflections; presentation board layout - compositing renders, plans, material swatches, and AI images into A1/A2 boards at print resolution; typography - font hierarchy and text placement; graphic identity - consistent colour scheme and grid across all portfolio pages; high-resolution PDF and JPEG export.

Module 4

Sophisticated AI Workflow - Integration with IDS-IV Brand decoding - extracting a hospitality brand's visual identity and translating it into a spatial mood language; advanced AI prompting - style references, image-to-image prompting, inpainting; AI for material selection - texture, reflectance, and colour temperature for sensory-driven spaces; user journey narrative boards - visual story from guest arrival to private sanctuary; AI concept development for the minor project - one material, one lighting mood, one brand value expressed spatially; critical and ethical AI use - limitations, curation, and designer responsibility.

Module 5

Integrated Digital Portfolio - Integration with IDS-III Portfolio architecture - cover, brand narrative, concept, user journey, 2D drawing sheets, 3D views, composited renders, material board, AI narrative, minor project; drawing sheet finalisation - title block, north point, scale bar, gridlines, cross-reference marks; final colour grading pass on all renders; final A2 presentation boards for major and minor projects; AI narrative integrated as a design development layer; unified graphic language across all pages; PDF compilation and digital submission; viva preparation - 8–10 minute verbal portfolio presentation.

Course Outcomes

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

CO1: Produce a coordinated 2D working drawing set - floor plan, sections, elevations, and reflected ceiling plan - for a complex multi-zone interior project.

CO2: Build a multi-level, multi-zone 3D interior model with advanced lighting that communicates the spatial mood and public-private divide of a luxury hospitality environment.

CO3: Post-process rendered interior images and composite professional-quality presentation boards with consistent graphic identity across the full portfolio.

CO4: Apply a sophisticated AI design workflow - brand decoding, spatial mood generation, user journey narrative, and AI-assisted material selection - to a luxury hospitality interior project.

CO5: Assemble and present a complete professional digital hospitality design portfolio - working drawings, 3D visualisations, composited boards, and AI narrative - at SEE Viva Voce.

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 Corky Binggeli, Interior Design Illustrated, 3rd ed., Wiley, 2012.
- Francis D.K. Ching and James Eckler, Introduction to Architecture, Wiley, 2013.

Web Links and e-Resources

- https://nptel.ac.in - CAD for Engineers and Architects.
- https://www.archdaily.com - interior project references.
- official learning platforms and documentation for all tools used in the course.

Skill Development Activities Suggested

Working drawing coordination exercise - plan, section, elevation, and RCP for one room, cross-checked for consistency; image post-processing workshop - 3 colour grades applied to the same render, peer evaluated; AI brand decoding workshop - groups decode 3 hospitality brands and present spatial mood language; mock viva - 8-minute portfolio presentation with peer feedback; guest lecture by a professional interior designer or digital visualiser.

IV - SEMESTER

CONSTITUTION OF INDIA & PROFESSIONAL ETHICS			
Course Code	**22BI406**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:0:0:0	SEE Marks	50
Total Hours of Pedagogy	15	Total Marks	100
Credits	1	Exam Hours	1

Course overview

1. Introduction to the Indian Constitution – Covers the making, structure, Preamble, salient features, Fundamental Rights, Duties, and Directive Principles of State Policy.
2. Indian Governance & Constitutional Framework – Introduces the Union and State Governments, Parliament, Judiciary, Election System, Constitutional Amendments, and Emergency Provisions.
3. Professional Ethics & Responsibilities – Develops awareness of ethics, values, professional responsibility, conflicts of interest, intellectual property, safety, risk, and liability.

Course objectives

1. To know about the basic structure of Indian Constitution.
2. To know the Fundamental Rights (FR's), DPSP's and Fundamental Duties (FD's) of our constitution.
3. To know about our Union Government, political structure & codes, procedures.
4. To know the State Executive & Elections system of India.
5. To learn the Amendments and Emergency Provisions, other important provisions given by the constitution.

Teaching-Learning Process (General Instructions)

These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.

1. Lecturer method (L) does not mean only the traditional lecture method, but a different type of teaching method may be adopted to develop the outcomes.
2. Show Video/animation films to explain concepts.
3. Encourage collaborative (Group Learning) Learning in the class.
4. Ask at least three HOTS (Higher-order Thinking) questions in the class, which promotes critical thinking.
5. Adopt Problem Based Learning (PBL), which fosters students' Analytical skills, develops thinking skills such as the ability to evaluate, generalize, and analyze information rather than simply recall it.
6. Topics will be introduced in multiple representations.
7. Show the different ways to solve the same problem and encourage the students to come up with their own creative ways to solve them.
8. Discuss how every concept can be applied to the real world - and when that's possible, it helps improve the students' understanding.

Module-1

Introduction to Indian Constitution:

The Necessity of the Constitution, The Societies before and after the Constitution adoption. Introduction to the Indian constitution, The Making of the Constitution, The Role of the Constituent Assembly. The Preamble of Indian Constitution & Key concepts of the Preamble. Salient features of India Constitution.

Module-2

CONSTITUTION OF INDIA & PROFESSIONAL ETHICS
FR's, FD's and DPSP's: Fundamental Rights and its Restriction and limitations in different Complex Situations. Directive Principles of State Policy (DPSP) and its present relevance in our society with examples. Fundamental Duties and its Scope and significance in Nation building.
Module-3
Union Executive: Parliamentary System, Union Executive – President, Prime Minister, Union Cabinet, Parliament - LS and RS, Parliamentary Committees, Important Parliamentary Terminologies. Supreme Court of India, Judicial Reviews and Judicial Activism.
Module-4
State Executive & Elections, Amendments and Emergency Provisions: State Executive, Election Commission, Elections & Electoral Process. Amendment to Constitution (How and Why) and Important Constitutional Amendments till today. Emergency Provisions
Module-5
Professional Ethics: Ethics & Values. Types of Ethics. Scope & Aims of Professional & Engineering Ethics. Positive and Negative Faces of Engineering Ethics. Clash of Ethics, Conflicts of Interest. The impediments to Responsibility. Trust & Reliability in Engineering, IPRs (Intellectual Property Rights), Risks, Safety and liability in Engineering
Course outcome (Course Skill Set) At the end of the course the student will be able to: CO1: Analyse the basic structure, salient features, and principles of the Indian Constitution. CO2: Explain the Fundamental Rights, Directive Principles of State Policy, and Fundamental Duties. CO3: Describe the structure and functioning of the Union Government, Parliament, and Judiciary. CO4: Understand the State Executive, Election Commission, and electoral processes in India. CO5: Explain the major Constitutional Amendments, Emergency Provisions, and other important constitutional provisions.
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.

CONSTITUTION OF INDIA & PROFESSIONAL ETHICS
Suggested Learning Resources: **Books** **Text Books:** 1. "Constitution of India" (for Competitive Exams) - Published by Naidhruva Edutech Learning Solutions,Bengaluru. – 2022. 2. "Engineering Ethics", M.Govindarajan, S.Natarajan, V.S.Senthilkumar, Prentice –Hall, 2004. **References:** 1. "Samvidhana Odu" - for Students & Youths by Justice HN Nagamohan Dhas, Sahayana, kerekon. 2. "Constitution of India, Professional Ethics and Human Rights" by Shubham Singles, Charles E. Haries, and et al: published by Cengage Learning India, Latest Edition – 2019. 3. "Introduction to the Constitution of India", (Students Edition.) by Durga Das Basu (DD Basu): 4. Prentice –Hall, 2008. 5. "The Constitution of India" by Merunandan K B: published by Merugu Publication, Second Edition, Bengaluru.
Web links and Video Lectures (e-Resources):
1. https://www.india.gov.in/ 2. https://www.constitutionofindia.net/ 3. https://www.india.gov.in/
Activity Based Learning (Suggested Activities in Class)/ Practical Based learning 1. Mock Parliament Session 2. Rights and Duties Simulation

IV - SEMESTER

UNIVERSAL HUMAN VALUES AND PROFESSIONAL ETHICS			
Course Code	**22BI407**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:0:0:0	SEE Marks	50
Total Hours of Pedagogy	15	Total Marks	100
Credits	1	Exam Hours	1

Course Overview

1. Understanding Human Values – Introduces value education, self-exploration, basic human aspirations, and the relationship between values, happiness, and prosperity.
2. Harmony in Life and Existence – Explores harmony within the individual, family, society, and nature, with emphasis on trust, respect, relationships, and mutual fulfilment.
3. Values and Professional Ethics – Develops a holistic understanding of ethical conduct, professional responsibility, humanistic values, and value-based approaches to life and profession.

Course objectives:

1. This introductory course input is intended:
2. To help the students appreciate the essential complementarity between 'VALUES' and 'SKILLS'
3. to ensure sustained happiness and prosperity which are the core aspirations of all human beings.
4. To facilitate the development of a Holistic perspective among students towards life and
5. profession as well as towards happiness and prosperity based on a correct understanding of the
6. Human reality and the rest of existence. Such a holistic perspective forms the basis of Universal
7. Human Values and movement towards value-based living in a natural way.
8. To highlight plausible implications of such a Holistic understanding in terms of ethical human
9. conduct, trustful and mutually fulfilling human behavior and mutually enriching interaction with Nature.
10. This course is intended to provide a much-needed orientational input in value education to the young enquiring minds.

Teaching-Learning Process (General Instructions)

These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.

1. These are sample Strategies, which teacher can use to accelerate the attainment of the various course
2. outcomes.
3. The methodology of this course is explorational and thus universally adaptable. It involves a systematic and rational study of the human being vis-à-vis the rest of existence.
4. The course is in the form of 20 lectures (discussions) It is free from any dogma or value prescriptions.
5. It is a process of self-investigation and self-exploration, and not of giving sermons. Whatever is found as truth or reality is stated as a proposal and the students are facilitated to verify it in their own right, based on their Natural Acceptance and subsequent Experiential Validation the whole existence is the lab and every activity is a source of reflection.
6. This process of self-exploration takes the form of a dialogue between the teacher and the students to begin with, and then to continue within the student in every activity, leading to continuous self evolution
7. This self-exploration also enables them to critically evaluate their pre-conditionings and present beliefs.

Module-1
Introduction to Value Education Right Understanding, Relationship and Physical Facility (Holistic Development and the Role of Education) Understanding Value Education, Self-exploration as the Process for Value Education, Continuous Happiness and Prosperity – the Basic Human Aspirations, Happiness and Prosperity – Current Scenario, Method to Fulfil the Basic Human Aspirations
Module-2
Harmony in the Human Being Understanding Human beings as the Co-existence of the Self and the Body, Distinguishing between the Needs of the Self and the Body, The Body as an Instrument of the Self, Understanding Harmony in the Self, Harmony of the Self with the Body, Program to ensure self-regulation and Health
Module-3
Harmony in the Family and Society Harmony in the Family – the Basic Unit of Human Interaction, 'Trust' – the Foundational Value in Relationship, 'Respect' – as the Right Evaluation, Other Feelings, Justice in Human-to-Human Relationship, Understanding Harmony in Society, Vision for the Universal Human Order
Module-4
Harmony in the Nature/Existence Understanding Harmony in Nature, Interconnectedness, self-regulation and Mutual Fulfilment among the Four Orders of Nature, Realizing Existence as Co-existence at All Levels, The Holistic Perception of Harmony in Existence
Module-5
Implications of the Holistic Understanding – a Look at Professional Ethics Natural Acceptance of Human Values, Definitiveness of (Ethical) Human Conduct, A Basis for Humanistic Education, Humanistic Constitution and Universal Human Order, Competence in Professional Ethics Holistic Technologies, Production Systems and Management Models-Typical Case Studies, Strategies for Transition towards Value-based Life and Profession
Course outcome (Course Skill Set) At the end of the course the student will be able to CO1: Understand the fundamental concepts of Universal Human Values, self-exploration, happiness, and prosperity. CO2: Explain the harmony between the Self and the Body and develop awareness of self-regulation and well-being. CO3: Apply values such as trust, respect, and justice in relationships within the family and society. CO4: Explain the interconnectedness and mutual fulfilment in Nature and Existence and develop a holistic perspective towards life. CO5: Apply human values and professional ethics in personal and professional life, with awareness of responsible and value-based practices.

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

1. JeevanVidya: EkParichaya, A Nagaraj, JeevanVidyaPrakashan, Amarkantak, 1999.
2. Human Values, A.N. Tripathi, New Age Intl. Publishers, New Delhi, 2004.
3. The Story of Stuff (Book).
4. The Story of My Experiments with Truth - by Mohandas Karamchand Gandhi
5. Small is Beautiful - E. F Schumacher.
6. Slow is Beautiful - Cecile Andrews
7. Economy of Permanence - J C Kumarappa
8. Bharat Mein Angreji Raj – Pandit Sunderlal
9. Rediscovering India - by Dharampal
10. Hind Swaraj or Indian Home Rule - by Mohandas K. Gandhi
11. India Wins Freedom - Maulana Abdul Kalam Azad
12. Vivekananda - Romain Rolland (English)
13. Gandhi - Romain Rolland (English)
14. Sussan George, 1976, How the Other Half Dies, Penguin Press. Reprinted 1986, 1991
15. Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III, 1972, Limits to Growth – Club of Rome's report, Universe Books.
16. A Nagraj, 1998, Jeevan Vidya Ek Parichay, Divya Path Sansthan, Amarkantak.
17. P L Dhar, RR Gaur, 1990, Science and Humanism, Commonwealth Publishers.
18. A N Tripathy, 2003, Human Values, New Age International Publishers.
19. SubhasPalekar, 2000, How to practice Natural Farming, Pracheen (Vaidik) KrishiTantraShodh, Amravati.
20. E G Seebauer & Robert L. Berry, 2000, Fundamentals of Ethics for Scientists &Engineers , Oxford University Press
21. M Govindrajran, S Natrajan & V.S. Senthil Kumar, Engineering Ethics (including Human Values), Eastern Economy Edition, Prentice Hall of India Ltd.
22. B P Banerjee, 2005, Foundations of Ethics and Management, Excel Books.
23. B L Bajpai, 2004, Indian Ethos and Modern Management, New Royal Book Co., Lucknow. Reprinted 2008
24. The Textbook A Foundation Course in Human Values and Professional Ethics, R R Gaur, R Asthana, G P Bagaria, 2nd Revised Edition, Excel Books, New Delhi, 2019. ISBN 978-93-87034- 47-1
25. The Teacher"s Manual Teachers" Manual for A Foundation Course in Human Values and Professional Ethics, R R Gaur, R Asthana, G

Web links and Video Lectures (e-Resources):

https://uhv.org.in/

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- Self-Exploration Workshop
- Role-Playing Scenarios for Family and Society Harmony
- Case Study Analysis on Professional Ethics