

BENGALURU NORTH UNIVERSITY

Proceedings of the Board of Studies meeting in Fashion & Apparel Design (UG) held on 15th October 2022 at 11 AM in the Department of Apparel Technology & Management, Bangalore University, Bengaluru.

The Chairman welcomed all the members and the agenda was taken up for discussion.

Item No. 1. Approval of the scheme and syllabus of III & IV Semesters B.Sc. (Fashion & Apparel Design) course.

The members deliberated on the scheme and syllabus of III and IV Semesters proposed by the subject expert committee as per NEP-2020. After thorough discussion and after incorporating the necessary changes the Board unanimously approved the scheme and syllabus of III & IV Semesters as per ~~IC~~^{IC3} model proposed by Karnataka Higher Education Council, Govt. of Karnataka to be implemented from the academic year 2022-23.

Item No. 2. Approval of the scheme and syllabus of III & IV Semesters B.Sc. (Interior Design & Decoration) course.

The members deliberated on the scheme and syllabus of III and IV Semesters proposed by the subject expert committee as per NEP-2020. After thorough discussion and after incorporating the necessary changes the Board unanimously approved the scheme and syllabus of III & IV Semesters as per IC model proposed by Karnataka Higher Education Council, Govt. of Karnataka to be implemented from the academic year 2022-23.

Item No. 3. Approval of panel of Examiners for B.Sc. (Fashion & Apparel Design) for the year 2021-22

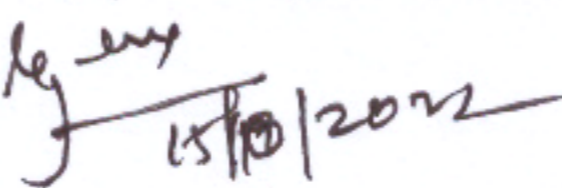
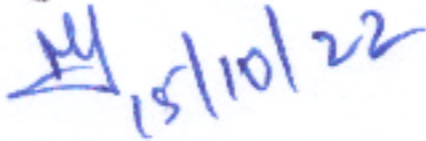
The list of panel of examiners for B.Sc. (Fashion & Apparel Design) course for the year 2022-23 was placed before the members and their suggestions were incorporated and approved.

Item No. 4. Approval of panel of Examiners for B.Sc. (Interior Design and Decoration) for the year 2022-23

The list of panel of examiners for B.Sc. (Interior Design & Decoration) course for the year 2022-23 was placed before the members and their suggestions were incorporated and approved.

The Chairman thanked all the members for their active participation in the meeting.

Members Present:

Dr. R. Sudhakar	Chairperson	
Dr. HL Vijayakumar	Member	 15/10/2022
Dr. Shashikala H	Member	 15/10/22
Sri Balakrishna Shetty	Member	Approved taken online

BENGALURU NORTH UNIVERSITY

CHOICE BASED CREDIT SYSTEM

**(Semester Scheme with Multiple Entry and Exit Options
for Under Graduate Course)**

Syllabus for B.Sc. (Interior Design & Decoration)

(III & IV Semesters)

2021-2022 onwards

Scheme of Examination

B.Sc. (INTERIOR DESIGN AND DECORATION)								
SEMESTER – III								
CODE	Course	Theory/	Instruction	Duration of Exam (Hrs)	Marks			CREDIT
		Practical	Hrs/wk		IA	Exam	Total	
	Language I	Theory	4	2.5	40	60	100	3
	Language II	Theory	4	2.5	40	60	100	3
ID-T 3.1	Space Planning in Interiors	Theory	3	2.5	40	60	100	3
ID-P 3.1		Practical	3	3	25	25	50	2
ID-T 3.2	Building Services- Lighting	Theory	3	2.5	40	60	100	3
ID-T 3.2		Practical	3	3	25	25	50	2
ID-P.3.3	CAD in Interiors-II	Practical	6	4	50	50	100	3
ID OE-3 /IC	Open Elective 3/ Indian Constitution	Theory	3	2.5	40	60	100	3
	SEC	Theory+ Practical	1+2	2	25	25	50	2
	PE-Sports	Practical	2	-	25	-	25	1
	NCC/NSS/R&R/CA	Practical	2	-	25	-	25	1
				TOTAL	375	425	800	26

B.Sc. (FASHION & APPAREL DESIGN)								
SEMESTER – IV								
CODE	Course	Theory/	Instructio	Duration of Exam (Hrs)	MARKS			CREDIT
		Practical	n Hrs/wk		IA	Exam	Total	
	Language I	Theory	4	2.5	40	60	100	3
	Language II	Theory	4	2.5	40	60	100	3
ID-T 4.1	History of Interiors	Theory	3	2.5	40	60	100	3
ID-P 4.1		Practical	3	3	25	25	50	2
ID-T 4.2	Construction	Theory	3	2.5	40	60	100	3
ID-P 4.2	Detailing	Practical	3	3	25	25	50	2
ID-P 4.3	Interior Design- Residence	Practical	6	4	50	50	100	3
ID- OE-3 /IC	Open Elective 3/ Indian Constitution	Theory	3	2.5	40	60	100	3
	SEC	Theory+ Practical	1+2	2	25	25	50	2
	PE-Sports	Practical	2	-	25	-	25	1
	NCC/NSS/R&R/CA	Practical	2	-	25	-	25	1
				TOTAL	375	425	800	26

Open Elective: III / IV Semester: OE 3 Basics of Lighting

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 successful 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.

Course Content

Unit 1: Introduction	12 Hrs
<p>Chapter 1 Space planning, terms and intent, necessity of space planning, synthesis of space planning, design program.</p>	

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, 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 with examples.	
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, generating concepts, present preliminaries, developing a rough floor plan, circulation spaces, construction reality, spatial quality, basic room allocations, storage, furniture and equipments.	
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, data line, 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.	

References

1	Ching, Francis D.K.; Binggeli, Cork; Interior Design Illustrated; Willey Publications; New York; 2004.
2	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.
3	McGraw, Time saver Standards for Architectural Design Data, Publications, Delhi, 2011.
4	Rao M, Pratap, 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: Steps in Space Planning	20 Hrs
Area calculation, bubble & circulation diagram, block diagram, development of concepts for a café, a small residence, or a small office space.	
Unit 2: 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 3: Design Documentation	20Hrs
Preparing the complete design program, planning steps, design drawings and documentation for a small project studio apartment / retail showroom/café/small residence/small office space.	

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.
- ❖ To facilitate basic understanding about the science behind lighting design.

Course Outcomes: On successful 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 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
<p>Chapter 1</p> <p>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.</p>	

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 lighting systems.	
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, moulded 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	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. Symbols and legends used in electrical designs.	

Chapter 9

Principles and application techniques. 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	Gary Gordon, “Interior Lighting for Designers”, 5th edition, Wiley Publishers, 2015, ISBN: 9780 47011 422 3
3	Jason Livingston, “Designing with Light”, Wiley Publisher, 2014, ISBN: 9781 118 70477
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
Illustrate 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 space complete with all the symbols and specifications with legends	
Unit 3: Lighting Design Documentation	24Hrs
Preparing a lighting layout complete with all the calculations, symbols and specifications, as per the code for a typical residence and a commercial space	

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 students to understand the skill of computer aided drafting.
- ❖ To enable students to understand 2D & 3D CAD drafting skills & rendering techniques.

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

CO-1	Perform basic to intermediate image correction to existing images.
CO-2	Work with the type tools and panels to type, insert and manage text.
CO-3	Work with 3D modelling tools, layers and masks to manage projects efficiently
CO-4	Work with industry standard libraries.

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, lamps, working with complete residence model.	

References	
1	Ascent, “Autodesk 3ds Max 2017”, Fundamentals Publisher, ISBN:13:9781943184477
2	David Martin, “Instant Revit: A Quick and Easy Guide to Learning Autodesk Revit 2018”, 2017, ISBN:9781 5455 5 384 8 30
3	Dean Muccio, “AutoCAD 2016 for the Interior Designer”, SDC Publications, 2015, ISBN13: 978 1 58503 863 3
4	James M Kirkpatrick, “AUTO CAD for Interior Design and Space”, Pearson Education, 2015, ISBN: 9780133144857.
5	Kelly L. Murdock’s, “Autodesk 3ds max 2017 Complete Reference Guide”, Publisher CRC Press, ISBN -13: 978 1 63057 033 0
6	Lydia Cline, “Sketch Up for Interior Design: 3D Visualizing, Designing, and Space Planning”, John Wiley & Sons, 2014
7	Suining Ding”, Photoshop for Interior Designers”, A nonverbal communication, Bloomsbury Publishers 2014 ISBN-13 978-1609015442.

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 of interior designing.

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

CO-1	Understand the theory and methodologies associated with Interior design.
CO-2	Acquire basic skills for analysing and describing interiors.
CO-3	Gain an appreciation for the built environment, its history, development over time, and its conservation.

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 its designer.	
Unit 2: Chinese & Indian Furniture style	15 Hrs
Chapter 4: Elements of style and determinants of architectural and interior environments, including Oriental style – Chinese and Japanese furniture.	
Chapter 5: Elements of style and determinants of architectural and interior environments, including furniture styles	

of Indian Interiors: – Rajasthani, Saharanpur, Dravidian, Jain, Buddhist and Bamboo furniture of Northeast.	
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.	

References	
1	Alan Barnard & Jonathan Spencer, Encyclopaedia 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.

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	24 Hrs
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 components.
- ❖ To introduce students to various building components design, uses and detailing methods.
- ❖ To provide students with opportunities to develop basic supervision skills with respect to simple structures.

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

CO1: Study of building component, their design, and detailing methods.

CO2: Use various components of buildings.

CO3: Supervise the construction of buildings and their components.

CO4: Identify snags in defective construction.

Course Content

Unit 1: Arches, Lintels, Carpentry Joints

15 Hrs

Chapter-1:

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

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, angle & oblique joints, bearing & framing joints.

Unit 2: Doors, Windows & Ventilators	15 Hrs
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. Hardware used in doors.	
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. Hardware used in windows.	
Chapter 6: Introduction to ventilators, types, uses, advantages, and disadvantages. Hardware fixtures used in ventilators, types, materials, and uses of fixtures.	
Unit3: 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: Introduction to roofs, types of roofs, concept of flat, pitched and arched roofs. Glossary of terms for pitched roofs - batten, eaves, fascia board, gable, hip, lap, purlin, rafter, rag bolt, valley, ridge, rainwater gutter, anchoring bolts, roof drainage, roof treatment -brick bat Koba.	

References	
1	Arora, S.P. Bindra, “Textbook of Building Construction”, Dhanpat Rai Publications, New Delhi, 2010.
2	Gurcharan Singh, “Building materials”, Standard Publishers Distributors, Delhi, 2016.
3	Punmia, B.C.; A Textbook of Building Construction; Laxmi Publications (P) Ltd; New Delhi; 2005.
4	Rangwala, “Building Construction”, Charotar Publishing House Pvt. Ltd., Gujarat, 2008.
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 Materials) with all the necessary details. Drafting of different types of joints (any10).	
Unit 2: Doors, Windows	24 Hrs
Drafting different types of doors (any 5) and windows with all the necessary details (any 5).	
Unit 3: Staircases, False Ceiling, Lift Interiors	24 Hrs
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 of any material (any one).	

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 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 for residence.

Course Outcomes: On successful 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.

Course Content	
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

1	Ernst and Peter Neufert, "Neufert Architect's Data", Wiley Blackwell Publication, United Kingdom, 2012 ISBN:9781 4051 9253 8
2	Joseph De Chiara, Julius Panero, "Standards for Interior Design and Space Planning", McGraw-Hill Professional, 2011, ISBN: 9780 07170 465 6
3	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
4	Joseph De Chiara, Michael J Crosbie, "Time Savers Standards for Building Types", 4 editions, McGraw Hill Education, 2014, ISBN: 9780070163874
5	Maureen Mitton "Residential Interior Design "Willey, 4 th edition Jan 2022 ISBN-10-1119653428
6	Sarjoo Patel, Khyati Trivedi, Kavita Shah & Nidhi Desai, Residential Space Designing," Authorspress, India 2020.

Program Title	B.Sc. Interior Design and Decoration		Semester	Third / Fourth Semester
Course Code	ID-T OE 3	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.
- ❖ To enable understanding of the science behind lighting design.

Course Outcomes: On successful 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 illumination techniques to ensure lighting.
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, guidelines for good natural lighting, advantages, and disadvantages of natural lighting.	
Chapter 2 Introduction to artificial lighting, different types of lighting, types of arrangements, principles of lighting, importance, advantages, and disadvantages of artificial lighting.	
Chapter 3 Eco lighting: Introduction, types, materials and application of LED and solar lighting, advantages, and disadvantages of solar lighting.	

Unit 2: Electrical Services	15 Hrs
Chapter 4	
Introduction to commonly used terminology – Voltage, current, power, connected load, max. load. Importance of electrical services and its implications on building design. 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 - circuit breakers -introduction to wiring, types of wiring, benefits, importance, and applications.	
Chapter 6	
Earthing & lightning protection system - Definition, purpose - types of earthing systems, factors affecting selection. Benefits of earthing.	
Unit 3: Types of Lighting	15 Hrs
Chapter 7	
Introduction to lighting, types of lighting, type of lamps –Incandescent, discharge lamps, fluorescent, CFL, LED and OLED. Integration of day lighting with artificial lighting.	
Chapter 8	
Guidelines for lighting design, symbols, and legends in electrical design.	
Chapter 9	
Applications of lighting methods - Ambient, task & accent lighting; systems of luminaries - up-lighting, down-lighting, spot lighting etc.; street lighting, façade lighting, landscape lighting.	

References	
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