

BHARATHIAR UNIVERSITY: COIMBATORE 641 046
DIPLOMA IN INTERIOR DESIGN
(For the CPP/COP students admitted from the academic year 2016-17 onwards)

SCHEME OF EXAMINATIONS

COURSE TITLE	Instruction Hours/Week	Examination	
		Dur.Hrs.	Total Marks
SEMESTER-I			
1.1 Basics of Design(Practical)	5	3	100
1.2 Drafting for Interior Designers(Practical)	5	3	100
1.3 Interior Space Components & Furnishing(Practical)	5	3	100
1.4 Interior Space Planning(Practical)	5	3	100
1.5 Building Materials & Construction(Theory)	5	3	100
SEMESTER-II			
2.1 Introduction to Auto CAD(Practical)	5	3	100
2.2 Building Services(Practical)	5	3	100
2.3 Professional Practice & Estimation(Theory)	5	3	100
2.4 Office Design(Practical)	5	3	100
2.5 Google Sketch up & rendering(Practical)	5	3	100
TOTAL			1000

Eligibility for admission: Candidate for admission to the Course shall be required to have passed the Higher Secondary Examinations (Academic or Vocational)

Duration of the course: The course shall extend over a period of One Year comprising of Two Semesters.

Medium of instruction and examinations: The medium of instruction and examinations shall be in English.

Other requirements: LIVE trainings as when suggested by Institute is to be completed within the duration of the course followed by submission of the report.

Semester I
Basics of Design
(Practical)

Unit-I

Elements of Design - (Line, Shape, Color, Value, texture, Space): How lines, shapes, color, value and texture & space affect design.

Unit-II

Principles of Design – Study about Patterns, Contrasts, Emphasis, Balance, Proportion/Scale, Harmony, Rhythm/Movement in relation to Design

Unit-III

Color theory (Color Wheel): the different formats, color terminology, active and passive colors, Cold & Warm, color relationship. Discover color and its implications for designers and artists. Study ideas of space and the use of color to solve spatial problems.

Unit-IV

Color Schemes: Study the various types of color schemes including monochromatic, complementary, analogous etc.

Unit-V

Color combinations & compositions: Exploring Different mediums to be used in a composition (Poster color, Water Color, Paper craft etc.). Look at color harmony and the way colors interact, as well as color qualities and combinations.

Reference books:

- Color Theory: An essential guide to color- from basic principals to practical applications (Artist's library), Patti Mollica
- The elements of Color. A treatise on the color system of Johannes Itten Based on his book, the Art of Color, Johannes Itten

Drafting for Interior Designers (Practical)

Unit I

Lines, lettering, dimensions & scales: An introduction to the preparation of drawings for architectural purposes. Topics include identification and use of drafting equipment, drafting in scale, basic lettering, line weights, and standard notation conventions.

Unit II

Orthogonal projections – Geometric Solid projections, Conic sections & Plan, Elevation, Sections. The emphasis is on orthographic projections related to floor plans, elevations, and ceiling plans.

Unit III

3D - Isometric, Axonometric Projections & Perspectives -- 1 point & 2 point. Study the principles of 3D isometric, axonometric projections and perspectives.

Unit IV

Rendering techniques - materials, humans, landscape & Sociography. Learn about rendering materials, methods, and techniques. Use watercolor, marker, pencil, ink, and mixed media to learn color mixing and color theory, as well as shade and shadow. Apply rendering techniques to room drawings, plans, and elevations.

Unit V

Measured Drawing of Classroom Furniture & Classroom (Plan, Elevation, Section & Isometric views). An exercise to measure the drawing of a space e.g. classroom and associated furnitures etc.

Reference books:

1. Basis Drafting: A manual for beginning Drafters; Lelend Scott
2. Architectural Drafting: Procedures and Processes

Interior Space Components & Furnishing (Practical)

Unit I

Study of Interior space components, Walls, partitions & panels, Floors, Mezzanine floor, Ceilings & false / suspended ceilings, Openings – Doors & Window types, Stair and its types

Unit II

Interior space Furnishings, Paints & Textures, Laminates, Claddings & Others: Through sessions on furnishings, paints and textures, etc learn to conceptualize and plan creative solutions for interior spaces.

Unit III

Ergonomics & Circulation (Anthropometrics & furniture standards). Concepts of Anthropometrics & Furniture Standards

Unit IV

Brief on Period furniture & Modern furniture styles.

Unit V

Formats & standard conventions in Interior drawings (Typical wall sections & material representation).

Reference Books:

1. In detail: Interior space, Space, Light and material
2. Basics of Interior Architecture 01: Form and Structure: The organization of the Interior space, Graeme Brooker, Sally Stone.
3. Introduction to Ergonomics, Third edition, R. S. Bridger

Interior Space Planning(Practical)

Unit I

Planning with respect to physical, social & psychological needs. Develop plans that satisfy programmatic needs and use space efficiently. Learn techniques for assimilating client-project information, analyzing program requirements, and developing schematic space-planning solutions for residential and commercial situations.

Unit II

Understanding Design process: Study the Design brief, process and requirements of Data collection & Analysis with respect to design. Analyze and study Design Alternatives. Learn the process and art of Design Presentation.

Unit III

Conceptual Drawings & Mood Boards: Work on all aspects of the design process from concept development including moodboards to sketch scheme. Use texture, color, form and shape effectively. Read plans and make a technical drawing to scale.

Unit IV

Residential: Plan residential designs using with grids, zoning, circulation & furniture layouts. Study how living, dining, bedrooms and study rooms can be designed and conceptualized. Understanding the use and design of modular kitchens and bathroom designs.

Unit V

Commercial: Plan commercial spaces e.g. coffee shops using grids, zoning, circulation and furniture layouts. Study how commercial spaces should be designed and conceptualized. Understand the use and design of furniture for commercial purpose.

Reference books:

1. Basics of Interior Architecture 01: Form and Structure: The organization of the Interior space, Graeme Brooker, Sally Stone.
2. Time –Saver Standards for interior design and space Planning; Joseph Dechiara

Building Materials & Construction(Theory)

Unit I

Materials & Finishes – Interior applications: Materials used to make walls, floors, Ceilings & openings for interior of spaces.

Unit II

Insight on new construction materials including but not limited to Wood & wood products, Carpentry joints, Concrete, Steel and Metal Alloys, and Glass and plastics. How the materials interplay to be used for construction.

Unit III

Insight on finishing material e.g. Textiles & Interiors (Market Surveys). Finishing and cladding materials- plasters, paints &varnishes, Adhesives, Gypsum board, Ceramic tiles, wood. Use of Fabric & Upholstery for interior designing.

Unit IV

Individual project: Design a residence with a living, dinning, kitchen, 2 bedrooms & attached bathrooms. Planning & Decor based on a concept. Basic circulation & functional needs have to be addressed – entry, exits & furniture. Layout, Basic lighting, electrical & plumbing layouts

Unit V

Project Documentation and Presentation. Students are required to document the process of interior designing project assigned and prepare a presentation

Reference books:

1. Interior Design Materials and Specifications; Lisa Godsey
2. Material and components for Interior Architecture; J. Rosemary Riggs

Semester II **Introduction to Auto CAD** (Practical)

Unit I

Workspace, User Interface & Basic Tools: Study the User Interface of AutoCAD. Working with Commands. Cartesian Workspace – Precision input. Opening an Existing Drawing File. Viewing/Saving Drawing

Unit II

Using Drawing, editing & viewing tools. Organizing and getting information from drawing objects. Organising and creating drawing.

Unit III

Drawing objects, layers, blocks & line weights. Organizing Your Drawing with Layers, What are Layers? Layer States, Transparency, Changing an Object's Layer. Drawing Lines, rectangles, circles, polygons, ellipses. Using Running Object Snaps. Using Object Snap Overrides. Polar Tracking and Polar Snap. Object Snap Tracking. Grid Mode. Erasing Objects. Undo and Redo Actions. Selecting Objects for Editing, Moving, Copying, Rotating & Mirroring Objects, Editing with Grips, Trimming and Extending Objects, Stretching Objects, Creating Fillets and Chamfers, Blend, Offsetting Objects, Creating Arrays of Objects.

Unit IV

Text, Annotations, hatching & dimensions. Working with Annotations, Setting up text styles, Adding single line and multiline text in a Drawing, Edit Multiline Text, Formatting Multiline Text, Adding Notes with Leaders to Your Drawing, Creating and editing hatching.

Unit V

Plotting, file types, formatting, view ports & Xref. Setting Up a Layout and printing your drawing Printing Concepts, Working in Layouts, Copying Layouts, Creating Layout Viewports, Setting view in viewports to control layer display, properties, etc, Guidelines for Layouts, Printing Layouts, Printing from the Model Tab.

Reference books:

1. AutoCAD 2015 and AutoCAD LT 2015 Essentials: Autodesk, Scott Onstott
2. AutoCAD 2015 and AutoCAD LT 2015 Bible, Ellen Finkelstein

Building Services(Practical)

Unit I

Lighting, lighting fixtures. Fundamentals of lighting design, including lamps, luminaires, lighting techniques, and applications for residential and commercial projects. Provides basic understanding of vision as affected by light, color, texture and form. Introduces basic principles of lighting design including criteria, calculations, planning and layout.

Unit II

Electrical Layouts. Aspects of designing and documenting electrical installations for most domestic, agricultural and commercial use. This includes Telephone, Data, Lighting, TV, Satellite, AV systems, Security, Low Voltage, Heating and Ring.

Unit III

Plumbing & Bathroom / Kitchen Fixtures. Study various type of plumbing materials, tools used. Study common bathroom and kitchen fixtures, respective use cases including advantages and disadvantages in certain scenarios.

Unit IV

Natural Ventilation: information on design features and practices affecting natural ventilation in buildings. Guidelines based on the best available data are provided. Comfort, life-cycle costs, maintenance concerns and functional efficiency of decisions with respect to interior design, and designers should draw on their previous experience as well as on the guidelines presented.

Unit V

HVAC (Air conditioning): Understand the technology, concepts and terminology in the design of HVAC systems. Recognize different types, components and accessories of HVAC systems. Specify correctly the type of HVAC systems to be used for interior designs

Reference books:

- 1. Building systems for Interior Designers; Corky Binggelli**

Professional practice & Estimation(Theory)

Unit I

Professional Practice. Learn the process of putting together professional practice to be followed for successful completion of an interior design project

Unit II

Estimation & Specifications for Interior projects. Estimating problem-solving in general conditions. Hands-on estimating with quantity take-off, pricing.

Unit III

Preparing Bill of Quantities. Learn to prepare the bill of quantities (sometimes referred to as 'BoQ') is a document prepared by the cost consultant (often a quantity surveyor) that provides project specific measured quantities of the items of work identified by the drawings and specifications in the tender documentation. The quantities measuring techniques e.g. number, length, area, volume, weight or time. Requirements of preparing a bill of quantities and respective dependencies.

Unit IV

Project Detailing & Execution: Learn the basics of detailing an interior design project and identifying dependencies for execution.

Unit V

Restaurant Design Project: A project specifically designed to learn the practice of designing a restaurant including the following concepts.

- Restaurant planning layouts
- Planning services
- Lighting & Aesthetics

Reference books:

1. Managing the design process- concept developments, Terry Lee stone
2. Managing the design process- Implementing, Terry Lee stone
3. Estimating and costing for interior designers; Diana Allison

Office Design (Practical)

Unit I

Office / work station types & space planning. Learning various workstations and their use cases. Understanding the relationship between shapes and how they affect design. A study and application of the design process from programming through presentations to working drawings based upon client needs and applicable commercial spaces.

Unit II

Office furniture – partitions, workspace table, chair, filing cabinets & storage units. Study various types of partitions, workspace tables, chairs, filing cabinets and storage units.

Unit III

Lighting, Air conditioning & Equipment. Identify use of lighting, air conditioning and respective equipment.

Unit IV

Individual project (Practical)

Design an office space – Areas & design brief will be provided.

Unit V

Project Documentation, Presentation & Research report.

Reference books:

1. Building construction Illustrated; Francis D.K. Ching
2. Construction drawings and details for interiors; Basic skills, Rosemary Kilmer

Google Sketch Up & Rendering (Practical)

Unit I

Basics of Sketch up.

Unit II

Use of Materials & Renderings.

Unit III

Use of Lighting and Camera in Sketchup

Unit IV

Retail Design (Theory)

- Store types & planning
- Retail furniture – Storage & display units
- Lighting, Air conditioning requirements

Unit V

Individual project

Design a show room in Google sketch up – Areas & design brief will be provided.

Reference books:

1. Building construction Illustrated; Francis D.K. Ching
2. Construction drawings and details for interiors; Basic skills, Rosemary Kilmer
3. Wiley Pathways Introduction to Google Sketch up; Aidan Chopra & Laura Town