Syllabus for B.Sc. (Interior Design and Decoration) III & IV Semester

Curriculum Structure Semester – B.Sc. (Interior Design and Decoration)

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SEM	COURSE CODE	CATEGOR Y OF COURSE CORE/DSC /OE	THEORY/ PRACTICAL	CREDITS	PAPER TITLES	SA	IA
	ID-T 3.1	DSC	Theory	3	Space Planning in Interiors	60	40
	ID-P 3.1	DSC	Practical	2	Space Planning in Interiors	25	25
	ID-T 3.2	DSC	Theory	3	Building Services- Lighting	60	40
III	ID-P 3.2	DSC	Practical	2	Building Services- Lighting	25	25
	ID-P 3.3	DSC	Practical	3	Cad in Interiors - II	50	50
	ID-OE 3.1	OE -1	Theory	3	Arts and Craft for Interiors	60	40
	ID-OE 3.2	OE -2	Theory	3	Green Interiors	60	40
	ID-T 4.1	DSC	Theory	3	History of Interiors	60	40
	ID-P 4.1	DSC	Practical	2	History of Interiors	25	25
	ID-T 4.2	DSC	Theory	3	Construction Detailing	60	40
IV	ID-P 4.2	DSC	Practical	2	Construction Detailing	25	25
	ID-P 4.3	DSC	Practical	3	Interior Design –Residence	50	50
	ID-OE 4.1	OE -1	Theory	3	Home Automation	60	40
	ID-OE 4.2	OE -2	Theory	3	Basics of Lighting	60	40
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III Semester - B.Sc. (Interior Design and Decoration)

SN	Course code	Course Name	, , , , , , , , , , , , , , , , , , ,	
1	ID-T 3.1	Space Planning in Interiorg Theory	No. of Theory Credits	3
1	ID-1 3.1	Space Planning in Interiors-Theory	No. of lecture hours/semester	42
2	ID-P 3.1	Space Planning in Interiors Practical	No. of Practical Credits	2
2	1D-F 3.1	Space Planning in Interiors-Practical	No. of Practical hours/semesters	56
3	ID-T 3.2	Building Services – Lighting-Theory	No. of Theory Credits	3
3	1D-1 3.2	Dunuing Services – Lighting-Theory	No. of lecture hours/semester	42
4	ID-P 3.2	Building Services–Lighting-Practical	No. of Practical Credits	2
4	1D-1 3.2	Dunuing Services—Lighting-Practical	No. of Practical hours/semesters	56
5	ID-P 3.3	Cad In Interiors–II - Practical	No. of Practical Credits	3
3	ID-P 3.3	Cau III Interiors-II - Fractical	No. of Practical hours/semesters	84
6	ID-OE 3.1	Arts and Craft for Interiors- Theory 3 Credits and 42hrs per Semester		
7	ID-OE 3.2	Green Interiors- Theory	3 Credits and 42hrs per Semester	

IV Semester - B.Sc. (Interior Design and Decoration)

SN	Course code	Course Name		
1	ID T 4 1	History of Interiors Theory	No. of Theory Credits	3
1	ID-T 4.1	History of Interiors-Theory	No. of lecture hours/semester	42
2	ID-P 4.1	History of Intonions Dugotical	No. of Practical Credits	2
2	1D-P 4.1	History of Interiors -Practical	No. of Practical hours/semesters	56
3	ID-T 4.2	.2 Construction Detailing -Theory	No. of Theory Credits	3
3	110-1 4.2		No. of lecture hours/semester	42
4			No. of Practical Credits	2
4	ID-F 4.2	Construction Detailing -Practical	No. of Practical hours/semesters	56
5	ID-P 4.3	Interior Decign Decidence Practical	No. of Practical Credits	3
3	ID-P 4.3	Interior Design- Residence - Practical	No. of Practical hours/semesters	84
6	ID-OE 4.1	Home Automation - Theory	3 Credits and 42hrs per Semester	
7	ID-OE 4.2	Basics of Lighting - Theory	3 Credits and 42hrs per Semester	



Program Title	B.Sc. Interior Design and Decoration	Semester	Third Semester
Course Code	ID-T 3.1	Course Credits	3
Course Name	Space Planning in Interiors- (Theory)	Contact hours	42 hrs

OBJECTIVES:

- ❖ To enable the students to learn the concept of space in interior design.
- ❖ To understand the importance of space planning

Course Outcomes: On completion of the course, the student will be able to:

CO-1	Analyse and solve space planning problems using physical, psychological, and sociological factors that influence client preferences
CO-2	Prepare a floor plan and colour board to illustrate residential space planning that incorporates specific needs of a client, and/or special populations.

- **CO-3** Identify & analyse design principles and integrate into spatial compositions.
- CO-4 Communicate interior design concepts in accurate and professional graphic, oral and written formats.
- CO-5 Assess cultural, regional, and historical interior design styles and factors that affect design solutions.
- CO-6 Utilize creative visual presentation techniques for communication of design solutions.
- CO-7 Demonstrate the use of design applications for special populations

Course Content:

Unit-1: Introduction

12 Hrs

Chapter 1

Space planning, terms and intent, necessity of space planning, synthesis of space planning, design program.

Chapter 2

Planning Methodology, Introduction to defining design, evaluating design - function, structure and materials, aesthetics, analysing existing space and its advantages.

Chapter 3

Space design, data collection, analysis, synthesis - zonal and block diagram, adjacency matrix, stacking plans, circulation, evaluation, execution, feedback- evaluation- literature study, case study, Prototypical plan sketches, relationship diagram.

Unit -2: Steps in Planning

15 Hrs

Chapter 4

Planning steps, Mind mapping, data collection, case study, literature study, Area calculation, bubble &circulation diagram, block diagram, explained using any sample projects.

Chapter 5

Factors influencing the spatial planning, Building codes, the building shell, plumbing, HVAC, electrical systems, human factors, furniture placement and planning.

Chapter 6

Introduction to space development, generate concepts, present preliminaries, Developing a rough floor plan, circulation spaces, construction reality, spatial quality, Basic room allocations, storage, furniture, equipment's.

Unit -3: Final Drawings

15 Hrs

Chapter 7

Introduction to types of consultants - Acoustical consultant, lighting consultant, plumbing consultant, AC consultant, special consultant based on project needs.

Chapter 8

Introduction to construction documents, layout plan, construction plans, telephone, and electrical plans, finishes plans, furniture plans and section details.

Chapter 9

Presentation drawing: circulation diagram, block diagram, stack diagram – development of elevations, sections, detailed drawings, 2 dimensional and 3 dimensional views according to design proposal.

Ref	Perences
1	Ching, Francis D.K.; Binggeli, Cork; Interior Design Illustrated; Willey Publications; New York;
	2004.
2	Joseph De Chiara, Michael J Crosbie, Time Savers Standards for Building Types, McGraw Hill,
	Boston Burr Ridge, Dubuque, I A Madison, W I New York, San Francisco.
3	Joseph De Chiara, Julius Perero and Martin Zelnik, Time Saver Standards for Interior design and Space
	Planning, McGraw Hill, New York, San Francisco, Lisbon, London.
4	McGraw, Time saver Standards for Architectural Design Data, Publications, Delhi, 2011.
5	Rao M, Partap; Interior Design (Principles and Practice); Standard Publishers Distributors; Delhi; 2006



Program Title	B.Sc. Interior Design and Decoration	Semester	Third Semester
Course Code	ID-P 3.1	Course Credits	2
Course Name	Space Planning in Interiors- (Practical)	Contact hours	56 hrs

Course Content:

Unit-1: Development of a Design Program

16 Hrs

Data collection, case study, literature study, Mind mapping, Relationship diagrams, Prototypical plans, Adjacency matrix, Criteria matrix. Developing a complete design program for a Café/ small residence/ small office space.

Unit-2: Steps in Space Planning

20 Hrs

Area calculation, bubble & circulation diagram, block diagram, development of a concepts for a Café, a small residence, or a small office space.

Unit -3: Design Documentation

20Hrs

Preparing the complete Design program, Planning steps, Design drawings and documentation for a small project Studio Apartment / Retail Showroom.



Program Title	B.Sc. Interior Design and Decoration	Semester	Third Semester
Course Code	ID-T 3.2	Course Credits	3
Course Name	Building Services – Lighting - (Theory)	Contact hours	42 hrs

OBJECTIVES:

- * To enable the students to understand basic principles of illumination and application of natural and artificial lighting in interiors.
- ❖ This subject will give basic understanding about the science behind lighting design.

Course	Outcomes: On completion of the course, the student will be able to:
CO-1	Identify lighting requirements for a range of interior situations in terms of the needs of occupants and to meet statutory regulations.
CO-2	Apply advanced illumination engineering techniques to ensure lighting installations meet specified design objectives
CO-3	Implement lighting designs for selected projects
CO-4	Apply energy saving design techniques by integrating daylight in interior lighting design.
CO-5	Apply creative lighting techniques to selected scenarios.
CO-6	Implement emergency lighting designs to fulfil statutory requirements.

Course Content:	
Unit-1: Lighting	12 Hrs

Chapter 1

Introduction to natural lighting, daylight factor, recommended daylight factors for interiors, calculation of the opening for natural lighting, guidelines for good natural lighting, factors affecting illumination reflection and transmission and their applications, advantages, and disadvantages

Chapter 2

Introduction to artificial lighting, different types of lighting, types of arrangements, principles of lighting, luminous intensity of light sources, position of lighting points, their importance, advantages, and disadvantages.

Chapter 3

Eco lighting: Introduction, types, materials and application of LED and solar

Unit -2: Electrical Services

15 Hrs

Chapter 4

Introduction to commonly used terminology – Voltage, Current, Power, Connected Load, Max. Demand, Load Factors, Diversity Factor etc., Importance of Electrical Services and Its implications on building design. Supply and distribution of electricity to buildings: Brief introduction to various Sources for Electricity generation. Introduction to Transmission and Distribution system

Chapter 5

Electrical Services - Protection Systems Switchgear & Protection Devices - Fuses, Breakers: Miniature Circuit Breakers; Earth Leakage Circuit Breakers; Molded Case Circuit Breakers & Air Circuit Breakers and Protection Relays. Wiring process, introduction to wiring, types of wiring, benefits, importance, and applications. Wiring of a typical residential unit, wiring layout of a typical commercial space.

Chapter 6

Earthing & Lightning Protection System: Definition, Purpose; Types of Earthing Systems, Factors affecting selection and system specification - Type of Soil, water table, soil resistivity etc. Brief about new advances in Earthing systems; Lightning system design - Factors affecting the system specification, basic rules as per NBC and other relevant codes.

Unit -3: Quality & Quantity of Lighting design

15 Hrs

Chapter 7

Fundamentals Quality & Quantity of Lighting; Recommended Lux Levels; Type of Lamps –Incandescent, Discharge Lamps, Fluorescent, CFL, LED and OLED. Integration of Day lighting with Artificial Lighting, Control Systems, Laws of illumination

Chapter 8

Recommended level of illumination for various spaces as per the relevant building codes, guidelines for lighting design, lumen method of design. Preparation of lighting layouts for a typical residential unit and commercial unit.

Chapter 9

Techniques, Principles and Applications: Lighting Methods - Ambient, Task & Accent lighting; Systems of Luminaries - Up-Lighting, Down-Lighting, Spot Lighting etc.; Street Lighting, Façade Lighting, Landscape Lighting.

Ref	ferences
1	Anna Yudina, "Lumitecture-Illuminating Interiors for Designers And Architects", Thames and Hudson, 2016, ISBN: 9780 500 518342
2	Jason Livingston, "Designing with Light", Wiley Publisher, 2014, ISBN: 9781 118 70477
3	Gary Gordon, "Interior Lighting for Designers", 5th edition, Wiley Publishers, 2015, ISBN: 9780 47011 422 3
4	Malcolm Innes, "Portfolio Skills, Lighting for Interior Design", Laurence King Publishing Ltd, London, 2012, ISBN: 9781856698368
5	Mark Karlen, "Lighting Design Basic" Wiley publishers, 2003, ISBN: 0471 38162 4



Program Title	B.Sc. Interior Design and Decoration	Semester	Third Semester
Course Code	ID-P 3.2	Course Credits	2
Course Name	Building Services – Lighting - (Practical)	Contact hours	56 hrs

Course Content:	
Unit-1: Lighting	8 Hrs
Types of lighting, lighting arrangements, lighting positions	
Unit-2: Electrical Services	24 Hrs
Preparation of drawing and presentation of a typical wiring plan for a residential and commercial complete with all the symbols and specifications with legends	space
Unit -3: Lighting Design Documentation	24Hrs
Preparing a lighting layout complete with all the calculations, symbols and specifications, as per for a typical residence and a commercial space	the code



Government of Karnataka

Model Curriculum

Program Title	B.Sc. Interior Design and Decoration	Semester	Third Semester
Course Code	ID-P 3.3	Course Credits	3
Course Name	CAD in Interiors II - (Practical)	Contact hours	84 hrs

OBJECTIVES:

- ❖ To enable the students to understand the skill of computer aided drafting
- ❖ 2D & 3D Skills, Rendering Techniques.

Course Outcomes: On completion of the course, the student will be able to:

CO-1	Perform basic to intermediate image correction to existing images.
CO-2	Enhance images using advance editing tools to create magazine covers
CO-3	Work with the Type tools and panels to type, insert and manage text.
CO-4	Work with layers and masks to manage your projects efficiently

Course Content:

Unit-1: Graphics Editing Software

10 Hrs

Introduction to a Graphics Editing Software user interface, different file types, image types - vector and raster image, file formats and its applications, uses of Graphics Editing Software, colour types and applications, colour modes, selection menu-selection tools, marquee tools, lasso tools, magic wand tools vector and raster tools uses and its applications, image menu-image size and resolution, basic adjustments working with selections, re-touching photos.

Unit -2: Working with selecting tools

14 Hrs

Working with selecting tools and saving, blending grouping and ungrouping of layers, image editing, image manipulation, gradient tool, eraser tool, red eye tool, edit menu, paper sizing, composing images, filters, effects and composition, Layers and composing images, working with multiple files, layers - understanding layers, layer styles, flattening adding to existing images, working with selections, blur, smudge, burn, sponge tools, uses and its applications, adding & editing text.

Unit -3: Renderings 18 Hrs

Pen tool, add anchor point, delete anchor point, convert point, path selection, direct selection tool, shape tools and its application, photo merge and its applications. Filter menu-blur distort, noise, pixelate, automate, export, uses and its application, save as different formats, rendering basics: Output image sizes, exports as jpeg, file handling- save, save as, save copy as, save Selected, archive, summary info, view image file, hold, fetch, and undo/redo.

Unit -4: Introduction –3D Modelling Software

14 Hrs

Introduction to 3D Modelling Software, importance, and application of the tool in interiors. Fundamentals of computers, file menu-saving closing files, importing and exporting files, saving files in different formats.

Unit -5: Object Editing

10 Hrs

Introduction to object editing, types in editing the drawing with different command push/pull, arch, paint bucket, trim, extend, stretch, erase delete, introduction to viewing, types of viewing – zoom, pan, material application, browsing for materials hatch, editing, introduction to grouping, working with grouping ungrouping, creating objects, editing scene.

Unit -6: Viewports & Models

18 Hrs

Introduction about 3d warehouse/ library viewports, camera, extension warehouse, creating models, creating furniture's, lamps, working with complete residence model.

References Ascent, "Autodesk 3ds Max 2017", Fundamentals Publisher, ISBN:13:9781943184477 Kelly L. Murdock's, "Autodesk 3ds max 2017 Complete Reference Guide", Publisher CRC Press, ISBN -13: 978 1 63057 033 0 Lydia Cline, "SketchUp for Interior Design: 3D Visualizing, Designing, and Space Planning", John 3 Wiley & Sons, 2014 Sham Tickoo, "Autodesk 3DS Max 2015, A Comprehensive Guide", Cadcim Technologies, 2014, ISBN:13-978 1 936646 75 David Martin, "Instant Revit: A Quick and Easy Guide to Learning Autodesk Revit 2018", 2017, 5 ISBN:9781 5455 5 384 8 30 Dean Muccio, "AutoCAD 2016 for the Interior Designer", SDC Publications, 2015, ISBN13: 978 1 58503 863 3 7 James M Kirkpatrick, "AUTO CAD for Interior Design and Space", Pearson Education, 2015, ISBN: 9780133144857. Joseph A fiorello, "CAD for Interiors: Beyond the Basics", Wiley publisher, 2010, ISBN:9780 470 8 4388 55



Program Title	de B.Sc. Interior Design and Decoration		Semester	Third Semester
Course Code	ID-OE 3.1	OPEN ELECTIVE	Course Credits	3
Course Name	Arts and Craft for Inte	eriors - (Theory)	Contact hours	42 hrs

OBJECTIVES:

- ❖ To enable the student to understand the importance of crafts of India
- ❖ To understand the various Art forms.

Course Outcomes: On completion of the course, the student will be able to:

CO-1	Identify different art forms for interiors.
CO-2	Know arts of various regions of India.
CO-3	Appreciate traditional crafts of India.
CO-4	Recognize natural fibres used in crafts
CO-5	Distinguish localized crafts of various regions of India.

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Course	COHILEHI.

Unit-1: Art forms for Interiors

15 Hrs

Chapter-1:

Introduction to different art forms used in interiors, Types of paintings – Madhubani, Pattachitra, Pithora, Kalamkari, Mysore, Tanjore, Kalighat, Wall painting of Chhattisgarh

Chapter-2:

Warli, Gond, Murals – Characteristics, Techniques, types of murals – Painted, Abstract and ceramic.

Chapter-3:

Floor decoration- Rangoli- Types of rangoli: Chowk dotted, free hand, flower petal, Alpana, Floating and glass rangoli, Artificial/ flower arrangement in Interiors.

Unit -2: Traditional Crafts of India

Chapter 4:

Traditional crafts of various states of India – Andhra Pradesh (Kalamkari), Karnataka (Chittarahase) Goa, Rajasthan, Gujarat, Kutch, Uttar Pradesh, West Bengal, Bihar, Jammu and Kashmir, etc. Temple arts of Tamil Nadu (Tanjore paintings), Karnataka (Mysore paintings), Orissa (Pattachitra), Kerala (Murals).

Chapter 5:

Terracotta crafts in India. - Karnataka, Bengal, Gujarat, Rajasthan, Orissa & Bihar. Different forms of terracotta arts – jewellery, pottery, crockery, tiles, decorative items.

Chapter 6:

Bamboo and Cane Craft of India Arunachal Pradesh and Mizoram and Tripura, Wood Craft of Jharkhand, Lavo Mandri of Goa.

Unit -3: Textiles and Other materials crafts

12 Hrs

Chapter-7:

Traditional and modern materials and methods. Tie and die printing, batik printing, appliqué, macramé and braiding

Chapter-8:

Weaving and Embroidery of Assam, Weaving of Meghalaya, Chikankari of Lucknow, Zari Work of Gujarat, Wool weaving of Himachal Pradesh, Pashmina Shawls of Jammu and Kashmir,

Chapter-9:

Bidriware of Karnataka, Dhokra metal casting of West Bengal, Pembarti Sheet metal work of Telangana, Blue Pottery of Rajasthan Kondapalli dolls of Andhra Pradesh, Coconut shell handicraft of Kerala, Wood Carving of Manipur

Ref	References	
1	The Fundamentals of Architecture (Fundamentals (Ava)) (Paperback) by Lorraine Farrelly (Author)	
2	Francis D.K.Ching - Architecture - Form Space and Order Van Nostrand Reinhold Co.,	
3	Design Methods (Architecture) (Paperback), by John Chris Jones (Author).	
4	How Designers Think, Fourth Edition: The Design Process Demystified (Paperback) by Bryan Lawson	
5	Basics Design Ideas (Paperback) by Bert Bielefeld (Author), Sebastian El khouli (Author)	
6	Graphic Thinking for Architects, Paul Laseau.	

Ref	References	
7	Design Drawing, Francis D. K. Ching.	
8	Foundations of Art and Design (Paperback) by Alan Pipes (Author)	
9	John W.Mills - The Technique of Sculpture, B.T.Batsford Limited, New York - Reinhold Publishing Corporation, London, 1966.	
10	C.Lawrence Bunchy - Acrylic for Sculpture and Design, 450, West 33rd Street, New York, N.Y.10001, 1972.	
11	The Elements of Graphic Design: Space, Unity, Page Architecture, and Type (Paperback) by Alexander W. White (Author)	
12	Geometry of Design: Studies in Proportion and Composition, Kimberly Elam.David Gibson	



Program Title	e B.Sc. Interior Design and Decoration		Semester	Third Semester
Course Code	ID-OE 3.2	OPEN ELECTIVE	Course Credits	3
Course Name	Green Interiors - (The	ory)	Contact hours	42 hrs

OBJECTIVES:

- ❖ Understand the importance of green building technology
- ❖ Acquired knowledge in recent green building materials and to trap rain water.

Course Outcomes: On completion of the course, the student will be able to:

	ı ,
CO-1	Identify different art forms for interiors.
CO-2	Know arts of various regions of India.
CO-3	Appreciate traditional crafts of India.
CO-4	Recognize natural fibres used in crafts
CO-5	Distinguish localized crafts of various regions of India.

Course Content:	
Unit-1: Materials	15 Hrs

Chapter-1:

Introduction to Green interiors, definition and concept of Green interiors, aims and objectives. Importance and necessity of Green interiors. Brief history and development of green interiors. Principles of green interiors

Chapter-2:

Materials and finishes used in green building – Bamboo, straw, wood, dimension stone, Recycled stone, non-toxic metals, Earth blocks-compressed, rammed, baked; vermiculites, flax linen, sisal, wood fibres, cork, coconut, polyurethane block.

Chapter-3:

Green building practices and technologies. Roof, walls, floors – electrical, plumbing, windows, and doors, heating, ventilation, and air conditioning (HVAC), insulation, Interior finishes, landscaping

Unit -2: Renewable Energy Resources

Chapter 4:

Renewable energy resources – meaning and importance, solar energy – advantages, principles, and functions of solar devices – solar room heater, solar lights, solar water heater, solar air conditioners.

Chapter 5:

Water conservation - Rainwater harvesting-importance, requirements of rainwater harvesting structure, types of rain water harvesting systems, advantages.

Chapter 6:

Parameters to be considered for making buildings green, basic concepts of building design, systems design, and controls.

Unit -3: Green Building Design

12 Hrs

Chapter-7:

Heat Insulation and Building Density, Solar Protection, Glare Protection, Daylight Utilization, Noise Protection

Chapter-8:

Green Building Design, Reducing Material Impact, Increasing Energy Efficiency, Green wall system, Roofing system, green floor finish system

Chapter-9:

Rating systems of green buildings, green buildings certification, and carbon credits. Certification systems and certification authority-IGBC, GRIHA, BEE

Ref	References		
1	Diesendorf, Mark (2007). Greenhouse Solutions with Sustainable Energy.		
2	Faulkner, R., and Faulkner. S, (1987) Inside Today's Home, Rinehart publishing House, New York		
3	Rai G.D (1996), Solar Energy Utilization, Khanna Publishers, Delhi.		
4	Riggs, J.R. (1992) Materials and components of Interior Design, Regents Hall, New Jersey		
5	Roa, M.P. (1998), Interior design, principles and practice, standard publishers, Delhi.		
6	Abbaszadeh, S, L. Zagreus, D. Lehrer, and C. Huizenga, "Occupant Satisfaction with Indoor		
	Environmental Quality in Green Buildings",		
7	4. Miles Keeping, David Shiers, "Sustainable Building Design: Principles and Practice",		
8	WileyBlackwell, 1st edition, 2017. 5. Susan M Winchip, "Sustainable Design for Interior		
	Environment", Fairchild Publication, 2nd revised edition, 2011.		
9	WileyBlackwell, 1st edition, 2017. 5. Susan M Winchip, "Sustainable Design for Interior		

Environment", Fairchild Publication, 2nd revised edition, 2011.



Program Title	B.Sc. Interior Design and Decoration	Semester	Fourth Semester
Course Code	ID-T 4.1	Course Credits	3
Course Name	History of Interiors - (Theory)	Contact hours	42 hrs

OBJECTIVES:

❖ To study the History and its influences on social and cultural aspects on interior design.

Course Outcomes: On completion of the course, the student will be able to:

- Understanding of the theory and methodologies associated with Interior design.
- Acquire basic skills for analysing and describing interiors. Gain an appreciation for the built environment, its history, its development over time, and its conservation and interpretation which is very crucial for the professional practice in future

Course Content:	
Unit-1: History of interiors and furniture of the ancient world	15 Hrs

Chapter-1:

Elements of style and determinants of architectural and interior environments, including furniture styles of ancient civilizations. Greek, Roman, Egyptian. Early medieval period – Early Christian, Byzantine, Gothic.

Chapter-2:

Elements of style and determinants of architectural and interior environments, including furniture styles of Romanesque, Renaissance, Baroque, Rococo & Colonial.

Chapter-3:

Elements of style and determinants of architectural and interior environments, including furniture styles of Regency, Neoclassical, Art Nouveau, Art deco style, the arts and craft movement, and designers.

Unit -2: Chinese & Indian Furniture style 15 Hrs

Chapter 4:

Elements of style and determinants of architectural and interior environments, including furniture styles of Oriental style – Chinese and Japanese.

Chapter 5:

Elements of style and determinants of architectural and interior environments, including furniture styles of Indian Interiors: Hindu style – Rajasthani, Saharanpur, Dravidian style, Jain style, Buddhist style.

Chapter 6:

Elements of style and determinants of architectural and interior environments, including furniture styles of Indian Interiors: Islamic style, Indo-Saracenic style.

Unit -3: Modern & Post Modern

12 Hrs

Chapter-7:

English furniture from 16th to 18th century. Tudor, Stuart, Jacobean, Restoration period, Queen Ann period, Gregorian period, Chippendale, Sheraton.

Chapter-8:

Modern era – Elements of style, furniture elements and interior in Art movements' cubism, surrealism, romanticism, mid-century modern.

Chapter-9:

Postmodern era Industrial style Bauhaus, Charles and Ray Eames

Ref	ferences
1	Alan Barnard & Jonathan Spencer, Encyclopedia of Social and Cultural Anthropology, Taylor &
	Francis, 1996
2	Alan Colquhoun, Modern Architecture, History of Arts, First Edition, Paperback publishers, ISBN:
	13978-0192842268
3	Barry Burgdoll, European Architecture (1750-1890) Oxford History of Arts, First Edition, Paperback
	publishers, ISBN: 13978-0192842220
4	Charles. V. Stanford, Studies in Indian society, Culture and Religion, South Asia Books, 1988.
5	Clifford Geertz, the Interpretation of Cultures, Basic Books, 1977.
6	Human Behaviour in the Social Environment: A Social Systems Approach, Gary Lowe, Irl Carter,
	Ralph Anderson, Aldine Transaction, 1999
7	Kenneth Frampton, Modern Architecture: A Critical History, Fourth Edition, Thames and Hudson,
	ISBN: 13978-0500203958
8	Kumar Raj (Ed) Essays on Indian Art and Architecture. Discovery pub., New Delhi, 2003
9	Niggel Rapport, Social and Cultural Anthropology: The Key Concepts, Routledge, 2000



Program Title	B.Sc. Interior Design and Decoration	Semester	Fourth Semester
Course Code	ID-P 4.1	Course Credits	2
Course Name	History of Interiors - (Practical)	Contact hours	56 hrs

Course Content:			
Unit-1: Greek, Roman	8 Hrs		
Sketching of Furniture of Ancient Style – Greek, Roman, Gothic style & Egyptian.			
Unit -2: Renaissance			
Sketching and rendering of Renaissance period – Furniture Baroque, Neo classical, Regency, Rococo and			
Colonial.			
Unit -3: 20th Century	24 Hrs		
Sketching and Rendering of English Furniture, Sketching and rendering of 20th Century Furniture &			
Sketching of Indian Furniture- Hindu, Islamic, Saracenic, Rajasthan, Dravidian,			



Program Title	B.Sc. Interior Design and Decoration	Semester	Fourth Semester
Course Code	ID-T 4.2	Course Credits	3
Course Name	Construction Detailing - (Theory)	Contact hours	42 hrs

OBJECTIVES:

- ❖ To enable the students, understand the construction in detail and to learn about the specific.
- ***** Each students the various building components design, uses and detailing methods.
- Provide students with opportunities to develop basic supervision skills with respect to simple structures and high-rise buildings

Course Outcomes: On completion of the course, the student will be able to:

CO1: This is an advanced study of building component, their design, and detailing methods. Building

CO2: Do a careful detailing of various components of buildings.

CO3: Supervise the construction of buildings and their components.

CO4: Identify snags in defective construction detailing.

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Course	Cont	ent

Unit-1: Arches, Lintels, Carpentry Joints

15 Hrs

Chapter-1:

Introduction to arches, and lintels terminology, classification of arch - according to shape, classification of arch - according to material, classification of arch according to number of centres.

Chapter-2:

Introduction to lintels - classification according to material, advantages, and its disadvantages,

Chapter-3:

Introduction to carpentry joints principles, classification and terminology in joints, lengthening & widening joints, and angle & oblique joints, bearing & framing joints.

Unit -2: Doors, Windows & Ventilators

Chapter 4:

Introduction to doors: Terminology, evolution of doors, types of doors based on materials – wooden metal & PVC doors, classification of doors based on method - rolling shutters, collapsible doors, sliding doors, special doors and its applications

Chapter 5:

Introduction to windows, terminology, evolution of windows, types of windows based on materials, types of windows based on method, types of windows based on design, special types of windows and its applications and benefits

Chapter 6:

Introduction to Ventilators, types, uses, advantages, and disadvantages. Hardware fixtures used in Doors, windows & Ventilators, types, materials, and uses of fixtures.

Unit -3: Staircases, False Ceilings, & Roofs

12 Hrs

Chapter-7:

Introduction to staircases, terminology, types of stairs – straight, dog-legged, circular, spiral, stairs of different material – timber, steel, RCC, balustrades and handrails.

Chapter-8:

Introduction to false ceiling, types of false ceiling & materials used for false ceiling, wooden & gypsum board false ceiling, plaster of Paris false ceiling, PVC and decorative sheets false ceiling, application and its advantages

Chapter-9:

Types of roofs, concept of flat, pitched and arched roofs. Glossary of terms for pitched roofs - batten, eaves, facia board, gable, hip, lap, purlin, rafter, rag bolt, valley, ridge, rainwater gutter, anchoring bolts, Roof drainage, Roof treatment-brick Koba

References

- Arora, S.P. Bindra, "Text book of Building Construction", Dhanpat Rai Publications, New Delhi, 2010.
- 2 | Gurcharan Singh, "Building materials", Standard Publishers Distributors, Delhi, 2016
- 3 Rangwala, "Building Construction", Charotar Publishing House Pvt. Ltd., Gujarat, 2008
- 4 Punmia, B.C.; A Textbook of Building Construction; Laxmi Publications (P) Ltd; New Delhi; 2005.
- 5 | Sushil Kumar, "Building Construction", Standard Publishers Distributors, Delhi, 2006



Program Title	B.Sc. Interior Design and Decoration	Semester	Fourth Semester
Course Code	ID-P 4.2	Course Credits	2
Course Name	Construction Detailing - (Practical)	Contact hours	56 hrs

Course Content:			
Unit-1: Arches, Lintels, Joints	8 Hrs		
Drafting different types of arches (any 5 based on points and styles) and lintels (Any 4 on Material all the necessary details. Drafting of different types of joints, (any 10)			
Unit -2: Doors, Windows			
Drafting different types of doors (any 5) and windows with all the necessary details (any 5)			
Unit -3: staircases, False Ceiling, Lift Interiors			
False ceiling details (any 3). Drafting different types of staircases based on material and design with all the			
necessary details (any 3 each) Lift Interiors any materials (anyone)			



Program Title	B.Sc. Interior Design and Decoration	Semester	Fourth Semester
Course Code	ID-P 4.3	Course Credits	3
Course Name	Interior Design – Residence- (Practical)	Contact hours	84 hrs

OBJECTIVES:

- To enable the students to learn the Process of interior design and to understand the relationship of space with that of function for basic living activity.
- ❖ To enable the students to learn to convert creative ideas into practical designs

Course Outcomes: On completion of the course, the student will be able to:

CO1: Comprehend and communicate basic concepts and theories of residential interiors.

CO2: Apply theories and tools to analyse and communicate studio projects.

CO3: Conceptualize new designs and resolve real-life projects/challenges with confidence

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('Allrea	Content:
Course	Comtent.

Unit-1: Case study & Literature Study

12 Hrs

Introduction to Designing of a given Interior spaces such as layout & working methods. Case studies and Literature studies for a given project Interiors and studying various aspects like Requirements, Planning, Circulation, Aesthetics, Furniture design, Material adopted etc.

Unit -2: Data Collection 12 Hrs

Designing the Interior of a given project includes, measured drawings of the site, Observation of special design elements, Analysis of the data collected & creating a design program. Area calculation,

Unit -3: Requirement & Area Analysis

14 Hrs

Client Profile, Requirements, Area Analysis, Bubble Diagram, Block Diagram, Site Analysis

Unit -4: Concept Development

14 Hrs

Mind mapping of the design program, arriving and presentation of conceptual design with help of sketches, material samples etc.

Unit -5: Design Development

16 Hrs

Development of Space with furniture Layout, Flooring Layout, Lighting and wiring layout with legend

Unit -6: Presentation Drawings

16 Hrs

Converting conceptual design into final drawings suitable for execution with anthropometrics. Development of Plans, Elevations, Sections. Working Drawings

References

- Ernst and Peter Neufert, "Neufert Architect's Data", Wiley Blackwell Publication, United Kingdom, 2012 ISBN:9781 4051 9253 8
- Joseph De Chiara, Julius Perero and Martin Zelnik, "Time Saver Standards for Interior design and Space Planning", McGraw Hill, London, 2011, ISBN:978 0 07170 465 6
- Joseph De Chiara, Michael J Crosbie, "Time Savers Standards for Building Types", 4 editions, McGraw Hill Education, 2014, ISBN: 9780070163874
- 4 Joseph De Chiara, Julius Panero, "Standards for Interior Design and Space Planning", McGraw-Hill Professional, 2011, ISBN: 9780 07170 465 6



Program Title	B.Sc. Interior Design and Decoration		Semester	Fourth Semester
Course Code	ID-OE 4.1	OPEN ELECTIVE	Course Credits	3
Course Name	Home Automation - (Theory)		Contact hours	42 hrs

OBJECTIVES:

- ❖ To learn about various controls or monitoring signals from different appliances, or basic services.
- ❖ To learn about energy efficiency and different networking and fire alarm systems

Course Outcomes: On completion of the course, the student will be able to:

CO1: Develop project based on automated systems

CO2: Build own Bluetooth operated Home Automation System

CO3: Get hands-on experience on control devices and electrical loads

CO4: Program and test Home Automation

Course C	ontent:
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Unit-1: Fundamentals of Building Management System

15 Hrs

Chapter-1

Home automation – Introduction, definitions, objectives, scope, concept of green & smart design, energy management systems, MEP design fundamentals, advantages and disadvantages

Chapter-2

Automation in Interiors – introduction, definitions advantages and disadvantages. Sensors –classification – based on types and requirement, design consideration, advantages, and disadvantages

Chapter-3

Introduction to CCTV Systems, Types of CCTV Systems, Camera Selection and Design Concepts, Camera Types, Camera Specifications & Features. Introduction to Digital Video Recorder, Setting a DVR, DVR Structure and Sections, Classification Of DVR, Special DVRs, Networking.

Unit -2: Intrusion Detection & Alarm System

Chapter-4

Smart homes – introduction, definition, terminologies, elements of smart homes advantages and disadvantages. Smart appliances – introduction, advantages and disadvantages

Chapter-5

Smart kitchens – introduction, definition, advantages and disadvantages. Smart gadgets – Bluetooth operated appliances, Alexa or Google voice controls, sensor based plumbing fixtures

Chapter-6

Sensor based Lighting systems – introduction, types, controls, advantages, disadvantages. Energy efficient lighting system – introduction, types of sensors, advantages and disadvantages

Unit -3: Networking & Fire Alarm Systems & Panels

12 Hrs

Chapter-7

Smart Communication – Introduction, definitions, importance of smart communication, types, and properties. Wireless communication systems – uses in homes, types, advantages, and disadvantages.

Chapter-8

Introduction to concept of Cloud Services - LAN, WAN, implementing of networks, Introduction to Cloud services - sharing of files, printing and scanning, network protocols- TCP/IP, Ethernet, Modbus

Chapter-9

Introduction To Fire Alarm System, Need For Fire Alarm System, Types Of Fire Detectors Types Of Fire Panels, Conventional And Addressable System, Input-Output Modules, Indicators & Annunciators Fire Cables And Classes Of Wiring, Fire Alarm Wiring And Configuration, Conventional Addressable Fire Panel Interfacing With access control System, Sensors-heat, smoke, pir, conventional fire alarm panels, addressable fire alarm panels, cabling, safety standards, alarms, pa systems, recorders

References

- 1 Gerard O'Driscoll, In the Essential Guide to Smart Home Automation Safety & Security.
- O'Driscoll Essential Guide to Smart Bulbs & Lighting Control Essential Guide to Smart Home Entertainment James Gerhart, Home Automation & Wiring.
- 3 Nick-Vandome, Smart Homes in easy steps: Master smart technology for your home
- 4 Donald Norris, Home Automation with Raspberry Pi: Projects Using Google Home, Amazon Echo, and Other Intelligent Personal Assistants.



Program Title	B.Sc. Interior Design and Decoration		Semester	Fourth Semester
Course Code	ID-OE 4.2	OPEN ELECTIVE	Course Credits	3
Course Name	Basics of Lighting - (Theory)		Contact hours	42 hrs

OBJECTIVES:

- ❖ To enable the students to understand basic principles of illumination and application of natural and artificial lighting in interiors.
- ❖ This subject will give basic understanding about the science behind lighting design.

Course Outcomes: On completion of the course, the student will be able to:

Course Outcomes: On completion of the course, the student will be able to:		
CO-1	Identify lighting requirements for a range of interior situations in terms of the needs of occupants and to meet statutory regulations.	
CO-2	Apply advanced illumination engineering techniques to ensure lighting installations meet specified design objectives	
CO-3	Implement lighting designs for selected projects	
CO-4	Apply energy saving design techniques by integrating daylight in interior lighting design.	
CO-5	Apply creative lighting techniques to selected scenarios.	
CO-6	Implement emergency lighting designs to fulfil statutory requirements.	

Course Content:		
Unit-1: Lighting	12 Hrs	

Chapter 1

Introduction to natural lighting, daylight factor, recommended daylight factors for interiors, calculation of the opening for natural lighting, guidelines for good natural lighting, factors affecting illumination reflection and transmission and their applications, advantages, and disadvantages

Chapter 2

Introduction to artificial lighting, different types of lighting, types of arrangements, principles of lighting, luminous intensity of light sources, position of lighting points, their importance, advantages and disadvantages.

Chapter 3

Eco lighting: Introduction, types, materials and application of LED and solar

Unit -2: Electrical Services

15 Hrs

Chapter 4

Introduction to commonly used terminology – Voltage, Current, Power, Connected Load, Max. Demand, Load Factors, Diversity Factor etc., Importance of Electrical Services and Its implications on building design. Supply and distribution of electricity to buildings: Brief introduction to various Sources for Electricity generation. Introduction to Transmission and Distribution system

Chapter 5

Electrical Services - Protection Systems Switchgear & Protection Devices - Fuses, Breakers: Miniature Circuit Breakers; Earth Leakage Circuit Breakers; Molded Case Circuit Breakers & Air Circuit Breakers and Protection Relays. Wiring process, introduction to wiring, types of wiring, benefits, importance, and applications. Wiring of a typical residential unit, wiring layout of a typical commercial space.

Chapter 6

Earthing & Lightning Protection System: Definition, Purpose; Types of Earthing Systems, Factors affecting selection and system specification - Type of Soil, water table, soil resistivity etc. Brief about new advances in Earthing systems; Lightning system design - Factors affecting the system specification, basic rules as per NBC and other relevant codes.

Unit -3: Quality & Quantity of Lighting design

15 Hrs

Chapter 7

Fundamentals Quality & Quantity of Lighting; Recommended Lux Levels; Type of Lamps –Incandescent, Discharge Lamps, Fluorescent, CFL, LED and OLED. Integration of Day lighting with Artificial Lighting, Control Systems, Laws of illumination

Chapter 8

Recommended level of illumination for various spaces as per the relevant building codes, guidelines for lighting design, lumen method of design. Preparation of lighting layouts for a typical residential unit and commercial unit.

Chapter 9

Techniques, Principles and Applications: Lighting Methods - Ambient, Task & Accent lighting; Systems of Luminaries - Up-Lighting, Down-Lighting, Spot Lighting etc.; Street Lighting, Façade Lighting, Landscape Lighting.

References				
1	Anna Yudina, "Lumitecture-Illuminating Interiors for Designers And Architects", Thames and Hudson, 2016, ISBN: 9780 500 518342			
2	Jason Livingston, "Designing with Light", Wiley Publisher, 2014, ISBN: 9781 118 70477			
3	Gary Gordon, "Interior Lighting for Designers", 5th edition, Wiley Publishers, 2015, ISBN: 9780 47011 422 3			
4	Malcolm Innes, "Portfolio Skills, Lighting for Interior Design", Laurence King Publishing Ltd, London, 2012, ISBN: 9781856698368			
5	Mark Karlen, "Lighting Design Basic" Wiley publishers, 2003, ISBN: 0471 38162 4			