



THIRUVALLUVAR UNIVERSITY

SERKKADU, VELLORE-632115

B.Sc. INTERIOR DESIGN AND DECORATION

SYLLABUS

FROM THE ACADEMIC YEAR

2023 - 2024

Content:

- 1. Introduction to the Programme**
- 2. Highlights of the Programme**
- 3. Programme Outcomes (PO) of UG Degree Programme**
- 4. Programme Specific Outcomes (PSO) of UG Degree Programme**
- 5. Teaching Methodologies (Common for both UG and PG)**
- 6. Template for Curriculum Design for UG Degree Programme**
- 7. Credit Distribution for UG Programme**
- 8. Consolidated Semester Wise and Component Wise Credit Distribution**
- 9. Methods of Evaluation**

Under-Graduate Programme

B.Sc. Interior Design and Decor

INTRODUCTION

Home Science is both multidisciplinary and interdisciplinary in its context encompassing five major disciplines which include Family Resource Management, Foods and Nutrition, Textiles and Clothing, Human Development, and Extension Education. Each discipline has one or more specific areas of specialization. Each specialization under Home Science offers a wide array of courses that prepare students for employment or setting up an enterprise in a wide range of sectors such as healthcare, childcare, food and hospitality, textiles, home and office interiors. Further, all courses of the programme are designed to improve the lifestyle of the individual, family and society that could most certainly contribute to the holistic development of the community.

The course curriculum for this programme has been planned to improve the employability potential and increase the scope for higher education. Globalization has created a market for jobs with different skills in the areas of food and health care industries and can thus contribute to the professional growth of students enrolled in this programme. This programme facilitates action-based research in various fields with the advantage of nurturing critical and analytical thinking that paves the way for innovation and entrepreneurship.

The interior design profession plays a crucial role in shaping our built environment and enhancing the quality of our lives. Interior designers have the expertise to optimize the functionality and usability of interior spaces. Well-designed interiors have a direct impact on our well-being and quality of life. Interior designers consider aspects such as ergonomics, acoustics, and lighting to create spaces that promote comfort, productivity, and a sense of well-being. With a growing focus on sustainable design practices, interior designers are playing a vital role in incorporating eco-friendly materials, energy-efficient systems, and sustainable strategies into their projects. In commercial spaces, interior design helps businesses create a unique brand identity and provide memorable experiences for their customers. Interior designers often collaborate with architects, contractors, and other professionals to ensure the seamless execution of a project. Overall, the interior design profession contributes significantly to the functional, aesthetic and experiential aspects of our built environment, making it an essential discipline in shaping the spaces we live, work, and interact in.

Programme	B.Sc Interior Design & Decor
Code	
Duration	3 years [UG]
Programme Outcomes	<p>PO1: Disciplinary Knowledge and Skills Demonstrates theoretical and practical knowledge and understanding of subjects related to Interior Design and Decoration</p> <p>PO2: Effective Communicator Capable of effective communication of subject specific scientific information through oral and written formats using ICT wherever necessary. Explores communication skill set to engage key stakeholders such as domestic and commercial clientele.</p> <p>PO3: Critical thinking, Analytical reasoning and problem solving Applies disciplinary knowledge, understanding and transferable skills to the given context. Capable of identifying and analysing problems and issues and finding solutions in planning spaces and interiors suitable to homes and commercial establishments</p> <p>PO4: Research and Scientific Reasoning Demonstrates skills in research through collection of relevant qualitative and quantitative data, analysis and interpretation of data using appropriate methodologies for formulating evidence-based solutions and arguments</p> <p>PO5: Co-operation/ Teamwork Capable of contributing significantly and working enthusiastically both independently and in a group</p> <p>PO6: Digital Literacy Demonstrates competency in accessing relevant and authentic information and data from electronic media with a motive to learn and synthesize information for academic and extension work presentation; prepare computer aided designs and use specific software to plan interiors for the home and commercial establishments.</p> <p>PO7: Multicultural competence Recognizes and assesses societal, environmental and cultural issues related to area of study within the local and global context</p> <p>PO8: Moral and Ethical awareness/reasoning: Displays moral responsibility and values; Has a professional approach, is objective, unbiased and truthful in all aspects of work and refrains from unethical practices such as plagiarism, fabrication, falsification, misinterpretation of the data and breaching intellectual property rights</p> <p>PO9: Leadership readiness/qualities Develops leadership skills, takes initiative, mobilizes resources has the capacity to lead group projects and initiatives successfully</p> <p>PO10: Lifelong learning Capable of staying motivated to be updated consistently with content, concepts, theories, specializations, fields, technologies, books and avenues to meet professional and personal needs at any given instant.</p>

	Programme Specific Outcomes: On successful completion of the program the student:
PSO 1	Acquires knowledge and understanding concepts in core areas such as interior design and decoration and supporting courses in Textiles, Mass Communication as well as Nutrition.
PSO2	Develops ability to articulate subject knowledge effectively both orally or written to all categories of stake holders/beneficiaries such as patients, clients, professionals and layperson.
PSO3	Is competent in the use of ICT for collecting and disseminating scientific information.
PSO4	Acquires skill to translate knowledge of art and design to select interiors, structure and decorative requirements of residential and commercial places.
PSO5	Is capable of pursuing higher education, research or engaging in teaching, entrepreneurship, public or corporate sector.

Highlights of the Revamped Curriculum

- The curriculum is designed to cater to the specific needs and requirements of the Home and Office Interiors, Textiles, Nutrition, and Social Welfare industries.
- This student centric programme ensures knowledge and skill development by providing hands-on training, on-the-job internships, projects, lab practices, experiential activities, exposure to entrepreneurial skills and training for competitive examinations.
- The course content is comparable to world class curriculum.
- The courses are updated to include recent developments in the field of Home Science.
- References are updated and web resources are cited.
- Each course in the curriculum carries either a practical/activity or experiential learning component to ensure skill development along with acquiring knowledge in the subject.
- Potential for employability has been enhanced through mandatory internships.
- Digital literacy and competency are ensured using ICT enabled learning environment.

TEACHING METHODOLOGIES

Teaching methods: Chalk and Board, Experiential learning, Student centric learning and Small projects and Practical assignments; Virtual Classroom, LCD projector, Smart Class, Video Conference, Workshop, Demonstration class and Guest Lectures by eminent people.

Training students to engage in self-study without relying on faculty (for example – library and internet search, manual and handbook usage, etc.)

Library, Net Surfing, Manuals, NPTEL, Naan Mudhalvan Courses, Other university websites.

**6. CREDIT DISTRIBUTION FOR UG PROGRAMME
(B.Sc. Interior Design and Decor)**

Sem I	Credit	H	Sem II	Credit	H	Sem III	Credit	H	Sem IV	Credit	H	Sem V	Credit	H	Sem VI	Credit	H
Part 1. Language – Tamil	3	6	Part..1. Language – Tamil	3	6	Part 1. Language – Tamil	3	6	Part..1. Language – Tamil	3	6	5.1 Core Course CC IX Furniture Design	4	5	6.1 Core Course CC XIII Ergonomics	4	6
Part.2 English	3	6	Part..2 English	3	6	Part.2 English	3	6	Part..2 English	3	6	5.2 Core Course CC X Application of Color in Interiors	4	5	6.2 Core Course CCXIV Principles of Resource Management	4	6
1.3 Core Course – CC I Fundamentals of Art and Design	5	6	2..3 Core Course – CC III Building Finishes	5	5	3.3 Core Course – CC V Lighting and Lighting Fixtures	5	5	4..3 Core Course – CC VII Furnishing in Interiors	5	5	5.3 Core Course – CC XI Kitchen Design	4	5	6..3 Core Course – CC XV 3D Modeling in Design (Practical)	4	6
1.4 Core Course – CC II Life Space Planning	5	5	2.4 Core Course – CC IV Life Space Planning (Practical)	5	5	3.4 Core Course – CC VI Basics of AutoCAD	5	5	4.4 Core Course – CC VIII Computer Aided Design (Practical)	5	5	5. 4.Core Course – CC XII Project with viva- voce	4	5	6.4 Elective VII Generic/ Discipline Specific EC7 Entrepreneurship Development	3	5
1.5 Elective I Generic/ Discipline Specific Floriculture and Landscape Design	3	5	2.5 Elective II Generic/ Discipline Specific Front Office Management	3	6	3.5 Elective III Generic/ Discipline Specific Applied Art on Textiles	3	5	4.5 Elective IV Generic/ Discipline Specific Building Services	3	6	5.5 Elective V Generic/ Discipline Specific EC5 Human Nutrition	3	4	6.5 Elective VIII Generic/ Discipline Specific EC8 Professional Practice	3	5
1.6 Skill Enhancement Course SEC-1 Event Management	2	2	2.6 Skill Enhancement Course SEC-2 Accessories In Interior	2	2	3.6 Skill Enhancement Course SEC-4 Decorative Styles	1	1	4.6 Skill Enhancement Course SEC-6 Visual Merchandising	2	2	5.6 Elective VI Generic/ Discipline Specific EC6 Mass Communication	3	4	6.6 Extension Activity	1	-
1.7 Foundation Course in Interior Design	2	2	2.7 Skill Enhancement Course SEC-3 Handicrafts of India	2	2	3.7 Skill Enhancement Course SEC-5 Free Hand Sketching	2	2	4.7 Skill Enhancement Course SEC-7 Computer Applications in Home Science	2	2	5.7 Value Education	2	2	6.7 Professional Competency Skill Aptitude and Reasoning skills for Competitive examinations	2	2
						3.8 Environmental studies	2	2				5.8 Summer Internship /Industrial Training	2	-			
	23	32		23	32		24	32		23	32		26	30		21	30
Total – 140 Credits																	

Credit Distribution for UG Programmes

Sem III	Credit	H	Sem IV	Credit	H
Part 1. Language – Tamil	3	6	Part.1. Language – Tamil	3	6
Part.2 English	3	6	Part.2 English	3	6
3.3 Core Course – CC V Lighting and Lighting Fixtures	5	5	4.3 Core Course – CC VII Furnishing in Interiors	5	5
3.4 Core Course – CC VI Basics of AutoCAD	5	5	4.4 Core Course – CC VIII Computer Aided Design (Practical)	5	5
3.5 Elective III Generic/ Discipline Specific Applied Art on Textiles	3	5	4.5 Elective IV Generic/ Discipline Specific Building Services	3	6
3.6 Skill Enhancement Course SEC-4 Decorative Styles	1	1	4.6 Skill Enhancement Course SEC- 6 Visual Merchandising	2	2
3.7 Skill Enhancement Course SEC-5 Free Hand Sketching	2	2	4.7 Skill Enhancement Course SEC- 7 Computer Applications in Home Science	2	2
3.8 Environmental studies	2	2			
	24	32		23	32

Sem V	Credit	H	Sem VI	Credit	H
5.1 Core Course CC IX Furniture Design	4	5	6.1 Core Course CC XIII Ergonomics	4	6
5.2 Core Course CC X Application of Color in Interiors	4	5	6.2 Core Course CC XIV Principles of Resource Management	4	6
5.3 Core Course – CC XI Kitchen Design	4	5	6.3 Core Course – CC XV 3D Modeling in Design (Practical)	4	6
5.4 Core Course – CC XII Project with viva- voce	4	5	6.4 Elective VII Generic/ Discipline Specific EC7 Entrepreneurship Development	3	5
5.5 Elective V Generic/ Discipline Specific EC5 Human Nutrition	3	4	6.5 Elective VIII Generic/ Discipline Specific EC8 Professional Practice	3	5
5.6 Elective VI Generic/ Discipline Specific EC6 Mass Communication	3	4	6.6 Extension Activity	1	-
5.7 Value Education	2	2	6.7 Professional Competency Skill Aptitude and reasoning skills for Competitive examinations	2	2
5.8 Summer Internship /Industrial Training	2	-			
	26	30		21	30

**Choice Based Credit System (CBCS), Learning Outcomes Based Curriculum Framework
(LOCF) Guideline Based Credit and Hours Distribution System
for all UG courses including Lab Hours**

First Year – Semester-I

Part	List of Courses	Credit	No. of Hours
Part-1	Language – Tamil	3	6
Part-2	English	3	6
Part-3	Core Courses & Elective Courses [in Total]	13	16
Part-4	Skill Enhancement Course SEC-1	2	2
	Foundation Course	2	2
		23	32

Semester-II

Part	List of Courses	Credit	No. of Hours
Part-1	Language – Tamil	3	6
Part-2	English	3	6
Part-3	Core Courses & Elective Courses including laboratory [in Total]	13	16
Part-4	Skill Enhancement Course -SEC-2	2	2
	Skill Enhancement Course -SEC-3 (Discipline / Subject Specific)	2	2
		23	32

Second Year – Semester-III

Part	List of Courses	Credit	No. of Hours
Part-1	Language - Tamil	3	6
Part-2	English	3	6
Part-3	Core Courses & Elective Courses including laboratory [in Total]	13	15
Part-4	Skill Enhancement Course -SEC-4 (Entrepreneurial Based)	1	1
	Skill Enhancement Course -SEC-5 (Discipline / Subject Specific)	2	2
	E.V.S	2	2
		24	32

Semester-IV

Part	List of Courses	Credit	No. of Hours
Part-1	Language - Tamil	3	6
Part-2	English	3	6
Part-3	Core Courses & Elective Courses including laboratory [in Total]	13	16
Part-4	Skill Enhancement Course -SEC-6 (Discipline / Subject Specific)	2	2
	Skill Enhancement Course -SEC-7 (Discipline / Subject Specific)	2	2
		23	32

**Third Year
Semester-V**

Part	List of Courses	Credit	No. of Hours
Part-3	Core Courses including Project / Elective Based	22	26
Part-4	Value Education	2	2
	Internship / Industrial Visit / Field Visit	2	2
		26	30

Semester-VI

Part	List of Courses	Credit	No. of Hours
Part-3	Core Courses including Project / Elective Based & LAB	18	28
Part-4	Extension Activity	1	-
	Professional Competency Skill	2	2
		21	30

Consolidated Semester wise and Component wise Credit distribution

Parts	Sem I	Sem II	Sem III	Sem IV	Sem V	Sem VI	Total Credits
Part I	3	3	3	3	-	-	12
Part II	3	3	3	3	-	-	12
Part III	13	13	13	13	22	18	92
Part IV	4	4	3	6	4	1	22
Part V	-	-	-	-	-	2	2
Total	23	23	22	25	26	21	140

***Part I, II, and Part III components will be separately taken into account for CGPA calculation and classification for the undergraduate programme and the other components. IV, V have to be completed during the duration of the programme as per the norms, to be eligible to obtain the UG degree.**

MethodsofEvaluationTheoryandPractical		
InternalE valuation	Continuous InternalAssessmentTest	25Marks
	Assignments	
	Seminars	
	Modelexamination	
	Attendanceand ClassParticipation	
External Evaluation	EndSemesterExamination	75Marks
	Total	100Marks

Title of the Course		LIGHTING AND LIGHTING FIXTURES								
Category	Year II	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
CC5	III	Y				5	5	25	75	100

Learning Objectives
To enable the students to:
Gain an understanding of the importance and functional value of lighting & accessories in interiors.
Apply, create and study the functional and decorative values of lighting & accessories in interiors.
Acquire knowledge in the folk arts and crafts of India.

UNIT	CONTENT	HOURS
UNIT I	Lighting - Definition – Objectives – Functions and Importance of lighting. The colour spectrum. Sources of lighting - Natural and Artificial lighting. Natural light source – Sun –merits. Sources of Artificial light – Incandescent and fluorescent – merits and demerits. Other artificial light source – Quartz, Halogen, HID, Neon, LED, CFL	10
UNIT II	Types of lighting – Based on use – General lighting, task lighting, Accent lighting. Types of lighting based on lighting fixtures - direct, semi-direct, In-direct, semi-indirect and diffused lighting. Factors affecting illumination – Brightness, Contrast, Glare, Diffusion, Colour and Colour rendition. Benefits of effective lighting.	20
UNIT III	Lighting fixtures – Definition, Functions, Types of light fixtures - Free-standing or portable - Table lamp, Floor lamp, speciality lamp, Surface mounted fixtures – ceiling and wall fixtures, chandelier and pendent lights, mini and strip lighting, built in lighting. Standard lamp fixtures and office task light luminaries. Architectural lighting – cove, panel, spot, valance, track, and concealed lighting. Selection of lamps and lamp shades.	15
UNIT IV	Selection of lighting - Requirements of an ideal lighting installation, Measurements of lighting, Recommended foot candles for residential activities. Factors to be considered in selection of lighting – space and atmosphere, light design, focus and detail, task, practicalities, control systems. Economy in lighting.	15

	Lighting accessories – switches, sockets, fuse, outlets, boxes, lamp-holders, ceiling roses, lamp holders, and pattress.	
UNIT V	Lighting for different residential areas – Entrance and passages, Living room, dining room, bedroom, children’s room, study room, kitchen, bathroom, staircase, garage, outdoor and garden lighting. Modern features in use of lighting in residential and commercial spaces.	15
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Describe the importance of selection and arrangement of accessories.

CO2: Classify and apply arts and crafts in interiors.

CO3: Compare the types of lighting accessories.

CO4: Discuss lighting and select the appropriate lighting in interiors.

CO5: Identify different kinds of accessories and utilize them in interiors appropriately.

References:

- Barbara Moreau, (2023) Interior Design 101: A Beginner's Guide to Transforming Your Home ISBN: 9798890747044 E Book.
- V. Ramesh Babu, S. Sundaresan, (2018) Home Furnishing, WPI India Publisher, ISBN: 9781351186216, 1351186213 E Book
- Eagle moss Publications Ltd, (1996). Creating your Home, Creative Flowers & Plants for Your Home.
- Eve Harlow, (1995). The Book of Handicrafts for all the Family. Honeywood Publishing Limited.
- Harriet Goldstein & Vetta Goldstein, (Fourth Edition, 1988). Art in Everyday Life. Oxford & IBH Publishing CO.
- Premavathy Seetharaman & Parveen Banu, (2001). Interior Design & Decoration. CBS publishers.

e-Learning Resources:

- <http://www2.ca.uky.edu/HES/fcs/FACTSHTS/HF-LRA.095.PDF>
- <http://www.interiordezine.com/wp-content/uploads/2013/09/Part-5-Syles-Periods-and-Design-History.pdf>
- <http://www.home-designing.com/category/accessories>
- <https://wbdg.org/ccb/AF/AFDG/interior.pdf>
- <http://download.nos.org/sec225new/Lesson-4.pdf>
- http://www.archive.india.gov.in/knowindia/culture_heritage.php?id=99

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	S	S	c	M	M	M	L	L	M	S
CO2	S	S	S	M	M	M	L	L	M	S
CO3	S	S	S	S	M	M	L	M	M	S
CO4	S	S	S	M	M	M	L	M	M	S
CO5	S	S	S	S	S	M	L	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		BASICS OF AUTOCAD								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	II							CIA	External	Total
	Sem									
CC6	III	Y		Y		5	5	25	75	100

Learning Objectives
To enable the students to :
Learn the basic skills of drafting 2D floor plans in CAD.
Apply AutoCAD tools in designing exterior and interior of a building.

UNIT	CONTENT	HOURS
UNIT I	Overview of AutoCAD – Purpose, Need, Uses and Applications, General commands – New, Open, Save, Save as, Close and Exit a drawing in AutoCAD, AutoCAD screen components – Title bar, Menu bar, Standard tool bar, Object Properties tool bar, Draw toolbar, Modify tool bar, UCS, Layout tab, Command Window and Status bar.	15
UNIT II	Point fixing methods – Direct method, Absolute Coordinate system, Relative Coordinate system and Polar Coordinate system, Setting up the drawing environment - setting Units, Limits and Paper size, Control Zoom and Pan commands.	15
UNIT III	Working with Drawing Aids – Grid, Snap, Ortho, Osnap, Polar Tracking, Object Snap Tracking, Dynamic Input and Object properties – Colour, Line Type and Line Weight, Use of function keys and shortcut keys.	10
UNIT IV	Draw tools – Line, Plane, Rectangle, Arc, Circle, Polygon, Ellipse and Spline, Text – Style, M text, Text edit and Layer concept.	10
UNIT V	Modify tools – Erase, Copy, Move, Scale, Rotate, Mirror, Offset, Chamfer, Fillet, Trim, Extent, Stretch, Array, and Break, Object selection methods.	10
	Practicals: Creating Line, Circle, Arc, Ellipse, Rectangle, and Polygon using different methods. Creating text using text style, text edit, line type & line weight Creating a simple 2D plan.	15
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course the student will be able to

- CO1. Understand the significance, configuration and working requirements of AutoCAD software.
- CO2. Illustrate the point fixing methods in AutoCAD
- CO3. Apply drawing aids in working.
- CO4. Criticize the draw tools in a drawing.
- CO5. Design and develop plans using the modify tools.

References

- Sandeep Dogra (2022). AutoCAD 2022: A Power Guide for Beginners and intermediate users, CAD Artifex Publishers.
- CAD Folks (2020), AutoCAD 2021 Beginners Guide. Independently Published, ISBN: 9798634102023
- Yasser Shoukry and Jaiprakash Pandey (2020), Practical Autodesk AutoCAD 2021 and AutoCAD LT 2021, Packt Publishing, ISBN: 9781789803761, 1789803764
- Sham Tickoo, Anurag, (2013). AutoCAD 2013. Cad Soft Technologies, Dreamtech Press, New Delhi.
- Sham Tickoo, D. Saravanan, (2010). AutoCAD 2010. Cad Soft Technologies, Dreamtech Press, New Delhi.
- David Frey, (2000). AutoCAD 2000.
- Gokulachari, (Second Edition, 2008). CAD in Civil Engineering Drawing Practice I.
- K. Venugopal, (Third Edition, 1998). Engineering Drawing with AutoCAD. New Age International (P) Limited.
- Ilangoan, (Sep 1999). Engineering Drawing with AutoCAD.

e-learning resources

- https://www.google.co.in/books/edition/AutoCAD_2022_A_Power_Guide_for_Beginners/F9QxEAAAQBAJ?hl=en&gbpv=1&dq=autocad+books+for+beginners&printsec=frontcover
- www.cad-notes.com/autocad-articles/
- <https://knowledge.autodesk.com>
- www.cadforum.cz/cadforum_en/default.asp
- www.archblocks.com
- <http://www.mycadsite.com/tutorials/>

Mapping with Programme Outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO1	S	S	S	M	S	S	M	M	M	S
CO2	S	S	S	M	S	S	M	M	M	S
CO3	S	S	S	M	S	S	M	M	M	S
CO4	S	S	S	M	S	S	M	M	M	S
CO5	S	S	S	M	S	S	M	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		APPLIED ART ON TEXTILES								
Category	Year II	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
EC3	III	Y		Y		3	4	25	75	100

Learning Objectives
To enable the students to:
Design the fabrics using the principles of art and colour in relation to textiles.
Develop skills in fabric painting and hand embroidery.
Embellish the fabrics with various techniques of surface ornamentation.

UNIT	CONTENT	HOURS
UNIT I	Application of art principles in Surface Enrichment of fabrics – Harmony, Balance, Rhythm, Emphasis Proportion. Application of principles of colour in surface enrichment of fabrics – Hue, Value and Intensity.	10
UNIT II	Fabric Painting – Definition, Equipment used, Preparation of Fabric for painting. Painting Techniques – Brush strokes, Splashing, spraying, Tie & Dye, and Stencil.	10
UNIT III	Embroidery – Equipment/ Tools used, methods of transferring designs on fabric. Basic embroidery stitches – Classification of embroidery stitches - Outline Stitches: Running, Back, Stem, Looped Stitches: Chain, Blanket, Lazy daisy, Feather, Knot Stitches: French Knot, Bullion Knot, Flat Stitches: Satin, Long and short, Catch Stiches: Herringbone, Couching and Cross Stich (Utility of above-mentioned stitches).	10
UNIT IV	Hand Methods of Printing – Block printing: preparation of fabric, preparation of table and color pad, techniques, Tie & Dye techniques: Knotting, Marbling, Binding, Sewing, Dabu, Batik: preparation of wax, selection of Tjanting tool, techniques, Ikat, Stencil Printing, preparation of fabric, preparation of stencil, techniques.	10
UNIT V	Surface Embellishment - Applique, cut work, Quilting, Bead work, Sequin work, Mirror work, Kundan/Stonework, Glitter Art.	10
	PRACTICAL a) Prepare samples of fabric painting using different techniques. b) Make samples of basic embroidery weaves. c) Application of cross stitch on a wall hanging. d) Prepare samples for tie and dye, batik, block printing and stencil printing. e) Prepare samples for various methods of surface embellishments. f) Application of any one surface embellishment on a kurti.	10
	TOTAL	60

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Understand and relate the art principles in an effective way in surface embellishment of fabrics.

CO2: Identify the appropriate technique of fabric painting in terms of fabric and utility.

CO3: Apply basic and decorative embroidery stitches in designing fabrics.

CO4: Evaluate and select the appropriate method of hand printing.

CO5: Create an exhibit or a decorative item using the appropriate surface embellishment technique.

References:

- Marian Jazmik, (2021). Textures from Nature in Textile Art, London
- Susan Stein, (2010). The complete photo guide to textile art, Creative publishing International Inc. Quayside Publishing Groups, China
- ShailajaD.Naik, (1997). Folk embroidery and handloom weaving, A.P.H.Publishing
- Ryan, (1995). The Complete Encyclopedia od Stitches, Adams Media Corporation Holbrook.
- Bernard. P. Corbman, (1983). Textiles - Fibre to Fabric, McGraw-Hill. Corporation, New York.
- Mathews. M (2005), Practical Clothing Construction, Part 1 & 2, Cosmic Press, Chennai.

E-Learning Resources:

- <https://www.craftsvilla.com/blog/famous-indian-embroidery-styles/>
- <https://www.iloencyclopaedia.org/component/k2/item/880-cotton-yarnmanufacturing>
- <https://www.slideshare.net/hemaupadhayay/traditional-embroideries-of-india-76836145>
- <http://www.india-crafts.com/articles/block-printing-in-india.html>
- <https://study.com/academy/lesson/how-is-cad-cam-used-in-textiles.html>

Mapping with Programme Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	L	S	M	S	S	S	S
CO2	S	S	S	L	S	M	S	S	S	S
CO3	S	S	S	L	S	M	S	S	S	S
CO4	S	S	S	L	S	M	S	S	S	S
CO5	S	S	S	L	S	M	S	S	S	S

Mapping with Programme Specific Outcomes

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		DECORATIVE STYLES								
Category	Year II	L	T	P	C	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
SEC- 4	III	Y				1	1	25	75	100

Learning Objectives
To enable the students to :
Understand the needs of styles in interiors in various aspects.
Develop a conceptual understanding of the Interior Design field.

UNIT	CONTENT	HOURS
UNIT I	Intangibles of Design - Styles based on Design – Formal, Informal and Free styles. Styles based on Elements - Wood and Stone. Theme based on Colour – Warm and Cool, Monotone, Complementary, Split Complementary, Triad and tetrad.	5
UNIT II	Traditional Style: Concept and characteristic features of Mediterranean and Neo classical.	3
UNIT III	Classic-Modern Styles – Concept and Characteristic features of Rustic Style, Vintage Style and Bohemian style.	2
UNIT IV	Modern Styles - Luxury, Minimalist, Scandinavian.	2
UNIT V	Styling of a House - Individual House - Bungalow/Duplex, Twin House and Prefabricated House. Flats - Importance of Amenities in gated Community.	3
	TOTAL	15

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

- CO1: Understand the characteristics and aesthetic features in various styles of interiors.
- CO2: Classify and distinguish decorative styles in interiors.
- CO3: Analyze the styles of a house in interiors styling steps in interior rooms.
- CO4: Compare and Summarize the different Classic and modern styles in interiors.
- CO5: Choose and organize an appropriate style of interiors to satisfy customer needs.

References:

- Emily Henderson (2015), *Styled: Secrets for Arranging Rooms, from Tabletops to Bookshelves*. Random House LLC
- Lauren Liess (2015), *“Habitat: The Field Guide to Decorating”* Abrams, New York.

e-Learning Resources:

- <https://www.thespruce.com/modern-architecture-4797910>
- <https://www.2020spaces.com/blog-interior-design-styles/>
- <https://foyr.com/learn/types-of-interior-design-styles/>

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	S	S	S	L	L	L	M	L	M	S
CO2	S	S	S	L	L	L	M	L	M	S
CO3	S	S	S	L	L	L	M	L	M	S
CO4	S	S	S	L	L	L	M	M	M	S
CO5	S	S	S	L	L	L	M	L	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to Pos	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		FREE HAND SKETCHING								
Category	Year II	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
SEC: 5	III	Y		Y		2	2	25	75	100

Learning Objectives
To enable the students to:
Acquire basic knowledge of drawing and sketching exercises.
Draw different types of design, develop design by using motifs.

UNIT	CONTENT	HOURS
UNIT I	Drawing and Sketching – Meaning and concept, Materials - Pencil and its types, Charcoal, Pastels, types of Paints. Usage of different points of pencils, handling of pencils. Drawing sheets and their sizes.	5
UNIT II	Drawing and Sketching exercises –Simple exercises in drafting, point and line, line types, line weights, straight and curvilinear lines, dimensioning, lettering, borders, title panels, tracing in pencil, ink, use of tracing cloth.	5
UNIT III	Standards and Conventions , Construction Lines, Proportions Drawing types - Diagramming, Geometric Modeling. Role of scale models in design, Ceramic designs, stained glass design, and grill design.	5
UNIT IV	Object Drawings: Natural geometric forms with emphasis on depth and dimension, detail & texture, sunlight & shadow using different mediums.	5
UNIT V	Landscape Sketching - still life pictures, natural and man-made landscaping, perspectives, lighting & composition, textures and details, using different media.	5
	Practical: Drawing - Practice sketching the still life composition. Objects – Furnitures, Accessories. Sketchbook - outdoors - landscapes, buildings or urban scenes.	5
	TOTAL	30

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Understand the concept of drawing and sketching and know the basic material and mediums used for sketching.

CO2: Describe the Role and scope of scale models in design.

CO3: Sketch designs for ceramic, glass and grills.

CO4: Compare diagramming and geometric modeling techniques in design.

CO5: Develop Standards and conventions in drawing design.

References

- Maria DolorsRosFrijoa, The Art and Craft of ceramics: Techniques, projects, Inspiration, Lark books, 2006.
- Maureen Mitton, Interior Design Visual Presentation: A Guide to graphics, models and presentation techniques, 3rd edition, wiley publishers, 2007
- MogaliDelgadeYanes and Ernest Redondo Dominquez, Freehand drawing for Architects and Interior Designers, ww.Norton& co., 2005
- Shah, M.G., Kale, C.M. and Patki, S.Y. Building Drawing: with an integrated approach to build environment, 7th ed. Tata McGraw Hill Pub., Delhi, 2000.
- Susan Bruce, (2000). The Art of hand-built ceramics, Crowood Press.

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0
CO1	S	S	S	M	M	M	L	L	M	S
CO2	S	S	S	M	M	M	L	L	M	S
CO3	S	S	S	S	M	M	S	M	M	S
CO4	S	S	S	M	M	M	L	L	M	S
CO5	S	S	S	M	M	M	L	L	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		FURNISHINGS IN INTERIORS								
Category	Year II	L	T	P	O	Credits	InstHrs	Marks		
	Sem							CIA	External	Total
CC7	IV	Y		Y		5	5	25	75	100

Learning Objectives
To enable the students to:
Make a wise choice in the selection of fabric for furnishings.
Draft and construct furnishings used in interior spaces.
Know about the types, care and maintenance of furnishings used in interiors.

UNIT	CONTENT	HOURS
UNIT I	Selection of Fabrics in Interior Design: Importance, Factors to be considered in the selection of fabric for furnishings, Types of fabric used in interiors. Steps involved in fabric preparation. Methods of transferring pattern markings onto the fabric. Methods of Drafting - Curtains, Draperies, Pillow Covers, Slip Covers and Cushion Covers.	10
UNIT II	Construction of furnishings: Selection, Use and Care of Sewing machine and sewing tools. Study of Basic hand stitches – Temporary-Even basting, Uneven basting and Hemming - Permanent – Running, Back, Over cast, Over hand, Whip and Slip. Seams and Seam finishes	15
UNIT III	Window Treatments – Hard window treatment – Blinds, Shutters, Screens, Panels, Shades and Curtains. Soft window treatment - Curtains and Draperies. Styles of hanging Curtains – Tie- Backs, Café, Ruffles, Tier. Decorative curtain heads – Valence, Cornice, Swags and Cascade.	10
UNIT IV	Soft furnishings – Importance, types, uses, care and maintenance of soft furnishings. Carpets and Rugs – Types based on construction– Woven, Knotted and Tufted.	10
UNIT V	Traditional fabrics and interiors – History, method of construction, designs, colours and uses of Brocade, Jamdani, Chanderi, Damask and Kancheepuram in Interiors.	15
	PRACTICAL Basic hand stitches. Seams and Seam finishes Construction of different types of Curtains. Construction of Pillow and Cushion Covers. Styles of hanging curtains Prepare an album on the traditional fabrics used in interiors.	15
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Outline the factors to be considered in the selection of fabric for furnishings.

CO2: Describe the methods of drafting and construction of various furnishings.

CO3: Identify and list out the various soft furnishings used in interiors and ways of maintaining them.

CO4: Explore the hard and soft window treatments for interiors.

CO5: Summarize the history, construction and uses of traditional fabrics in interiors.

References:

- Wilhelmine Van Aerssen, Chris Halsey (2017), From Fibre to Fabric, The Ultimate Guide to Soft Furnishings, Clearview books publisher.
- Wendy Baker · (2009), Complete Book of Curtains, Drapes and Blinds Design Ideas for Every Type of Window, Treatment, Pavilion Books Publishers. ISBN:9781843405054, 1843405059
- Philips B, (2000). Hamlyn book of decorating, Octopus publishing Ltd, London.
- Clifton.C. et al (1991). The complete Home decorator, Conran Octopus Ltd, London.
- Luke. H., (1996). Soft furnishings, New Holland Publishers Ltd, Singapore.
- Wilhide,E and Copestick,I. (2000). Contemporary decorating, Conran Octopus Ltd., London.
- Levine M (1998). Living rooms, Rockport publishers, USA.
- Mary Mathews, (1996). Practical Clothing Construction, Part I and Part II, Cosmic Press.
- Mehta, R.J, (1970) “Masterpieces of Indian Textiles”, B.B Taraporewala& Sons Pvt. Ltd, India.
- Pizzuto’s. J.J (2010), “Fabric Science”, 9th Edition, Fairchild Books, U.S.A.

e-Learning Resources:

- <http://gpkt.weebly.com/classification-of-textile-fibers.html>
- https://textilelearner.blogspot.com/2011/05/definition-and-classification-of-fiber_41.html
- <https://www.thesprucecrafts.com/sew-simple-custom-curtains-2977596>
- <http://ncert.nic.in/vocational/pdf/ivsm104.pdf>
- <https://www.thespruce.com/basic-types-of-window-treatments-for-bedrooms-350468>
- <https://www.homeonline.com/hol/home-tips/10-tips-to-care-for-your-soft-furnishings.html>
- https://aces.nmsu.edu/pubs/_g/G402.pdf

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0
CO1	S	S	S	L	S	M	S	S	S	S
CO2	S	S	S	L	S	M	S	S	S	S
CO3	S	S	S	L	S	M	S	S	S	S
CO4	S	S	S	L	S	M	S	S	S	S
CO5	S	S	S	L	S	M	S	S	S	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		COMPUTER AIDED DESIGN - PRACTICAL								
Category	Year II	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CI A	External	Total
CC8	IV			Y		5	5	40	60	100

Learning Objectives
To enable the students to :
Learn and implement the advance drafting techniques in drawing 2D plans in CAD.
Create 3D View of simple objects and furniture.
Design room interiors in 3D with material application

UNIT	CONTENT	HOURS
UNIT I	Dimensions – Linear, Align, Angular, Radius, Diameter, Baseline, Continue, Leader. Dimension edit, Dimension styles – Lines and Arrow tab, Fit tab, Primary Units, Alternate Units, and tolerances. To create and insert Blocks and Block edit. Hatch and Gradient. Applying Dimensions, Layers, Hatch and Gradient in 2D plans.	15
UNIT II	Solid Model -Creating 3D solids using standard primitives like Box, Wedge, Cylinder, Sphere, Cone, Torus, and Pyramid. Designing Chair, Bed, Sofa, Table, Roof structures using Solid primitives	15
UNIT III	Boolean operations - Union, Subtract and Intersect. 3D Operations - Extrude, Loft, Revolve, Sweep. Create Door and Window openings, Furniture with complex shapes and designs using Boolean operations and 3D operations.	20
UNIT IV	Materials – Flooring, Wall finishes, Fabric, Plastic and Metal. Create new materials from the existing material browser. Applying the materials to the different room interiors like Living room, Bedroom, Dining room, Study room and Kitchen.	15
UNIT V	Setting Background image to 3D model. Camera tool – Setting Camera to create different views and walkthrough of the interior and exterior of the building models	10
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course the student will be able to:

- CO1. Identify the advanced tools used for 2D drafting of house plans.
- CO2. Distinguish the significance of 3D models of objects over 2D drafting.
- CO3. Devise design using Boolean operations.
- CO4. Compare the materials using 3D tools for different areas.
- CO5. Compose interior viewing using camera tools.

References:

- [Randy Shih](#) (2015) AutoCAD 2016 Tutorial Second level 3D Modeling, SDC Publications
- Sham Tickoo, Anurag, (2013). AutoCAD 2013. Cad Soft Technologies, Dreamtech Press, New Delhi.
- Sham Tickoo, D.Saravanan, (2010). AutoCAD 2010. Cad Soft Technologies, Dreamtech Press, New Delhi.
- David Frey, (2000). AutoCAD 2000.
- Gokulachari, (Second Edition, 2008). CAD in Civil Engineering Drawing Practice I.
- K.Venugopal, (Third Edition, 1998). Engineering Drawing with AutoCAD. New Age International (P) Limited.
- Ilangovan, (Sep 1999). Engineering Drawing with AutoCAD.

E-Learning Resources:

- www.cad-notes.com/autocad-articles/
- <https://knowledge.autodesk.com>
- www.cadforum.cz/cadforum_en/default.asp
- www.archblocks.com
- <http://www.mycadsite.com/tutorials/>

Mapping with Programme Outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO1	S	S	S	M	S	S	L	M	S	S
CO2	S	S	S	M	S	S	L	M	M	S
CO3	S	S	S	M	S	S	L	M	M	S
CO4	S	S	S	M	S	S	L	M	M	S
CO5	S	S	S	M	S	S	L	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	P O 1	P O 2	P O 3	PO 4	P O 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		BUILDING SERVICES								
Category	Year II	L	T	P	C	Cred its	Inst Hrs	Marks		
	Sem							CIA	External	Total
EC4	IV	Y				3	3	25	75	100

Learning Objectives
To enable the students to:
Gain an understanding on various services required for the proper functioning of the buildings.
Learn the standards to be followed in designing buildings.

UNIT	CONTENT	HOURS
UNIT I	Introduction to building services – importance, concept, Kinds of services. Plumbing services – Need, Purpose and general guidelines in designing plumbing system. Types of pipes – Waste water pipe, Soil pipe and vent pipe. Traps – requirements and types. Sanitary apparatus – Wash basin, Sink, Bath tub, Urinal, Water closet and Flushing cistern. Methods of plumbing system – one pipe system and two pipe system.	10
UNIT II	Electrical services – Single phase and three phase supply. Wiring systems – Cleat wiring, batten, concealed wiring, Casing wiring and Conduit wiring. Electrical switches and sockets. Need and purpose of earthing system. Causes and prevention of Electrical fires.	10
UNIT III	Ventilation system – Definition, need and purpose. Types - Natural ventilation – general rules followed in natural ventilation, Mechanical ventilation – Air Conditioning system – Components, working principle and types. Function of heating ventilation air conditioning (HVAC) and Air Heating Unit (AHU).	10
UNIT IV	Fire Safety - Definition and causes of fire. Classification of fire. Safety devices - Smoke detectors, Alarm system, Sprinkler system, Portable fire extinguisher, Fire hydrants and Wet riser. Fire resisting materials for buildings.	5
UNIT V	Mechanical services – Lifts and Escalators – Parts, working principle and types. Building Bye laws - Definition, Purpose, and technical terms – Carpet area, Built up area, set back, Floor Space Index (FSI). Requirements for Entry/Exit, Staircase, Open space, Building height and different rooms of a building.	10
	TOTAL	45

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Understand the general principles in providing plumbing system for building.

CO2: Examine the requirements for electrical supply and distribution system.

CO3: Discuss the role of ventilation and its types.

CO4: Explain the concept of Fire safety in designing the buildings.

CO5: Relate the building by laws and standards.

References:

- A.S.Panchdhan, (Second Edition 2000). Water Supply and Sanitary Installations. New Age International (P) Ltd.
- Dr. B.C. Punmia, Ashok Kumar Jain & Arun Kumar Jain, (Tenth edition). Building Construction. Laxmi Publications (P) Ltd.
- P.C. Varghese, (May 2013). Building Construction, PHI Learning Private Limited.
- Rangwala, (Thirty Eighth Edition, 2011). Engineering Materials (Material Science), CharotarPublishingHousePvt Ltd, Anand.
- S.S. Bhavikatti, (2012). Building Construction, Vikas Publishing Home Pvt Ltd.

e-Learning Resources:

- <https://www.wbdg.org/design-objectives/secure-safe/fire-protection>
- <http://www.level.org.nz/water/wastewater/drainage-systems/>
- http://www.ecs.umass.edu/ece/hollot/ECE497DS06/ESD_1.pdf
- <http://mohua.gov.in/upload/uploadfiles/files/Chap-4.pdf>
- <https://www.cedengineering.com/userfiles/Building%20Elevators.pdf>
- <http://tzb.fsv.cvut.cz/files/vyuka/125bes1/prednasky/125bes1-02.pdf>

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	S	S	S	M	L	L	M	M	M	S
CO2	S	S	S	M	L	L	M	M	M	S
CO3	S	S	S	M	L	L	M	M	M	S
CO4	S	S	S	M	L	L	M	M	M	S
CO5	S	S	S	M	L	L	M	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15

Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3
---	---	---	---	---	---

Strong 3 Medium 2 Low 1

Title of the Course		VISUAL MERCHANDISING								
Category	Year II	L	T	P	O	Credits	Inst Hrs	Marks		
	Se m							CIA	External	Total
SEC - 6	IV	Y				2	2	25	75	100

Learning Objectives
To enable the students to:
Understand the concept of Visual Merchandising.
Analyze the merchandising techniques used.
Analyze current trends and forecast future trends in merchandising.

UNIT	CONTENT	HOURS
UNIT I	Fundamentals of Visual Merchandising - Introduction, Objectives, Techniques, Store exteriors - store signs, façade, banners, planters, signage and awnings.	5
UNIT II	Display - Types of display- Window Display - Meaning and Scope, Promotional Display Vs. Institutional Display, Art principles in arrangement of display.	10
UNIT III	Understanding Fixtures -The Purpose of Planning Fixtures, Types of Fixtures. Colour Blocking & Colour Psychology - Interiors & Exteriors.	5
UNIT IV	Merchandise Presentation – Concept and its Principles, Dominance Factor in Merchandise Presentation, Cross Merchandising.	5
UNIT V	Trend analysis & Sales Forecasting - Styling, Display Calendar, Sales Tracking, Handling the Props, Lighting, Organizing an In-store Event.	5
	TOTAL	30

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

- CO1: Identify Visual merchandising and retailing.
- CO2: Classify and assess the different types of display.
- CO3: Compare the materials and its purpose in planning fixtures.
- CO4: Appraise and recommend Merchandise presentation.
- CO5: Justify and anticipate the current trend and follow SOPs.

References:

- Ebster Clause, Garaus Marion (2015), Store Design and Visual Merchandising, Second Edition, Business Expert Press
- Levy, Michale& Barton A. Weitz (2009). Retailing Management. Tata McGraw Hill.
- Morgan Tony (2010), Window Display: New Visual Merchandising, Laurence King Publishing
- Murugan (2018), Retail Marketing, Thakur Publication.
- PradhanSwapana (2009). Retailing Management. Tata McGraw Hill.
- Swati Bhalla and Anurag S (2010). Visual Merchandising. Tata McGraw Hill.

e-Learning Resources:

- <http://www.slideshare.net/dianhasan/iiscm-retail-innovation-seminar-jakartaapril-8-2011>
- www.businessdictionary.com/definition/visual-merchandising.html
- www.managementstudyguide.com/visual-merchandising.html
- www.rmsservicing.com/articles/what-is-visual-merchandising

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0
CO1	S	S	S	L	L	S	M	L	L	S
CO2	S	S	S	L	L	S	M	L	L	S
CO3	S	S	S	L	L	S	M	L	L	S
CO4	S	S	S	L	L	S	M	L	L	S
CO5	S	S	S	L	L	S	M	L	L	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		COMPUTER APPLICATION IN HOME SCIENCE								
Category	Year II	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
SEC: 7	IV	Y				2	2	25	75	100

Learning Objectives
To enable the students to :
Understand the application of computer in various disciplines of Home Science.
Know the features of Google Sketch Up in Interior Design.
Explore the benefits of computer applications in the field of research.

UNIT	CONTENT	HOURS
UNIT I	General commands - Creating and opening a file, Steps in creating a folder and saving a file in the destined folder. MS Office Package - Software in MS Office package, creating a document using MS Word, preparing slide presentation using MS Power Point. Making Graphs and Charts using MS Excel.	4
UNIT II	Computer Application in Space planning - Application for preparing Plan, Elevation and section drawings for interiors and exteriors. Need for rendered views in design. Creating 3D models and 3D views using Google Sketch up.	10
UNIT III	Computer Application in Nutrition - Software package for nutrition education and diet counselling - Nutritive value of food items, Nutritional analysis, Meal planning and recipes	5
UNIT IV	Computer Application in Textiles –Use of computer in textile Designing – Definition, Concept, Software – Printed fabrics, Sketch Pad system, Texture mapping, Embroidery system.	6
UNIT V	Computer Application in Research - Data collection – creating online form using Google forms, Data entry in MS Excel– Frequency analysis, Cross Tabulation.	5
	TOTAL	30

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Recall the features of MS Office package.

CO2: Understand the application of Google Sketch UP for design.

CO3: Explain computer applications in the field of Nutrition.

CO4: Compare and apply design using computer.

CO5: Create Google forms for data collection.

References:

- AutoCAD 2018 for Novices (Learn By Doing), CAD Soft Technologies.
- CAD Practical Skills in Textile Technology and Design (TTD), Patience Chitura , 2020.
- Microsoft Office 365 for Beginners 2022: [8 in 1] The Most Updated All-in-One Guide from Beginner to Advanced | Including Excel, Word, PowerPoint, OneNote, OneDrive, Outlook, Teams and Access, James Holler.
- SPSS Statistics for Data Analysis and Visualization, Jesus Salcedo, Wiley Publishers, 2017.

e-Learning Resources:

- <https://www.tutorialspoint.com/word/index.htm>
- <https://www.vmaker.com/tutorial-video-hub/microsoft-tutorial-videos/microsoft-office-tutorial/>
- <https://www.thesourcecad.com/autocad-tutorials/>
- <https://nutrium.com/blog/why-should-you-choose-a-nutrition-software-over-an-excel-word/>

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0
CO1	S	S	S	M	M	S	L	M	M	S
CO2	S	S	S	M	M	S	L	M	M	S
CO3	S	S	S	M	M	S	L	M	M	S
CO4	S	S	S	M	M	S	L	M	M	S
CO5	S	S	S	S	M	S	L	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		FURNITURE DESIGN								
Category	Year III	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
CC9	V	Y		Y		4	5	25	75	100

Learning Objectives
To enable the students to:
Understand the various traditional and modern styles of furniture design.
Develop furniture layout on floor plans.

UNIT	CONTENT	HOURS
UNIT I	History of Furniture Design - Different styles of furniture- William and Mary period, Queen Anne period, Chippendale, Hepplewhite, Sheraton, Adam furniture, American Georgian, Baroque, Rococo and Neo Classical.	10
UNIT II	Study of Modern Furniture - Styles through works of F. L.Wright, Mies Van der Rohe, and Marcel Breuer. Factors influencing the selection of furniture –comfort, expressiveness, style, beauty, utility, family needs and preferences.	10
UNIT III	Types of furniture – Built in furniture – Movable furniture – Upholstery furniture - Sectional furniture - Systems furniture – Readymade furniture. Joineries used in furniture.	10
UNIT IV	Use of furniture in Interiors – Arrangements of Furniture using Principles of Design, general guidelines in arranging furniture. Planning furniture for selected activities – Educational Institution and General office.	15
UNIT V	Design of Residential Furniture - Wall cabinet, TV Show cases, sofa, Dining table, study table, center table, children furniture and multipurpose furniture. Furniture layout on floor plans of Living Room, Bedroom, Study Room and Dining Room. Care and maintenance of furniture.	15
	Practicals Styles of furniture sketching. Measured drawing of furniture. Kitchen cabinets and Show case drawings. Designing of furniture. Model making.	15
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course the student will be able to:

CO1. Recognize the history of various styles of furniture design like Chippendale, Hepplewhite.

CO2. Understand the factors influencing the selection of furniture for various uses.

CO3. Identify Different types of Furniture and its uses.

CO4. Apply the guidelines in the arrangement of furniture.

CO5. Develop new ideas to design furniture in residential spaces by implementing ergonomic principles.

Reference:

- Natalie Walton (2022). Style: the art of creating a beautiful home, Hardie Grant Publishers.
- [George Nakashima](#) (2012). The Soul of a Tree: A Master Woodworkers Reflections, Kodansha USA
- [Charlotte Fiell](#) (2017). 1000 Chairs, Taschen America Llc
- [Anne Hepfer](#) (2022). MOOD: Interiors & Inspiration, Gibbs Smith Publishers
- Interior Design (2012). Francis D.K. Ching, John Wiley & Sons, New York
- [Frida Ramstedt](#) (2020). The Interior Design Handbook: Furnish, Decorate, and Style Your Space, Clarkson Potter Publishers.

e-learning resources

- <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=4839&context=extensionhist#:~:text=These%20art%20principles%20%2D%2D%20balance,cessories%20or%20setting%20the%20table.>
- shutterfly.com/ideas/how-to-arrange-furniture/
- <https://www.archdaily.com/tag/furniture-design>
- <http://www.lectra.com/en/furniture/upholstered-design-product-development>

Mapping with Programme Outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO1	S	S	S	M	M	M	L	M	M	S
CO2	S	S	S	M	M	M	L	M	M	S
CO3	S	S	S	M	M	M	L	M	M	S
CO4	S	S	S	M	M	M	L	M	M	S
CO5	S	S	S	M	M	M	L	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		APPLICATION OF COLOUR IN INTERIORS								
Category	Year III	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
CC10	V	Y		Y		4	5	25	75	100

Learning Objectives
To enable the students to:
Understand the needs of colours in interiors in various aspects.
Develop a conceptual understanding in the Interior Design field.

UNIT	CONTENT	HOURS
UNIT I	Colour concept - Colour and light, colour and distances and scales. Techniques for choosing appropriate wall colours based on the purpose of the room. Understanding the psychological impact of different colours on human emotions and moods.	10
UNIT II	Colours based on Design – Formal, Informal and Free styles. Colours based on Elements – Wood, Glass, Metal and Stone. Colours based on Themes – Warm and Cool Colours based on Lighting - Additive Colour, Subtractive Colour	10
UNIT III	Interior Colour Combination – Warm neutrals and Rich earth tones. VOC and odour less paint that protects the walls from tough stains & harmful bacteria. Types of emulsion paint – Gloss, Semi gloss, matte, eggshell or velvet. Application of Emulsion paint – spraying, brushing and rolling with a brush like motion.	15
UNIT IV	Home Interior - Wall Colours and Textures, Create a design board for various room. Suggest Interior colours for kids’ room, living room, bedroom, study room and Pooja room. Exterior Colours for Bungalow and Apartments. Factors to consider lighting, room size, furniture and personal preferences.	15
UNIT V	Commercial Spaces – Introduction to commercial space wall colours and textures, Study of various wall materials and finishes suitable for commercial spaces, exploring techniques such as wallpaper, textured paint, veneers, and 3D panels, examining eco-friendly and sustainable wall colour and texture options for commercial spaces, incorporating materials and finishes that meet green building standards.	15
	Practical a) Applying acquired knowledge and skills to design and execute a wall colour and texture project. b) Presenting the project concept, materials and techniques used. c) Creating professional presentations and documentation for wall colour and texture projects.	10

	d) Articulating design concepts, material specifications and project outcomes.	
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Outline the importance of Colour combination and analyse various colours on human moods.

CO2: Identify colours based on designs, elements, themes and lighting.

CO3: Understand the types of emulsion paint and apply to achieve different texture.

CO4: Suggest colour for various interior rooms.

CO5: Explore various wall materials and finishes for commercial spaces.

References:

- GokcakanÇicek N., Gokcakan K.: Characteristics Of Colors, Interior Design And Their Psychological And Physiological Effects. TOJET: The Turkish Online Journal of Educational Technology, November 2016, Special Issue for INTE 2016, p.p. 425-430.
- Sadat Behbahani N (2011). Theoretical Review on Color in Interior Space: An Experimental Assessment of Iranian Houses, Eastern Mediterranean University, Gazimağusa, North Cyprus.
- Krstić H., Rađelović D (2013) Color as a powerful tool in interior design. Proceedings Third international science conference Balkan color, p.p. 568-575.
- RiosVelasco C., Color and Visual Comfort, The University of Texas, Austin, 2010.
- Living in Color: Color in Contemporary Interior Design (2021). [Phaidon Editors](#), Phaidon publishers.

e-Learning Resources:

- <https://www.researchgate.net/publication/333928432>
- <https://www.2020spaces.com/blog-interior-design-styles/>
- <https://foyr.com/learn/types-of-interior-design-styles/>
- <https://foyr.com/learn/psychology-of-colors-in-interior-design/>
- <https://www.stewart-schafer.com/journal/the-importance-of-color-in-interior-design>

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	S	S	S	M	L	S	S	L	M	S
CO2	S	S	S	M	L	S	M	L	M	S
CO3	S	S	S	M	L	S	M	L	M	S
CO4	S	S	S	M	L	S	M	L	M	S
CO5	S	S	S	M	L	S	S	L	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to Pos	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		KITCHEN DESIGN								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	III Sem							CIA	External	Total
CC11	V	Y				4	5	25	75	100

Learning Objectives
To enable the students to :
Gain knowledge of different materials used for various surfaces in kitchen.
Develop skill to plan, change or enhance Kitchen design layout.
Apply the appropriate technique to redirect kitchen traffic.

UNIT	CONTENT	HOURS
UNIT I	Kitchen planning – Functions performed in a kitchen Principles of planning kitchen – orientation and location, ventilation, storage needs, work triangle, color, light and safety.	10
UNIT II	Types of kitchen – One- Wall Kitchen, U – Shaped Kitchen, L – Shaped Kitchen, Galley Kitchen, Island Kitchen and Peninsula Kitchen. Materials and finishes – Various materials and finishes used in kitchen – floor, wall, sink, ceiling, countertops, storage and their characteristics	20
UNIT III	Modular Kitchen: Characteristics, requirements, Materials used – Wood, Steel, Sintex and Aluminium. Pull Outs – Double basket, Cutlery trays, Corner unit, Sleek oil pull out, Ladder unit, Basket bin holder. Kitchen storage – principles of kitchen storage, storage areas in kitchen – Free Standing and Built-In Storage, dimensions, hand operated tools and their location. Care and maintenance of storage.	15
UNIT IV	Household Equipment- Concept, importance, uses, Influence of household equipment in modern family life, Selection criteria of household equipment's-Specification, time, money and energy saving, quality, durability, features, colour and design, safety, cost, Ease of Service, size, brand, space storage, Ease of cleaning, Ease of use, warranty and guarantee. Conservation of Fuel, Electricity and Water.	15
UNIT V	Major equipment- Uses, Merits and Demerits, Care and Maintenance, Ranges, Stoves, Refrigerator, Washing machines, Dish washers, Food Waste Disposers and Vacuum Cleaner. Significance of Labour-saving equipment.	15

	Minor equipment- uses, care and maintenance, Merits and demerits. Measuring cups, Peelers, mincers, choppers, Spatula, pots, pans, knives - types - knife sharpener, whisks, bowls, Juice extractor, Hand food mixer, spoons and strainer/colander.	
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Draw and Apply the Principles of planning and standards in Kitchen design.

CO2: Apply various types of Kitchen for suitable interiors.

CO3: Examine the Material and finishes of kitchen well suited for performance. Interpret the Current trends in modular kitchen

CO4: Analyze the types of household equipment and design to the needs of customers

CO5: Create a Design for major, minor equipment, storage spaces and their requirements for kitchen.

References:

- [Heather J. Paper](#) (2018). All New Kitchen Ideas that Work, Taunton Press Publishers
- Sarah Blank (2022). Classic Kitchens for Modern Living: Sarah Blank, Images Publishing Dist Ac Publishers
- KITCHEN Remodeling: Design Ideas to Modernize Your Kitchen -THE LATEST TRENDS +50 pictures (REMODELING IDEA) (2022). [H. PRESS](#)
- [Barbara Sallick](#) (2022). The Perfect Kitchen, (2020)
- [Nancy Wolford](#), [Ellen Cheever](#), [NKBA \(National Kitchen and Bath Association\)](#) (2015). Kitchen and Bath Design Principles: Elements, Form, Styles (NKBA Professional Resource Library), Wiley Publishers
- Bhargava S.C (2020), Household Electricity and Appliances, BS Publications, ISBN-13: 978-9390211265.
- Eric Kleinert, (2012), “Troubleshooting and Repairing Major Appliances”, Edition 3, McGraw-Hill Professional Publishing, ISBN-13: 9780071770187

e-Learning Resources:

- <http://bestinteriors4u.weebly.com/kitchen.html>
- <https://www.kutchina.com/e-catalogue/catalogue-modular%20kitchen.pdf>
- https://johnsonkitchens.in/pdf/theater_bro_hi-res.pdf
- <https://foyr.com/learn/kitchen-floor-plans-with-dimensions/>
- <https://www.roomsketcher.com/blog/kitchen-layout-ideas/>
- <http://www.seas.ucla.edu/~junjie/project/SP4.pdf>

Mapping with Programme Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	M	L	L	M	M	M	S
CO2	S	S	S	M	L	L	M	M	M	S
CO3	S	S	S	M	L	L	M	M	M	S
CO4	S	S	S	M	L	L	M	M	M	S
CO5	S	S	S	M	L	L	M	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		PROJECT VIVA VOCE								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	III							CIA	External	Total
	Sem									
CC12	V	Y		Y		4	5	40	60	100

Learning Objectives
To enable the students to :
Develop skills in conducting a research study
Learn the art and science of preparing and presenting a research document.

UNIT	CONTENT	HOURS
UNIT I	Introduction	10
UNIT II	Review of Literature and Citing of Bibliography	15
UNIT III	Methodology	15
UNIT IV	Results and Discussion	15
UNIT V	Summary and Conclusion	10
	Project Presentation	10
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: State a research problem on a topic relevant to their field.

CO2: Prepare a systematic literature review on the topic selected.

CO3: Select and execute the most appropriate methodology for the study.

CO4: Acquire basic skill in collecting, analyzing, presenting and interpreting data

CO5: Present findings of the study in a logical and sequential manner and discuss them against a backdrop of available scientific literature; Cite references in prescribed format.

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0
CO1	S	S	M	S	L	S	L	M	M	S
CO2	S	S	M	S	L	S	L	M	M	S
CO3	S	S	M	S	L	S	L	M	M	S
CO4	S	S	M	S	L	S	L	M	M	S
CO5	S	S	M	S	L	S	L	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low

Title of the Course		HUMAN NUTRITION								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	III							CIA	External	Total
	Sem									
EC5	V	Y				3	4	25	75	100

Learning Objectives
To enable the students to :
Understand the benefits of nutrients of different age groups
Analyze dietary management for lifestyle disorder.

UNIT	CONTENT	HOURS
UNIT I	Health and Nutrition - Nutrients - classification, balanced diet, functions of food, Basic five food groups, Principles of Menu planning. Proteins - classification of amino acid, functions and Sources.	10
UNIT II	Carbohydrates – classification of carbohydrates, functions and Sources. Lipids - classification of saturated and unsaturated fatty acid, functions and Sources.	15
UNIT III	Sources, functions and deficiency of Vitamins and Minerals – Water-soluble Vitamins and Fat-soluble Vitamins. Minerals – Macro-minerals – Calcium, Phosphorus, Magnesium, Potassium, Sodium. Micro minerals – Iron and Iodine. Water- Functions, dehydration and water intoxication.	15
UNIT IV	Nutrition requirements of Infants, preschool, School going, Adolescents, Adults, Pregnant and lactating mothers and at old age.	10
UNIT V	Lifestyle disorders – Prevention and dietary management of Obesity, Cardiovascular diseases (CVD) and Diabetes Mellitus.	10
	TOTAL	60

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

- CO1. Understand the concept of Balanced diet.
- CO2. Identify sources of foods rich in lipids and protein.
- CO3. Analyze the functions of vitamins and minerals
- CO4. Assess the nutritional requirements for different age groups
- CO5. Propose meal plans for lifestyle disorders

Reference:

- Srilakshmi.B,(2019).Dietetics - Multi Colour,, New Age International Publishers
- [SHARMA A](#) (2017). Principles Of Therapeutic Nutrition And Dietetics, CBS Publishers
- Shubhangini.A. Joshi, 5th Edition (2021). Nutrition and Dietetics, Tata McGraw Hill Education Pvt, LTD., New Delhi.
- Srilakshmi.B,(2012). Nutrition Science, NewAge Publications International, Pvt, Ltd., NewDelhi.
- [Sumati R. Mudambi](#) (2020). Fundamentals Of Foods, Nutrition And Diet Therapy, New Age International Private Limited
- [Gullybaba Com Panel](#) (2012), ANC-1 Nutrition For The Community, Gullybaba Publishing House Pvt. Ltd.

e-Learning Resources:

- [http://www.nios.ac.in/media/documents/SecHmscicour/english/Home%20Science%20\(Eng0\)%20Ch-3.pdf](http://www.nios.ac.in/media/documents/SecHmscicour/english/Home%20Science%20(Eng0)%20Ch-3.pdf)
- <http://agritech.tnau.ac.in/nutrition/pdf/cooking%20methods.pdf>
- <http://icmr.nic.in/final/rda-2010.pdf>
- <http://www.textbooksonline.tn.nic.in/Books/12/Std12-Nutr-EM.pdf>
- <https://egyankosh.ac.in/bitstream/123456789/31103/1/Unit-1.pdf>
- <https://ncert.nic.in/textbook/pdf/kehe103.pdf>

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	S	S	S	M	L	M	L	M	M	S
CO2	S	S	S	M	L	M	L	M	M	S
CO3	S	S	S	M	L	M	L	M	M	S
CO4	S	S	S	M	L	M	L	M	M	S
CO5	S	S	S	M	L	M	L	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		MASS COMMUNICATION								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	III							CIA	External	Total
	Sem									
EC6	V	Y		Y		3	4	25	75	100

Learning Objectives
To enable the students to :
Understand the meaning and concept of communication
Gain theoretical and practical knowledge of basic design processes of communication
Conduct Cultural and Educational Programs to establish international relation.

UNIT	CONTENT	HOURS
UNIT I	Meaning of Mass Communication - Definition, Characteristics, Elements and its types of mass communication. Mode of communication - Books, Newspapers, Film, Cinema, Radio and Television and social media.	8
UNIT II	Communication Process - Communication Process, audio-visual aids, Mass media production. Barriers in Communication – Definition, types and overcoming the barrier of communication. Tools of communication. Advantages of effective communication.	10
UNIT III	Graphic Design – Introduction, Role of design in society – Impact and function of graphic design, Types - Booklets, Brochures, Folders, Posters. Role of design in the changing social scenario. Role and responsibility of Graphic Designers.	10
UNIT IV	Advertising – Definition, Role of advertising in modern life - Advertising through Print Media and social media. Advantages and disadvantages of advertising. Logo – Definition, Evolution of logos and their importance.	10
UNIT V	Photography –Definition, Photographic types. Calligraphy – Definition, styles of calligraphy, Equipment’s used in calligraphy. The anatomy of type, type specification, type classification. Typography - evolution, Font anatomy, text typefaces and its types, display graphics.	10
	PRACTICALS a) Using computers applications to prepare Invitation, Brochures and Posters. b) Basic design exercises – Designing a logo, Digital design. c) Different styles of Calligraphy. d) Model Making. e) Compile photography - landscape, portrait, still life, and documentary.	12
	TOTAL	60

COURSE OUTCOMES

After successful completion of the course the student will be able to:

CO1. Identify and understand the meaning, characteristics, elements and mode of Mass communication.

CO2. Distinguish the Barriers in communication and practice the ways of overcoming barriers in communication.

CO3. Analyze the Impact and functions of Graphic design.

CO4. Criticize the Role of advertisement in modern society.

CO5. Develop display skills in photography.

Reference:

- Keval J. Kumar (2020), “Mass Communication in India” (5th Edition) Jaico Publishing House, Mumbai
- [HASAN S.](#) (2019). Mass Communication Principles And Concepts, CBS Publishers
- [Cath Caldwell](#) (2019), GRAPHIC DESIGN FOR EVERYONE: Understand the Building Blocks so You can Do It Yourself, DK Publishers
- [Gail Anderson](#), [Gaile Anderson](#), [Steven Heller](#) (2016) THE GRAPHIC DESIGN IDEA BOOK, Laurence King Publishing
- Dahama O P & Bhatnagar O P (2019), Education and communication for development, 2nd edition, Oxford & IBH publishers.
- Evelyn P. Mann (2012) “Advertising: types, trends and Controversies” Nova Science Publishers, ISBN: 161324679X, 9781613246795.

e- learning resources

- https://www.researchgate.net/publication/344235361_The_Types_of_Communication
- https://assets.cambridge.org/97811071/51048/frontmatter/9781107151048_frontmatter.pdf
- https://www.researchgate.net/publication/304038097_COMMUNICATION_BARRIERS
- <https://www.southampton.ac.uk/~assets/doc/hr/Barriers%20to%20effective%20communication.pdf>
- https://www.aiga.org/sites/default/files/2021-03/1A_IntroductionToGraphicDesign.pdf
- <https://ncert.nic.in/textbook/pdf/kegd103.pdf>
- <https://www.loveleighloops.com/blog/basic-calligraphy>
- <https://capturetheatlas.com/photography-for-beginners-pdf/>

Mapping with Programme Outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO1	S	S	S	M	M	S	L	M	M	S
CO2	S	S	S	M	M	S	L	M	M	S
CO3	S	S	S	M	M	S	L	M	M	S
CO4	S	S	S	M	M	S	L	M	M	S
CO5	S	S	S	M	M	S	L	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

INTERIOR DESIGN INTERNSHIP

Students in the interior design program are required to participate in the department coordinated internship program with interior design firms that involve a minimum of 30 days professional experience. At the conclusion of this experience students submit a final project that demonstrates their growth of knowledge and skills in the field of interior design.

Objective: The Internship is committed to preparing graduates in the B.Sc., Interior Design and Décor Degree to join as entry level Designers with a strong foundation with professional experience.

Expected Outcome of the Internship

On successful completion of the internship, the student:

- Gains knowledge about industry/company process.
- Develops skills in 2D and 3D software.
- Analyze cost estimation of building materials and finishes.
- Learns the methods and strategies used in cost control.
- Develops managerial skills in the areas of managing works required by the client.
- Adapts to working in a team and contributes to needs as they arise.
- Demonstrates competency in professional presentation, communication and writing skills.

Internships will be permitted in the following areas:

- b) Regional and National Interior design firms/Architecture firms.
- c) Construction companies – Space planning.
- d) Manufacturing Sectors – Metal arts and crafts, Ceramic design, building products.
- e) Companies related to Building Material and Finishes.
- f) Interior design specializations - Lighting design, Furniture design, sustainable design, facilities management and community development.
- g) Related specializations - Model home design, kitchen and bath design, art representation, color specialist and architectural photography.

Evaluation

Internship will be carried out during the summer vacation of the fourth semester and the report will be evaluated by the two examiners within the department.

Title of the Course		ERGONOMICS								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	III							CIA	External	Total
	Sem									
CC:13	VI	Y				4	6	25	75	100

Learning Objectives
To enable the students to:
Gain knowledge on importance of ergonomics in work effectiveness.
Design work areas using ergonomic principles.

UNIT	CONTENT	HOURS
UNIT I	Ergonomics – Concept, Definition, Characteristics of places, things and activities. Human Factors, Principles of Ergonomics, Occupational factors affecting the worker.	15
UNIT II	Anthropometry - Definition, Types of data – Static dimensions and Dynamic dimensions, Definition and Applicability of Stature – Eye height, Elbow height, Sitting height, Shoulder and Elbow breadth, Thigh clearance and Popliteal height, Maximum and Minimum Vertical and Horizontal reach.	25
UNIT III	Posture – Sitting, Standing, lying down, Change of posture, Movement – Lifting, Pulling and Pushing, Problems of Posture – Kyphosis, Lordosis, Scoliosis and squatting and cross legged problems. Exercises for Postural problems.	20
UNIT IV	Musculoskeletal Disorder (MSD) – Strain, Tendinitis, Joints, Ligaments. Carpel Tunnel Syndrome (CTS) , Back, Neck, Knee problem. Stress – Definition, types and coping techniques.	15
UNIT V	Environmental Factors - Noise – Noise Guidelines, Noise reduction materials - Acoustics. Temperature – Heat stress, Heat strain, Materials used for thermal comfort, Heat Exchange - Convection, Conduction and Radiation.	15
	TOTAL	90

COURSE OUTCOMES

After successful completion of the course the student will be able to:

- CO1. Relate anthropometry, posture and Musculo skeletal disorder.
- CO2. Assess the static and dynamic dimensions in anthropometry.
- CO3. Analyze the problems of posture and relate the significance of exercises.
- CO4. Understand the concept of ergonomics design.
- CO5. Compare and identify the right environmental factors.

References:

- Khan M.I., (2014). Industrial Ergonomics. PHI Learning Private Limited, New Delhi.

- Umesh Prasad, (2011). Essential of Ergonomics. Sonali Publications, New Delhi.
- ManjitKaurChauhan, (2015). Ergonomics Practical Manual for Beginners. Authorspress, New Delhi.
- Jan Dul and Bernard Weerdmeester, (2008). Ergonomics for Beginners – A quick reference guide, CRC Press, New York.
- [Bridger](#) (2017). Introduction To Human Factors And Ergonomics, 4th Edn, Taylor & Francis Publishers
- [K.C. Jain, P.L. Verma, Nitin Shrivastava](#) (2018). Work Study And Ergonomics, New Age International Publishers

e-Learning resources

- <https://www.medicalnewstoday.com/articles/324071.php#summary>
- <https://www.healthyworkstations.com/resources/ergo/TakingMeasurements.pdf>
- <https://biologydictionary.net/anthropometry/>
- <https://www.osha.gov/ergonomics>

Mapping with Programme Outcomes

	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO10
CO1	S	S	S	M	L	M	M	M	M	S
CO2	S	S	S	M	L	M	M	M	M	S
CO3	S	S	S	M	L	M	M	M	M	S
CO4	S	S	S	M	L	M	M	M	M	S
CO5	S	S	S	M	L	M	S	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to Pos	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		PRINCIPLES OF RESOURCE MANAGEMENT								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	III Sem							CIA	External	Total
CC14	VI	Y		Y		4	6	25	75	100

Learning Objectives
To enable the students to:
Understand the concepts, principles and significance of resource management.
Apply the principles in the management of resources.
Acquire Knowledge in work simplification.

UNIT	CONTENT	HOURS
UNIT I	Management Process – Definition, Qualities of a Good Manager. Management Process-Planning, Organizing, Controlling and Evaluation.	10
UNIT II	Managerial Inputs - Values, Goals, Standards Decision making - Meaning and its importance, Steps in Decision making process, Kinds of decisions, Methods of resolving conflicts. Resources - Meaning and classification, Factors affecting the use of resources, Maximizing the use of family resources.	15
UNIT III	Time Management - Tools in time management - Peak loads, Work Curves, Rest periods and work simplification. Time management process - Planning - Steps in making time plans - Controlling the planning action - Evaluation.	20
UNIT IV	Energy Management – Efforts used in Activities, Body mechanics, Fatigue - Types - Physiological and Psychological fatigue, Remedies for fatigue and Managerial process applied to energy. Work Simplification - Definition, Techniques - Process chart, Operation chart, and Pathway chart.	15
UNIT V	Money Management – concept of Income - Types, methods of augmenting family income. Methods of handling money, Family Expenditure – steps in making a Budget, controlling the use of income, Evaluation. Engel’s Law, Savings and its importance.	15
	PRACTICAL a) Plan an event. b) Identification of personal and family values and goals. c) Plan Time schedule. d) Techniques to study work simplification. e) Formulation of budgets for family.	15
	TOTAL	90

COURSE OUTCOMES

After successful completion of the course the student will be able to:

- CO1. Understand the managerial process.
- CO2. Identify the resources and factors influencing the use of resources.
- CO3. Understand use of tools in time management in day to day life.
- CO4. Apply work simplification techniques while planning work.
- CO5. Develop skills to draw a budget within the available income and to maintain accounts.

References:

- [Dipak Kumar Bhattacharyya](#) (2017), HR Analytics, Sage Publications India Private Limited
- [K Aswathappa](#) (2005), Human Resource And Personnel Management, Mcgraw-Hill Education India Ltd.
- [Kavita Singh](#) (2015), Organizational Behaviour Text And Cases, Vikas Publishing House
- PremavathySeetharaman, Sonia Batra, PreetiMehra, An Introduction To Family Resource Management(April 6, 2019)
- [Raman Preet](#) (2019), Future of Human Resource Management, Wiley Publishers
- Rao, V.S.P., (2010) Human Resource Management. Excel Books Publishers.
- Rao, V.S.P., (2019)Human Resource Management, Rao, Cengage Learning India Pvt. Ltd.

e-Learning resources

- <http://www.eiilmuniversity.co.in/downloads/Human-Resource-Management.pdf>
- <https://www.mgncre.org/pdf/publication/403%20HRM.pdf>
- <http://www.yourarticlelibrary.com/decision-making/decision-making-in-management-definition-and-features-explained/25657/>
- https://www.researchgate.net/publication/355445394_What_is_Human_Resource_Management_HRM
- https://www.sagepub.com/sites/default/files/upm-binaries/25450_Ch1.pdf
- https://archive.mu.ac.in/myweb_test/M.Com.%20Study%20Material/Human%20Res.%20Management%20-%20M.%20Com%20-%20I.pdf

Mapping with Programme Outcomes

	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO10
CO1	S	S	S	M	S	M	M	L	M	S
CO2	S	S	S	M	S	M	M	L	M	S
CO3	S	S	S	M	S	M	M	L	M	S
CO4	S	S	S	M	S	M	M	L	M	S
CO5	S	S	S	M	S	M	M	L	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to Pos	3	3	3	3	3

Strong 3 Medium 2 Low

Title of the Course		3D MODELING IN DESIGN (PRACTICAL)								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	III Sem							CIA	External	Total
CC15	VI			Y		4	6	40	60	100

Learning Objectives
To enable the students to :
Understand the application of 3D Modeling & there by upgrade their presentation skills in the design field.
Analyze the features of various tools in Google Sketch up for 3D Modeling
Create rendered 3D views using 3ds Max Software

UNIT	CONTENT	HOURS
UNIT I	Concept of 3D Modeling Need & purpose of 3D models and views in the design field. Overview on different software's & plugins used for 3D modeling - Google Sketchup, 3Ds Max, Revit, V ray.	15
UNIT II	User Interface of Google Sketch up Components of Google Sketchup screen Basic tools - Rectangle, Circle, Select, Pencil, Push-pull, Groups, Components, Move, Array, Copy, Rotate, Offset & Paint bucket. Navigation tools - Zoom, Orbit, Pan Creating the components of a building such as walls, doors, window openings, furniture's using the available rooms	20
UNIT III	Materials & Lighting Creating and applying materials to the models created. Exploring setting options in lights and camera tools. Create rendered views by using V ray plugin.	20
UNIT IV	Overview of 3Ds Max User Interface of 3Ds Max Compare the features of 3Ds Max with Google SketchUp	15

UNIT V	Rendering using 3Ds Max Import of 3D models from Google Sketchup Create 3D rendered views after applying materials, set the lights and camera positioning.	20
	TOTAL	90

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1: Outline the importance of 3D modeling in designing spaces.

CO2: Create interfacing in both interior and exterior spaces using Google Sketch up.

CO3: Identify and utilize different materials and evaluate the light and camera settings for 3D views.

CO4: Compare features of 3Ds Max and Google Sketch up.

CO5: Create rendered 3D views of residential and commercial spaces using 3Ds Max.

References:

- Aidan Chopra, SketchUp 2014 For Dummies, John Wiley & Sons
- Alexander C. Schreyer, Architectural Design with SketchUp: 3D Modeling, Extensions, BIM, Rendering, Making, and Scripting 2nd Edition, Wiley Publishers.
- Daniel Tal, Rendering in SketchUp: From Modeling to Presentation for Architecture, Landscape Architecture, and Interior Design, Wiley Publishers.
- Kelly L. Murdock, Autodesk 3ds Max 2020 Complete Reference Guide, SDC Publications
- Markus Kuhlo, Architectural Rendering with 3ds Max and V-Ray: Photorealistic Visualization 1st Edition, Routledge Publishers.

e-Learning Resources:

- <https://www.sketchup.com>
- <https://vdoc.pub/download/building-blocks-of-sketchup-69si3ltjgke0>
- <https://www.bgsu.edu/content/dam/BGSU/libraries/documents/collab-lab/Sketchup-Tutorial.pdf>
- https://www.academia.edu/31650716/Architectural_Rendering_with_3ds_Max_and_V_Ray
- http://images.autodesk.com/adsk/files/3dsmax_2010_lighting_rendering.pdf

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	S	S	S	L	M	S	L	M	M	S
CO2	S	S	S	L	M	S	L	M	M	S
CO3	S	S	S	L	M	S	L	M	M	S
CO4	S	S	S	L	M	S	L	M	M	S
CO5	S	S	S	L	M	S	L	M	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PS O1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		ENTREPRENEURSHIP DEVELOPMENT								
Category	Year	L	T	P	O	Credits	Inst Hrs	Marks		
	III							CIA	External	Total
	Sem									
EC7	VI	Y				3	5	25	75	100

Learning Objectives
To enable the students to :
Understand the concept of entrepreneurship
Cultivate entrepreneurial values, attitude, qualities and desires.

UNIT	CONTENT	HOURS
UNIT I	Entrepreneur - Definition of Entrepreneur and Entrepreneurship, Need of entrepreneurship, Characteristics and qualities of an entrepreneur, functions of an Entrepreneur, Types of Entrepreneurs.	20
UNIT II	Small enterprises - Definition, characteristics, Relationship between small and large Units. Role of Small enterprises in economic development, and problems of small-scale industries. Subsidies and incentives, importance of MSMEs	15
UNIT III	Project report- Meaning, Significance, Elements of Project formulation, planning, commission, guidelines for project report. Formulation of project report.	10
UNIT IV	Institutional Finance to Entrepreneurs - Commercial Banks, Other Financial Institutions- SIDBI, SISI, SIPCOT,IFCI, ICICI, IRBI, DIC and SFCs. Steps to start an enterprise.	15
UNIT V	Marketing Management - Concept of Marketing, Functions of marketing, Market Assessment and segmentation. Marketing Mix. Distribution channels, Sales promotion Branding, Labeling and Packaging.	15
	TOTAL	75

COURSE OUTCOMES

After successful completion of the course the student will be able to

- CO1.** Understand the Concept of entrepreneur and entrepreneurship.
- CO2.** Compare the financial institutions offering finance to entrepreneurs.
- CO3.** Relate the role of small enterprises in economic development.
- CO4.** Explain the concepts of marketing management and marketing mix.
- CO5.** Create project report for starting a small-scale enterprise.

References

- [T N Chhabra](#) (2019), Entrepreneurship Development, Sun India Publications
- [Pankaj Goyal](#) (2017). Before You Start Up: How to Prepare to Make Your Startup Dream a Reality, Fingerprint! Publishing
- Hisrich, R.D. (2015). International Entrepreneurship: Starting, Developing, and Managing a Global Venture
- Taneja, S. and Gupta, S.L. (1992). Entrepreneurship Development, New Venture Creation, Galgotia Publishing Company, New Delhi.
- Sunil Gupta, (2018), Small-Scale Industries and Entrepreneurship, ABD Publishers
- [B. Jankiraman](#), [P.V. Raveendra](#), [V.K. Srirama](#) (2010). Role and Challenges of Entrepreneurship Development, Excel Books Publishers

e-learning resources

- <http://www.worldtechgossips.com/2013/02/entrepreneurial-development.html>
- https://www.iare.ac.in/sites/default/files/lecture_notes/IARE_Entrepreneurial_Development_NOTES.pdf
- <https://ncert.nic.in/ncerts/l/lbs213.pdf>
- https://www.researchgate.net/publication/344413560_Small_Scale_Industries_in_Entrepreneurship_Development_of_India_References
- <https://egyankosh.ac.in/bitstream/123456789/52149/1/Unit-1.pdf>

Mapping with Programme Outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO1	S	S	S	M	L	M	S	M	S	S
CO2	S	S	S	M	L	M	M	M	S	S
CO3	S	S	S	M	L	M	M	M	S	S
CO4	S	S	S	M	L	M	M	M	S	S
CO5	S	S	S	M	L	M	M	M	S	S

Mapping with Programme Specific Outcomes

CO/PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

Strong 3 Medium 2 Low 1

Title of the Course		PROFESSIONAL PRACTICE								
Category	Year III	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
EC8	VI	Y		Y		3	5	25	75	100

Learning Objectives
To enable the students to
1. Plan residential interiors and commercial interiors.
2. Gain knowledge in estimating and costing.
3. Understand the preparation of quotation and tenders.

UNIT	CONTENT	HOURS	
UNIT I	Residential Interior design - meaning, types of residential buildings - single family homes, condominiums, multi-family homes, apartments and flats, penthouses, studio flats, villas, farmhouses, huts, eco-friendly homes. Planning for residential interiors - living room, dining room, kitchen, bedroom, children's room, Bathroom.	15	
UNIT II	Commercial interiors - meaning, Role of commercial interior designers, Types of Office Layouts- cubicle, low partition, team-based, open-plan, hybrid, co-working, home office - prospects and constraints. Factors to be considered in commercial Interior Designing - versatility of space, aesthetics, technology implementation, personalized spaces and safety. Space planning for office interiors - cabinets, conference rooms.	15	
UNIT III	Estimation - Definition of estimates, need for estimation, Types of estimates - approximate, detailed, revised, supplementary, repair, annual maintenance and sub-estimate. Types of approximate estimate. Preparation of detailed estimate. Measurement of materials - units and mode of measurement, rules for measurements. Quantity surveying - methods of taking out quantities- long wall-short wall, centre line, partially centre line and short wall. Analysis of rates, schedule of items, schedule of quantities.	15	
UNIT IV	Specifications - definition, importance of specification, uses of specification, types of specification - General, detailed, special, restricted or recommended and manufactures. Principles of drafting specifications, requirements of specifications, points to be included in the specifications. Sources for information regarding the specification.	15	
UNIT V	Tenders and quotations - Tenders - meaning, objectives of tendering, contents of a tender notice, types of tender, tender document, preparation of tenders, methods of inviting tender public, e-tendering, limited tender, single tender, nomination. Quotations - meaning, Contracts - meaning, types - measurement contracts, lump sum, cost plus fee, turnkey, labour, day work, unit price, target cost, time and material.	15	
	66	TOTAL	75

COURSE OUTCOMES

After successful completion of the course, the student will be able to:

CO1. Understand and recognize the selection criteria in purchase of common household equipment.

CO2. Interpret and implement the proper care and maintenance of all major equipment.

CO3. Distinguish the merits and demerits of minor equipment.

CO4. Evaluate the concepts, uses, types of electric household equipment.

CO5. Adapt to the use of smart home gadgets and automation in modern living.

Reference:

- Bhargava S.C (2020), Household Electricity and Appliances, BS Publications, ISBN-13: 978-9390211265.
- Eric Kleinert, (2012), “Troubleshooting and Repairing Major Appliances”, Edition 3, McGraw-Hill Professional Publishing, ISBN-13: 9780071770187
- Jean B MacLeod (2018), “The Kitchen Paraphernalia Handbook: Hundreds of Substitutions for Common and Uncommon Utensils” Jean B. MacLeod ISBN-13: 978-0997446432
- Chin Robert (2020), “ A DIY Smart Home Guide: Tools for Automating Your Home and Security”, ISBN-13: 978-1260456134

e-Learning Resources:

- <https://www.slideshare.net/loggcity/smart-home-technologies>
- <https://nios.ac.in/media/documents/srsec321newE/321-E-Lesson-16.pdf>
- <https://www.trendhunter.com/slideshow/home-appliances>
- <https://www.aylanetworks.com/blog/what-is-a-smart-appliance-and-how-do-you-make-one>

Mapping with Programme Outcomes

	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	S	S	S	M	L	M	L	L	M	S
CO2	S	S	S	M	L	M	L	L	M	S
CO3	S	S	S	M	L	M	L	L	M	S
CO4	S	S	S	M	L	M	L	L	M	S
CO5	S	S	S	S	L	S	L	L	M	S

Mapping with Programme Specific Outcomes

CO/PSO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage (rounded of) of Course Contribution to POs	3	3	3	3	3

67

Strong 3 Medium 2 Low 1

Title of the Course		APTITUDE AND REASONING SKILL FOR COMPETITIVE EXAMINATIONS								
Category	Year III	L	T	P	O	Credits	Inst Hrs	Marks		
	Sem							CIA	External	Total
Professional Competency Course	VI	Y	Y			2	2	25	75	100

Learning Objectives
To enable the students to :
Get acquainted with quantitative aptitude and logical reasoning tests employed in various competitive examinations.
Recognize the importance of aptitude and reasoning skills to obtain placement in campus interviews.

UNIT	CONTENT	HOURS
UNIT I	Quantitative Ability (Basic Mathematics) Number Systems, LCM and HCF, Decimal Fractions, Simplification, Square Roots and Cube Roots, Average, Problems on Ages, Surds & Indices, Percentages, Problems on Numbers.	6
UNIT II	Quantitative Ability (Advanced Mathematics) Logarithm, Permutation and Combinations, Probability, Profit and Loss, Simple and Compound Interest, Time, Speed and Distance, Time & Work, Ratio and Proportion.	5
UNIT III	Data Interpretation Tables, Column Graphs, Bar Graphs, Line Charts, Pie Chart, Venn Diagrams	5
UNIT IV	Verbal and Non-Verbal reasoning Analogy, Blood Relation, Directional Sense, Number and Letter Series, Coding – Decoding, Calendars, Clocks, Venn Diagrams, Seating Arrangement, Syllogism, Mathematical Operations, logical sequence of work, alphanumeric sequence puzzle, Series, Analytical reasoning, Mirror-image, Water-image, Completion of incomplete pattern, Grouping of identical figures	8
UNIT V	Logical Reasoning Statement – Argument, Statement Assumptions, Statement – Course of action, Statement and Conclusions, Theme detection, Cause and Effect reasoning, Deriving conclusion from passages, Theme detection.	6
	TOTAL	30

