

Syllabus for B. Voc. in Interior Design



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Lonere 402 103 Taluka - Managaon, Dist. Raigad (M.S.)**

Semester V

Sr. No.	Course Code	Name of the Course	Teaching scheme			Evaluation Scheme			Credits	Total Marks	
			L	T	P	IA	MSE	ESE			
General Education											
			Theory								
1	BVIDC 501	Environmental Studies	2	0	3	25	0	25	3	50	
2	BVIDC 502	Research Methodology	3	0	0	25	0	25	3	50	
3	BVIDC 503	Estimating and Costing	3	0	0	25	0	25	3	50	
4	BVIDC 504	Interior Professional Practice	3	0	0	25	0	25	3	50	
								Total	12	200	
Skill Components											
5	BVIDL505	Interior Design Studio -5	0	0	14	40	0	60	6	100	
6	BVIDL506	Elective (Any One from Below) 1. Product Design 2. Interior Design Photography 3. Textile Design 4. Creative Arts & Crafts	0	0	2	25	0	25	3	50	
			On-Job-Training (OJT)/Qualification Packs (Any One)								
7	BVIDE517	Professional Training or Allied skill Sector Council Qualification Pack /Job role - NSQF level 5,6,7	200 (Working Hours)						9	150	
			Total							18	300

SEM-V

Total Subjects : 07 (6 + 1 OJT)

Total Credits : 30

Total Marks : 500

THEORY: In Internal Assessment Marks= Sessional Work + Attendance+ Assignments
End Semester Marks= Theory Paper Marks

PRACTICAL: In Internal Assessment Semester Marks= Attendance+ Term Work
End Semester Marks= Practical + Oral

Abbreviations: L: Lecture Hours, T : Theory Hours, S: Studio Hours, P: Practical Hours, OR: Oral, IA: Internal Assessment
ESE : End Semester Exam

Assessment of PR / OR / TW:

- 1) All orals and practicals are to be assessed by external & internal examiners.
- 2) All TW are to be assessed by internal examiner only.

Semester VI

Sr. No.	Course Code	Name of the Course	Teaching scheme			Evaluation Scheme			Credits	Total Marks
			L	T	P	IA	MSE	ESE		
General Education										
Theory										
1	BVIDC601	Project Management	2	0	3	25	0	25	3	50
2	BVIDC602	Interior Landscape Design	3	0	0	25	0	25	3	50
3	BVIDC603		3	0	0	25	0	25	3	50
4	BVIDC604		3	0	0	25	0	25	3	50
									12	200
Skill Components										
Lab/Practical										
5	BVIDL605	Interior Design Dissertation	0	0	16	50	0	100	9	150
On-Job-Training (OJT)/Qualification Packs (Any One)										
6	BVIDE616	Professional Training or Allied skill Sector Council Qualification Pack /Job role - NSQF level 5,6,7	200 (Working Hours)						9	150
Total									18	500

SEM-VI

Total Subjects : 06 (5 + 1 OJT)

Total Credits : 30

Total Marks : 500

THEORY: In Internal Assessment Marks= Sessional Work + Attendance+ Assignments
End Semester Marks= Theory Paper Marks

PRACTICAL: In Internal Assessment Semester Marks= Attendance+ Term Work
End Semester Marks= Practical + Oral

Abbreviations: L: Lecture Hours, T : Theory Hours, S: Studio Hours, P: Practical Hours, OR: Oral, IA: Internal Assessment
ESE : End Semester Exam

Assessment of PR / OR / TW:

- 1) All orals and practicals are to be assessed by external & internal examiners.
- 2) All TW are to be assessed by internal examiner only.

Semester

V

Syllabus

Subject Name: Environmental Studies		
Course Code : BVIDC501		Semester: V
Weekly Teaching Hours: TH: 02 ST/P: 3		Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours		Scheme of Marking PR: --
Credit :03		
Objective: To introduce the concept and principles of environment and its impact on interior spaces, including climatic study and parameters of human comfort. Learner should be exposed to use of preliminary analysis tools used during the early planning stages of an interior project.		
Content		Hours
Unit – I	Human comfort in built form and environment.	15
	Definition of climate and elements of climate. Built environment, impact and issues of climatic balance in traditional and contemporary built environments. Effect of climate on human comfort. Climatic factors which affect thermal comfort in humans, along with its interface with Interiors.	
Unit – II	Natural Light	10
	Importance of day lighting, IAQ its application and ventilations. Daylight factor, size of opening with reference to daylight, lighting in buildings, light and its sources, lighting criteria, artificial lighting levels for various activities, calculation for lighting levels. Lighting design and energy usage, conservation of energy.	
Unit – III	Design of built environment with respect to services	15
	Natural ventilation and its importance. Design of openings to achieve comfort. Air cooling systems- passive and evaporative cooling, desert coolers, ducting and air distribution. Air-conditioning- functions and principles, refrigeration cycle, capacity of AC ,types of AC systems and their details, ducting and air distribution, AC layouts for office spaces-load calculations with details of ducting.	
Unit – IV	Eco-Friendly Materials	10
	Importance of materials in the Interiors. Properties of materials. Introduction to sustainable material. Concept of Reduce-Reuse – Recycle Properties of materials and heat transfer. Evaluation of materials on environmental aspects. Innovative ecofriendly materials for interiors.	
Unit – V	Rating Systems and EPA	10
	Rating systems of green buildings, green buildings certification, carbon credits. Understanding of LEED, GRIHA. Leadership in energy and environmental design. Concept of EPA-Environmental Protection Act. Environment Impact Assessment. Basic concepts, objective and methodology of EIA. Objectives and requirement of Environmental Management. System (ISO-14000) (An Introduction).	

Reference/Text Books		
Name of Authors	Title of the Book	Publisher
Rai G.D (1996),	Solar Energy Utilization,	Khanna Publichcers, Delhi.
Riggs, J.R. (1992)	Materials and components of Interior Design,	Regents Hall, New Jersey.
Faulkner, R., and Faulkner. S, (1987)	Inside Today’s Home, ,	Rinehart publishing House Newyork.
Roa, M.P. (1998),	Interior design, principles and practice,	Standard publishers, Delhi.
Despande, R.S, (1974)	Build your own home,	United book corporation, Poona.
Koenisberger	Tropical climate and housing	
Prof.A.L.Chatre	Building services and equipment	

Name of the Subject : Research Methodology		
Course Code : BVIDC502		Semester: V
Weekly Teaching Hours: TH: 03 ST: 00		Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours		Scheme of Marking PR: --
Credit :03		
Objective: The course aims to teach the students to read, understand and explore something new from the conventional material before they climb up the ladder for more progressive research works.		
Content		Hours
Unit – I	Foundations of Research: Meaning, Objectives, Motivation, Utility . Concept of theory, empiricism, deductive and inductive theory. Characteristics of scientific method - Understanding the language of research - Concept, Construct, Definition, Variable. Research Process	08
Unit – II	Problem Identification & Formulation: Research Question –Investigation Question - Measurement Issues - Hypothesis – Qualities of a good Hypothesis - Null Hypothesis & Alternative Hypothesis. Hypothesis Testing - Logic & Importance.	08
Unit – III	Research Design: Concept and Importance in Research - Features of a good research design - Exploratory Research Design -concept, types and uses, Descriptive Research Designs - concept, types and uses. Experimental Design: Concept of Independent & Dependent variables.	10
Unit – IV	Qualitative and Quantitative Research: Qualitative research, Quantitative research - Concept of measurement, causality, generalization, replication. Merging the two approaches.	10
Unit – V	Case studies Model paper presentation on assigned topics Survey and sample collection for project Preparation.	15

Reference/Text Books		
Name of Authors	Title of the Book	Publisher
P. K. Manoharam	Research methodology	Pearson India
Dr. C. Rajindra Kumar	Research methodology	APH Publishing Corporation, 2008
C. R. Kothari	Research methodology methods and techniques	New Age International Pvt. Ltd., Publishers

Subject Name: Estimating and Costing		
Course Code :BVIDC503		Semester: V
Weekly Teaching Hours: TH: 03 Tut: 00		Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours		Scheme of Marking PR: --
Credit :3		
Objective: To provide the student adequate knowledge to prepare the Estimate & find the cost of overall project of works. To provide the student adequate knowledge to prepare the Estimate & find the cost of overall project of works.		
Contents		Hours
Unit – I	Introduction to Estimation	06
	Estimation – definition, purpose, types of estimate, and procedure for Estimating the cost of work in order to implement an interior design project or to make products related to interior design like furniture, artifacts etc.	
Unit – II	Rate Analysis & Estimation Format	06
	Rate Analysis – definition, method of preparation, quantity & labour estimate for woodwork, steelwork, Aluminum work, glass & its rate for different, thickness & sections, finishing (enamel paint, duco paints, melamine, DU coats, Hand polishing, veneering and laminating) for walls & ceilings. Electrical & plumbing products, wiring, ducting etc., and laying of tiles & wall paneling in the estimate format of the project.	
Unit – III	Detailed Estimate	06
	Detailed Estimate – data required, factors to be considered, methodology of preparation, abstract of Estimate, contingencies, labour charges, bill of quantities, different methods of estimate for interior design works, methods of measurement of works.	
Unit –IV	Costing of Fixtures & Fittings	06
	Cost of the following items: electrical fitting like, luminaries, fan, cables, switches etc., tiles in skirting & dado, cement plaster, joinery in wood, steel & aluminum, painting to walls – cement paint, oil paints , distemper acrylic emulsion, enamel paint painting to joinery, varnishing, French polishing plumbing equipments like piping, shower panels ,cubicles, tubs, Jacuzzis , taps, motors, fountains, false ceiling of aluminum panels, steel & wooden frame work, thermocol etc. wall paneling of ceramic tiles & other tiles of materials suitable for the same, partitions made of materials like aluminum wood, steel etc	
Unit –V	Specification	06
	Specification – Definition, purpose, procedure for writing specification for the purpose of calling tenders, types of specification. Specification for different item related to interior design project – woodwork for furniture window frames & pelmets, partitions etc also of materials like steel aluminum glass of various kind. Wall paneling & false ceiling of materials like aluminum, steel, wood, electrical, plumbing, airconditioning & fire fighting equipments.	

Reference/Text Books		
Name of Authors	Title of the Book	Publisher
M. Chakraborti	Estimation, Costing, Specification and Valuation in Civil engineering.	
B.N.Dutta	Estimating & Costing in Civil Engineering Theory &Practice	UBS Publishers“ Distributors Ltd., New Delhi, 1995.
Diana Allison	Estimating &Costing for Interior Designers	Publishing House.
S. C. Rangwala,	Elements of Estimating and costing,	Charoter publishing House, Anand, India, 1984.
Theo Susan	The interior designers guide: to pricing, estimating budgeting	

Subject Name: Interior Professional Practice	
Course Code :BVIDC504	Semester: V
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours	Scheme of Marking PR: --
Credit:3	
Objective : The students will be equipped with knowledge and skills needed for professional practices, codes of conduct required to enhance skills and techniques of managing small and large scale residential and commercial interior projects.	

Content		Hours
Unit – I	Introduction to the word-Interior Designer. Characteristics of a proper interior designer. Necessity of an interior designer. Interior designer’s role towards execution of project. Fees of an Interior designer. Ethics & professional conduct of conduct for interior designer. Self-development of an interior designer. Job procurement and public relations. Recording, Documentation of projects.	10
Unit – II	Arbitration and the legal aspects of the contract and contract documents. Tender, contract, Billing, certificates of payments, clerk of works. Introduction, definitions and Tender types. Tendering Procedure. Tender document preparation, types of invitation. Aspects of Tender, schedule writing. Contents of Tender Document. Contractual Procedures.	10
Unit – III	Quantity survey, Rate analysis, Specification : detail specification writing, specifications for tender documents. Agreements : client to interior designer / client to contractor. Rate analysis.	08
Unit – IV	Examination Tender documents, contract documents, specialized services, and execution procedure in respect of the Design problem developed under working drawing. Reports, notes and proceedings of business, meetings, appreciative writing. Knowledge of insurance requirements, tax liabilities and valuations of interior schemes. Accounts and book keeping and tax liabilities for a practicing interior designer.	10
Unit – V	Avenues for professional practice including advantages and limitations .Professional Ethics. Codes of conduct and responsibility towards clients, fellow professionals, profession, contractors, suppliers, other consultants and the society. Entering the profession. Working of interior design studio and ideal office structure, distribution of work, authority, duties and responsibilities, reporting etc. Acts applicable, basis for professional fees and scales of fees, accounting, maintenance of books of accounts and records. Code of ethics of different professional bodies like IID,IDS etc.	10

Reference/Text Books		
Name of Authors	Title of the Book	Publisher
Christine M. Piotrowski	Professional Practice for Interior Designers	Prentice Hall of India
Roshan Namavati	Professional Practice	Lakhani Book Depot, Mumbai
Cindy Coleman	Interior Design Handbook for Professional Practice	McGraw-Hill and Interior Design magazine

Lab/ Practical- Interior Design Studio - 5

Course Code :BVIDL505	Semester: V
Weekly Practical : ST: 10 Tut: 00	Scheme of Marking TH: --
TH Exam Duration:--	Scheme of Marking PR: 60, IA: 40, Total: 100
Credit:6	

Content

Objective

In this semester the learner is expected to apply individual professional design acumen with enhanced skills of planning interior spaces related to commercial activity with use of ecofriendly materials and practices. Learner will provide due emphasis to the relationship of space to the contextual environment, achieving individual interpretations through client profiling, case studies and framing of requirements. The subject further explores application of advanced knowledge to materials used, construction techniques, modular furniture and services.

To create commercial and public interior spaces responding to needs of the users and society in general. To apply knowledge of various streams like behavior, user and customer psychology, building technology, services , acoustics etc. in giving design solutions to enhance the qualitative aspects of life / usage.

Contents

- The assignment may include large commercial projects like corporate office of a Multi-National corporation. OR
- Designing activity based small to medium sized Public spaces such as Art Gallery, Convention centers, Multiplexes etc. OR
- SPA/ Saloon/ Therapy Centre OR
- Theme Dine Restaurant.

NOTE: The carpet area of the project should not be less than, 300.00 sq.mts.

Evaluation

Continuous assessment of sessional work may consist of sketches, cad generated drawings, study models in various materials, case studies, visit reports, power point presentations etc.

Design portfolio should consist of Project Brief, Client profile, Theme Sheet, Measurement Plan/ Furniture Layout Plan/ Flooring Layout/ Reflected Ceiling Layout/ Electrical Layout/ Lighting Layout, Sectional Elevations/ Perspective Views).

Computer Aided Drawings are expected in this Semester.

References:

1. Time saver standards for building types, De Chiara and Callender, McGraw hill company.
2. Neufert Architec's data, Bousmaha Baiche& Nicholas Walliman, Blackwell science ltd.
3. National Building Code – ISI
4. Time saver standards for landscape architecture – Charles W Harris – McGraw Hill
5. New Metric Handbook – Patricia Tutt and David Adler – The Architectural Press
6. Scott-Webber. Programming: A Problem Solving Approach for Users of Interior Spaces. Thomson Learning, 1998. ISBN: 0-873-93674-4 2. Karlen, Mark, Ruggeri, Kate, & Hahn, Peter. Space Planning Basics. New York: John Wiley and Sons, Incorporated, 2003. ISBN: 0-471-43439-6.
7. Sherrill, Whiton, and Abercrombie, Interior Design & Decoration, Fifth edition. Upper Saddle River, New Jersey: Prentice-Hall, 2002 ISBN: 0-13-030748-3
8. Additional relevant books, journals, and magazines may be identified and included by the faculty.

Lab/ Practical- Elective (Any one of the Electives)

1. Product Design

Course Code :BVIDL506-1

Semester: V

Weekly Practical: ST: 04 Tut: 00

Scheme of Marking TH: --

TH Exam Duration:--

Scheme of Marking PR: 25, IA: 25, Total: 50

Credit: 3

Content

Objective

To make the students learn the production technique of furniture and accessories related to interiors in any medium.

Contents

1. Selection of an area in furniture/ceramics/Pottery/ Stone/Metals/ light fittings, fixtures or other accessories in relation to interiors and develop a design scheme based on design process. The medium could be selected out of wood, fibre glass, metal, cane, Thermocol, Plaster of paris, etc.Ceramic painting, Small pieces of Sculpture using Mud/Ceramic/Plaster of Paris.
 - Preparation of working drawings of finally selected product design keeping in mind the anthropometers, preparing a design on paper of one furniture items with details of materials and budget
 - Product design using waste and recycle materials, Using wood stems, Small plant, Dry roots etc., Planters stand, Flower arrangement scheme using different products.
2. Preparation of product design using computer software small scale model mapping.

Evaluation

Continuous assessment and Viva voce of sessional work consists of Reports/ Presentation and analytical work etc.

References:

1. De Chiara and Callender – Time Saver Standards for interior design, 1982.
2. De Chiara et al – Time Saver standards for interior design and space planning, Mcgraw Hill, 1982.
3. The Design of Everyday Things By Don Norman
4. Product Design *by Alex Milton*

Lab/ Practical- Elective (Any one of the Electives)
2. Interior Design Photography

Course Code :BVIDL506-2	Semester:V
Weekly Practicals: ST: 04 Tut: 00	Scheme of Marking TH: --
TH Exam Duration:--	Scheme of Marking PR: 25, IA: 25, Total: 50
Credit: 3	

Content

Objective

To expose the students to the basic principles of photography in interiors. To help the student understand the principles and technology of photography. To enable the student to understand the applications of photographs in interior

Contents

Principles of Composition : Rule of thirds, perspective-worm's eye view, normal eye view, bird's eye view, one-point perspective, two-point perspective, three point perspective, exercises in composition
Technical definitions, understanding a camera, anatomy of a SLR camera, technical setting in a SLR camera, different types of lenses.

Principles of Photography : Technical definitions, understanding a camera, anatomy of a SLR camera, technical setting in a SLR camera, different types of lenses

Principles of Interior Lighting: Technical definitions, lighting sources, types of lighting fixtures, types of lamps, calculating lighting levels, flash photography, types of flashes, controlling lighting levels with flash photography Exercise in interior lighting photography with artificial light and black and white photos

Principles of Colour : Color rendering in photographic medium, color rendering in photographs under different lighting condition, lighting colors and its effect on a photograph, color filters in a camera Exercise on color photography of interiors

Integration : Project work/exercise in integrating all prior units

Evaluation

Continuous assessment and Viva voce of sessional work consists of Reports/ Presentation and analytical work etc.

References:

1. Point view- The art of architectural photography , E.Manny A Ballan, VNR
2. Professional photography –photographing buildings, David Wilson, Rotovision

Lab/ Practical- Elective (Any one of the Electives)
3. Textile Design

Course Code :BVIDL506-3	Semester:V
Weekly Practicals: ST: 04 Tut: 00	Scheme of Marking TH: --
TH Exam Duration:--	Scheme of Marking PR: 25, IA: 25, Total: 50
Credit: 3	

Content

Objective

To familiarize the students of Interior Design on textile materials used in interior and to gain knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications

Contents

Introduction To Fabrics : Fabric, yarn and fiber structure, Fabric structure- **woven**- warp, weft, selvedge ,knitted- course, non-woven, Fabric types and classification- woven, including plain, twill, satin, Jacquard, crepe and pile weaves, **knitted**- including single knit, double knit, tricot knit, pile knit, lace and net ,**non-woven**- including felts webs and films, identification and properties of fabrics, yarns and fibers.

Application Of Elements And Principles : Application of elements and principles of design across a range of textiles. Describe and analyze elements and principles of design -furnishings, textile arts, non-apparel. Functional and aesthetic requirements and features of textile range.

Colour On Fabrics : Fabric coloration and decoration- Principles of applying color to fabrics. Textile arts and crafts in interiors, traditional and modern materials and methods. Preparing samples on tie and die printing, batik printing, appliqué, macramé and braiding.

Furnishings : Furnishings-classification, types of curtain, curtain construction, selection criteria relation to backgrounds in walls, floors and ceilings. Slip covers, cushion covers, bed linen and table linen Floor coverings - rugs and carpets, types selection, care and maintenance, installation of floor coverings.

Other Natural Materials : Jute or hessian – dyed jute fabric and its applications – various kinds of processed leather, its application in interior design.

Evaluation

Continuous assessment and Viva voce of sessional work consists of Reports/ Presentation and analytical work etc.

References:

1. Inside today's home, Faulkner, R. and Faulkner 1987, Rinehart Winston, New York
2. Interior Design & Decoration, Sherril Whiton, Prentice Hall
3. Introduction to home furnishings, Stepat, D.D, 1991, The macmillan company, New York.
4. The themes and Hudson manual of textile printing , Storey joyce , 1992, London
5. Colour in interior Design Jhon, F.P, 1997, Mc Graw Hill Company

Lab/ Practical- Elective (Any one of the Electives)
4. Creative Arts & Crafts

Course Code :BVIDL506-4

Semester: V

Weekly Practical: ST: 04 Tut: 00

Scheme of Marking TH: --

TH Exam Duration:--

Scheme of Marking PR: 25, IA: 25, Total: 50

Credit: 3

Content

Objective

To provide the student of interior design a foundation in various aspect of arts and crafts, which can be applied in design of interiors. Detailed study of the characteristics of Indian arts and crafts and its application in the interiors.

Contents

Introduction To Creative Arts And Crafts: Introduction to creative arts and crafts in India – its application in interior design – materials – Art movements through history – Traditional arts and crafts of India – Folk arts of India

Traditional Arts And Crafts Of India: Traditional arts and crafts of various states of India including – Tamilnadu, Karnataka, Kerala, Andhra Pradesh, Goa, Rajasthan, Gujarat, Kutch, Uttar Pradesh, West Bengal, Orissa, Bihar, Jammu and Kashmir, etc.

Art Movements In Post Modern India: Art Movements in Post Modern India and their influences in Interior design – Abstract Expressionism, Pop art, Minimal art, Conceptual art – Neo Expressionism – Computers in Arts.

Creative Art Objects: Creating decorative art objects –picture framing, macramé, decoupage, wall hangers, ceramic painting, murals etc.

Projects: Assignment or projects on application of the Art in interior spaces such as – Reception, Lobby spaces, Theme Boutiques, Hotel, Restaurants, etc.

Evaluation

Continuous assessment and Viva voce of sessional work consists of Reports/ Presentation and analytical work etc.

References:

1. Inside today's home, Faulkner, R. and Faulkner 1987, Rinebart Winston, New York
2. Interior Design & Decoration, Sherril Whiton, Prentice Hall
3. Introduction to home furnishings, Stepat, D.D, 1991, The macmillan company, New York.
4. The themes and Hudson manual of textile printing, Storey joyce, 1992, London
5. Colour in interior Design Jhon, F.P, 1997, Mc Graw Hill Company

Semester V - On-Job-Training (OJT)/Qualification Packs (Any One)

Subject Name: Any Allied Skill Sector Council Qualification Pack /Job role - NSQF level 5,6,7	
Course Code : BVIDE517	Semester: V
Weekly Skilling Hours: PR: 24 Tut: 00	Scheme of Marking TH: 00, IA: 00, Total: 00
PR Exam Duration: -	Scheme of Marking PR: 150, IA: 00, Total: 150
Credit: 9	
Syllabus as approved by Skill Sector Council	

***Skill Practical assessment will be done rules/ procedure of respective Skill Sector Council of India.**

Semester

VI

Syllabus

Subject Name: Project Management		
Course Code : BVIDC601		Semester: VI
Weekly Teaching Hours: TH: 02 ST: 3		Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours		Scheme of Marking PR: --
Credit :03		
<p>Objective: 1.Knowledge about the methodology of executing a Project greatly enhances the professional ability of an Interior Designer. 2.To expose the students to the currently prevalent techniques in the planning, programming and management of a project.</p>		
Content		Hours
Unit – I	<p>INTRODUCTION Project planning and project scheduling and project controlling, Role of Decision in project management, Method of planning and programming, Human aspects of project management, work breakdown structure, Life cycle of a project, disadvantages of traditional management system</p>	10
Unit – II	<p>ELEMENTS OF NETWORK Event, activity, dummy, network rules, graphical guidelines for network, numbering of events</p>	08
Unit – III	<p>CRITICAL PATH METHOD AND PERT ANALYSIS CPM network analysis & PERT time estimates, time computation & network analysis</p>	10
Unit – IV	<p>PROJECT TIME REDUCTION AND OPTIMIZATION Project cost, Indirect project cost, direct project cost, slope of the direct cost curve, total project cost and optimum duration, contracting the network for cost optimization, steps in cost-time optimization</p>	10
Unit – V	<p>PROJECT UPDATING AND ALLOCATION When to update? Data required for updating, steps in the process of updating Resource usage profile: Histogram, Resource smoothing and Resource leveling, Computer applications in project management.</p>	10

Reference/Text Books		
Name of Authors	Title of the Book	Publisher
Dr. B.C.Punmia et al	Project planning and control with PERT and CP M	Laxmi Publications,
Jerome D.Wiest and Ferdinand K.Levy	A Management Guide to PERT, CPM	Prentice Hall of India Pub, Ltd., New Delhi, 1982
R.A. Burgess and G.White,	Building production and project Management,	The construction press, London, 1975

Subject Name : Interior Landscape Design		
Course Code : BVIDC602		Semester: VI
Weekly Teaching Hours: TH: 03 ST: 00		Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours		Scheme of Marking PR: --
Credit :03		
Objective: 1. To study the concepts of interior landscaping and their application in the design of interior spaces. 2. To develop an understanding about the design of interior landscape with special emphasis on the choice and care of plant materials used in the interior spaces. 3. To study about the various landscaping elements and their application in interior spaces.		
Content		Hours
Unit – I	INTERIOR LANDSCAPING Definition, classification of plants, indoor plants and their functions, layout & components, Floriculture – commercial, ornamental, Selection of plants & pest control.	08
Unit – II	PHYSICAL REQUIREMENTS OF PLANTS Physical requirements of plants – light, temperature, water, planting medium, soil separator, weight of plants, acclimatization & maintenance. Techniques to meet physical requirements.	08
Unit – III	INTERIOR LANDSCAPING ELEMENTS & PRINCIPLES Various interior landscaping elements – water bodies - pools, fountains, cascades Plants, rocks, artifacts, paving & lighting, Design guidelines- plant texture & colour, plant height, plant spacing.	08
Unit – IV	ROOF AND DECK LANDSCAPE Protection of the integrity of the roof and structure, provisions for drainage, light weight planting medium, irrigation, selection of materials, water proofing, provision for utilities and maintenance.	08
Unit – V	EXERCISE ON INTERIOR LANDSCAPE <input type="checkbox"/> Residential / Courtyard design <input type="checkbox"/> An outdoor room design <input type="checkbox"/> Terrace garden <input type="checkbox"/> Preparation of indoor plants Herbarium	16

Reference/Text Books		
Name of Authors	Title of the Book	Publisher
	Time saver standards for landscape architecture	McGrawHill, Inc, 1995
Theodore D.Walker	Planting design	VNR Publications New York.
Jack E.Ingels	Landscaping Principles and Practices by,	Delmar Publishers.
Joelle Steele	Interior Landscape Dictionary (Landscape Architecture)	Wiley; 1 edition (December 15, 1992)

Subject Name: Contemporary Interior Designers		
Course Code :BVIDC603		Semester: VI
Weekly Teaching Hours: TH: 03 Tut: 00		Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours		Scheme of Marking PR: --
Credit :3		
<p>Objective: 1.To provide the student of Interior Design knowledge on the works of leading interior designers and their influence on design through ages. 2.To help the student understand the designs from the industrial age to the present information age. 3.To know more on the Modern Movements in Interior design from the beginnings of 20th century.</p>		
Contents		Hours
Unit – I	EARLY PIONEERS Art nouveau, the post Industrial era works of Charles Renée Mackintosh, Antonio Gaudi, Gerrit Rietveld and their expressionist interior design.	12
Unit – II	BAUHAUS AND POST WAR MODERNISTS Walter Gropius/ Bauhaus, De Stijl, Mies Van Der Rohe, Art Deco, Postwar Modernism.	12
Unit – III	MODERNISM Interiors of Le Corbusier, Frank Llyod Wright, Louis Khan, Kenzo Tange and Oscar Niemeyer	12
Unit –IV	INTERNATIONAL STYLE The works of Alvar Alto, Phillip Johnson, Charles and Ray Eames , Eero Saarinen, Eero Arnio, Arne Jacobsen.	12
Unit –V	POST MODERNISM AND MINIMALISM Interiors of Zaha Hadid, Santiago Calatrava, Frank Gehry and Peter Eisenmann, David Collins, Marcel Wanders, Philippe Starck etc.	12

Reference/Text Books		
Name of Authors	Title of the Book	Publisher
Mary Gilliat Coyran	Interior Design Course,	Octopus Ltd., London
Sherril Whiton	Interior Design & Decoration,	Prentice Hall
Francis D.K. Ching	Interior Design,	John Wiley & Sons, New York
Sir Banister Fletcher	History of Architecture,	CBS Publishers & distributors, New Delhi
Joseph De Chiara	Time Saver Standards for Interior Design,	McGraw Hill, New York.

Subject Name: Interior Design Codes

Course Code :BVIDC604	Semester: VI
Weekly Teaching Hours: TH: 03 Tut: 00	Scheme of Marking TH: 25 IA: 25 Total: 50
TH Exam Duration: 01 Hours	Scheme of Marking PR: --
Credit:3	

Objective : To expose the students to the various problems and issues encountered in the practice of Interior design as a profession & to teach them the methods of legal redressal. To develop understanding of the duties and liabilities of an Interior designer along with knowledge of bye-laws that relate to the building & the environment in the Indian context.

Content		Hours
Unit – I	FIRE SAFETY CODES Fire – combustibility – NBC – fire resistant rating of materials – fire fighting requirements – wet riser, dry riser, fire zones, fire escape stair case, fire alarms, smoke detectors and fire lifts.	08
Unit – II	CODES FOR LIGHTING Measurement of illumination and luminous intensity – day light factor – sky luminance – ERC, IRC – light output ratio – recommended illumination levels for various spaces such as library, class room, garment factory, etc. Energy conservation in lighting.	08
Unit – III	CODES FOR VENTILATION Ventilation rates – air changes per hour – relative humidity – cross ventilation, stack effect, recommended ventilation rates for kitchen, toilet, etc.	08
Unit – IV	CODES FOR ELECTRICAL LAYOUT Typical electrical layout for a building – location requirement for switch rooms and distribution panels – codes for fan points, power points and light points – PVC sheathed wiring system – protective earthing – earth electrode.	08
Unit – V	CODES FOR BARRIER FREE ENVIRONMENT Requirement of toilets, corridors, etc. for handicapped persons – wheel chair clearances – ramps for handicapped, etc. according to ISO 9001 Standards	08
Unit – VI	CODES FOR WATER SUPPLY AND SANITAION Requirement for water, position of fixtures, sizes of pipes etc. Sanitation requirements as per NBC.	08

Reference/Text Books

Name of Authors	Title of the Book	Publisher
	National Building code of India 2016 – Bureau of Indian Standards	
V.K.Jain	Fire Safety in Buildings,	New age International (Pvt Ltd) publishers, Chennai, 2007.
	IS 9668 : 1990 – Fire fighting code of practice - Bureau of Indian Standards.	

Lab/ Practical- Interior Design Dissertation

Course Code :BVIDL605	Semester: VI
Weekly Practical : ST: 16 Tut: 00	Scheme of Marking TH: --
TH Exam Duration:--	Scheme of Marking PR: 100, IA: 50, Total: 150
Credit:6	

Content

Objective

Independent project is supposed to be prepared by the student with help of knowledge acquired within a three years of college. Students are expected to enter in highly competitive professional world after completing this project work so they expected to put all their efforts with skills regarding design, working details, technology, materials, and computers.

In this semester the learner should have a focused individualistic approach towards design as per the brief finalized in consultation with the guide resulting in professionally satisfying presentation of the design that would put to test the individual strength and caliber of the learner. The student has a complete choice for selection of a subject & site. The scale shall be more or less standard for all the students.

Contents

Design of large scale and specialized multi- functional interior species like Residential & commercial, urban spaces which are covered in all three years.

Submission of the project should include the constraints of real client his programmed base on functional and aesthetic requirements, socio-cultural and economic framework focus upon.

The synchronized design solution is achieved by case studies, analysis of data conceptualization of ideologies and explorations in design the practically of the project is attained by studying available materials, their fabrication system, surface finishes, methods and process involved in execution along with budget and time factor.

Evaluation

Continuous assessment of sessional work may consist of design developments at various stages indicating the above in the given time frame as set by the guide/subject coordinator.

At the end of the Semester each learner is required to submit the final finished, rendered drawings to suitable scale with related detailing supplemented with concise Detailed Project Report (40-70 pages, all certified by the guide/subject coordinator and Principal which may be presented for final Viva-voce examination.

**Semester VI - On-Job-Training (OJT)/Qualification
Packs (Any One)**

Subject Name: Any Allied Skill Sector Council Qualification Pack /Job role - NSQF level 5,6,7	
Course Code : BVIDE617	Semester: VI
Weekly Skilling Hours: PR: 24 Tut: 00	Scheme of Marking TH: 00, IA: 00, Total: 00
PR Exam Duration: -	Scheme of Marking PR: 150, IA: 00, Total: 150
Credit: 9	
Syllabus as approved by Skill Sector Council	

***Skill Practical assessment will be done rules/ procedure of respective Skill Sector Council of India.**