

**BHARATHIAR UNIVERSITY COIMBATORE - 641 046**  
**CENTRE FOR COLLABORATION OF INDUSTRY AND INSTITUTIONS**  
**B.Sc. FASHION DESIGN & TECHNOLOGY**  
**(For the CCII candidates admitted from the academic year 2013-14 onwards)**  
**SCHEME OF EXAMINATIONS - (CBCS Pattern)**

PART	SUBJECTS/Course Title	Ins.Hrs./ Week	Examination				Credits
			Duration	CIA	Marks	Total	
	<b>SEMESTER I</b>						
I	Language-I (Tamil / Hindi / French)	6	3	25	75	100	4
II	English I	6	3	25	75	100	4
III	<b>Core-I</b> Textile Science	4	3	25	75	100	4
III	<b>Core-II</b> Textile Design & Colour	4	3	25	75	100	4
III	<b>Core Practical I</b> – Textile Design & Colour	4	3	20	30	50	2
III	<b>Allied I</b> - Fashion Sketching - Practical	4	3	40	60	100	4
IV	Foundation Course : Environmental Studies#	2	3		50	50	2
	<b>SEMESTER II</b>						
I	Language-II (Tamil / Hindi /French)	6	3	25	75	100	4
II	English II	6	3	25	75	100	4
III	<b>Core-III-Apparel</b> Fashion Design	4	3	25	75	100	4
III	<b>Core Practical II</b> – Textile Design & Computer Software	4	3	20	30	50	2
III	<b>Core Practical III</b> – Textile Traditional Design	4	3	20	30	50	2
III	<b>Allied - II</b> -Historic Costumes and Textiles of India	4	3	25	75	100	4
IV	Value Education -Human Rights#	2	3		50	50	2
	<b>SEMESTER III</b>						
III	<b>Core IV-</b> Garment Construction -I	5	3	25	75	100	4
III	<b>Core - V-</b> Leather Product Design	4	3	20	55	75	3
III	<b>Core Practical-IV</b> – Computerized Textile Traditional Design	4	3	20	30	50	2
III	<b>Core Practical-V-</b> Leather Goods, Footwear & Garments	4	3	20	30	50	2
III	<b>Skill Based Subject</b> - Fashion Illustration - Practical	6	3	30	45	75	3
III	<b>Allied III</b> - Production & Quality Control	5	3	25	75	100	4
IV	Non -Major Elective I - Constitution of India#	2	3		50	50	2
	<b>SEMESTER IV</b>						
III	<b>Core- VI-</b> Knitting Technology	4	3	25	75	100	4
III	<b>Core- VII-</b> Garment Construction – II	4	3	25	75	100	4
III	<b>Core VIII</b> – Fashion Illustration & Appreciation	4	3	20	55	75	3
III	<b>Core Practical- VI-</b> Garment Construction	4	3	20	30	50	2
III	<b>Core Practical VII</b> : Knitting Machine Techniques	4	3	30	45	75	3
III	<b>Skill Based Subject II-</b> Drafting & Pattern Making - Practical	4	3	30	45	75	3
III	<b>Allied - IV</b> - Art Appreciation	4	3	25	75	100	4
IV	Non -Major Elective II - General Awareness#	2	3		50	50	2

<b>SEMESTER V</b>							
III	<b>Core-IX-</b> Garment Casting & Programming	5	3	25	75	100	4
III	<b>Core- X-</b> Apparel Industrial Engineering	5	3	25	75	100	4
III	<b>Core Practical – VIII</b> –Computer Aided Design(CAD)- I	4	3	20	30	50	2
III	<b>Core Practical- IX-</b> Draping Techniques	4	3	30	45	75	3
III	<b>Core Practical X -</b> Jewellery Design	4	3	30	45	75	3
III	<b>Elective – I -</b> Apparel Production Management	4	3	25	75	100	4
III	<b>Skill Based Subject IV-</b> Fashion Photography - Practical	4	3	30	45	75	3
<b>SEMESTER VI</b>							
III	<b>Core-XI-</b> Export Analysis & Documentation	5	3	25	75	100	4
III	<b>Core - XII-</b> Fashion Presentation	5	3	20	55	75	3
III	<b>Core Practical– VIII</b> – Computer Aided Design(CAD)-II	4	3	20	30	50	2
III	<b>Skill Based Practical V-</b> Export Sampling Methods	4	3	30	45	75	3
III	<b>Elective II -</b> Apparel Merchandising Management	4	3	25	75	100	4
III	<b>Elective III –</b> Apparel Quality Management	5	3	25	75	100	4
III	<b>Project -</b> Fashion Portfolio Presentation	3				100*	4
	Extension Activities@			50		50	2
	<b>Total</b>					<b>3500</b>	<b>140</b>

\* For Project Work 80 % and Viva-Voce 20%

@ No University Examinations. Only Continuous Internal Assessment(CIA)

# No Continuous Internal Assessment(CIA) Only University Examinations.

**SEMESTER I****CORE-I TEXTILE SCIENCE****OBJECTIVE:**

The subject aims to make the students differentiate types of fabrics and yarns and the use of it in clothing.

**UNIT – 1 : FABRIC**

Flow chart from fiber to finished fabric -Fiber classification Different methods of fiber identification – physical examination, burning test, chemical test. Properties of natural fibers (vegetables and animal) i.e. cotton, linen, wool, silk, etc. - Properties of Synthetic fibers i.e. Polyester, nylon, acrylic, etc.

**UNIT – 2 : YARN**

Different yarn formation process i.e. cotton yarn, woolen / worsted yarn, synthetic or blended yarn – blending, opening, cleaning, doubling, carding, combing, drawing, roving, spinning, yarn twist – S and Z.

**UNIT – 3 : TYPES OF YARN**

Different types of yarns -Fiber quality requirements for different types of yarn and fabrics. -Different methods of fabric formation i.e. Weaving, Knitting, non- woven. -Comparative study of woven, knitted and non- woven fabrics.

**UNIT – 4 : WEAVING**

Different types of weaves – plain, satin, sateen, twill, bird's eye, jacquard, basket, ribbed, crepe, pile, dobby, triaxial, lappet. -Properties and uses of different weaves. -Construction of different weaves – their EPI and PPI. Different types of Weaving machinery, i.e. dobb, jacquard.Common defects in weaving.

**UNIT – 5 : WOVEN FABRIC**

Non – wovens -Classification of non- wovens -Properties and end users of non wovens -Different methods of production – Web formation, bonding, finishing. -Industrial visits.

**OUTCOME:**

Gain complete knowledge about the fabric and yarn structure, weaving

**TEXT BOOK :**

Fabric studies by KVP Singh Kalyani Publishers

**REFERENCE BOOKS :**

1. Textiles – Fiber to Fabric by Bernard P. Corbman McGraw Hill
2. Introduction to textiles by KVP Singh Kalyani Publishers
3. Textiles – Fiber to Fabric by Bernard P. Corbman McGraw Hill

## **CORE-II TEXTILE DESIGN & COLOUR**

### **OBJECTIVE:**

The course aims to enhance the drawing skills of the learner in terms of space, proportion, colour thus evolving into a design and dyes)

### **UNIT – 1: BASIC - DRAWING**

Exploration of the various characteristics of line and its expression. Horizontal, Vertical, diagonal, thick, thin, wavy, straight and zigzag. Exploration of the various types of shapes line squares, rectangles, triangles, circles, polygons etc., and forms like cubes, cones, prisms, spheres, cylinders etc. Study of light and dark, illusions of depth, advancing forms, etc. Experimentation with textural effects- visual and tactile, natural and man-made like cross hatching, dots, squares, stripes etc. The physical properties of colour, the psychological impact, the various harmonies, their permutations and combinations.

### **UNIT – 2: DRAWING AND ILLUSTRATION**

Aerial space, linear space, planar space, receding space, advancing space etc., Designing a unit and its application. Symmetrical balance, asymmetrical balance, radical balance using the various elements of design. Interrelated proportions, contrasting and relating scales using the elements of design. Repetitive rhythm, progressive rhythm, radial rhythm, alternating rhythm. Principle of subordination and domination and highlighting / underplaying. Combination of the elements of design in an integrated manner. Integration of diverse features unifying elements. Stimulation of interest in compositions made for similar features with the introduction of varied elements.

### **UNIT – 3 : COLOUR**

Dimensions of color- hue, intensity and value. Color wheel and its various color schemes- primary, secondary, tertiary, quaternary, warm and cool colours, Analogous colours, complimentary and split complimentary, tints, tones and shades , achromatic and monochromatic colours, pastels and dusty pastels- effect of these colour schemes. Effects of colours- red, blue, green, yellow, orange, pink, purple, grey black, white, neutrals. Colour and combination in clothes. Factors affecting the choice of colours- effects of light, texture, age, size, personality, complexion, occasion.

Natural Dyes – synthetic dyes – Types of Dyes preparation – Dyeing method.

### **UNIT – 4: TEXTURE**

Types of textures- thread pulling, thread crumple, thread rolling, paper dabbling, wax rubbing, wax drop , smoke , blade , leaf, flower, butterfly, lace, jute, thumb, matchstick, sponge, cabbage, potato, onion, chilly, lady finger, ink drop, ink blow, drop ink, batik, leather, dry brush, mesh, comb, cloth dabbling etc., Textural effects, use of textures in fashion designing. Depicting textures (e.g., silk, satin, chiffon, denim, corduroy, velvet, knit etc., ) and patterns on clothes.

### **UNIT – 5: DESIGN**

Principles of design-repetition, gradation, radiation, dominance, unity, harmony, contrast, Proportion, balance & rhythm- its importance in designing. Elements of Design-Lines, Dots, Prints, Checks, silhouettes, colour, texture, etc.

### **Outcome:**

Gaining Knowledge about the Drawing, Colour, Illustration, Texture and Design

**TEXT BOOK:**

1. DESIGN STUDIES by ManmeetSodhia- Kalyani Publishers

**REFERENCE BOOK :**

2. Fashion and color by Mary Garthe- Rockport Publishers
3. Color Harmony<sup>2</sup> by Bride M.Whelan- Rockport Publishers

**CORE PRACTICAL – I- TEXTILE DESIGN & COLOUR**

1. Draw a Nature study of Birds, Animal forms Trees.
2. Draw a Fruits, Vegetables, flowers and geometrical forms.
3. Prepare exercises in lettering various types of Lines, rounds, zigzag, thin and thick.
4. Prepare a Textile Block printing designs on paper (8” x9” or 9” X 12”)
5. Prepare a two colour dress material textile designs, size- 9x9 inches .
6. Draw a COLOR WHEEL and warm and cool colours ,
7. Draw analogous colours- tints, tones and shades, achromatic and monochromatic colours .
8. Draw effects of colors- red, blue, green, yellow, orange, pink, purple, grey black, white, neutrals.

**ALLIED-I FASHION SKETCHING- PRACTICAL**

1. Draw a croqui drawing – all sizes, and all poses (front,back,side,3/4)
2. Draw a different types of Faces ; Hands, eyes, nose, lips, ear.
3. Draw Hair styles
4. Draw Illustration of Gathers, Folds, Pleats showing fullness in a garment.
5. Draw an illustration drawing and figure drawing
6. Prepare collage work of different models
7. Draw in detail- Collars, Necklines, Pockets, Sleeves, Waistlines, cuffs, skirts, trousers, yokes, waistlines

**Semester II****CORE – III- APPAREL FASHION DESIGN****UNIT I**

Terms related to the fashion industry –fashion, style, fad, classic, and collection, chic Custom made , mannequin , fashion , show, trend, forecasting, high fashion, fashion cycle, haute couture, couture, couturier, fashion director, fashion editor, line, knock-off avant garde, bridge, buying house, apparel, fashion merchandising, pre –a –porter, sample.

**UNIT II**

Elements of design –line, shape or form, colour , size and texture. Application of structural and decorative design in a dress, selection and application of trimmings and decorations. Principles of design -balance –formal and informal, rhythm-through repetition, radiation and gradation, emphasis, harmony and proportion. Application of principles of design in a dress. Design-definition and types– structural and decorative design, requirements of a good structural and decorative design. Colour-definition, colour theories-prang colour chart and munsell colour system, Dimensions of colour-hue, value, and intensity. Standard colour harmonies-application in dress design.

**UNIT III**

Wardrobe planning for different age groups, factors influencing wardrobe selection, Fashion and season, Designing dresses for different occasions –business meetings, parties/ dinners, evenings/leisure hours, marriage functions, sports, uniforms for civil service, airhostess, hoteliers, schools –girls and boys (school, high school).

**UNIT IV**

Designing dresses for unusual figures –becoming and unbecoming –for the following figure types. Stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent chin and jaw, prominent forehead.

**UNIT V**

Study of Indian designers – Tamil Nadu, Maharashtra, Rajasthan, Karnataka and Uttar Pradesh and World designers – France, Germany, U.S, United Kingdom and Italy (any one popular designer)

## References:

1. Fashion Sketch Book –Bina Abling, Fair Child Publications, New York Wardrobe
2. Strategies for Women –Judith Rasband, Delmar publishers London
3. Inside the Fashion Business- Bennett,Coleman & Co,Mumbai,1998.
4. Art and Fashion in clothing selection – Harriet T,Mc Jimsey,The Iowa University press,Ames,Iowa.1973.
5. Fashion – from concept to consumer – Gini Stephens Frings,6<sup>th</sup> Edition,prentics Hall(1999).

**CORE PRACTICAL-II- TEXTILE DESIGN & COMPUTER SOFTWARE**

1. Draw two colour dress material textile natural design, size – 9x9 inches using coral draw software.
2. Draw two colour dress material textile abstract design, size – 9x9 inches using coral draw software.
3. Draw two colour dress material textile Geometrical design, size – 9x9 inches using coral draw software.
4. Do colour separation in given dress material design by coral draw.
5. Separate first colour and second colour of given design by film processing coral draw

**CORE PRACTICAL- III-TEXTILE TRADITIONAL DESIGN**

1. Prepare a sari border design
2. Prepare a sari pallu design
3. Prepare sari border and pallu design with two colours and four colours
4. Prepare colour preparation, colour correction, & colour matching.
5. Draw any traditional textile sari design with multicolours
6. Do traditional printing like batik, hand block printing, dye & tie

## **ALLIED-II- HISTORIC COSTUMES AND TEXTILES OF INDIA**

### **OBJECTIVE:**

The subject aims to make the student understand the clothing trends in different states of India as well as costumes for Western culture.

### **UNIT – 1: COSTUMES**

Beginning of costume, Growth of dress out of painting, cutting etc....., Study of dyed and printed textiles of India – Bandhani, patola, ikat, kalamkari – in all the above types and techniques used.

Study of woven textiles of India - Dacca Muslin, Banarasi /Chanderi brocades, baluchar, himrus and amrus, Kashmir shawls, pochampalli, silk sarees of Kancheepuram.

### **UNIT – 2: TRADITIONAL COSTUMES IN DIFFERENT STATES OF INDIA**

**Costumes of India** – Traditional costume of different states of India

Tamil Nadu, Kerala, Andhra Pradesh, Karnataka, Assam, Orissa, Bihar, West Bengal.

### **UNIT – 3: TRADITIONAL COSTUMES IN DIFFERENT STATES OF INDIA**

Maharashtra, Rajasthan, Haryana, Himachal Pradesh, Uttar Pradesh, Jammu and Kashmir, Gujarat, Madhya Pradesh.

### **UNIT – 4: INDIAN JEWELLERY**

Jewelleries used in the period of Indus valley civilization, Mauryan period, Gupta period, the Pallava and chola period, Symbolic jewellery of South India, Mughal period, temple jewellery of South India, Tribal jewellery.

### **UNIT – 5: TRADITIONAL EMBROIDERIES OF INDIA**

Origin, embroidery stitches used-embroidery of Kashmir, Phulkari of Punjab, Gujarat – Kutch and Kathiawar, embroidery of Rajasthan, Kasuti of Karnataka, Chickenkari work of Lucknow, Kantha of Bengal – in all the above – types and colours of fabric/thread.

### **OUTCOME:**

To get an idea about traditional Indian Costumes, jewelleryes and embroideryes.

### **TEXT BOOK**

1. History of fashion ,Manmeet Sodhia-Kalyani Publishers

2. Fashion Kaleidoscope, Mehar Castelino-Rupa and Co

### **REFERENCE BOOKS :**

Indian Jewellery – M.L.Nigam, Lustre Press Pvt Ltd, India (1999)

Indian Costume – G.H Ghosrye, Popular books Pvt Ltd.

The costumes and textiles of India- Jamila Brij Bhushan, D B Taraporevala Sons &Co, Bombay (1958)

Costumes of India , Dorris Flyn, Oxford &IBH Publishing Co, Delhi (1971).

Costumes of India and Pakistan b-Das S N , D B Taraporevala Sons and Co, Bombay (1956).

Traditional Indian Textiles, Parul B. Abhishek Publications

**SEMESTER-III****CORE-IV- GARMENT CONSTRUCTION – I**

**UNIT-I- Elements and Functions of Clothing-** Garment Analysis and Its Classification – Measurement And Size Charts For Men, Women, And Children - Requirement and Breakdown Of Garments - Flow Process - Torso And Bifurcated Garments.

**UNIT-II- Stitches Introduction** –Definition -Basic Principles Of Stitch Formation – Classification Of Stitches Based on Federal Standards -- Formation Of Important Stitch Classes In 100,200,300,400,500 and 600 Series – Detailed Study Of Application Of All Stitches - Comparison Of Stitches .

**UNIT-III- Seams** -Introduction –Definition – Properties –Detailed Study On Seams Classification As Per Federal Standards – Plain, Top Stitched Seam, Welt Seam, Lapped Seam, Slot Seam, Flat Fell Seam, Hemmed Flat Felt Seam, French Seam, Piped Seam ,Superimposed And Bound Seam. Seam Finishes – Devices For Introducing Fullness. ThreadConsumption For Various Types Of Stitches And Garments

**UNIT-IV- Defects & Remedies** Detailed Study On Various Stitching, Sewing And Assembly Defects - Causes & Remedies: Skip Stitch, Unbalanced, Puckering, Gathering, Needle Defects, Thread Problems – Quality Of Threads And Its Impact On Sewing Quality – Sewability And Its Influencing Factors – Needle Cutting Index.

**UNIT-V- Alternative Methods Of Joining Materials:** Fusing And Its Requirements – Fusing Process – Interlinings – Fusible Resin Types – Factors For Fusing Equipment . Introduction To Trims And Accessories Attachments -Label, Zips, Fasteners – Sewing Thread Types And Ticket Numbering.

**References:**

- 1.Apparel Manufacturing – Hand Book – Jacob Solinger
- 2.Technology Of Clothing Manufacture – Herold Carr & B.Latham
- 3.Knitted Clothing Technology – T.Bracken Berry
- 4.Technology Of Stitches & Seams – Coats Viyella Limited

**CORE-V- LEATHER PRODUCT DESIGN****OBJECTIVE:**

The course aims to make the student understand the methods of processing and dyeing leather to be used as dress, as accessories which are also a thriving market on its own.

**UNIT-1: INTRODUCTION TO LEATHER**

History of leather- classification of leather- leather structure- leather science- leather processing- leather tannery- leather printing- classification of leather varieties- blue leather- leather board.



**UNIT-2: LEATHER PROCESS**

Leather dyes- method of dying- suitability of dyes- process involved- tannery process- leather finishing process- important process involved- quality control of leather- TQM- industry- industrial safety- classification of adhesives- method of adhesive selection- later adhesive- Neoprene adhesive- polyurethane adhesives- hot melt adhesives- pressure sensitive adhesive

**UNIT- 3: LEATHER GOODS DESIGN**

Leather goods illustration drawing- line drawing- pattern design- sketch drawing- measurement of leather goods- pattern making- elements of tools and equipments- varieties key hook purse- coin purse- gents purse- ladies purse- gents wallet- gents wash belt- travel bag- gents pouch – gents bag- ladies- brief case- bag holder- document file- cash box- VIP- file cover- industrial belt- industrial gloves- fancy gloves- optical glass cover.

**UNIT – 4: LEATHER FOOTWEAR DESIGN**

Foot wear illustration drawing- pattern design- pattern making- elements of tools and equipments- footwear design- footwear styles- sports and athletic- footwear modeling- design and footwear industry- safety shoes- orthopedic footwear- anatomy of human foot- skeletal structures of foot- muscle of fascia- structural and durable- stability- contribution of bones and muscles for stability in both static and dynamic postures- foot abnormalities an introduction- children's foot wear- men's wear- woman's footwear- seasonal footwear- seasonal shoes- sportswear- modern and fashion foot wears.

**UNIT – 5: LEATHER FASHION GARMENT DESIGN**

Line drawing- illustration drawing- figure drawing- 8 head theory- design drawing- classification of garment design- classification of children women men garments pattern making- industrial pattern design and grading- sportswear- jacket- classification of fashion accuracy design- drawing equipments and tools- pattern tools, garment industry equipments- finishing process.

**OUTCOME:**

The Students will gain knowledge about the leather processing, leather goods, leather foot ware and Leather Garments.

**TEXT BOOKS:**

1. Inside fashion business by Dickerson -Pearson
2. Inside fashion business by Tate -Pearson

**REFERENCE BOOKS:**

1. Footwear manufacture- Thomson.h
2. Pattern making manual- women garments, esmod, paris
3. Skiving manual- CLRI madras
4. Fashion design modeling- alt Bangalore
5. Adhesive in shoe manufacture- Vendatappiah
6. Theory and practice of leather manufacture- AjoyBrocor. Madras

### **CORE PRACTICAL –IV- COMPUTERIZED TEXTILE TRADITIONAL DESIGN**

1. Using corol draw prepare textile traditional butta and border design
2. Using corol draw , prepare textile traditional sari design with 2 colours and 4 colours
3. Using corol draw , prepare colour separation
4. Using corol draw , do film assembling

### **CORE PRACTICAL- V- LEATHER GOODS, FOOTWEAR & GARMENTS**

1. Draw leather goods- key chain, valet, hand glove types of bags , belt, leather ornaments, briefcase , suitcase
2. Prepare drafting and pattern making leather goods
3. Prepare leather goods finishing process(cutting, stitching, adhesives, and moulding)
4. Draw leather footwear design ( types of slipper, shoes, sports & industrial safety shoes)
5. Prepare pattern making footwear (different types)
6. Prepare upper clicking and closing methods
7. Bottom making and finishing process
8. Draw different types of leather fashion garments
9. Prepare pattern making, cutting and stitching process

### **SKILL BASED PRACTICAL-I- FASHION ILLUSTRATION**

Draw fashion illustration design

1. Figure drawing
2. Different types of apparels
3. Different styles of garments

Prepare different presentation of fashion illustration

1. Water colour
2. Poster colour
3. Colour pencil
4. Collage work

Draw classic and innovative designs

1. Collars
2. Necklines
3. Pockets
4. Sleeves
5. Waistlines. Cuffs, skirts,
6. Trousers , yokes, waistlines

### **ALLIED III- PRODUCTION & QUALITY CONTROL**

#### **OBJECTIVE:**

The course aims to introduce machines in fashion, planning time, quality, skills and safety concerns in Industrial setup.

#### **UNIT – 1: METHOD OF STUDY**

Basic methods study- introduction, method study part in your job, sequence of improvement, principles of motion economy, how to record methods. Basic work measurements- work measurements, elements, timing , timing errors, rating, allowances, standard time calculations, PMTS.

#### **UNIT – 2: PRINCIPLES OF INDUSTRIAL MANAGEMENT**

Balancing – basics, theoretical balance, skills inventory, initial balance, balance control -Production systems-Planning and control. Principles of cutting- types of cutting in the fashion industry -Principles of sewing- types of machines and accessories to simplify and modernize the concept of basic sewing. - Principles of pressing- types of press.

#### **UNIT – 3: FASHION INDUSTRY**

Packaging- various methods, people involved and precautions to be taken.

Quality control at each stage.- Quality standards- ISO, etc. -Quality from design to dispatch- introduction , design, cloth and trimmings, fusible, cutting, making up, after make, quality cycle.

#### **UNIT – 4: QUALITY CONTROL**

Production and people -Training – importance, methods of training , how training can be made effective.-Charting and layouts- introduction, single line, double line, product layout, process layout.- Industrial visits.

#### **UNIT – 5: TQM**

Quality Assurance –Quality Management – Total Quality –TQM procedures - Industrial Management – Industrial Safety – Industrial Welfare – Industrial Psychology – Quality Control

#### **OUTCOME:**

The student will gain knowledge about the Garment Production& Quality control

#### **TEXT BOOK**

1. Intro to clothing & Production Management -A J Chuter, Blackwell Science

#### **REFERENCE BOOK**

1. The Tech of clothing manufacture -Harold Carr Blackwell
2. Garment Technology for Fashion Designers - Gerry Cooklin Blackwell

**SEMESTER- IV****CORE-VI-KNITTING TECHNOLOGY****OBJECTIVE:**

The course aims to make the student proficient in making and finishing materials using knitting technology that is flourishing in Western countries.

**UNIT – 1: KNITTED GARMENTS**

Knitted garments- introduction -Difference between woven and knitted structures - Classification of knitted garments -Weft knitted fabrics-plain, rib, purl, etc.

**UNIT - 2 : FULLY GARMENTS**

Warp knitted fabrics- tricot, raschel, kitten raschel, crochet, Milanese knit, simplex. -Other knitted constructions- jacquard, pile,fleece,high pile, terry knit, velour knit.

**UNIT – 3: FULLY GARMENTS**

Fully garments- knit type, uses - Fully fashioned knitted garments- knit type, uses -Integral knitted garments- knit types, uses -Cut stitch shaped knitted garments- knit type, uses, processes involved.

**UNIT – 4: SEAM AND STITCHES**

Seam and stitches used in knitting -Machinery used for knitted garments Flat bed, two-bar wrap knitting machine, circular jacquard knitting machine, circular pile knitting machine.

**UNIT – 5:**

Quality control - Defects in knitted fabrics - Industrial visit.

**OUTCOME:**

Knowledge about circular knitting and flat knitting machine operation.

**TEXT BOOK :**

Knitting Technology -KVP Singh Kalyani publishers

**REFERENCE BOOKS:**

Fabric Studies- KVP SinghKalyaniPublishers

Textiles-fiber to fabric- Bernard P. CorbmanMcGraw Hill

**CORE-VII - GARMENT CONSTRUCTION-II****OBJECTIVE :**

The course aims to make the students design specific dress, pattern, ornaments and dresses for occasion.

**UNIT – 1 : DIFFERENT SKIRTS DESIGN**

Designing of fifteen different skirts using fabrics, mediums, silhouettes, surface ornamentation of various types. -Layout and marker making of any of these five different skirts.-Pattern making and construction of these five skirts.Grading should be done for bigger and smaller sizes.

**UNIT – 2: ORNAMENTS**

Designing of atleast ten, one pc. Dresses using fabrics, mediums, silhouettes, surface ornamentation of various types.-Layout and marker making of any two of these dresses on smaller scale.

**UNIT – 3 : PATTERN MAKING**

Pattern making of these two, one piece dresses on full scale, using flat form or draping method of drafting.The pattern to be marked properly. -Construction of these two, one pc. Dresses using appropriate tailoring techniques. -Grading should be done for bigger and smaller dresses.

**UNIT – 4 : DESIGNING OF ANY TWO GARMENTS**

Designing and construction of any two garments for a fashion show

**UNIT – 5: CREATIVE IDEA**

The theme of the garment should be specified. It should be an innovative creation and not a copy work. The theme should be researched well and it should reflect in the dress, either in the colour, or surface texture, or silhouette, or surface ornamentation, or the accessories accompanying the dress.

**OUTCOME:**

The students will be well prepared about the different designing of the ornaments and skirt designs.

**TEXT BOOK :**

1. Pattern making for fashion design -H.J.Armstrong Pearson
2. Advanced drafting and draping -ManmeetSodhiaKalyani publishers

**REFERENCE BOOK :**

1. The art of fashion draping - Connie Amaden Crawford Fairchild
2. Dress Fitting -Natalie Bray Blackwell Science

**CORE-VIII-FASHION ILLUSTRATION APPRECIATION****OBJECTIVE:**

The course aims to introduce themes in fashion from medieval to modern and its evolution of innovative trends and its appreciation.

**UNIT -1: ILLUSTRATING GARMENTS**

Designing of theme based garments. -Illustrating garments on Themes like Culture, Environment, Historical Evolution, Seasons, Signs and Symbols, flora and fauna, Colour Schemes, fusion, traditional embroideries, traditional fabrics, festivals, college wear, office wear, bridal wear, etc.

**UNIT -2: CONTEMPORARY INDIAN FASHION**

Contemporary Indian Fashion. -The prevalent fashion trends – fashion elements and accessories. - Listing, collecting and illustrating the prevalent fashion elements.

**UNIT – 3: INNOVATIVE DRESSES**

Use of prevalent fashion trends in creating more innovative dresses. -Illustrating the innovative dresses by the use of appropriate mediums and different presentation skills.

**UNIT – 4: APPRECIATION**

Appreciation of any five Indian Fashion Designers. -Collecting and illustrating the work of these Indian Designers. -Brief history on the work of these Indian Designers.

**UNIT – 5: DESIGNERS**

The famous and celebrated designs of these designers. -The shows, studios, and expertise of these designers.

**OUTCOME:**

The student would gain knowledge about the medieval to Modern Fashion Garments Illustrations.

**TEXT BOOK**

Fashion Kaleidoscope - MeherCastelinoRupa and company  
Indian Fashion - HindolSengupta Pearson Education

**REFERENCE BOOK**

A Celebration of style - SharadhaDwivedi AJSK Publications  
Fashion Design, Drawing and Presentation - Elisabeth DrudiBatsford

**CORE PRACTICAL- VI- GARMENT CONSTRUCTION**

1. Prepare sari blouse in drafting and pattern making method
2. Prepare salwarkameez in drafting and pattern making method
3. Prepare chudidhar in drafting and pattern making method
4. Prepare shirt in drafting and pattern making method
5. Prepare trouser in drafting and pattern making method
6. Prepare embroidery designs – lazy daisy, fish bone, patch work, zigzag chain
7. Prepare decorations and trimmings- lace work, rope work, appliqué work, ribbon work.
8. Prepare the different types of ornaments
9. Design any two garments for a fashion show.
10. Prepare fashion illustration design- men, women

**CORE PRACTICAL-VII- KNITTING MACHINE TECHNIQUES**

1. Differentiate between woven and knitted structure design
2. Draw different types of knitted garments
3. Give the sample collection for knitted fabrics
4. Identify the defects in knitted fabrics
5. Draw different types of knitting machines

**SKILL BASED SUBJECT PRACTICAL – II- DRAFTING & PATTERN MAKING**

1. Prepare drafting of sleeves
2. Prepare drafting of kids casual wear
3. Prepare drafting of children's casual wear
4. Prepare drafting of Women's casual wear
5. Prepare drafting of Men's casual wear
6. Prepare drafting of Sports wear
7. Prepare garment designing and pattern making process

**ALLIED-IV- ART APPRECIATION****OBJECTIVE:**

The course aims to develop the students to appreciate Art cultures of different countries and its influence in designing the garment.

**UNIT – 1 : INTRODUCTION**

All the contents of the syllabus will have descriptive as well as illustrative study in the class. - Inferences could be collected from historic books, internet , encyclopedias, etc.

**UNIT – 2 : ANCIENT INDIAN HISTORIC PERIODS**

Ancient Indian historic period's influences, architecture, culture, religion, tradition, -People, incidents- Application of these influences in designing garments.- Medieval Indian historic period's influences- architecture, culture, religion, tradition,-People, incidents- Application of these influences in designing garments.

**UNIT – 3. : MODERN INDIAN HISTORIC PERIOD**

Modern Indian historic period- architecture, culture, religion, tradition, people - Incidents- Application of these influences in designing garments.

**UNIT – 4 : WESTERN ART INFLUENCES**

Western art influences- Application of these influences in designing garments.-Greek Historic Period- Application of these influences in designing garments.-Roman renaissance- Application of these influences in designing garments.

**UNIT – 5 : MODERN PERIOD**

Modern Period World Art like, Modern Buildings, Paintings, Architecture, Sculptures, - And Films etc- Application of these influences in designing garments.

**OUTCOME:**

Student would get an idea about the art and culture about the different countries in fashion design.

**TEXT BOOK :**

1. Textile Art By Michael Thomas
2. The Art of Fashion Design by Connie Amaden – Crawford

**REFERENCE BOOKS :**

1. Design : A Crash Course – Paul Clark and Julian Freeman
2. Design and Form The Basic Course at the Bauhaus – Johannes Itten
3. A Century of Design : Design Pioneers of the Twentieth Century – Penny Sparke
4. Encyclopedia Articles on the Artist, Craftsman and Designer
5. Design History : A Students Handbook – ed. H. Conway

**SEMESTER- V****CORE-IX- GARMENT CASTING & PROGRAMMING**

**Unit- 1 - INTRODUCTION TO COST ACCOUNTING-**Responsibility Accounting , uses of cost accounting, elements of cost, direct labour, factory overhead, cost of goods manufactured statement, cost behavior patterns in the Apparel Industry, Fixed , variable, semi variable, job order for process costing.

**Unit-2 - ACCOUNTING FOR FACTORY OVERHEAD-** Capacity level concepts, production and service department, direct and indirect costs, over and under applied overhead- bank statement – final accounting- cost accounting- random statistics.

**Unit- 3 - COST VOLUME PROFIT ANALYSIS-**

Break even analysis: Contribution margin, variable cost ratio, and marginal income, sales mix by garment style, effect of volume change, price volume analysis. Apparel marketing cost analysis– Marketing cost accounting marketing cost standards, variance analysis for marketing costs, effective variance.

**Unit-4 - DETERMINING PRICING OF APPAREL PRODUCTS:** Price elasticity of demand and supply , marginal revenue and marginal cost, cost plus pricing , variable cost pricing , direct cost pricing – estimating- cost pricing control- planning- production cost- marketing cost- management costing & procedure.

**Unit- 5 - DERIVATION OF COST OF APPAREL-** woven and knitted. The budgeting process includes budgeting principles for the Apparel Industry, fixed vs variable budget, laminations of budgets in any justification effort.

**CORE-X-APPAREL INDUSTRIAL ENGINEERING****UNIT I: Plant Engineering**

Introduction to apparel Industry- Plant Location – Factors influencing plant location -Location Economics. Plant Layout – Classification - Process Layout - Product Layout - Combination Layout – Plant layout procedures – factory building.



**UNIT II: Product Design**

Product design, planning and development – Factors affecting apparel design - design by imitation – Product planning. Requirements for product design, Constituents of product planning and product development procedure. Requirements for process planning.

**UNIT III: Line Balancing**

Production - Definitions - Terminology - Basic Production Systems - Evaluating and Choosing the System - Process Flow and Charts for Garment - Scheduling Calculations - Introduction to Balancing Theory - Balance Control - Balancing Exercises For Garment -Industry.

**UNIT IV Production Planning and Control**

Functions: Planning, action and control phases – Forecasting – order writing – process planning & routing – material control - scheduling – dispatching – re-planning. Coordinating Departmental Activities. Scheduling techniques: Load analysis sheet, Gantt chart, Order schedule chart. Cutting & Sewing room planning: Drawing and reproduction of the Marker – Marker planning & spreading specification – Cutting planning and requirements - Sorting and Bundling

**UNIT V: Productivity**

Measurement of Productivity - Total Factor Productivity - Quick Response - Criteria for Increasing Productivity in Garment Industry - conducting productivity analysis survey in the garment industry.

**References:**

1. A. J. Chuter, Introduction to Production Management
2. Tripathi, Personal Management and Industrial Relations.
3. O.P. Khanna, Industrial Engineering and Management.
4. Rama Moorthi, Production and Operations Management.
5. T.R. Banga & S.C. Sharma, Industrial Organisation and Engineering Economics

**CORE PRACTICAL-VIII- COMPUTER AIDED DESIGN (CAD-I)**

1. Prepare textile design using Coral draw
2. Prepare fashion sketching by coral draw
3. Prepare fashion illustration design
4. Prepare various design using Photoshop
5. Prepare pattern making methods using CAD

**CORE PRACTICAL-IX- DRAPING TECHNIQUES**

1. With the help of draping techniques how will you prepare different types of dress forms
2. With the help of draping techniques how will you prepare different types of women's wear
3. With the help of draping techniques how will you prepare different types of men's wear
4. With the help of draping techniques how will you prepare different types of children's wear.
5. With the help of draping techniques how will you prepare sleeves, pleat, gather, neckline and collars.

### **CORE PRACTICAL-X-JEWELLERY DESIGN**

1. Draw jewels designs (3-D forms)
2. Prepare the various methods of jewelery making – traditional and industrial methods.
3. Gems stones checking, testing & Quality control
4. Diamond , grading sorting

### **ELECTIVE I- APPAREL PRODUCTION MANAGEMENT**

#### **Unit – 1 Human Resource Development**

Introduction To Structure And Sectors Of Clothing Industry - Job Analysis And Description – Job Specification – Recruitment And Selection – Kinds Of Interview - Purpose Of Appraisal – Criteria Of Appraisal – Methods Of Appraisal Methods – Limitations - Hrd Methods And Processes – Sewing Room Supervisor’s Job And Training Needs - Hrd In Indian Apparel Industry.

**Unit – 2. Plant Engineering & Line Balancing** Introduction To Garment Industry Plant Location – Location Economics – Plant Layout – Process Layout – Product Layout – Combination Layout – Introduction To Balancing Theory – Balance Control – Balancing Exercises For Garment Industry.

**Unit – 3. Work Study Concept And Need** – Method Study And Work Measurement –Techniques – Process Chart Symbol – Process Flow Chart – Flow Diagrams – String Diagrams – Multiple Activity Chart – Principles Of Motion Economy – SIMO Chart – Time Study Methods – Standard Time Data – Ergonomics With Special Reference To Garment Industry.

**Unit – 4. Production And Productivity Methods Of Production Systems** – Job, Mass & Batch – Section Systems, Progressive Bundle System & ‘Synchro’ System – Conveyor Systems – Unit Production System – Quick Response. Productivity Concepts – Measurement Of Productivity– “Man Machine Material” – Criteria For Increasing Productivity.

**Unit – 5 Production Planning And Control** - Function, Qualitative And Quantitative Analysis Of Production - Coordinating Departmental Activities - Basic Production Systems - Evaluating And Choosing The System - Flow Process And Charts For Garment - Scheduling Calculations -Assigning Operators Optimally - Setting Up Complete Balanced Production Lines To Produce Given Amount Of Garments

#### **References:**

1. Technology Of Clothing Manufacture – Carr & Latham
2. Apparel Manufacturers Handbook – Jacob Solinger
3. Introduction To Clothing Manufacture – Gerry Cooklin
4. Introduction To Production Management – A. J. Chuter
5. Personal Management And Industrial Relations –Tripathi

## **SKILL BASED PRACTICAL-IV- FASHION PHOTOGRAPHY**

1. Camera processing methods
2. Still photography
3. Model photography
4. Fashion model photography
5. Film processing
6. Advertising fashion photographs

## **SEMESTER-VI**

### **CORE-XI- EXPORT ANALYSIS & DOCUMENTATION**

#### **Unit I :**

Cost estimation of yarn, knitted fabric, dyeing, printing & finishing. Cost estimation for cutting, stitching, checking, forwarding, shipping insurance –INCO terms & their relationship with costing. Estimation of factory cost for vest, briefs, shorts, T-Shirts, pyjamas, children's wear and women's wear. Various factors to be considered in costing for domestic products & international products.

#### **Unit II:**

Introduction – Apparel Export promotion Council and– Registration formalities – Registration cum membership certificate – Import Export code – RBI code. Benefits and incentives offered by Government of India to garment export. Role of SEZ and apparel parks in export.

#### **Unit III:**

Need, rationale and types of documents relating to goods – Invoice – Packing note and list – Certificate of origin – Certificates related shipment – Mate receipt – Shipping bill – Certificate of measurement – Bill of lading – Airway bill – Documents related to payment – Letter of credit – Bill of exchange – Letter of hypothecation – Bank certificate for payment – Document related to inspection – Certificate of inspection – GSP and other forms. Importance of insurance of goods in foreign trade – ECGC and its role.

#### **Unit IV:**

Import license – Procedure for import license – Import trade control regulation procedure – Special schemes – Replenishment license – Advance license – Split up license – Spares for after sales service license – Code number – Bill of entry.

#### **Unit V:**

Pre shipment inspection and quality control – Foreign exchange formalities – Pre shipment documents. Shipment of goods and port procedures – Customs clearance.

#### **BOOKS FOR REFERENCE:**

1. Paras Ram, Hand Book of Import and export Procedures

## **CORE-XII- FASHION PRESENTATION**

### **OBJECTIVE :**

The course aims to use general accessories into the garment to add beauty, create mood, illusion etc., to the main garment.

### **UNIT – 1: CREATING SURVEY BOARDS**

Creating Survey boards. -Creating Mood boards- its application in designing costumes. -Theme boards- its direct relation to creating designs of costumes. -Client boards- the study of peculiar characteristics of a client to design special costumes for him/ her. -Swatch boards- Use of swatches in surface texture of the designed costumes.

### **UNIT – 2: CREATING LINES**

Creating Lines- lines with similar themes, similar fabrics and similar surface ornamentation. -Collage Work- collage on dress, collage on background, use of collage in fashion illustration. -Theme based illustrations- themes could be picked up from nature, surroundings, objects, events, celebrities, sports, jewellery, toys, etc.

### **UNIT – 3: FASHION ACCESSORY DESIGNING**

Fashion Accessory Designing -Designing and illustrating Jewellery- using various mediums like pearls, beads, gold and silver, diamonds, wires, flowers, net, etc. Designing and illustrating head gears- using various mediums like leather, cane, pearls, beads, wood, wires, velvet, flowers, net, etc.

### **UNIT – 4: DESIGNING AND ILLUSTRATING**

Designing and illustrating Belts using various mediums like leather, cane, pearls, beads, gold and silver, diamonds, wires, net, macramé etc. - Designing and illustrating Foot wear of all types using different mediums -Designing and illustrating Bows and ties on different dresses. -Illustrating different Hairstyles.

### **UNIT – 5: DESIGN STUDIO**

Design Studio- designing dresses based on different themes for a fashion show - Study of the basic aspects of a fashion show- the background, the lights, the amp, the accessories, the make-up, the fabric, surface ornamentation, etc. -Designing and illustrating lines for a fashion show.

### **OUTCOME:**

To gain knowledge about the design studio and fashion presentation.

### **TEXT BOOK:**

Illustrating Fashion -Kathryn Mckelvey Blackwell Series  
Encyclopedia of Fashion accessories -Phyllis TortoraFairchild

### **REFERENCE BOOKS:**

Fashion Sketchbook–AblingFairchild  
How Fashion Works- Gavin WaddellBlackwell

**CORE PRACTICAL-VIII- COMPUTER AIDED DESIGN(CAD-II)**

1. Application of colour harmony in Design

- Monochromatic colour harmony
- Analogous colour harmony
- Complementary colour harmony
- Double Complementary colour harmony
- Split complementary colour harmony
- Triad colour harmony
- Tetrad colour harmony
- Neutral colour harmony

2. Applications of Principles of design in dress design

- Balance –Formal and informal
- Rhythm – by line movement, gradation, repetition.
- Emphasis
- Proportion
- Harmony

3. Design Garments for the following.

- Party Wear – Women, Men, Children.
- Sports Wear- Tennis, Basket ball/foot ball (men and Women), Golf, any other.
- Fashion show – Children, men and women
- Winter Wear - Children, men and women
- Summer Wear - Children, men and women
- Spring Wear - Children, men and women
- School uniforms – Preschool, school, higher secondary and college going students-boys and girls.

4. Prepare pattern for the following.

- Bib
- Jabla
- Knicker

5. Grade the following patterns.

- Bodice front
- Bodice back

6. Scan designs from books / Magazines / photos and edit the designs – colour or features or background etc., or add details like ornaments & accessories.

### **SKILL BASED PRACTICAL-V-EXPORT SAMPLING METHODS**

Students will be given export order or export enquiry and they are asked to design the samples as per the specification given and also prepare a report containing the following details.

1. Yarn Details & Composition
  2. Yarn Consumption per Garment
  3. Fabric Details – Design, GSM, Machine Etc.,
  4. Size Details
  5. Factory Cost of Garment
- (Totally 5 Export Orders & 5 Export Enquiries Shall Be Given)

Designs may be given from the following styles :

Specialized Ladies Garments - Blouses & Cholies – Midis Skirts – Night Wears. Party Wears - Casual Wears, Specialized Men’s Wear - Various Types of Knitted T Shirts for Formal and Casuals - Over Dresses. Specialized Kid’s Wear For 1 To 5 Year Age Groups. Knitted Garments for Teen Ages / School Going Boys And Girls.

### **ELECTIVE-II- APPAREL MERCHANDISING MANAGEMENT**

#### **OBJECTIVE:**

The course aims to make the student understand the ways and means to promote the product.

#### **UNIT – 1: PRINCIPLES OF MARKETING**

Introduction to marketing - Marketing plan and processes -Marketing terminology – Principles of Marketing- Marketing Research – Research market analysis – research methodology- marketing communication.

#### **UN IT – 2: FASHION DETAILS**

Factors influence fashion - Fashion cycles - Forecasting fashion – Fashion types – Fashion Collection – fashion details – Fashion structure – fashion modeling details- fashion communication- fashion photography – fashion journalism.

#### **UNIT – 3 : FASHION MARKET**

Fashion market and marketing environment -Fashion marketing planning  
User’s buying behavior - Marketing communication – buyer co-ordination- client co-ordination- merchandising co-ordination- fashion sales marketing – fashion international marketing- global marketing.

#### **UNIT – 4: ADVERTISING**

Advertising - Sales promotion techniques - Exhibitions & sales, fashion shows (concept and presentation skills, publicity campaigns)- public relation- advertising communication- print media- visual media – electronic media- trade fair- fashion show techniques.

**UNIT – 5: SALES & RETAIL**

Retailing – department stores, apparel specialty stores, discount retailing, franchise retailing, mails, direct selling, internet selling and catalogue selling – purchasing management- stores management- material management- sales communication- sales procedures- sales discount method.

**TEXT BOOK :**

1. Fashion marketing & merchandising -PoojaChatleykalyani publishers
2. Fashion marketing -Mike Essay Blackwell

**REFERENCE BOOKS :**

1. Inside fashion business -Dickerson , Pearson
2. Fashion buying -Helen Gowerk Blackwell

**ELECTIVE-III- APPAREL QUALITY MANAGEMENT****Unit I :**

Meaning of quality, testing and standard and their importance in apparel industry – Quality terminologies – Sources of international standards. Quality Parameters of yarn:Yarn evenness & hairiness and their effect on fabric quality. Quality parameters of fabric: Brief study of fabric pilling resistance, bursting strength, colour fastness and dimensional stability. Testing of sewing threads, zippers, fusible interlinings, buttons and fasteners.

**Unit II:**

Inspection: Incoming and raw material inspection: Fabric inspection – 4-point system. In process/ on-line inspection: Advantages – On line inspection during spreading, pattern making, cutting, sewing and ironing. Final inspection: Sampling plans and AQL charts – Level of final inspection. Packing & packaging quality tests. Care labeling and international care symbols.

**Unit III:**

Principles of TQM – Deming's PDCA Cycle - KAIZAN concepts – 5 'S' applications in apparel industry. Application of seven QC tools in apparel industry.

**Unit IV:**

Understanding of ISO 9001:2000 standards: QMS, management responsibility, resource management, product realization and measurement analysis & improvement – Various documents required for ISO 9001:2000 implementation and its contents – Development of quality system manual for garment industry.

**Unit V:**

Documented procedures required for ISO 9001:2000 implementations – Procedures for internal quality audit – Management review meeting – Certification process – Surveillance audit.

**Text Book**

Pradeep V Mehta, Managing the Quality in Apparel Industries, New Age International (P) Ltd, New Delhi – 1998 Edition.

**BOOKS FOR REFERENCE:**

1. D.L.Shah Trust,ISO 9000 Quality Managemnt System, DL Shah Trust.
2. Booth J.E, Principles of Textile Testing, CBS Publishers and Distributors, New Delhi, First Edition.
3. Kothari V.K. Testing and Quality Management, IAF L Publications, New Delhi, First Ed,1999.

**PROJECT- FASHION PORTFOLIO PRESENTATION**

**Portfolio development and presentation technique;**

1. To be planned for a season or occasion Mood board, Story board, Fabric board, colour board– to be presented separately or in a combined form.
2. Fabric development chart
3. Dying development chart
4. Textile Design development chart
5. Fashion illustration presentation
6. Garments in a collection – 4-6 garments (children's, women & men)