

## B. Voc.- Interior Design

### Semester: 1- Skill Component Subjects

#### Subject: Basic Design-I

Code No.	101
Course Objectives	<ol style="list-style-type: none"><li>1. To understand design issues through design elements and principles.</li><li>2. To study dimensions of colors and light and textures.</li></ol>
Learning outcomes	<ul style="list-style-type: none"><li>• To recognize the elements and principles of design and their applications.</li><li>• To identify the physical as well as social and psychological aspects of design.</li><li>• To Produce design compositions and develop presentation skills.</li><li>• To Practice the application of basic rules of space planning and organization.</li><li>• To show competency on visual scale, proportion, balance, rhythm, emphasis.</li><li>• To develop an awareness of two-dimensional and volumetric composition of spaces.</li><li>• To create believable shade and shadow effects for use in freehand sketches and perspective drawings of interior spaces.</li><li>• Demonstrate ability to produce drawings that show appropriate line weights and a specific scale.</li></ul>
Course content	<ol style="list-style-type: none"><li>1. Elements of Design-<ul style="list-style-type: none"><li>• Point</li><li>• Line</li><li>• Color- Color schemes, Theory of colors, Color Psychology</li><li>• Shape</li><li>• Form</li><li>• Texture</li><li>• Light- Types of Light, Impact of Lights</li><li>• Shade</li></ul></li><li>2. Principles of Design-<ul style="list-style-type: none"><li>• Harmony</li><li>• Contrast</li><li>• Proportion</li><li>• Rhythm</li><li>• Balance</li><li>• Unity</li><li>• Dominance</li></ul></li><li>3. Progression Development of Visual perception through simple design elements - line, plane and solid and perception of spaces through design elements and organization.</li><li>4.</li></ol>

Assignments	<ol style="list-style-type: none"> <li>1. Elements of design</li> <li>2. Composition of lines</li> <li>3. Color wheel</li> <li>4. Color schemes</li> <li>5. Effects of lights and shades</li> <li>6. Showing textures</li> <li>7. 2D composition of shapes, eg. Tiles, photo frames etc.</li> <li>8. 3D composition of shapes eg. Mural</li> <li>9. Various compositions to show principles of design.</li> <li>10. Simple designs with combination of principle of element of design.</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. Colour Harmony – Chijiwa, Hideaki</li> <li>2. All magazines publish for the purpose of interior and architecture.</li> <li>3. Easy Home Improvement – Kelly, Margaret</li> <li>4. Architecture Digest International Interiors</li>   <li>5. Design Elements, Color Fundamentals: A Graphic Style Manual for By AarisSherin</li>   <li>6. The Elements of Design -Rediscovering Colours, Textures, Forms and Shapes by Loan Oei and Cecile De Kegel, 2002</li> </ol>
Specific outcome	<ul style="list-style-type: none"> <li>• This is the main subject in the curriculum, which focuses on the practical application of all the theory subjects in the design studio. It aims at allowing the student to develop his designing skills by actually getting involved.</li> </ul>

### **B. Voc.- Interior Design**

#### **Semester : 1- Skill Component Subjects**

Subject :**Graphics –I**

<b>Code. No.</b>	<b>102</b>
Course Objectives	<ol style="list-style-type: none"> <li>1. To introduce drawing tools and equipment's</li> <li>2. To develop visual perception and drawing skills</li> <li>3. To introduce system of technical representation</li> </ol>

Learning outcomes	<ol style="list-style-type: none"> <li>1. To develop the sense of depth of line, shape, mass, texture etc.</li> <li>2. To produce three dimensional presentations as isometric and perspective.</li> <li>3. To demonstrate ability to produce drawings that show appropriate line weights and a specific scale.</li> <li>4. To demonstrate a number of drawing skills while using appropriate tools, equipment, materials, processes, medium selection, techniques of drawings and graphics, etc.</li> <li>5. To develop an awareness of two-dimensional and volumetric composition of spaces.</li> </ol>
Course content	<ol style="list-style-type: none"> <li>1. Introduction of drawing materials and equipment.</li> <li>2. Point and line, straight and curvilinear lines, Types of lines and line thickness, representation of lines</li> <li>3. lettering single stroke letter, Gothic lettering</li> <li>4. Dimensioning</li> <li>5. Principles of plane geometry, scale, orthographic projection, of points, line, planes and solids.</li> <li>6 Sections of solids, simple and complex solids.</li> <li>7. Development of surfaces of solids.</li> <li>8. various types of scale and their representation</li> <li>9. Isometric and oblique Presentation</li> </ol>
Assignments	<ol style="list-style-type: none"> <li>1. Types of lines</li> <li>2. types of letters</li> <li>3. representation of points, lines, shapes</li> <li>4. representation of solids</li> <li>5. sections of solids</li> <li>6. development of surface</li> <li>7. types of scales</li> <li>8. isometric projections and oblique projection</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. Engineering Drawing – N.D. Bhatt</li> <li>2. Hindi and English Lettering style – Hashmi</li> </ol>

**B. Voc.- Interior Design**

**Semester : 1- Skill Component Subjects**

**Subject : History of Furniture Design and Architecture**

Code No.	<b>103</b>
Course Objectives	1. To develop the better understanding of impact of art and culture in Interior Design.
Learning outcomes	<ol style="list-style-type: none"><li>1. To recognize architecture and interior design including furniture styles, decorative elements and motifs and interior components specific to the Ancient World.</li><li>2. To Understand name period styles of interior environment elements from the Ancient World.</li><li>3. To recognize the relationship of economic, social, political and religious influences in the designed environment.</li><li>4. To Interpret and apply historic design styles to contemporary interior environment settings.</li><li>5. To demonstrate ability to research and illustrate the details of architecture, interior design, furniture design techniques and ornaments.</li></ol>
Course content	<ol style="list-style-type: none"><li>1. Development of Architecture.</li><li>2. Indian Architecture and furniture Design (Indus valley civilization, Hindu Temple Architecture.</li><li>3. Mughal furniture and Architecture.</li><li>4. Egypt furniture and Architecture</li><li>5. Chinese and Japanese Architecture.</li><li>6. Greek furniture and Architecture.</li><li>7. Roman furniture and Architecture.</li><li>8. Famous designers Furniture</li><li>9. Modern Architecture.</li></ol>
Assignments	<ol style="list-style-type: none"><li>1. As per the reading material specified above</li><li>2. Front page design for all the chapter</li><li>3. Sketches according to the study material</li></ol>
Reference Books	<ol style="list-style-type: none"><li>1. History of Architecture : by Alfred D. Hamlin</li><li>2. World History : by G.K. Hiraskar.</li><li>5. A History of Architecture : Banister Fletcher .</li><li>6. History of furniture: Group of history of furniture.</li></ol>

**B. Voc.- Interior Design**

**Semester : 1- Skill Component Subjects**Subject : **Building Materials –I**

Code. no.	104
Course Objectives	1. To introduce basic materials used in construction their physical and behavior properties.
Learning outcomes	<ul style="list-style-type: none"><li>To understand Building Materials like Clay products, Brick, Stone, Cement their uses types' strength of materials.</li></ul>
Course content	<ol style="list-style-type: none"><li>Bricks/Tiles-Quality and type of bricks and their uses.</li><li>Concrete- Introduction of P.C.C. and R.C.C. Ingredients of concrete, properties of concrete, various finishes. Wood: Properties uses, availability and costs of soft, hard and medium wood. Choice of wood for furniture making &amp; building construction.</li><li>Wood- Types of Wood, Quality and defects of wood and other woody products plywood, block board, particle board, teak plywood, teak block board, teak particle board, both side teak board. Cane, Bamboo, Rubber their uses and properties.</li></ol>
Assignments	1. Presentation on the qualities of good building material, identify or check quality and it's uses.
Reference Books	1. Rangwala A., Building Materials, UPB Publication, N. Delhi, 12 <sup>th</sup> Edition 2004

**B. Voc.- Interior Design****Semester : 1- Skill Component Subjects**Subject : **Basic Computer**

Code no.	<b>105</b>
Course Objectives	<ol style="list-style-type: none"><li>To study about the basics of office work at computer.</li><li>To upgrade the technical knowledge.</li></ol>
Learning outcomes	<ul style="list-style-type: none"><li>To study the use of Auto CAD – Students are practical to get them the use of CAD by using simple drawing &amp; molding compounds, to draw simple object only.</li><li>Utilize software for word processing for basic reports and specification writing.</li></ul>

	<ul style="list-style-type: none"> <li>• Use spreadsheet and graphic presentation software applications.</li> <li>• Utilize CAD software for scaled drawings.</li> <li>• Use graphic symbols for interior material finishes.</li> <li>• Sequence dimension techniques and annotations.</li> <li>• Construct drawings sets using Computer Aided Drawing (CAD) programs.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Computer applications to business</li> <li>2. Characteristics, Log diagram, Number system, Data representation schemes, Flowcharts, Types of computers</li> <li>3. MS-Word- Basics, File operations, Working with document, Text formatting, Advance formatting, Tables, inserting objects &amp; page design, Mail merge, printing, views, creating styles</li> <li>4. MS-Excel- Working with sheets, Formule, Self formatting, Functions, Graphic objects charts, Data base • MS Power point- Slide shows, Animation, Transition</li> <li>5. Windows Basics</li> <li>6. Internet use</li> </ol>
Assignments	1. Powerpoint presentation on any course subject.
Reference Books	<ol style="list-style-type: none"> <li>1. Computer General Awareness by Alok Kumar (Paperback - 2008)</li> <li>2. Computer Fundamentals by P. K. Sinha (Paperback - 30 November 2004)</li> </ol>

**Semester : 1**

**Subject :Workshop-I**

Code. No.	<b>106</b>
Course Objectives	<ol style="list-style-type: none"> <li>1. COLOUR WORKSHOP - to understand strong scientific base and sensibility towards colours as it is an important aspect of Design .</li> <li>2. Mural- To understand the impact of texture and surface difference on a design</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Students will successfully demonstrate craftsmanship skills in the presentation of the color application.</li> <li>• Students will successfully apply the knowledge of color to a space accurately based on key concepts.</li> <li>• Students will successfully use critical thinking in applying color and design theory to a space.</li> </ul>
Course	1. Colour - the Science, colour uses light as a vehicle.

content	<p>*Physics, Physiology and Psychology of colours.</p> <p>*Colour as system and its application.</p> <p>*Colour in nature, geographic regions and colour perception.</p> <p>*Modifying factors to colour - namely light, surface quality, distances and scales.</p> <p>*Manifestation of colours in various cultures.</p> <p>*Perception of colour and form.</p> <p>2. Mural- Mural Design</p> <p>It's colour scheme</p> <p>Material secection for Mural</p> <p>Actual Preparation of Mural</p>
Assignments	<ol style="list-style-type: none"> <li>1. Impact of Colour Schemes</li> <li>2. Mural</li> </ol>

### B. Voc.- Interior Design

#### Semester: 2 – Skill Component Subjects

Subject: Design-II

Code No.	201
Course Objectives	<ol style="list-style-type: none"> <li>1. To understand human scale to environment.</li> <li>2. Study of space – client's requirement, climate of place, surrounding environment and energy and resource conservation method.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Students will successfully use critical thinking in the design of a space.</li> <li>• Analyze, justify, and rate interior applications of concepts</li> <li>• Employ space planning techniques and conventions.</li> <li>• Write residential interior specifications and recognize main components and design needs for residential interiors</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Study anthropometric data for different units e.g. - bedroom, toilet, kitchen and class room.</li> <li>2. Limited space design problems for single function and it's all furniture design, colour scheme and other design elements.</li> </ol>

	3. Designing with respect to Climatic Factor (Residential unit )
Assignments	1. Collection Anthropometric data along with sketches 2. Designing of Small Spaces e.g. Bed Room.(all Designs should be made by students, through manual means only( hand Drafted) 3. All presentation drawings of the exercise.
Reference Books	1. All magazines publish for the purpose of interior and architecture. 2. Easy Home Improvement – Kelly, Margaret 3. Architecture Digest International Interiors 4. Bathroom ?Design- Dean and Barry 5. Spaces, Spatiality and Technology (Computer Supported Cooperative Work) by Phil Turner and Elisabeth Davenport (Hardcover - 1 September 2005)

### B. Voc.- Interior Design

#### Semester : 2 – Skill Component Subjects

##### Subject - Graphics –II

Code no.	<b>202</b>
Course Objectives	1. Study of projection and visual techniques which give photographic and actual presentation.
Learning outcomes	<ul style="list-style-type: none"> <li>• Drawing skills as tools to design thinking, visualization and representation initial familiarization with drawing materials and equipment's is followed by basic understandings about the point and the line, straight and curvilinear.</li> <li>• To understand Sciography of individual and different geometrical objects and of Interior/Exterior partsof buildings</li> <li>• Study of shades and shadows.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Orthographic and Isographic Projection</li> <li>2. Perspective Projection – One point and Two point, freeHand views.</li> <li>3. Sciography – Shades and Shadow of Objects</li> <li>4. Presentation Techniques</li> <li>5. Rendering with Pencil</li> <li>6. Rendering with Ink</li> </ol>



	7. Presentation Drawing
Assignments	<ol style="list-style-type: none"> <li>1. Orthographic and Isographic Projection – simple 2D composition</li> <li>2. Orthographic and Isographic Projection – single Room</li> <li>3. One point Projection of simple 3d solids</li> <li>4. Two point Projection of simple 3d solids</li> <li>5. Every type of rendering techniques.</li> <li>6. Rendering of Student own Work i.e. Perspective Projection on any interior small space.</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. Ahmed Kasu ,Interior Design, Standard publication, N.Delhi ,4<sup>th</sup> Edition 2004</li> <li>2. Rendering with pen and ink – Gill Robert w.</li> <li>3. Basic Rendering - Gill Robert w.</li> </ol>

### B. Voc.- Interior Design

#### Semester : 2 – Skill Component Subjects

#### Subject - Building Construction – I

Code no.	203
Course Objectives	<ol style="list-style-type: none"> <li>1. To make students aware about the details of finishing interior materials and their proper use and properties.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• To recognize and define the technical aspects of interior building systems.</li> <li>• To Describe and illustrate the construction and finishing of walls.</li> <li>• To understand Different types of brick bonds &amp; stone masonry structure.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Basic idea of Construction</li> <li>2. Basic requirement of a building</li> <li>3. Basic Component, function and their requirement</li> <li>4. Classification of Building</li> <li>5. Types of Foundation</li> <li>6. Types of Brick and Brick walls</li> <li>7. types of stone walls</li> </ol>
Assignments	<ol style="list-style-type: none"> <li>1. Types of Foundation</li> <li>2. Types of brick</li> </ol>

	<ol style="list-style-type: none"> <li>3. Types of brick walls</li> <li>4. Types of stone walls</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. Building Construction – Sushil Kumar</li> <li>2. Building Construction: Metric Volume 1, 5/e by WB McKay 2012</li> <li>3. Building Construction: Metric Volume 3, 5/e by WB McKay 2012</li> <li>4. The Construction of Buildings – Barry .R</li> </ol>

### B. Voc.- Interior Design

#### Semester : 2 – Skill Component Subjects

##### Subject - Building Material -II

<b>Code no.</b>	<b>204</b>
Course Objectives	<ol style="list-style-type: none"> <li>1. To let students aware about the latest materials available in the market.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Identify materials used in the construction of interior spaces.</li> <li>• Identify standards used to determine code compliance for interior furnishings and finishes.</li> <li>• Identify building materials and finishes safe for the environment and health and welfare of general public.</li> <li>• Analyze finish materials and products taking into consideration functional, aesthetic and maintenance needs.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Plastics - Types, variety and uses according to type</li> <li>2. Glass- constituents, finishes and properties.</li> <li>3. Paints and Varnish and installation specification.</li> <li>4. Ferrous and Non Ferrous</li> </ol>

	5. Gypsum and related product and installation specification.
Assignments	Market survey in different groups and it's presentation
Reference Books	1. Building materials – Rangwala 2. Building MaterialsN-New Age International by S K Duggal: Paperback 2nd

### B. Voc.- Interior Design

**Semester : 2 – Skill Component Subject**

**Subject - Computer – AUTO CAD- 2D**

<b>Code no.</b>	<b>205</b>
Course Objectives	1. Objective- to study 2D drafting basics on Auto CAD.
Learning outcomes	<ul style="list-style-type: none"> <li>• Utilize CAD software for scaled drawings.</li> <li>• Use graphic symbols for interior material finishes.</li> <li>• Sequence dimension techniques and annotations.</li> <li>• Construct drawings sets using Computer Aided Drawing (CAD) programs</li> </ul>
Course content	<p><b>1.Auto Cad 2d drafting</b></p> <p>Introduction of cad -Draw tool</p> <ul style="list-style-type: none"> <li>• Modify tool</li> <li>• How to write text &amp; types of text</li> <li>• Presentation of 2D drawing trough hatches &amp; learns different type of hatch</li> <li>• How to set the setting of the drafting &amp; change the drawing unit</li> </ul> <p><b>2. Auto Cad 2d drafting advance tools</b></p> <ul style="list-style-type: none"> <li>• Create Isometric</li> <li>• Dimensioning of the drawing &amp; create dimension style</li> <li>• Creation of block,</li> <li>• Insertion of the block</li> <li>• How to layout &amp;plot in CAD</li> </ul>
Assignments	1. Layout plan of Interior Space with all text and dimensioning.

Reference Books	1. Computer Aided Design Guide for Architecture, Engineering and Construction by GhassanAouad, Song Wu, Angela Lee and Timothy Onyenobi (Hardcover - 12 January 2012)
-----------------	---

### **B. Voc.- Interior Design**

#### **Semester: 2 – Skill Component Subjects**

##### Subject - **Workshop – II**

Code no.	206
Course Objectives	SKETCHING WORKSHOP 2. To develop Visual perception skills, use of different media and techniques. 3.
Learning outcomes	<ul style="list-style-type: none"> <li>• Utilize one-point and two-point perspective methods for rapid visualization of interior spaces.</li> <li>• Evaluate and apply color media, equipment, and tools in rapid presentation techniques. Demonstrate and develop rapid rendering techniques to enhance quick sketch perspectives.</li> <li>• Develop and evaluate visualization skills in three-dimensional by experimenting with three-dimensional study models.</li> <li>• Demonstrate and develop visual presentation skills.</li> </ul>
Course content	Observation and recording through drawing - pencil, pen, brush, charcoal, crayons. Simple geometric objects, complex geometries and objects in nature. Line drawing, s hade and shading techniques.
Assignments	<ol style="list-style-type: none"> <li>1. Make sketches of small 3D articles eg. flower pot</li> <li>2. Sketches of single room.</li> <li>3. Sketch of front elevation of building</li> <li>4. Sketch of street, railway stations etc.</li> </ol>

### **B. Voc.- Interior Design**

#### **Semester: 3- Skill Component Subjects**

##### Subject - **Design –III**

Code no.	<b>301</b>
Course Objectives	1. To study about various furnishing techniques and understand balancing of different design elements.
Learning outcomes	<ul style="list-style-type: none"> <li>• Employ programming and research techniques.</li> <li>• Demonstrate space planning skills as related to office design.</li> <li>• Prepare selections and specifications of interior materials, finishes, and furnishings.</li> <li>• Utilize design process to integrate design concepts and develop solutions for design projects.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Furnishing of Residence and Office</li> <li>2. Furnishing using Accessories</li> <li>3. Wall Treatment of Residence and Offices</li> <li>4. Importance of Lighting</li> <li>5. Designing Commercial Space</li> <li>6. (small spaces e.g. beauty parlor, doctor's clinic, property broker' office)</li> </ol>
Assignments	<ol style="list-style-type: none"> <li>1. Complete residential project – room, hall, kitchen and dining</li> <li>2. Case study of residential un its</li> <li>3. Any small commercial space e.g. small office, cabin,</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. Newfort Architects Data – Jones and Vincent</li> <li>2. Restaurant Design – Colgan AND Susan</li> <li>3. Interior India- Nando India</li> <li>4. Time Saver Standards for Interior Design</li> </ol>

### **B. Voc.- Interior Design**

#### **Semester :3- Skill Component Subjects**

##### **Subject - Services – I**

Code no.	302
Course Objectives	<ol style="list-style-type: none"> <li>1. To study and understand about basic services required for comfortable living.</li> <li>2. See all requirements and check all basics services with relation with environment.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Define and use basic lighting terms and strategies related to the design of interiors</li> <li>• Perform various drawing standards and conventions used in lighting for</li> </ul>

	interior design.
Course content	<p>1. Ventilation and light – Natural and artificial</p> <p>*Lighting in buildings, light and its sources, lighting criteria, the visual field, day lighting, prediction method.</p> <p>*Artificial lighting levels for various activities, calculation for lighting levels.</p> <p>*Electric layouts, science of wire distribution, control panels, switches, types of wiring, wiring for heating/cooling, ducting system and Conduits.</p> <p>*Switches as product available in market, light as product available in market - tube lights, beam lights, wall lights, night lights.</p> <p>*Project drawings for residence, flats, commercial and institutional building.</p> <p>2. Water Supply</p> <p>*Requirements of water supply to various building sources of water, methods of conveyance of water, and water lines product</p> <p>Materials.</p> <p>*Water purification product availability in market.</p>
Assignments	<ol style="list-style-type: none"> <li>1. Electrical layout of residence.</li> <li>2. Water supply layout of residence.</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. A Text Book Of Building Services by Udayakumar- 2007</li> <li>2. Building Services Handbook by Fred Hall and Roger Greeno : 2013</li> </ol>

### **B. Voc.- Interior Design**

**Semester :3- Skill Component Subjects**

**Subject - Building Construction – II**

Code no.	303
Course Objectives	<ol style="list-style-type: none"> <li>1. To study and understand the different materials and methods of construction used in doors, windows, suspended ceilings and wall paneling.</li> <li>2. To understand built forms through its behavior in different structural systems.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Differentiate between and draw the construction methods and finishing of ceilings</li> <li>• Recognize and define the technical aspects of interior building systems.</li> <li>• Introduction to ceilings- types of ceilings –metal coated strip sections, ply, p.o.p, gypsum[readymade branded ceiling systems] -construction details of the above mentioned ceilings.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Doors and Windows – panel door , flush door , Sliding doors</li> <li>2. windows – Wooden paneled, metal, aluminum</li> <li>2. Partitions-Types of partitions, Simple partition (in wood, glass and metals)</li> <li>3. Ceilings -suspended, Different types of false ceiling</li> <li>4. Paneling - Paneling in plywood ply board, wood, laminates.</li> </ol>
Assignments	<ol style="list-style-type: none"> <li>1. Types of door</li> <li>2. Types of windows</li> <li>3. Types of partition</li> <li>4. Types ceiling explain through sections</li> <li>5. Types of paneling</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. Building Construction – Sushil Kumar</li> <li>2. Building Construction: Metric Volume 2, 5/e by WB McKay 2012</li> <li>3. Building Construction: Metric Volume 4, 5/e by WB McKay 2012</li> </ol>

### **B. Voc.- Interior Design**

**Semester :3- Skill Component Subjects**

Subject - **Building Materials -III**

Code no.	304
Course Objectives	1. To study about various techniques which protects building and furniture from environmental changes and insects.
Learning outcomes	<ul style="list-style-type: none"><li>• Evaluate the acoustics of an interior space.</li></ul>
Course content	1. Protecting - Dampness Protection, Termite Protection, Fire Protection 2. paints- Ingredients of Paints Types of Paints Painting Process Defects Process Defects and Remedies 3. Laminates, Properties and uses of laminates 4. Thermal and acoustical materials
Assignments	Market survey in different groups and its presentation.
Reference Books	1. Building materials – Rangwala 2. Building MaterialsN-New Age International by S K Duggal: Paperback 2 <sup>nd</sup>

**B. Voc.- Interior Design**

**Semester :3- Skill Component Subjects**

Subject - **Computers – AUTO CAD – 3D**

Code no.	305
Course Objectives	1. To study preparing presentation on 3D auto CAD
Learning outcomes	<ul style="list-style-type: none"><li>• Develop three-dimensional models to create photorealistic renderings.</li><li>• Utilize CAD software to create models.</li><li>• Light three-dimensional interior spaces including furniture, lighting, and background.</li><li>• Texture and create scenes in three-dimensional environments.</li><li>• Evaluate software for effectiveness in drawing appropriate models and</li></ul>



	environments for rendering.
Course content	<p><b>Auto Cad 3d modeling</b></p> <ul style="list-style-type: none"> <li>• Introduction of 3d surfaces</li> <li>• 3d views</li> <li>• Standard primitives</li> <li>• Introduction 3d solid</li> <li>• Deriving primitive</li> <li>• Boolean options</li> <li>• UCS icon &amp;property</li> <li>• Solid modifiers</li> <li>• Mass property</li> <li>• Material mapping</li> <li>• Apply light &amp; shadow on the object</li> <li>• Rendering</li> <li>• Import-Export of the drawing</li> </ul>
Assignments	1. Prepare 3D modal of a residence showing all room and spaces.
Reference Books	1.DataCad for the Architect (Computer graphics technology and management series) by Carol Buehrens (Paperback - 14 June 1989)

**B. Voc.- Interior Design**

**Semester :3- Skill Component Subjects**

**Subject - Workshop – III**

Code no	306
Course Objectives	<p>WOOD WORK</p> <ol style="list-style-type: none"> <li>1. Understanding of wood as building material, finishing material</li> <li>2. Understand wooden joinery.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Develop three-dimensional models to create photorealistic renderings.</li> <li>• Utilize CAD software to create models.</li> <li>• Light three-dimensional interior spaces including furniture, lighting, and background.</li> <li>• Texture and create scenes in three-dimensional environments.</li> <li>• Evaluate software for effectiveness in drawing appropriate models and</li> </ul>

	environments for rendering.
Course content	<ol style="list-style-type: none"> <li>1. Types of wood - natural and artificial and its properties. Working with wood and wood products to understand material pas.</li> <li>3. Wooden joinery and its strength.</li> <li>4. Wood polishes and other finishes - color and surface quality.</li> </ol>
Assignments	<ol style="list-style-type: none"> <li>1. Prepare drawing of own furniture piece.</li> <li>2. Prepare all wooden joints prototype.</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. Ahmed Kasu ,Interior Design, Standard publication, N.Delhi ,4<sup>th</sup> Edition 2004 wood Working Techniques- Broun, Jeremeny</li> <li>2. The Encyclopedia of wood Working Techniques- Broun, Jeremeny</li> </ol>

### B. Voc.- Interior Design

#### Semester :4- Skill Component Subjects

#### Subject - Design –IV

Code no.	401
Course Objectives	<ol style="list-style-type: none"> <li>1. Space making in order to understand elements and organization.</li> <li>2. Visual perception of Interior Spaces for large spaces.</li> <li>3. Way of analyzing furniture forms and designing furniture forms scientifically based on ergonomics, materials design and working</li> <li>4. Parameters and visual perception of furniture as a single form and as a system in a given interior space.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Studies of highly complex and complicated spaces and designs.</li> <li>• Design of large scale and specialized multi- functional interior spaces like Auditorium, museums, shopping and entertainment malls, hospitals Administrative buildings, hospitality etc.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Efficiency in space planning. Qualitative aspects and relationships of spaces, seats of space for movement.</li> <li>2. Modulation of space and form, organizational character suited to functionalism.</li> <li>3. Exploring design process through sketches, drawings and models.</li> <li>4. Analysis of existing space - built form.</li> <li>5. Measure drawing of a piece of furniture - plan, elevations and details drawing</li> </ol>

	ngs on full scale.
Assignments	<ol style="list-style-type: none"> <li>1. medium scale commercial unit e.g. Beauty parlor, CA Office</li> <li>2. Case study</li> <li>3. Designer chair with all workings.</li> <li>4. Designer foot stool with all workings.</li> <li>5. Designer sofa with all workings.</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. . Ahmed Kasu ,Interior Design, Standard publication, N.Delhi ,4<sup>th</sup> Edition 2004 wood Working Techniques- Broun, Jeremeny</li> <li>2. Designing Smart Homes: The Role of Artificial Intelligence by Juan Carlos Augusto and Chris D. Nugent : 2006)</li> <li>3. Designing User Friendly Augmented Work Environments by SaadiLahlou (October 2009)</li> </ol>

### **B. Voc.- Interior Design**

#### **Semester: 4- Skill Component Subjects**

#### **Subject - Services – II**

Code no.	402
Course Objectives	<ol style="list-style-type: none"> <li>1. To introduce various services this puts luxury and hygiene to the life.</li> <li>2. To introduce the safty services and techniques to reduce chances of any human disaster/ hazard.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• To study Advance building services like.:Vertical transportation, etc.to study of different type of systems used for high rise structures like water supply system(hot &amp; cold) , fire protection system , ducts , drainage system ,garbage system, refuse chutes etc.</li> </ul>
Course content	<p>1. Sanitation</p> <p>*Drainage: Refuse, different forms of refuse garbage, spoilage, toilet waste and storm - water and disposal system. General principles</p> <p>Of drainage, and drainage lines.</p> <p>*Connection to out-door drainage system, size requirements calculations, types of pipe available in market.</p> <p>*Bathroom-Interior layouts, extensive market survey of product available, economies</p>

	<p>of products available, how to fix products with</p> <p>Other finishing materials.</p> <p>2. Air Conditioning – Various types and uses, Calculation of capacity.</p> <p>3. Acoustics- Uses and requirement, Acoustical Materials</p> <p>4. Fire Safety- Building design for safety, Various supplementary fire fighting equipment according to use of building.</p>
Assignments	1. Sewage plan of residence
Reference Books	1. Building Services Handbook (6th edition) by Fred Hall and Roger Greeno :

### B. Voc.- Interior Design

#### Semester :4- Skill Component Subjects

#### Subject - Building Construction – III

Code no.	403
Course Objectives	2. To study about the multiple floor level units and construction techniques.
Learning outcomes	<ul style="list-style-type: none"> <li>• Identify the varied types of stair design and draw construction plans.</li> <li>• Label the different types of flooring systems, design and calculate material needed and then explain the assembling and finishing of floor systems.</li> </ul>
Course content	<p>1. Stair cases – simple staircase in R.C.</p> <p>2. Layout of stair cases – types of stair cases methods of calculating treads and risers – definition of various parts &amp; terminology.</p> <p>1. Floors – various type of floor finishes and their constructional details. Wood, pace, tiled (vitrified, ceramics etc.), linoleum, rubber &amp; other materials.</p>
Assignments	<p>1. Types of staircases</p> <p>2. Staircase details – R.C.C.</p> <p>3. Wooden Floors</p> <p>4. R.C.C. Floors and floor finishing sections.</p>
Reference Books	<p>1. Building Construction – Sushil Kumar</p> <p>2. Building Construction: Metric Volume 1, 5/e by WB McKay 2012</p> <p>3. Building Construction: Metric Volume 2, 5/e by WB McKay 2012</p> <p>4. 2. Building Construction: Metric Volume 3, 5/e by WB McKay 2012</p>

	5. Building Construction: Metric Volume , 5/e by WB McKay 2012
--	--

**B. Voc.- Interior Design**

**Semester :4- Skill Component Subjects**

**Subject - Estimating and Costing- I**

Code no.	404
Course Objectives	1. To let the students understand the role of interior designer as Professional.
Learning outcomes	<ul style="list-style-type: none"> <li>• Develop relationships with allied professions.</li> <li>• Introduction to professionalism, design practice, working of design organization</li> <li>• Contents: -</li> <li>• The profession of interior design.</li> <li>• Professional preparation- Education preparation ,professional association</li> <li>• Characteristics of interior designer.</li> <li>• Office management-clients, site management, professional correspondence, recruitment of staff etc.</li> <li>• Estimation of Interior space</li> </ul>
Course content	<p>1. Specifications: Different types (closed, open etc.), Importance of specification, Writing specifications and brief specifications with introduction to bill of quantities(BOQ), studying existing specifications for selected items, writing specification for items of project taken in previous semester.</p> <p>2. Typical specifications for different Interior materials.</p> <p>3. Tenders - Definition</p> <p style="padding-left: 40px;">- Types of tenders</p> <p style="padding-left: 40px;">- Procedures for opening of tenders.</p> <p>4. Estimating - Definition</p> <p style="padding-left: 40px;">- Units of measurement</p> <p style="padding-left: 40px;">- Rates</p>

	<ul style="list-style-type: none"> <li>- Problems in rate analysis</li> <li>- Types of estimates</li> <li>- Thumb Rules</li> </ul>
Assignments	1. Estimating and costing: Different methods of estimation (per unit area, item based), units of measurement of different interior items, analysis of rates and preparing spreadsheet.
Reference Books	<ol style="list-style-type: none"> <li>1. Construction estimating and costing by Frank W. Helyar McGraw-Hill Ryerson, 1978</li> <li>2. A textbook of estimating and costing by M. A. Aziz Zoberi Publisher, 1967</li> </ol>

### B. Voc.- Interior Design

#### Semester :4- Skill Component Subjects

#### Subject - Computers – 3D MAX- 1

Code no.	405
Course Objectives	To study the basics of 3ds Max to improve presentation techniques and make easy communication with client.
Course content	<p><b>MAX</b></p> <ul style="list-style-type: none"> <li>• Creation of the 3D object</li> <li>• Modification of the object</li> <li>• Modify with patches</li> <li>• Compound objects</li> </ul>
Assignments	<ol style="list-style-type: none"> <li>1. Create 10 Interior furniture and fittings.</li> <li>2. Create modal of an exterior.</li> </ol>
Reference Books	1. Mastering Autodesk 3ds Max 2013 by Jeffrey Harper

### B. Voc.- Interior Design

#### Semester :4- Skill Component Subjects

##### Subject - Workshop – IV (Code: 406)

Course Objectives	Modal Making - To develop a sense of development of furnitures actual modal making with simple materials.
Course content	Modal making by using forex sheet, cloth and lights.
Assignments	1. Modal of any interior space.

#### B. Voc.- Interior Design

#### Semester : 5- Skill Component Subjects

##### Subject - Design –V

Code no.	501
Course Objectives	1. To understand and design approach and space planning through furniture as elements of design.
Course content	<p>1.Modular in furniture design, its relationship to human ergonomics, survey of various modular system available for different Functions in market.</p> <p>2. Modular system of storage elements - closets, kitchen cabinets, displays etc.</p> <p>3. Modular approach in setting elements styles and types of units available in market.</p> <p>4. Modular approach and multiple uses of furniture forms.</p> <p>5. Exploration of wood, metal, glass, plastics and F.R.P. as materials for system design.</p> <p>6. Harmony through module, through materials, through details - evolving coordin</p>

	<p>ated system for entire space. Drawings, details, Working prototype model.</p> <p>7. Cost criteria of design, furniture for lower income sectors of society.</p>
Assignments	<p>1. Mass scale design problem including front elevation.</p> <p>2. Simple unit of furniture according to any Indian traditional furniture making technique.</p> <p>3. Stylish designer units.</p>
Reference Books	<p>1. Time Saver Standards For Interior Design and Space Planning by Joseph De Chiara and Julius Panero :2011 (Edition Second)</p> <p>2. Kitchen Creation – Zaccarini and Jane</p>

### B. Voc.- Interior Design

#### Semester : 5- Skill Component Subjects

#### Subject - Services – III

Code no.	502
Course Objectives	<ol style="list-style-type: none"> <li>1. 1.To let the students aware of the hazards of fire and their solutions</li> <li>2. To introduce the facilities which enhance the luxury.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• To study Advance building services like.: Vertical transportation, etc.to study of different type of systems used for high rise structures like water supply system(hot &amp; cold) , fire protection system , ducts , drainage system ,garbage system, refuse chutes etc.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Fire fighting/ emergency services - Sources of hazard, Low hazard planning and detailing, Fire detection &amp; fighting systems, Emergency evacuation – Planning features and systems.</li> <li>2. Acoustics: Introduction to sound and noise, concepts and terms, indoor &amp; outdoor noise control, Reverberation time calculation.</li> <li>3. Designing services – Preparing plumbing, electrical &amp; A.C. Layouts for residential spaces.</li> <li>4. Public water distribution</li> <li>5. sewage collection</li> </ol>



Assignments	1. Prepare chart of the acoustical materials required for various public palaces.
Reference Books	1. Building Services Handbook (6th edition) by Fred Hall and Roger Greeno

### B. Voc.- Interior Design

#### Semester : 5- Skill Component Subjects

#### Subject - Professional Practice

Code no.	503
Course Objectives	<ol style="list-style-type: none"> <li>1. Introduction to professionalism, design practice, working of a design organization.</li> <li>2.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Distinguish the differences and similarities between interior design specialties.</li> <li>• Develop a resume, cover letters, and follow up letters.</li> <li>• Design professional identities using self-branding.</li> <li>• Develop interview skills and professional demeanor.</li> <li>• Dress appropriately for interviews.</li> </ul>
Course content	<ol style="list-style-type: none"> <li>1. Job procedures and opportunities</li> <li>2. code of practice</li> <li>3. Duties and liabilities of Interior Designer.</li> <li>4. Relationship with client and contractor.</li> <li>5. Types of contracts and tender documents.</li> <li>6. Office management systems</li> <li>7. Duties, liabilities, IIID code of professional conducts.</li> <li>8. Condition of engagement of Designer.</li> <li>9. Banking system – Loan, cash transfer modes etc.</li> </ol>
Assignments	<ol style="list-style-type: none"> <li>1. Prepare own resume for job.</li> <li>2. Prepare a proper advertisement for a job vacancy in your office.</li> </ol>

Reference Books	<ol style="list-style-type: none"> <li>1. PROFESSIONAL PRACTICE FOR Interior Designers Third Edition by Christine M. Piotrowski, ASID, IIDA</li> <li>2. The Handbook of PROJECT MANAGEMENT A practical guide to effective policies, techniques and processes by Trevor L Young; revised second edition</li> </ol>
-----------------	---

### B. Voc.- Interior Design

#### Semester : 5- Skill Component Subjects

#### Subject - Working Drawing

Code no.	504
Course Objectives	3. Technical presentation of design at built form level, finishing level, product and furniture level.
Learning outcomes	<ul style="list-style-type: none"> <li>• This subject provides the technical base for the execution of the designer's ideas. He has to learn to make technical drawings explaining to the workmen how execute the design in actual.</li> </ul>
Course content	<p>Prepare working Drawing of projects</p> <ol style="list-style-type: none"> <li>1. Architectural Drawings.</li> <li>2. Furniture Details</li> <li>3. Finishing details.</li> <li>4. Layouts of various products and their details.</li> <li>5. Material, colour and texture details.</li> <li>6. Building services details and fixture layouts for various areas.</li> </ol>
Assignments	Working drawings of the project previously designed by the students.
Reference Books	<ol style="list-style-type: none"> <li>1. Ahmed Kasu ,Interior Design, Standard publication, N.Delhi ,4<sup>th</sup> Edition 2004</li> <li>2. The Architects' Handbook Blackwell Science I edited by Quentin Pickard 2002,2003</li> </ol>

### **B. Voc.- Interior Design**

#### **Semester : 5- Skill Component Subjects**

Subject - **Computer –3D MAX - 2**

Code no.	505
Course Objectives	To add realistic touch to the view of 3ds max.
Course content	<ul style="list-style-type: none"><li>• Setting of Lights</li><li>• Material Editing</li><li>• Effects of Lights</li><li>• Setting of the Camera</li><li>• Environment &amp; walkthrough</li></ul>
Assignments	1. Create 3ds well rendered view of a public place including Interior and exterior.
Reference Books	1. 3ds Max 2012 Bible - Kelly L. Murdock

### **B. Voc.- Interior Design**

#### **Semester : 5- Skill Component Subjects**

Subject - **Workshop – V**

Code no.	506
Course Objectives	3ds max expert advice to enhance rendering ability
Course content	1. 3D Studio MAX, upgrading from a previous release, or moving from 2D to 3D design, 3D Studio MAX to speed quickly and easily. With fully illustrated examples, easy-to-follow exercises, time saving tips, and helpful notes, you'll learn how to build fundamental objects, create realistic textures, light a scene, place cameras, render basic animation, and more. Guide also explains complex 3D design concepts in a simple and lay a solid foundation in the basics.

### **B. Voc.- Interior Design**

#### **Semester: 6- Skill Component Subjects**

Subject - **Design –VI**

Code	601
Course Objectives	2. To make student capable of doing Independent Projects. ( Major Project + thesis)
Learning outcomes	<ul style="list-style-type: none"> <li>• This continues to be the main subject in the curriculum. Interior design problems of highly complex nature are to be tackled by the students.</li> <li>• Thesis :Students are expected to enter in highly competitive professional world after completing this project work so he expected to put all his efforts with skills regarding design, working details, technology, materials, and computers.</li> </ul>
Course content	<p>1. Interiors spaces Shopping malls, Streets, Town squares, Fair grounds, Amusement parks.</p> <p>2. Interior of Public utility space Air ports, Bus stops, Railway stations, Boats/ports.</p> <p>3. Actual prototype sampling of spaces and products. Visualization of total display system.</p>
Assignments	<ol style="list-style-type: none"> <li>1. Case study</li> <li>2. Final major Project with all details.</li> <li>3. Working Drawing of the project.</li> </ol>
Reference Books	1. The Project Management Life Cycle by Jeson Westland - 2006

**B. Voc.- Interior Design**

**Semester : 6- Skill Component Subjects**

Subject - **Landscape Design**

Code	602
Course Objectives	<ol style="list-style-type: none"> <li>2. Transformation of interior spaces through natural elements of design - Interior landscaping.</li> <li>3. To Study of plants, their form related to interior &amp; outdoor herbarium, layout, drawing. •</li> <li>4. To Study of plants/ trees-Designing outdoor, gardens, fountains, indoor and</li> </ol>

	outdoor landscape, features its construction- electrification – services.
Course content	<ol style="list-style-type: none"> <li>1. Types of Natural Elements - stones, rocks, pebbles, water forms, plants and vegetation.</li> <li>2. Landscaping design parameters for various types of built forms - Indoor x Outdoor or linkage to spaces.r -</li> <li>3. Landscape of courtyards -Residential form and commercial forms.</li> <li>4. Indoor plants and their visual characteristics - colour, texture, foliage. Science of growing and maintaining greenery.</li> <li>5. Product survey of market availability and cost criteria.</li> </ol>
Assignments	<ol style="list-style-type: none"> <li>1. Case study</li> <li>2. Landscape design for the above project.</li> </ol>
Reference Books	<ol style="list-style-type: none"> <li>1. Tropical Garden Plants in Colour - Bose and Choudhary</li> <li>2. Alexander, Christopher et al A Pattern Language: Towns, Buildings, Construction (Oxford University Press, New York, 1977)</li> <li>3. Appleton, J. The Experience of Landscape John Wiley London 1975</li> </ol>

### **B. Voc.- Interior Design**

#### **Semester : 6- Skill Component Subjects**

#### **Subject – Internship**

Code	603
Course Objectives	<ol style="list-style-type: none"> <li>1. State of Interior Design profession in today's' business world and design world.</li> <li>2. More emphasis on site supervision.</li> </ol>
Learning outcomes	<ul style="list-style-type: none"> <li>• Acquire the ability to function and grow in a professional working environment.</li> <li>• Apply knowledge learned , Prepare project documentation that meets professional expectations of supervisors</li> <li>• Present projects to clients, supervisors</li> </ul>
Course	1.Understanding of "Professional Practice" methods of various interior designers

content	<ul style="list-style-type: none"> <li>- Design process from first client contacts to Production documents, tender documents for various work involved, production drawings for various work, site supervision.</li> <li>2. Coordination of various agencies - client, members of design team, consultants, contractors, craftsman and construction supervisor.</li> </ul>
Assignments	<p>Office Practice Report</p> <ol style="list-style-type: none"> <li>1. Project brief, detailed design and drawings worked on, site supervision reports.</li> <li>2. Brief assessment of projects worked on &amp; experience gained.</li> </ol>

### **B. Voc.- Interior Design**

#### **Semester : 6- Skill Component Subjects**

#### **Subject – Workshop**

Code no.	604
Course Objectives	To study of actual of a drawing and develop a sees of combination of different elements in a design of design.
Course content	Design of furniture piece and all its working and learn the actual working.
Assignments	<p>Prepare a prototype modal of any furniture piece</p> <p>Construct a original piece of furniture</p>

## B. Voc.- Interior Design

### Semester : 6- Skill Component Subjects

Subject : Indian Culture and Environment

Code No.	605
Course Objective	To identify the roots and details of some of the contemporary problems faced by our nation and try to locate possible solutions to these challenges by digging deep into our past.
Course content	<p>1. Traditional Practices and Environment: Various representations of Nature in popular culture; Knowledge and attitudes towards nature in ancient texts - Forest and Tree Worship as their cultural manifestations.</p> <p>Water Harvesting and Management: Tradition of Rainwater harvesting in different regions of the country; impact on environmental management; lessons for contemporary times.</p> <p>Mahatma Gandhi and Environment: Contribution of Mahatma Gandhi towards the cause of environment; inspiration for young generation</p> <p><b>2. Urbanization and Urbanism</b></p> <p>Defining Urbanization and Urbanism. Causal and sustaining factors of Urbanization. City: Hallmark of most cultures. Evolution of city: city-state; city within a state.</p> <p>Challenges of Urban Life: Alienation and sense of belonging; spirit of living together in limited space; challenges of multiple aspirations; pressure on urban infrastructure; unity in diversity- keeping Local alive while moving towards Global OR heterogeneity alive while moving towards homogeneity</p> <p><b>3. Cultural Heritage</b></p> <p>Cultural Heritage: Its significance and its constituents. Importance of Built Heritage at the level of Locality, Region, Nation and World.</p> <p>Architecture as symbol of power, representation of society, composite culture, involvement of different strata of society, economics, aesthetics -Discussion and Project on any one of these or any other: Cave temples of Ajanta or Ellora, Khajuraho temples or Konark Temple, QutubMinar , Humayun's Tomb, Imperial Calcutta or</p>

	<p>Imperial Delhi.</p> <p>Built Heritage: Destruction, Defacement, General Apathy, Conservation or Restoration, Funds, Antiquated Laws, Institutions engaged with Conservation. Tourism and its contributions towards infrastructure and economic prosperity</p> <p><b>4. Cultural Forms and Cultural Expressions</b></p> <p>Exploring the multiple forms of culture and understanding composite culture and its diffusion.</p> <p>The Performing Arts: Some case studies. Exploring classical dance forms and the case study of BharataNatyam/ Kathaka or any other dance form of India. The social context of fairs and festivals- Kumbhamela/ Pushkarmela/ RathYatra / Baisakhimela / Goa carnival. Formulation of 'Mass' Culture and Public Opinion- the impact of films, television, the print media and food on our society.</p>
Assignments	Portfolio Making
Reference Books	<ul style="list-style-type: none"> <li>• Indian culture and heritage – by VeenaGarg</li> <li>• Indian art and culture – Arihant experts</li> <li>• Symbols of Indian culture</li> <li>• Urbanization In India – by Isher Ahluwalia</li> <li>• Basics of Environment and Ecology – by AnubhaKaushik and C.P. Kaushik</li> </ul>

## OVERALL SPECIFIC OBJECTIVES FOR INTERIOR DESIGN PROFESSION:

### 1. Interior Designer

- This is the most obvious route for most designers. As an interior designer, He/she will be tasked with making the interiors of homes, offices, and other buildings beautiful.
- Interior designers have to be creative, understand color theory, and keep abreast with emerging interior design trends.
- The designers may work with residential or commercial clients.
- Residential interior designers are mostly involved with styling and interior decorating, fabrics and furnishing.
- Commercial interiors designers may work in retail, offices, restaurants, hotels, and education institutions.



## **2. Furniture Designers**

Furniture design is a more specialized part of interior design. As a furniture designer, your work can be twofold; with the client and with other suppliers.

- When working with a client, you may be tasked with arranging furniture at houses, showrooms, offices, and other areas to use space optimally, bring out desired themes and so on.
- You may also work with your client's suppliers such as carpenters, guiding them on what decorations to incorporate in the furniture to bring out your client's tastes.

## **3. Exhibition Designers**

Exhibition designers provide working layouts and decide the décor to be used in exhibition halls.

- The designers need to be knowledgeable on modular stand design, custom build designs, exhibition and museum design, and floor management. \Other skills required include CAD and 3D packages like Adobe Suites and AutoCAD/Vector works.
- When working on projects, the designers take into consideration the traffic expected at the exhibition hall, items that will be showcased and the theme of the exhibition.

## **4. Lighting Designers**

- Lighting designers ensure adequate lighting for the various projects they are involved in.
- The designers have to be knowledgeable in basic wiring or work with a qualified electrician to bring out various creative lighting effects depending on the nature of the projects.
- Lighting designers may also be involved in schematic design and work on decorative products such as light fittings, shades and luminaries for a design consultancy or manufacturer.
- Knowledge in different types of lighting and their effects is crucial to the success of a lighting designer.

## **5. Kitchen Designers**

- Kitchen designers are primarily involved with kitchen aesthetics and usefulness to the people who use them. The designers can work hand in hand with constructors to determine the floor plan or can come after the floor work has been done to help clients with kitchen items.
- Kitchen designers should balance both design and functionality of the items they recommend in the kitchen. The designers should know the effect of kitchen temperatures on the decors they go for, the maintenance required, and general replacement procedures.
- To be successful, creativity, passion for color, and skill for vision are a must.