

STATE BOARD OF TECHNICAL EDUCATION, BIHAR
Scheme of Teaching and Examinations for
IIIrd SEMESTER DIPLOMA IN COMPUTER AIDED COSTUME
DESIGN AND DRESS MAKING
(Effective from Session 2022-23 Batch)

THEORY

Sr. No.	SUBJECTS	SUBJECT CODE	TEACHING SCHEME	EXAMINATION – SCHEME							Credits
			Periods per Week	Hours of Exam.	Teacher's Assessment (TA) Marks (A)	Class Test(CT) Marks (B)	End Semester Exam. (ESE) Marks (C)	Total Marks (A+B+C)	Pass Marks ESE	Pass Marks in the Subject	
1.	Basics of Costume Design & Dress Making	2050301	03	03	10	20	70	100	28	40	03
2.	Digital Tools	2050302	03	03	10	20	70	100	28	40	03
3.	Textile Science	2050303	03	03	10	20	70	100	28	40	03
4.	Design Fundamental	2050304	03	03	10	20	70	100	28	40	03
5.	Clothing Construction	2050305	03	03	10	20	70	100	28	40	03
Total:-			15				350	500			15

PRACTICAL

Sr. No.	SUBJECTS	SUBJECT CODE	TEACHINGS SCHEME	EXAMINATION – SCHEME					Credits
			Periods per Week	Hours of Exam.	Practical		Total Marks	Pass Marks in the Subject	
					Internal (PA)	External (ESE)			
6.	Digital Tools Lab	2050306	04	03	15	35	50	20	02
7.	Design Fundamental Lab	2050307	04	03	15	35	50	20	02
8.	Clothing Construction Lab	2050308	04	03	15	35	50	20	02
Total: - 12							150		06

TERM WORK

Sr. No.	SUBJECTS	SUBJECT CODE	TEACHING SCHEME	EXAMINATION – SCHEME				Credits	
			Periods per week	Marks of Internal Examiner (PA)	Marks of External Examiner (ESE)	Total Marks	Pass Marks in the Subject		
9.	Design Concept and Design Effect (TW)	2050309	04	23	52	75	30	02	
10.	Python/Others (TW)	2000310	02	07	18	25	10	01	
Total: - 06							100		03
Total Periods per week Each of duration one Hours = 33							Total Marks = 750		24

BASICS OF COSTUME DESIGN & DRESS MAKING

Subject Code 2050301	Theory			No of Period in one session: 42			Credits 03	
	No. of Periods Per Week			Full Marks				:
	L	T	P/S	ESE	:	70		
	03	—	—	TA	:	10		
				CT	:	20		

Rationale: This course is designed to acquaint the students with the basic understanding of the principles of costume design and the psychology of clothing. It will develop skills in students related to design development which emerges through a process of character analysis, based on the script and directorial concept.

Course Outcomes (Cos): Students will be able to:

1. Understand different concepts of costume, fashion & design.
2. Understand elements of design, principles of fashion design & different divisions in clothing industry.
3. Know about fashion & clothing industry.
4. Exposed to different concepts & terminologies used in fashion & clothing industry.

CONTENTS: THEORY

	Name of the Topic	Hrs	Marks
Unit-1	<p>Introduction to Costume Design and Garment Making</p> <p>1.1 Basic concepts of Costume Design and Garment Making.</p> <p>1.2 Brief history of Indian garments from ancient to modern times: Harrappa and Mohenjodaro, Vedic Age, The Persian influence, The Greek influence, The Purdah system, Origin of the Royal Attire. Salwar – Kameez – The decades- old Indian Attire Garment.</p> <p>1.3 Brief information regarding: Ancient Egyptian dress, Ancient Greek dress, Ancient Roman</p> <p>1.4 Importance of Costume Design in our life.</p> <p>1.5 Design Process: Analysis, Design collaboration, Costume research, Preliminary sketching and colour layout, Final sketches.</p> <p>1.6 Production process: Pattern Drafting or Draping.</p> <p>1.7 Costume Designer.</p> <p>1.8 Difference between costume design and fashion design.</p>	12	
Unit-2	<p>Elements & Principles</p> <p>2.1 Elements of arts: Line, form, shape, value, colour, texture.</p> <p>2.1.1 Colour schemes. Colour co ordination</p> <p>2.2 Principles of design: Balance, emphasis, harmony, proportions & repetition</p> <p>2.3 Elements of costume & fashion design.</p> <p>2.3.1 Structural designs- darts, tucks, pleats.</p> <p>2.3.2 Decorative designs- prints, trims, embellishments.</p>	06	

Unit-3	Fashion & Clothing Terminologies 5.1 Clothing concept: Definition & principles, Objectives of clothing technology. 5.2 Clothing terminologies- baggies, bell- bottom, blazer, blouse, bow, ties, circle skirt, drapes, innerwear, jeans, lingerie's, polo shirt, seamless garment, wrap around skirt. 5.3 Fashion terminologies- fashion cycle, contemporary, conservative & continental costumes, surfer look, masculine, mod looks, formal wear, casual wear, classic, ethic, city wears, boutique, haute-o-couture, prêt –a-porter, mass production.	06	
Unit-4	Product categorization 4.1 Textiles 4.2 Accessories/lifestyle products, Leather goods and footwear 4.3 Apparel - Menswear/Womenswear/Kidswear 4.4 Trims and Accessories for the Fashion Industry 4.5 Various categories of menswear, womenswear and childrenswear 4.5.1 Menswear – shirt, trousers, formal jackets suit and sporty suit 4.5.2 Womenswear – dresses, blouses, skirts, trousers, kameezes, saris and blouses 4.5.3 Kids wear – categories of children for 0 – 15 years and various garments like frocks, skirts, blouses, trousers, dungarees, jackets etc. 4.5.4 Sizing Systems 4.5.5 Standard Measurements 4.5.6 Standard Sizing 4.6. Age group relationship to design.	18	
	Total	42	

List of Recommended Books

S. No.	Title of Books	Author	Publication
1	Traditional Indian Costume and Textile	Dr. Parul Bhatnagar	Abhishek publication, Chandigarh
2	Indian Textiles	John Gillow & Nicholas Barnard	
3	Textile and embroidery of India	John Irvin	Marry Publications, Bombay.
4	Elements of fashion and design	Lehnert Gertrud	West Duxbury Manchesters. 1995
5	Inside the fashion business	Kitty G. Dickerson	Person Education Pvt. Ltd. Singapore. 2004

DIGITAL TOOLS

Subject Code 2050302	Theory			No of Period in one session: 50			Credits 03
	No. of Periods Per Week			Full Marks			
	L	T	P/S	ESE	:	70	
	03	—	—	TA	:	10	
				CT	:	20	

Rationale:

Computers play a vital role in present day life, more so, in the professional life of any student. In order to enable the students to use the computers effectively in Design software's, this course offers the modern-day skills along with graphics application in design.

Course Outcomes (Cos): Students will be able to:

- Create an understanding of various design specific softwares and their functioning.
- Use Photoshop, Corel Draw and Illustrator for editing skills
- Use the various toolboxes and colour changing techniques.

CONTENTS : THEORY

Name of the Topic		Hrs	Marks
Unit -1	Corel Draw Introduction to Corel Draw, Terminology & Concept, Overview of the software Object, Drawing, Vector Graphic, Bitmap, Flyouts, Artistic Text, Paragraph Text, Title Bar, Menu Bar, Toolbar, Toolbox, Drawing Window, Property Bar, Editing Tools, Curve a Line, Closed Objects, Mirror, Rotate, Pen Tool, Outline Tool, Drawing Rectangles and Squares, Drawing Ellipses, Circles, Arcs, Drawing Polygons And Stars, Drawing Spirals, Drawing Grids, Drawing Predefined Shapes, Digitization of products, Shaping Objects, Basic & Advance Shapes, Drawing Shapes.	10	
Unit -2	Designing Tools Working With Filling Objects, Symbol, Colors Applying Uniform Fills, Fountain Fills, Pattern Fills, Texture Fills, Postscript Texture Fills, Using Symbols In Drawings, Managing Collections And Libraries, Sharing Symbols Between Drawings, Choosing Colors, Creating Custom Color Palettes, To Choose a Color Using a Fixed Or Custom Color Palette, Adding Three Dimensional Effects to Objects, Changing the Transparency of Objects, Adding & Formatting Text, Shifting And Rotating Text, Fitting Text To A Path, Theme Based Conceptualization of Croquie and Corresponding Jewelry Set, Four Theme Based Croquie, Female Croquie with Help of Measurement, Jewelry, Gold Shading, Kundan, Stones, Diamond, Rings, Necklace, Earrings.	10	
Unit -3	Photoshop Photoshop terminology & concept , Over view of the software, Creating a new document, Opening an image to edit, Cropping an image, Using brush & pencil, Adding & creating gradient, Making different shapes, Making selection with different selection tools, Elliptical marquee, Rectangle marquee, Lasso Tool(Polygonal & Magnetic Lasso tool), Magic wand, Add to Selection, Subtract from selection, Intersect with selection & Feathering.	10	
Unit -4	Layers Working with layers, Creating new layer (Layer via cut & copy), Duplicate layer, renaming a layer, deleting layer, Rearranging layers, Advanced Practice of Layers, Layer style, Merging Layers (merge down, merge visible), Linking layers, flatten image, Locking & unlocking background layer, Blending modes, Changing opacity of layers, Creating layer set, Attributes of an Image (Sizing & transforming images).	10	
Unit-5	Repairing & Retouching Tools Healing Brush, Patch tool, Clone stamp, Pattern stamp, Eraser Tool, Dodge, Burn & Sponge tool, Warping text, Rasterizing text layer, Changing the transparency of objects. Creating Pattern like Khadi, Silk, Denim, Jute, Cotton etc. Collage Making, Poster Making, Composition & Calendar, Applying makeup on a face. Setting up the Project Database, Assigning and Copying Object Data, Viewing an Object Data Summary, Making Composition & Posters based on various themes.	10	

Text Reading:

- Coreldraw X4 (Lawpoint Publications).
- Rapidex DTP Course (Shirish Chavan).

TEXTILE SCIENCE

Subject Code 2050303	Theory			No of Period in one session: 42			Credits 03
	No. of Periods Per Week			Full Marks			
	L	T	P/S	ESE	:	70	
	03	—	—	TA	:	10	
				CT	:	20	

RATIONALE:

Rapid changes and progress in the textile industry have led to the advancement in the fabrics selected for manufacturing garments. Manufacturing of fiber and textiles for apparel, household, and industrial use has a great business opportunity. This course provides in-depth knowledge on different fibers, yarns and fabrics available in the market, their manufacturing processes and their properties, principles of dyeing, printing and its operations, materials, equipment and process. This course will provide a sound foundation for students undertaking the course in costume designing and dressmaking.

Course Outcomes (Cos): Students will be able to

- Select suitable textile fibres for a given application on the basis of physical and chemical properties.
- Explain the characteristics of different types of fabrics based on type of yarn, weaves and other fabric construction processes.
- Select appropriate dyes and printing method for given textile fibre and fabric respectively.

CONTENTS: THEORY

	Name of the Topic	Hrs	Marks
Unit-1	Introduction 1.1 Terms and definition: Textile, Textile Science, Fibres, filaments, yarns (spun yarns, filament yarns), sewing threads, Fabrics (woven, knitted, non-woven, etc.), Garment. 1.2 Importance of textile science in our life.	02	05
Unit-2	Textile fibres 2.1 Introduction and classification of textile fibres. 2.2 General fiber properties 2.3 Brief introduction about manufacturing processes, physical & chemical properties, their suitability in garment of following textile fibres: Cotton, Silk, Wool, Polyester, Viscose rayon, Acrylic, Nylon. 2.4 Identification of important textile fibres (Feeling and burning test).	10	15
Unit-3	Yarns 3.1 Brief outline of the process involved in the conversion of fibres into yarn. 3.2 Different types of yarn, their properties and suitability for garment. 3.3 Yarn twist. 3.4 Yarn count (definition, unit of yarn count, system of yarn count).	06	10

Unit-4	<p>Conversion of yarn into fabric 4.1 Definition, objectives and principles of various methods of fabric formation – weaving, knitting, non-woven. End use of fabrics produced by these methods.</p> <p>4.2 Woven Fabric 4.2.1 Basic loom, loom mechanisms and function of its various parts, warp & weft yarns. 4.2.2 Woven design fundamentals: Introduction, classification of woven structures, methods of weave representation, weave repeat, basic elements of woven design, types of draft plan and denting plans. Basic weaves and its modification (Plain weave, Twill weave, Satin and weaves). Brief idea about decorative weaves. Draft and peg-plan of weave.</p>	12	20
Unit-5	<p>Chemical Processing of Textile 6.1 Introduction to various wet-processing treatments such as singeing, desizing, scouring, bleaching, mercerization.</p> <p>6.2 Dyeing: Dyes & its classification, Principles & Properties of dyes, Application of natural and Synthetic dyes on different fibres and their blends. Different dyeing techniques. Introduction to dyeing machinery. Defects in dyeing and their remedies.</p> <p>6.3 Textile Printing: Introduction, Difference between dyeing and printing. Methods of Printing such as Block Printing, Stencil Printing, Screen Printing, and Roller printing. Styles of Printing: Direct style of Printing, Resist style of Printing, Tie & dye, Batik Printing, Discharge style of Printing.</p> <p>6.4 Finishing of fabrics: Principle of finishing of natural, man-made fibres and blended fabrics. Wash-n-wear, crease-resistant anti-shrink, water-repellent, rot and mildew proofing, flame-proofing finishes, etc.</p>	12	20
	Total	42	70

List of Recommended Books:-

S. No.	Title of Books	Author	Publication
1	Textile science	Marjery Joseph.	Holt rinechart and wiston 1992
2	Introductory textile science	Marjory L. Joseph	
3	Textiles Fiber to Fabric	Bernard P. Corbman	McGraw-Hill Book Co.–Singapore- International Edition
4	Fundamentals of textiles and their care.	Sushila Dantyagi.	Orient blackswan pvt.ltd.2012
5	Modern textile	Do rothy S. Lyle.	Mcmillan publishing.co. 1982
7	Dyeing and Synthetic fabrics	R.S Paryag.	
8	Technology of Dyeing	V.A Shenai	Sevak Publishers, Mumbai.

DESIGN FUNDAMENTAL

Subject Code 2050304	Theory			No of Period in one session : 42			Credits
	No. of Periods Per Week			Full Marks			03
	L	T	P/S	ESE	:	70	
	03	—	—	TA	:	10	
				CT	:	20	

Rationale:

This course is designed to develop artistic aptitude in students to sustain themselves in the field of garment/fashion design. It helps in developing the basic foundation that is essential for costume design and dressmaking. The course also forms the basis for drawing proportionate human figures. Application of principles of design will be useful to the students in garment designing. In addition, the knowledge of different types of figures enables the designers to design costumes as per figure types.

Course Outcomes (Cos): Students will be able to

- Apply principles of design in garments for different types of human figures using appropriate elements of design.
- Use tools and materials for drawing and sketching.
- Create drawings and sketches using appropriate tools and elements of design.
- Apply principles of design in clothing using appropriate elements of design.
- Draw human figure proportionally.
- Design dress for various types of human figures.

CONTENTS: THEORY

	Name of the Topic	Hrs	Marks
Unit-1	<p>Introduction</p> <p>1.1 Drawing tools & material</p> <p>1.2 Sketching tools and material.</p> <p>1.3 Elements of Costume: 1. Necklines & Collars, 2 Sleeves & Cuffs, 3 Skirts & Pockets.</p> <p>1.4 Silhouette: Concept, Definition, Types of silhouette with their features.</p>	06	
Unit-2	<p>Element of design.</p> <p>2.1 Line: Definition, Types of lines, Line movements, Aspects of line, its physical and psychological effects on human figure. (Horizontal, Vertical, Diagonal, Curve, Zigzag)</p> <p>2.2 Space: Definition, Cues influencing perception of shape and space, physical and psychological effect of space.</p> <p>2.3 Shape and form: Definition, equally sided flat shapes, unequally sided flat shapes, equally sided volume forms ,unequally sided forms, some shapes that fit snugly together, shapes not fitting together create other shapes between them.</p> <p>2.4 Texture: Definition and concept of texture, Types of textures, Psychological and physical effect of Texture.</p> <p>2.5 Colour: Definition, psychological and physical effects of colour, Primary, secondary and tertiary colour. neutral colour. Dimension of colour – Hue, Value & Intensity, Tints, Shades and tones, Warm and Cool colour. Colour scheme – Neutral, Analogous, Monochromatic, Complementary, Double complementary, Split complementary, Double split complementary, Triad colour scheme.</p>	15	

Unit-3	Principles of design. 3.2 Harmony (Unity)— Definition, concept, effects (physical & psychological). 3.3 Balance - Definition, concept, types of balance, physical & psychological effects of balance. 3.4 Emphasis - Definition, concept, physical & Psychological effects of emphasis. 3.5 Proportion (Scale)- Definition, concept, physical & psychological effects of proportion. 3.6 Rhythm- Definition and effects of Rhythm. Different ways of achieving rhythm 3.5.1 Repetition-Definition and physical & psychological effects of repetition. 3.5.2 Parallelism-Definition and effects of parallelism. 3.5.3 Sequence-Definition and effects of Sequence. 3.5.4 Alternation- Definition and effects of Alternation. 3.5.5 Gradation- Definition and effects of Gradation. 3.5.6 Transition- Definition and effects of Transition. 3.5.7 Radiation-- Definition and effects of Radiation. 3.5.8 Concentricity- Definition and effects of Concentricity. 3.5.9 Contrast -Definition and effects of Contrast.	15	
Unit-4	Elements of Colour 3.1 Introduction, Fundamental basis of colour, Theories of colour (Light theory and Pigment theory of colour), Visual effects of various colours. 3.2 Modification of colours - concept, need & requirements. 3.3 Colour Contrast and Colour Harmony – Concept, Need & Requirements, and Different types.	06	
	Total	42	

List of Recommended Books

S. No.	Title of Books	Author	Publication
1	Visual design in dress	Marian L Devis.	Prentice-hall, Inc.
2	Individuality in clothing selection	Mary Kefgan	M/c Milan
3	Colour and line in dress	Hemstead	Lawrance Prantice Hall
4	Fashion design illustration-Men	Patrick John Ireland	B.T. Batsford Ltd. London
5	M/c calls' Sewing in colour	Hamlyn	Hamlyn
6	How you look and dress?	Byrta Carson	Mc graw hill book co.1949
7	Art in Everyday Life	Harriet Goldstein	The Macmillan Company, 1929

CLOTHING CONSTRUCTION

Subject Code 2050305	Theory			No of Period in one session: 42			Credits 03
	No. of Periods Per Week			Full Marks			
	L	T	P/S	ESE	:	70	
	03	—	—	TA	:	10	
				CT	:	20	

RATIONALE:

Today's fashion industry is versatile and also rapidly changing its trends, which calls for a quick and required response in the production of garments. Thus, there is a steep demand for the professional and technically educated workforce of pattern making which is one of the basic human resources of garment production industries. This course will provide a sound foundation for garment components and their manufacturing techniques. It is designed to develop skills in students related to taking body measurements using appropriate tools, sewing by non-automatic machine, application of appropriate constructional stitches, and various pattern-making techniques.

Course Outcomes (Cos): Students will be able to

- Make garment components using suitable measuring, marking, sewing & cutting tools.
- Identify Clothing articles, parts of the given sewing machine and various landmarks of human body used in apparel industry.
- Construct fabric samples using appropriate hand stitches, machine stitches, shaping techniques, trims and component.

CONTENTS:THEORY

Contents (Theory)		Hrs/week	Marks
Unit-1	<u>Clothing Terminology</u> 1.1 Definition of garment 1.2. History and role of garment in human race. 1.3. Terminologies associated with clothing: Fabric widths, Grain lines, Straightening, Shrinking, Seam, Seam allowances, Selvedge, Bias, Gusset, Crotch, In seam, Yoke, Piping, Lining, Interlining, Facing.	[04]	
Unit-2	<u>Non-Automatic tools for garment manufacturing</u> 2.1 Measuring Tools: Function, use and care of the following tools: Measuring tape, Tailor's square, Right angled triangle, Calculator, French curve Set, Set square, Curve Rules. 2.2 Marking tools: Function, use and care of the following tools: Paper, Pencil, Fiber pens, Rubber, Compass, Tracing wheel, Pins, Tailor's chalk, Pattern notcher, Pattern punch, Pattern books, Pattern weights, Model stands. 2.3 Cutting tools: Function, use and care of the following tools: Small shears, Big shears, Cutters, Pinking shears, Stitch opener. 2.4 Sewing tools: Function, use and care of the following tools: Bobbin & Bobbin case, Machine sewing needles, Hand sewing needles. 2.5 Miscellaneous tools: Function, use and care of the following: Thimble, Pin cushions, Thread, Ironing board, Iron, Bobbin winder.	[08]	
Unit-3	<u>Sewing Machine</u> 3.1 History of sewing machine 3.2 Types of sewing machine 3.3 Parts and functions of sewing machine 3.4 Operation of sewing machine 3.5 Care & maintenance of sewing machine 3.6 Problems of stitch formation, problems of pucker and problems of damage to the fabric along the stitch line. 3.7 Sewing area.	[08]	

Unit-4	<u>Body Measurement</u> 4.1 Knowledge of various landmarks on the body, required for making garments. 4.2 Techniques of taking body measurements. 4.2.1 Directly from the body (Vertical & Horizontal) 4.2.2 Indirectly form the readymade garments. 4.2.3 From standard size charts. 4.2.4 Technique of calculating all the measurements from chest measurement.	[04]	
Unit-5	<u>Clothing Construction</u> 5.1 Hand stitches: Basting (Even basting, Uneven basting), Running stitch, Different types of hemming stitches (Blind hemming stitch, Simple hemming stitch). 5.2 Machine stitches: Plain Seam, Curved Seam, Cornered, To join an inward corner, Trimming, To trim corner, Clipping, Hand overcast, Zigzagged, Bias bound, French seam, Flat felled seam, Self-bound seam, Corded seams, Lapped seams, Fagotted seam, Double top stitched seam, Welt seam, Tuck seam, Slot seam. Seaming special fabrics (Velvet, Net, Georgette). 5.3 Definition of Fullness. 5.3.1 Techniques of controlling fullness through different varieties of darts, tucks, pleats, gathers, shearing, smocking and ruffles.	[10]	
Unit-6	<u>Garment components</u> 6.1 Types of garment components 6.1.1 Necklines (Definition & its styles) 6.1.2 Pockets (Definition & its Types – Patch pocket, Slash pocket, Double welt pocket, welt pocket, flap pocket, inseam pocket) 6.1.3 Plackets (Placket opening of upper and lower garment) 6.1.4 Sleeves (Set in and Non-Set in) 6.1.5 Collars (Flat and raised) 6.1.6 Cuffs 6.1.7 Knowledge of various components such as lace, braid, elastic, hook and loop fastening, Velcro, seam binding and tape, eyelets, zip fasteners, buttons, tack buttons, snap fasteners and rivets.	[08]	
Total		42	

List of Recommended Books

S. No.	Title of Books	Author	Publication
1	Macall's sewing in colour	Hamlyn	Hamlyn
2	Singer sewing Book	Glady Cuning	Golden Pr
3	Complete guide to sewing		Reader digest
4	Clothing construction	Evelyn A. Mansfield	Houghton miffin 1953
5	The technology of clothing manufacture	Harold Carr and Barbara Latham	John Wiley & sons. 1994
6	The Art of Sewing	Thomas (anna jacob)	UBS Publication distributor Ltd.
7	Home dress making	Isabel Sutherland Ed	Pan Craft Book

DIGITAL TOOLS LAB

Subject Code 2050306	Practical			No of Period in one session: 60			Credits 02
	No. of Periods Per Week			Full Marks			
	L	T	P/S	Internal (PA)	:	15	
	—	—	04	External (ESE)	:	35	

	List of Experiment
Unit-1	Corel Draw
Unit-2	Designing Tools
Unit-3	Photoshop
Unit-4	Layers
Unit-5	Repairing & Retouching Tools

DESIGN FUNDAMENTAL LAB

Subject Code 2050307	Practical			No of Period in one session: 60			Credits
	No. of Periods Per Week			Full Marks			02
	L	T	P/S	Internal (PA)	:	15	
	—	—	04	External (ESE)	:	35	

CONTENTS:PRACTICAL

	List of Experiment	Hrs	Marks
Unit-1	Prepare given types of drawing by hand 1.1 Nature drawing. 1.2 Object drawing. 1.3 Free hand drawing. 1.4 Memory drawing.	04	
Unit-2	Calligraphy writing by hand (All alphabet). 2.1 Gothic letters.	12	
Unit-3	Effect of different types of line. (Types as per the theory portion.)		
Unit-4	Shape. 4.1 Prepare the sheet showing following equal sided flat shapes by hand 4.1.1 Square, Circle, Equilateral Triangle, Pentagon, Hexagon, Octagon. 4.2 Prepare the sheet showing following Unequal sided flat shapes manually 4.2.1 Rectangle, Parallelogram, Heart, Diamond, Teardrop, Marquis, Ogive, Star, Paisley, Club, Spade, Pear, Kidney.	12	
Unit-5	Preparation of the sheets showing shapes that fit snugly together (6.1 to 6.6) and the shapes that don't fit together but create other shapes between them (6.7 to 6.10) (Do it by hand) 5.1 Squares, Hexagon, Ogives, Diamonds, Triangles, Paisleys in to the circle, Octagon, Star, Circle, Square & Rectangle, Squares	02	
Unit-6	Form. (Do it by hand) 6.1 Preparation of sheet showing Equal sided three-dimensional form 6.1.1 Sphere, Cube 6.2 Preparation of the sheet showing Unequal sided three-dimensional forms. 6.1.1 Cylinder, Cone, Pyramid, Box, Bell, Dome, Ovoid, Barrel, Hourglass, Trumpet.	05	
Unit-7	Preparation of sheet showing following Textures. (Any medium) 7.1 Rough texture, 7.2 Smooth texture, 7.3 Transparent	02	
Unit-8	Principles of design 8.1 Preparation of sheet showing the effect of Balance in following areas manually. 8.1.1 Balance in line path, space, space & shape, value, texture, pattern. 8.2 Preparation of the sheet showing Emphasis in relation to the elements of design manually. 8.2.1 Emphasis of line thickness, shape, form, space, light, texture, pattern. 8.3 Preparation of sheets showing Rhythm and its relationship with elements of design manually. 8.3.1 Rhythm in line – Wavy, Zigzag, Single, Swirled, Jagged. 8.3.2 Rhythm in shape – Saw tooth, Diamond, Undulating. 8.3.3 Rhythm in pattern 8.4 Preparation of sheets showing the effect of radiation in relation to elements of design manually. 8.4.1 Radiation in line & space, shape & space, Pattern, Radiation from an axis. 8.5 Preparation of sheets showing the effect of Transition in relation to elements of design manually.	11	

Unit-9	Reducing and Enlargement of design.	03	
Unit-10	To prepare Structural and Applied design on sheet by hand.	03	
Unit-11	Colour. 11.1 Preparation of sheet showing colour wheel. 11.2 Preparation of sheet showing tints and shades. 11.3 Preparation of sheet showing colour schemes with reference to theory.	06	
	Total	60	

CLOTHING CONSTRUCTION LAB

Subject Code 2050308	Practical			No of Period in one session:			Credits 02		
	No. of Periods Per Week			Full Marks				:	50
	L	T	P/S	Internal (PA)				:	15
	—	—	04	External (ESE)				:	35

CONTENTS : PRACTICAL

	List of Experiment	Hrs	Marks
Unit-1	Prepare a labeled outline diagram of sewing machine.		
Unit-2	Take body measurement of another person and note it in the file.		
Unit-3	Prepare sample of hand stitches (covered in theory) on given fabric.		
	Prepare samples of machine stitches (covered in theory) on given fabric.		
Unit-4	Prepare samples of neck line finishing using piping and shape facing (any three)		
	To make samples of pockets (Patch, side and cut)		
Unit-5	Prepare samples of fullness technique (Simple dart, fish dart, vertical tuck, horizontal tuck, knife pleat, box pleat, inverted box pleat, gathering by hand and machine, smocking, and ruffles)		
Unit-6	Fix components such as zip, button and button hole, hook and eye and Velcro as directed on given garment		
	Total		

DESIGN CONCEPTS & DETAILS -TW

Subject Code 2050309	Term Work			No of Period in one session: 60			Credits 02	
	No. of Periods Per Week			Full Marks				: 75
	L	T	P/S	Internal (PA)				: 23
	—	—	04	External (ESE)				: 52

RATIONALE: This course will provide hands on experiences to students specifically related to design concepts associated with Clothing construction, Design Fundamental and Textile science. The content covered in the courses of Clothing construction, Design Fundamental and Textile science help the students in carrying out the design aspects through illustration. Students will be able to learn through this course about structural designs, applied design and the drape of the fabric.

Course Outcomes (Cos): The students will be able to

- Illustrate different types of design effects required for costume design and dress making by drawing and sketching.
- Draw different types of motifs.
- Create drawings and sketches illustrating different types of fullness techniques, trimmings and fasteners required for fashion design.
- Draw various patterns of stripes, checks and plaids.
- Draw different types of fabric falls, drapes, textures and patterns.

CONTENTS : TERM WORK

List of Term Work		Hrs	Marks
Unit-1	1.1 Draw different types of darts.	04	
	1.2 Draw different types of tuck.	04	
	1.3 Draw different types of pleats: Accordion or Crystal, Knife pleats, Box pleats, Inverted box pleats.	04	
	1.4 Draw different types of Ruffles: Circular ruffles, Straight ruffles	04	
	1.5 Draw different types of Trimmings Top stitching, Tucking, Fagotting, Insertion, Shirring, Braiding, Cording, Rick-rack, Bias binding, Quilting, Smocking, Ribbon, Laces, Edging, Eyelet, Plaiting.	10	
Unit-2	2.1 Draw different types of buttons, Placket's openings.	05	
Unit-3	3.1 Sketching Stripes, Checks or Plaids.	02	
	3.2 Draw following Fabric falls and drapes Crape, Soft and Sheer, Lace, Tulle and net, Organdies, Satin, Velvet, Taffeta.	04	
	3.3 Draw following Textures and Patterns: Diagonal, Herringbone, Basket weave, Glen plaids, Corduroy.	04	
Unit-4	4.1 different types of motifs. (5 Motifs each)	15	
	4.2 Natural Floral motifs Animal motifs Geometric Design Abstract Design Man-made motifs Decorative motifs Design Polka dot Design		
Unit-5	5.1 Sketch only outline of different types of faces such as round, oval, triangular, square and basic drawing of hand with fingers.	04	
Total-		60	

PYTHON / OTHERS -TW

Subject Code 2050310	Term Work			No of Period in one session:			Credits 01	
	No. of Periods Per Week			Full Marks				: 25
	L	T	P/S	Internal (PA)				: 07
	—	—	02	External (ESE)				: 18

CONTENTS		Hrs.	Marks
UNIT – 01	Write a program to demonstrate basic data type in python.		
UNIT – 02	Write a program to compute distance between two points taking input from the user (Pythagorean Theorem)		
UNIT – 03	Write a python program Using for loop, write a program that prints out the decimal equivalent of $1 + \frac{1}{2} + \frac{1}{3} \dots \frac{1}{n}$		
UNIT – 04	Write a Python program to find first n prime numbers. Write a program to demonstrate list and tuple in python.		
UNIT – 05	Write a program using a for loop that loops over a sequence. Write a program using a while loop that asks the user for a number and prints a countdown from that number to zero.		
UNIT – 06	Write a Python Program to add matrices. Write a Python program to multiply matrices.		
UNIT – 07	Write a Python program to check if a string is palindrome or not.		
UNIT – 08	Write a Python program to Extract Unique values dictionary values		
UNIT – 09	Write a Python program to read file word by word Write a Python program to Get number of characters, words.		
UNIT – 10	Write a Python program for Linear Search		